Pharmacopoeia officinalis et extemporanea: or, a compleat English dispensatory. In two parts. Theoretic and practical. Part I in two books ... Part II in five books ... / by John Quincy.

Contributors

Quincy, John, -1722.

Publication/Creation

London : Printed for T. Longman, 1782.

Persistent URL

https://wellcomecollection.org/works/aew33kc4

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

42625/R

Pharmacopœia Officinalis & Extemporanea:

Or, A COMPLETE

ENGLISH DISPENSATORY,

IN TWO PARTS.

THEORETIC and PRACTICAL.

PART I.

IN TWO BOOKS.

BOOK I. Of the Definition, Subject, General Intentions, Media, Inſtruments, and Operations of PHARMACY.

BOOK II. Of the Diſtribution into proper Claſſes, General Nature, and Medicinal Virtues, *&c.* of SIMPLES.

PART II.

IN FIVE BOOKS.

BOOK I. Of the Preparation of Simples.

BOOK II. Of Saline Preparations.

BOOK III. Of Metalline Preparations.

BOOK IV. Of Officinal Compoſitions; containing all the Preſcriptions of the *London* and *Edinburgh* PHARMACOPOEIAS, according to the laſt Alterations thereof; together with thoſe of other Authors, and the preſent Practice, which claim any Notice.

BOOK V. Of Extemporaneous Preſcriptions; which are therein diſpoſed into proper Claſſes according to their ſeveral curative Intentions.

By *JOHN QUINCY*, M. D.

The FIFTEENTH EDITION, much Enlarged and Corrected.

LONDON,

Printed for T. LONGMAN, in Pater-noſter Row. 1782.

25658

WELLCOME
HISTORICAL
MEDICAL
LIBRARY

ADVERTISEMENT.

IN the preſent Edition of Quincy's Diſpenſatory, *many of the old exploded Preſcriptions, which kept their Place in the former Editions, are left out, and new ones, more conformable to the preſent Practice, are added. Many Errors are corrected, and all the modern Diſcoveries in Medicine inſerted. The Reader will have in this Edition a complete View, not only of the moſt approved Practice of the laſt Age, but of the preſent; which cannot be ſaid of any other Book of the kind.*

After the Example of the Edinburgh College, the better to aſcertain the Articles of the Materia Medica in general, each is ſpecified according to the Linnæan Syſtem.

Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

https://archive.org/details/b2877596x

PREFACE.

IT would be needleſs to attempt to ſhow here the utility of QUINCY's *Diſpenſatory*, or to ſet forth its particular merit; the great demand for, and univerſal uſe of it by the practitioners in every branch of medicine, having done that much more effectually than lies within the power of words. But whatever value the whole might have, there were nevertheleſs particular parts of the book which were liable to exception: there were ſeveral things omitted which ought to have been inſerted; ſeveral inſerted which had been much better omitted: and many others, which, though in their proper place, were, through the authority of the reigning doctrines of the time, or want of lights more lately obtained, erroneous and deluſive. The theory of Pharmacy was the moſt defective and faulty: the greater part of what was ſo called, was by no means pertinent or relative to the ſubject: not only a proper general view of that was wanting, but alſo a far greater part of the neceſſary rules and directions for conducting well the operations; and the few of thoſe which were given, as likewiſe the ſurvey of the *Materia Medica*, though both proper parts of the theory, were disjointed from it. Inſtead of what properly related to the preparing and compounding medicines, abſtruſe hypotheſes and perplexed reaſonings, founded on an application of the mechanic and hydroſtatic laws, and other remote principles, were introduced to explain the qualities and effects of the ſimples, and the operations practiſed on them: and this not only in that part called the theory, but very frequently, likewiſe, in the ſurvey of the *Materia Medica*, and the notes on the recipes; while, to make the matter ſtill worſe, this was generally done inconcluſively, and ſometimes falſely.

The preſcriptive part was indeed much more perfect;

but through the crude and unrefined ſtate in which Pharmacy then was, many recipes had obtruded themſelves into it, which, being inſignificant or abſurd, have been totally neglected in practice; and rendering more uſeful articles leſs eaſy to be found, by idly enlarging the volume, required much that retrenchment, the author himſelf, in one part of his work, had threatened to perform on them: and, indeed there were ſome of theſe, which, ſince the exploding incantations and other anile practices, and the introduction of common ſenſe to judge in matters of medicine, were even an opprobrium to the work.

Beſides theſe original defects of the book, it had contracted others more momentous, which were the produce of time. The regard which the improved Pharmacopœia of *Edinburgh* met with from our practitioners, of courſe gave its preſcriptions a greater title to a place in this collection than the more obſolete ones of the *Auguſtan*, *Zwelfer*'s, and others, of which it was in part compoſed: and the great change made in the Diſpenſatory of our own College, rendered the new forms of it conſequently wanting here, to ſupport, even in any degree, the profeſſed intention of the work: which was to exhibit, in the firſt place, the orthodox practice, as ordained by the College; and then to ſubjoin ſuch other recipes as were already in ſome eſteem or merited to be ſo.

It was therefore abſolutely neceſſary, in order to continue the utility of this *Diſpenſatory*, and to preſerve that eſteem in which it has hitherto been held, that it ſhould undergo a reformation; and receive conſiderable additions; that what was originally trivial, or through the revolutions in practice grown obſolete, ſhould be diſcarded and expunged; and its place ſupplied, by what modern improvements, or preſent authority, has more lately introduced into practice. This it is preſumed is here effected; and not only ſo as to have reſtored the work to its priſtine value, but to have rendered it yet more extenſively uſeful, by enlarging the plan, as well as amending the method. But as great liberty has been taken in doing this, by making various alterations and additions, it ſeems expedient to

give a ſhort view of each particular of them, and to offer ſome reaſons in their juſtification.

What Dr. *Quincy* called *The Theory of Pharmacy*, together with the ſubſequent ſections on particular operations, is here totally rejected; the firſt containing very little to the purpoſe; and the latter being alſo loaded with impertinent matter, and in other reſpects very deficient. In their place here is ſubſtituted a methodical inveſtigation of the conſtituents, general intentions, media, inſtruments, and operations of the art: with a ſummary explication of the principles whereon they depend; which, together with the hiſtory of the *Materia Medica*, form a proper and perfect theory of Pharmacy; as comprizing every thing previouſly neceſſary to be known, for the execution of any particular preſcription. The dependence which modern Pharmacy has, in part, on Chemiſtry, gives us here occaſion to introduce ſuch of the principles of that art, as with the rules for the operations, and the collection of all the material proceſſes thereof in the preſcriptive part, make this book comprehend *A complete Syſtem of Pharmaceutic Chemiſtry:* a performance much demanded, and not hitherto executed; the voluminous work of *Boerhaave*, though the greateſt attempt towards it, falling far ſhort of perfection. The other part of what the theory is now made to conſiſt of, *viz.* the ſurvey of the *Materia Medica*, is ſuffered to remain with leſs alteration. In reſpect to the matter, there is only taken away ſome of the mechanical explication, and other immaterial paſſages, and a fuller added, and (as it is hoped) in ſeveral inſtances, a more juſt account of the nature and medicinal powers of the capital ſimples; as *Mercury*, the *Bark*, *Opium*, &c. in doing which nothing is delivered but what is deducible from the demonſtrable nature of the ſubject, or what may be immediately verified from the teſtimony of facts. But, in the diſpoſition of the contents of this part of the book, a conſiderable change is made. For Dr. *Quincy*, contrary to the obvious laws of method, having therein confounded the practical matter with the theoretic, by mixing the proceſſes requiſite for the preparations of ſimples previouſly to their being adminiſtered or entering

As it was proper to take all the preſcriptive part of the *London* and *Edinburgh* Diſpenſatories into the book, it is thought expedient to add likewiſe the reſt of their contents; by theſe and the other additions, it has been endeavoured to make the book comprehend every thing which can be required in an *Engliſh* Diſpenſatory; and to ſuffice fully in the place of all others.

Beſides the other additions, here is ſubjoined an *Appendix*, containing the ſeveral methods of preparation, and an inquiry into the nature and medicinal powers of ſome faſhionable remedies lately received into uſe: and care has been taken to give theſe articles a more particular conſideration; as the importance of their pretenſions, and the great reputation they bear, eſpecially the three principal, *Tar-Water*, *Mrs.* Steven's *Medicine for the Stone*, and that of *Dr.* Chittick's, of courſe, render any information in regard to them, acceptable to many perſons.

Thus, endeavours have been made to ſupply the defects, amend the faults, and extend the deſign of *Quincy*'s book; and thereby give it a juſt claim to its title of *A Complete* Engliſh *Diſpenſatory:* and it is hoped that in all material points, ſucceſs hath followed; though it is not pretended that the work is, in every reſpect, abſolutely perfect. Some leſſer errors of method and diſpoſition, and many immaterial paſſages, too cloſely connected in many places with what is more valuable, ſtill remain; and bid defiance to correction, without the total demolition of the original fabric of the book. But theſe are imperfections, nevertheleſs, which diminiſh, in a very ſmall degree, the value of the work; as in reſpect of the matter, the charge is *redundance* not *deficiency*; in regard to the method, the offence lies againſt *elegance*, not *utility:* the inaccuracies of order in it may be eaſily excuſed, as they reach not confuſion; and the comprehenſiveneſs of its uſeful matter may well atone for its containing ſomewhat more than was neceſſary: but this favour will appear more due, when it ſhall be compared with the performances which have been offered as its competitors.

CON-

CONTENTS.

PART I.

THEORY *of* PHARMACY.

BOOK I.

SECT. I. *Definition*, &c. *of Pharmacy.* Page 1
Sect. II. *Subject of Pharmacy.* 2
Sect. III. *Of menſtrual Powers, and Menſtrua.* 3
IV. *Of Fire, as a Medium of Pharmacy.* 10
V. *Of the Inſtruments of Pharmacy.* 11
VI. *Operations of Pharmacy. Of Pulverization or Comminution.* 14
VII. *Of Expreſſion.* 16
VIII. *Of Exſiccation.* 17
IX. *Of Depuration.* 18
X. *Of Digeſtion.* 20
XI. *Of Solution.* 21
XII. *Of Fuſion.* 23
XIII. *Of Corroſion.* 24
XIV. *Of Extraction.* ib.
XV. *Of Precipitation.* 25
XVI. *Of Diſtillation.* ib.
XVII. *Of Sublimation.* 28
XVIII. *Of Cryſtallization.* 30
XIX. *Of Fermentation.* 32
XX. *Of Incorporation.* ib.
XXI. *Of Calcination.* 33

BOOK

BOOK II.

The Diſtribution, general Nature, and Medicinal Virtues of Simples.

Introduction. *Of the Diſtribution of Simples.* 42
Sect. I. *Of Nervous Simples.* 47
Claſs 1. *Of Cardiacs and Cephalics.* ib.
2. *Of Carminatives.* 62
3. *Of Hyſterics and Emenagogues.* 66
II. *Of Corroboratives.* 75
Claſs 1. *Of Agglutinants.* 76
2. *Of Aſtringents.* 81
3. *Of Abſorbents.* 87
III. *Of Stomachics.* 93
IV. *Of Balſamics.* 95
Claſs 1. *Of Emollients.* 96
2. *Of Reſtoratives.* 100
3. *Of Vulneraries.* 105
4. *Of Detergents and Digeſtives.* 112
V. *Of Diuretics.* 133
VI. *Of Diaphoretics.* 144
VII. *Of Emetics.* 157
VIII. *Of Cathartics.* 162
Claſs 1. *Of the Eccoprotic or milder Purges.* 163
2. *Of the Draſtic or rougher Purges.* 169
IX. *Of Sternutatories.* 178
X. *Of Narcotics.* 181
XI. *Of Anti-inflammatories.* 186
XII. *Of Topics.* 191
Claſs 1. *Of Repellents.* ib.
2. *Of Suppuratives and Digeſtives.* 194
3. *Of Detergents.* 198
4. *Of Cauſtics.* 199

Sect. XIII. *Simples omitted, or not reducible under the former Heads.* 202
XIV. *Of Waters.* 214

CHAPTER II.

Diſtribution of Medicinal Simples, according to their ſenſible Qualities. 225
Sect. I. *Acids.* ib.
Claſs 1. *Vegetable.* ib.
2. *Mineral.* ib.
II. *Inſipid Earths, capable of abſorbing Acids.* 227
III. *Earths not diſſoluble in Acids, or other Liquors.* 229
IV. *Glutinous Vegetable, and Animal Subſtances.* 230
Claſs 1. *Vegetable.* ib.
2. *Animal.* 231
V. *Soft Unctuous Subſtances.* ib.
Claſs 1. *Inſipid Vegetable Oils.* ib.
2. *Animal Fats.* ib.
VI. *Aſtringents.* 232
VII. *Sweets.* 233
VIII. *Acrids.* 234
IX. *Aromatics.* 235
X. *Bitters.* 236
XI. *Subſtances, in which two or three of the foregoing Qualities are conjoined.* 237
XII. *Subſtances not reducible under the foregoing Heads.* ib.
Claſs 1. *Metallic and Mineral Bodies.* ib.
2. *Neutral Salts.* ib.
3. *Opium, Hemlock,* &c. ib.
4. *Acrid and bitter Subſtances.* ib.

CONTENTS.

PART II.

PRACTICE *of* PHARMACY.

BOOK I. *Of the Preparation of Simples.* 239
II. *Of Saline Preparations.* 274
III. *Of Metalline Preparations.* 308
IV. *Of Officinal Compositions.* 342
Sect. I. *Of Waters, Spirits, and essential Oils.* 348
II. *Of Decoctions and Infusions.* 380
III. *Of Syrups, Honeys, and Juices.* 396
IV. *Of Wines, Tinctures, and Elixirs.* 416
V. *Of Conserves, Sugars,* &c. 440
VI. *Of Electaries,* &c. 445
VII. *Of Troches and Pills.* 457
VIII. *Of Powders and Species.* 469
IX. *Of Balsams and Oils.* 482
X. *Of Plasters, Ointments, Cerates, and Epithems.* 491
BOOK V. *Of Extemporaneous Compositions.* 511
Sect. I. *Of Diet-Drinks,* &c. ib.
II. *Of Decoctions, Infusions, and Emulsions* 517
III. *Juleps, Draughts, and Mixtures.* 537
IV. *Linctuses, Lambatives,* &c. 546
V. *Electaries.* 548
VI. *Boluses.* 565
VII. *Pills and Lozenges.* 568
VIII. *Of Powders.* 517
IX. *Glysters, Injections, and Suppositories.* 537
X. *Gargles, Lotions, aud Collyriums.* 598
XI. *Embrocations, Fomentations, and Baths.* 601
XII. *Oils, Liniments, and Plasters.* 607
XIII. *Cataplasms.* 617
XIV. *Of Anomalous Forms.* 622
Directions for Prescriptions. 634

APPEN-

CONTENTS.

APPENDIX,

Containing, *An Account of the Preparation, Nature, &c. of Tar-Water*, 637 ; *Mrs.* Stephens's *Medicine for the Stone, &c.* 639, *Dr.* Chittick's *Secret for diſſolving the Stone*, &c. *being not properly reducible to any of the preceding Claſſes of this Work.*

ERRATA.

Page 291. *In the article* Liquor Æthereus Vitriolicus, *for* continue to boil until ſix ounces, *read* ſixteen ounces.

Pages 203 and 204 are each twice printed, ſo when referred to in the index, ſee both.

Page 229. Column the 2d, line the 8th; *for* page 6, *read* page 40.

PART I.

Theory of PHARMACY.

BOOK I.

SECT. I.

Definition, &c. of Pharmacy.

PHARMACY is the art of preparing and compounding natural and artificial ſubſtances for the purpoſes of medicine.

PHARMACY was diſtinguiſhed into two branches; GALENICAL and CHEMICAL. The firſt conſiſted in altering the form or texture of ſimples, ſo as to render them fit to be taken or applied, without attempting any change in their qualities; and in conjoining them in compoſitions of various forms, wherein, nevertheleſs, each ſimple was ſuppoſed to retain its original properties. The latter conſiſted in many operations (in moſt of which, fire was a principal medium) whereby extractions were made of the more elementary parts of ſimples, which in their ſeparate ſtate had qualities different from thoſe of the intire body of which they were a part; and combinations of different ſimples were formed, with qualities not found in any of the conſtituents.

This diſtinction of Pharmacy into GALENICAL and CHEMICAL was occaſioned by a diviſion of the practitioners of medicine into two ſects, which happened on the introduction of chemiſtry into medicine; the chemiſts arrogated to themſelves and their art every kind of merit. The other party blindly adhered to the rules of the ſchools; from whence, as followers of Galen, they were diſtinguiſhed by his name.

This diviſion into the two ſects of Galeniſts and Chemiſts hath long ſince ceaſed, and the diſtinction of Galenical preparations is as juſtly growing into neglect; there being no proper principle on which to ſupport it. The Galenical forms are none of them independent of Chemiſtry, the moſt ſimple pharmaceutical preparations are ſo far

chemical as they have any dependance upon the properties or relations of the materials; ſo that PHARMACY is properly and only, a branch of Chemiſtry.

PHARMACY may be divided into Theoretical and Practical.—The firſt, teaches the knowledge of the medicinal ſubſtances, their properties, qualities, and relations to one another, alſo their general effects on the human body: the ſecond, teaches the ſkilful performance of the ſeveral operations, by which they are adapted to particular uſes.

SECT. II.

Subject of Pharmacy.

THE SUBJECT OF PHARMACY, in a general view, is every thing that can be employed in, or made conducive to, the cure of diſeaſes. But as this would comprehend almoſt all the various ſubſtances in nature, there being few which have not already been applied to ſome purpoſe in medicine; and fewer yet, that, either from an original application of them, or as ſubſtitutes for others, might not be ſo, it is proper to reduce the *Materia Medica* to much narrower limits. As there are many advantages with regard to practice, in comprizing it in as few ſimples as can execute perfectly all the medicinal intentions; it would be expedient, were a complete reformation of medical practice attempted, to reject the greater part of what even at preſent are uſed. But as the undertaking to procure a conformity to the moſt rational ſyſtem, if at all practicable even by the moſt authorized body, would be a romantic purſuit in a private perſon; it is requiſite, in a work of this kind, inſtead of conſidering the *Materia Medica* as it ought to be, to treat of it as it is. The catalogue of ſimples in this work comprizes therefore all ſuch as the colleges of London and Edinburgh make a part of theirs, and ſuch others, as, by longer uſe or new introduction, hold any conſiderable place in the preſent practice.

The ſeveral ſpecies of ſubſtances which conſtitute the *Materia Medica*, may be reduced to claſſes in four views: according to their PRODUCTION, as vegetable,—animal, — mineral, — and artificial. According to their FORM, as earths, —ſalts,—oils, &c. and according to their QUALITIES, and the curative intentions they are made to ſerve, as evacuants,—alteratives, —cathartics,—narcotics, &c. The manner of the diſtribution of ſimples choſen in this work, in order to a ſurvey of the *Materia Medica*, is formed on the firſt and laſt of theſe claſſes, for reaſons there given; and the ſecond, being more applicable to medicines in general, than to ſimples, is laid aſide. There are, beſides the above, other leſſer claſſes or ſubdiviſions of each of thoſe genera; but I ſhall omit conſidering them here, as they will be more properly treated of when we come to the particular ſurvey of the *Materia Medica*.

SECT.

SECT. III.

Of Menſtrual Powers, and Menſtrua.

AS not only the improvement of Pharmacy, but the accurate preparation of many medicines, as well as a right conception of their effects and action, depends on the knowledge of the menſtrual powers, and menſtrua, I ſhall firſt give a juſt notion of their general nature and then proceed to ſhew the principal kinds thereof.

Whatever body will diſſolve and intimately mix with another, is called a menſtruum of that body. The name probably was derived from ſome notion of the old chemiſts about the influence of the moon in the preparation of diſſolvents. There are in all bodies, beſides that univerſal attraction from whence gravitation reſults, certain ſpecific attractions peculiar and confined to each kind, by which they tend to combine with ſome other particular kinds, and with them only; and being conjoined, form a new ſpecies, in which the ſpecific attractions peculiar to their conſtituents are frequently loſt, and new ones generated, by which they mutually act with ſome of thoſe bodies, in reſpect whereof they were before incapable of any effect. Thus tartar vitriolate, which is formed of oil of vitriol and fixed alkaline ſalt, ceaſes to combine with many of the coloured gum-reſins, contrary to the nature of both its elements; and water, fixed alkali, and the ſpirituous part of lime, make the menſtruum, called the capital lye, which will combine perfectly with oils, though all its ingredients refuſe, while ſeparate, to unite with them.

Bodies, in reſpect of others with which they are thus capable of combining, are called MENSTRUA; and in reſpect of thoſe with which they refuſe to combine, NEUTRAL: but as there is no term in preſent uſe to expreſs the action of menſtrua, I ſhall, when I have occaſion to ſpeak of it, call it COMMENSTRUATION, meaning the mutual effect of bodies in forming new combinations.

Commenſtruation is ſubject to various laws in the combinations of different kinds of bodies. In ſome inſtances, the elements being conjoined in a certain proportion of each, the new body becomes neutral, in regard to additional quantities of any of thoſe elements: as when the due proportion of volatile ſalt and ſpirit of ſalt are combined, they form *ſal ammoniacum*; to which, if any further quantity of either of its conſtituents be added, they remain unchanged, and only as if mixed with any indifferent body. Water likewiſe, which combines with all ſpecies of ſalts, will, after a certain proportion of any kind are conjoined with it, become neutral to any additional quantity of the ſame, which, if added, remains entirely unaltered. This limitation of the quantity, in which certain elementary ſpecies are capable of combining, is called SATURATION.

In other inſtances, as acid ſpirits, ſpirits of wine, and ſome kinds of gums, with water,—all the metals which will combine with each other,—and many more ſpecies of bodies, the commenſtruating proportion is indefinite; and they are capable of combining in any unlimited quantity without ſaturation.

In ſome inſtances, fluid bodies combining with ſolids, deſtroy their continuity, and render them likewiſe fluid; as in the caſe of water with ſalts and gums, — of ſpirit of wine with reſins, and of others. This kind of commenſtruation is called SOLUTION; and the ſolid bodies ſo changed, are ſaid to be DISSOLVED.

In other inſtances, the fluids commenſtruating with ſolids coaleſce with them in a ſolid form; as in the caſe of *aqua regia* with ſilver, — vinegar with lead, — and all acids with iron,—where their proportion is not too great. This kind of combination is called CORROSION.

The commenſtruating powers of bodies are in moſt ſubjects greatly increaſed by heat, not only in regard to the acceleration of the effect, but in reſpect of the quantity in which bodies can be diſſolved in the menſtrua capable of ſaturation; for in ſome of them, a quantity of diſſolved matter three times as great as they can retain when reduced to the coldneſs of the atmoſphere, can be kept fluid while they are of a boiling heat; and in ſome inſtances, an extraordinary degree of heat is abſolutely neceſſary to the commenſtruation, even in any time or proportion whatever. But in ſome caſes, as in the inſtances of whites of eggs and water, a certain degree of heat is deſtructive of the commenſtruating power they have when cold; and theſe bodies, if already combined, may be thereby re-ſeparated.

In order to the commenſtruation of bodies, it is always neceſſary that one or both of them ſhould be in a fluid ſtate, or at leaſt commixed with ſome fluid. Therefore, when ſolid bodies are to be conjoined, the addition of ſome proper fluid, or their fuſion by heat, when they admit of it, muſt be always made.

There are ſeveral genera of bodies, of which the reſpective ſpecies have the ſame commenſtruating powers, but in greater or leſs proportions; as in acids or alkalies, of each of which there is a gradual ſeries. In many inſtances, where one of the weaker of any genus is combined with another, and a third of a ſtronger ſpecies of the ſame genus with the firſt is added, it will, by its ſuperior force, diſpoſſeſs the firſt, and, having ſeparated it, form a new combination of the ſecond and itſelf; while the firſt, having regained its own nature, remains as if mixed with a neutral body. This is ſeen in the preparation of Glauber's ſalt, where the oil of vitriol being added to common ſalt, and being an acid of higher attraction than the proper ſpirit thereof, expels it from the alkaline baſis of the ſalt, with which itſelf combines: and the ſame happens alſo, when *aqua fortis* is made by means of oil of vitriol.

In like manner, a ſuperior alkali ſeparates thoſe of inferior ſtrength from acids wherewith they are combined; as in the caſe of fixed alkaline or volatile ſalts

added

added to alum or vitriol, where the earth or metal before joined with the acid, is diſpoſſeſſed by the ſaline alkali, and re-aſſuming its own nature, ſubſides in the form of a powder. When ſolid bodies diſſolved in a menſtruum are thus ſeparated by the addition of a third, and made to ſubſide, the effect is called PRECIPITATION. As the doctrine of the affinity of bodies is of very extenſive uſe in the chemical Pharmacy, and many of the officinal proceſſes are founded on it, we ſhall here ſubjoin a table of affinities formed upon that of Geoffroy.

A TABLE *of the Attractions or Affinities between different Substances.*

INFLAMMABLE SPIRITS	water	oils and refins							
WATER	inflammable spirits	neutral salts, compoſed of mineral acids and fixed alcalies; and metallic ſalts							
	all alcaline ſalts	inflammable ſpirits							
ACIDS in general	fixt alcaline ſalts	vol. alc. ſalts, and alc. earths	metallic ſubſtances						
VITRIOLIC Acid	inflammable principle	all alcalies	zinc and iron	earth of alum	vitrous copper	ſilver mercury			
NITROUS Acid	inflammable principle	all alcalies	zinc	iron	copper	tin lead	mercury	ſilver	camphor
MARINE Acid	all alcalies	zinc	iron	tin	regulus of antimony	copper	lead	ſilver	mercury
ACETOUS Acid	iron	copper							
FIXED ALCALINE SALTS	vitriolic acid	nitrous acid	marine acid	vinegar and vegetable acids	acid of tartar	oils and ſulphur			
VOL. ALC. SALTS	vitriolic acid	nitrous acids	marine acid						
SOLUBLE ALC. EARTHS	vitriolic acid	nitrous acids	marine acid						
METALLIC SUBSTANCES	marine acid	vitriolic acid	nitrous acid	vegetable acids	oils				
INFLAMMABLE PRINCIPLE	nitrous acid	vitriolic acid	metallic ſubſtances	fixt alcaline ſalts					
SULPHUR	fixt alcaline and quick lime	iron	copper	lead	regulus of antimony	mercury	arſenic		
GOLD	ethereal ſpirit	acids							
MERCURY	marine acid	vitriolic acid	nitrous acid						
LEAD	vitriolic acid	marine acid	nitrous acid	vinegar	oils				
SILVER	marine acid	vitriolic acid	nitrous acid						
COPPER	vitriolic acid	marine acid	nitrous acid						
IRON	vitriolic acid	marine acid	nitrous acid						
REGULUS of ANTIMONY	vitriolic acid	nitrous acid	marine acid						

If the firſt ſubſtance in any of the foregoing ſeries be combined with another of the ſame ſeries, the addition of any of the intermediate bodies will diſunite them. Thus if inflammable ſpirits are combined with oils, and water be added, the oils will be diſunited. Or if any acid is joined with a metallic ſubſtance, it will let go the metal to take up an alcaline earth, or volatile ſalt; and theſe again it will forſake, to unite with fixed alcalies.

Of

Of particular Menſtrua.

Any fluid that diſſolveth a ſolid body, is called a menſtruum, or ſolvent.

The principal menſtrua in Pharmacy are, water — acid ſpirits, — vinous ſpirits, — alkaline ſalts, and oils.

WATER is the moſt general menſtruum known, being found combined, in a greater or leſs proportion, with almoſt all ſpecies of bodies whatever; but, excepting that proportion which is neceſſary to their conſtituence, it is averſe to combining in a greater with ſome; as in the inſtances of oils, earths, metals, glaſs, and others.

The fluid bodies with which it will commenſtruate are vinous and acid ſpirits, wherewith, when both are pure, it will combine any proportion. The ſolid bodies with which it will commenſtruate, ſo as to produce a ſolution, are all kinds of ſalts,—the proper gums of vegetables,—and, by the aſſiſtance of heat, the gelatinous parts of animals. Being previouſly conjoined with alkaline ſalts, and the ſaline part of lime, it will commenſtruate with oils, and diſſolve all kinds of ſulphurous bodies, whether gums, reſins, or fixed ſulphurs. The menſtrual power of water in reſpect of theſe bodies, is without ſaturation, except in the caſe of ſalts.

The aſſiſtance of ſome fluid being required, as I before obſerved, in order to all menſtruations of ſolid bodies, water neceſſarily becomes a general medium of combination, with regard to all that do not admit of fuſion by heat; and conſequently is a principal medium in the execution of thoſe intentions of Pharmacy which depend on the combination of different ſubſtances, or the re-ſeparation of the elements of ſuch as are compound. The power of diſſolving gums renders it extremely uſeful in extracting and depurating that part of vegetables, in which frequently their whole virtues reſide, from all feculencies and heterogenous bodies. Edulcoration, chryſtallization, and many other intentions of Pharmacy, which could not be completed by any other medium, are executed by means of the diſſolving powers of water.

ACID SPIRITS may, from the extenſiveneſs of their action and power, be accounted the ſecond menſtruum. They combine with water, vinous ſpirits, and oils of every kind.——They diſſolve all metals, earths, alkaline ſalts, all animal and vegetable ſubſtances, moſt minerals; and indeed ſome or other of them either corrode or diſſolve almoſt all the ſubſtances in nature, ſome kinds of glaſs excepted. This diffuſive power of uniting with other bodies renders them applicable to many great purpoſes in Pharmacy; they divide the parts of metals, and render them capable of paſſing the lacteals, and of being introduced into the habit; whereas, the greateſt part can by no other manner of preparation be made to act further than in the *via prima*: they give activity likewiſe to ſeveral bodies, which in their ſimple ſtate are abſolutely paſſive and inefficacious. Being combined with alkaline ſalts and earth, they form neutral ſalts, indued with purgative, diuretic, and other medicinal qualities, and thence afford one of the moſt valuable *genera* of medicines. They likewiſe, from their

power of attracting alkalies, furniſh the means of making ſeveral precipitations, and pure ſeparations of various ſubſtances, which could not be otherwiſe accompliſhed.

There are four kinds of acid ſpirits; commonly, though improperly, diſtinguiſhed by theſe names, oil or ſpirit of vitriol,—ſpirit of nitre—ſpirit of ſalt,—and vinegar. The firſt and third are mineral productions; the ſecond, formed from the air, or ſomething therein contained, which is collected by alkaline ſalts or earths; and the laſt, produced from the ſaccharine juices of vegetables. The three firſt have in moſt inſtances common powers, but with a gradual ſubordination to each other: for if ſpirit of ſalt be combined with any alkaline body, with which likewiſe the ſpirit of nitre will commenſtruate, and the ſame be added, the laſt will expel the firſt, and ſeizing the alkali, form the ſame ſpecies of compound as if the ſpirit of ſalt had been abſent: If to this new body oil of vitriol be added, the ſpirit of nitre will be thereby diſpoſſeſſed, in the ſame manner as the ſpirit of ſalt was before by that; and the ſpirit of vitriol will combine with the alcali, as if they had been mixed ſimply. This power in acid ſpirits of ſuperſeding each other in their action on alkalies, conſtitutes the principle on which *aqua fortis*, Glauber's ſpirit of ſalt, mercury ſublimate when prepared by the common methods, and many other preparations, are made, and may probably hereafter furniſh the means of improving the methods of preparation now in uſe, or of forming new ones not leſs valuable. There are nevertheleſs particular inſtances in which acid ſpirits vary from each other in their diſſolving power: as all are incapable of diſſolving gold, beſide a mixture of ſpirit of nitre, and ſpirit of ſea-ſalt;—ſpirit of nitre *only* can diſſolve ſilver;—mercury, which is ſoluble in ſpirit of nitre and ſpirit of ſalt, is only corroded by ſpirit of vitriol; which is alſo entirely reſiſted by lead in its metalline ſtate; though that metal is ſoluble in both the other acids. But even this defect of power has been made uſeful in Pharmacy; for the proceſs for making what is properly called White Precipitate, is formed on this principle; for though ſpirit of nitre and ſpirit of ſalt both diſſolve mercury when ſingle, yet when mixed they only corrode it; in this proceſs therefore, the mercury being diſſolved in ſpirit of nitre, and ſea-ſalt being added, a part of the acid thereof is let looſe from the alkaline baſis, by the ſuperior power of the ſpirit of nitre, and the menſtruum conſequently changed from a diſſolvent to a coroſive, whence the mercury being converted from a fluid to a ſolid form, is neceſſarily precipitated. The vegetable acids diſſolve a conſiderable quantity of zinc, iron, copper, lead, and tin; and extract ſo much from the metallic part of antimony as to become powerfully emetic; they diſſolve lead more readily, if the metal is previouſly calcined by fire, than in its metallic ſtate.

Spirit of Wine is the third kind of menſtruum; it diſſolves (excepting the gums *animi* and *copal*, and ſome few others) all the concreted juices of vegetables, whether balſams, gums, reſins, or gum-reſins;—camphor,—ſal diureticus,—and ſulphur previouſly combined with fixed alkaline ſalt.

It

It combines with water, — acid ſpirits, though not in its whole ſubſtance with oil of vitriol, — eſſential and ethereal oils, — and ſope. The power of diſſolving the gums and reſins of vegetables renders it of great uſe in Pharmacy, in ſupplying the means of making extracts of thoſe ſubſtances from the ſpecies which afford them, and of purifying ſuch as are already obtained. The power of diſſolving balſams afford the means of forming artificial compound balſams; and the power of combining with ethereal and eſſential oils, furniſhes a proper vehicle and diluter to thoſe ſubſtances, too active and potent to be employed in their concentrate ſtate; whence reſult thoſe two conſiderable forms of medicines, tinctures and diſtilled ſpirituous waters. It is alſo the menſtruum of ſeveral of the colouring and of the medicinal parts of animals.

Alkaline Salts are the fourth kind of menſtrua; theſe are of two ſpecies, fixed and volatile; (the fixed are divided into the mineral and vegetable;) being themſelves previouſly diſſolved in water, they diſſolve many of the gum-reſins, or other concreted juices of vegetables, not ſoluble in water: they diſſolve likewiſe ſulphur; — being actuated by the addition of quick-lime, they diſſolve all the terebinthinate and reſinous parts of vegetables; — and oils, with which being united, they conſtitute ſope. Fixed alkaline ſalts combine with water ſo ſtrongly, and are ſo neutral to ſpirit of wine, that being added to the ſame, diluted with water, they ſeparate the water from it, and ſuffer it, by its ſpecific levity, to riſe above the ſolution. The power of alkaline ſalts to diſſolve the reſins and concreted juices of vegetables, has not been hitherto much applied in Pharmacy; ſpirit of wine, which is the more general menſtruum, having anticipated the uſe or neceſſity of it in that view: but the College have in their laſt Diſpenſatory, introduced them in one inſtance, the volatile tincture of the bark: and moſt probably they will be hereafter found to furniſh leſs laborious and more profitable extracts, than ſpirit of wine; as they diſſolve as well the gummous as the reſinous parts of thoſe ſpecies which contain both, and may be prevented from making any change in the quality of the ſubject, by adding to the extract ſuch a quantity of acid as will render them neutral. The power of combining with ſulphurs, and rendering them ſoluble in water, affords the means of making the *lac ſulphuris* and *ſulphur auratum antimonii*: their power of attracting water from ſpirit of wine, affords a method of inſtantly obtaining a very ſtrong ſpirit from a weaker, by adding fixed alkaline ſalts, heated red-hot. There is a ſubordination of power in the two kinds of alkaline ſalts, as well as in the acid ſpirits; fixed alkali ſuperſeding the attraction of the volatile, and diſpoſſeſſing it on their mixture of any acid with which it was before combined; as in the proceſſes for making ſpirit of *ſal ammoniac*, and *ſal volatilis oleoſus*, when ſalt of tartar is employed.

Oils are the fifth kind of menſtrua: and when conſidered as ſuch, muſt be diſtinguiſhed into their two ſpecies of ſubſtantial, and eſſential, or ethereal. Subſtantial oils, with the aſſiſtance of heat, diſſolve ſulphur, and with a large proportion aſſume a balſamic form; — turpentines and other concreted juices of vegetables; —

lead;—the coloured reſin of alkanet root;—and wax. Eſſential, &c. oils diſſolve many of the concreted juices of vegetables;—and ſulphur. The power of oils to combine with turpentines, &c. affords the principle on which moſt of the plaiſters and unguents in uſe are formed; as does likewiſe their power of uniting with lead and wax to ſeveral of the ſame: and indeed the commenſtruating power of oil is the baſis on which the form of moſt of the chirurgical remedies is founded.

There are, beſides theſe more general menſtrua, ſeveral bodies which act as ſuch, in reſpect only of ſome particular ſpecies; as wax when heated, combines with glaſs of antimony; the yolks of eggs with oils and water; balſams with ſome reſins, and eſſential oils with ſugar.

SECT. IV.

Of FIRE, as a Medium of Pharmacy.

BY FIRE, when I ſpeak of it as a medium of Pharmacy, I mean only heat, or that action which ignited bodies exert on others contiguous to them, or within a certain degree of nearneſs; and not any particular ſubſtance or ſpecies of body, as the word has by Boerhaave, and many other late writers, been made to ſignify. The general powers of fire (*i. e.* heat) are extremely various: it produces a rarefaction or expanſion in all bodies, but in very various degrees in different kinds: when this is augmented to ſuch a degree, that by the diminution of the ſpecific gravity, and the increaſe of the repulſive forces, the parts of the body heated fly off from the maſs, and exhale in vapour, the body is ſaid to be VOLATILE; but when, on the contrary, no ſuch avolation is produced, the body is ſaid to be FIXED.—It ſeparates the elementary parts of compound bodies, by cauſing the more volatile to riſe and leave behind the fixed; and this not only when ſuch elements are commixed, but even when joined by commenſtruative powers; where the degrees of volatility of the bodies are not nearly the ſame, or where the attraction is not very ſtrong, and one of the bodies highly fixed.—It accelerates moſt of the commenſtruating powers of bodies, and excites ſuch as in many inſtances are not to be found to ſubſiſt at all in them when cold.—It accelerates likewiſe moſt of the natural changes to which particular kinds of bodies have tendencies; as putrefaction, vinous fermentation, acetification; and applied in a greater degree, with the acceſs of air, produces that change in thoſe capable of putrefaction, which would otherwiſe be the reſult of a long time, *viz.* a total diſſipation of all the parts, except the earth.—It melts or renders fluid ſeveral kinds of ſolid bodies, which, on the diſcontinuance of its action, again return to their ſolid ſtate: the principal of theſe are wax; concreted oils; gelatinous parts of animals combined with water, in that ſtate in which they are called

Glaſ

Glac or Size; and the gums combined with water in ſuch proportion as to render it ſolid by their tenacity: in theſe inſtances, the liquefaction may be produced without being attended with any other change in the melted bodies, which, on the abſence of heat, again reſume their ſolid form.—Metals alſo, and glaſs, are fuſed or liquified with a greater degree of heat, and without alteration, if the calcining power of air be excluded, and the admiſſion of certain ſubtile effluvia prevented:—the gelatinous parts of animals, without the addition of water; amber, and many of the concreted juices of vegetables and ſulphur, are liquified by heat; but theſe cannot be melted without the ſeparation of part of their ſubſtance, or ſome other conſiderable changes in their texture or qualities.

The property of fire to ſeparate bodies, by means of their varying volatility, is the principle on which three of the moſt important chemical operations are performed; *viz.* diſtillation, ſublimation, and calcination: it is the means of analyſing moſt ſpecies of bodies, and obtaining their more elementary parts, in ſuch a ſtate as renders them applicable to many purpoſes, of which, in their compound condition, they were incapable; from hence only can be produced eſſential and etherial oils;—acid ſpirits (vinegar excepted);——ſpirit of wine;——volatile ſalts; lixiviate ſalts;——the proper calces of metals;—and other earths. It is alſo, in many caſes, intirely requiſite, and in others very expedient, to exſiccation. From the aid which fire lends to the menſtruative powers, many of the proceſſes of Pharmacy are much facilitated; as extractions made by digeſtion; and moſt other ſolutions;—and corroſions of various kinds. There are, in reality, few operations of Pharmacy (ſome ſimple commixtures, pulverization, and cold infuſion excepted) where the uſe of heat is not either abſolutely neceſſary, or leaſt expedient, for the quicker and eaſier completion of the end.

SECT. V.

Of the Inſtruments of Pharmacy.

The Inſtruments and Utenſils of Pharmacy, are,

1. THOSE employed in containing the ſeveral ſpecies of the *Materia Medica*, and all the preparations and compoſitions thereof: theſe are drawers, boxes, bottles, pots, &c.

2. Thoſe employed in adjuſting the quantities: which are, for ſolid bodies, ſcales and weights; for fluids, meaſuring veſſels.

3. The inſtruments uſed for pulverization, and the commixture of bodies varying in their texture, are mortars, of bell metal, marble, and glaſs with their proper peſtles;—a levigating ſtone and muller; or hand-mills, where large quantities of materials are to be prepared;—ſearces or ſieves, with proper boxes to them;—knives for taking

taking the matter off the ſtone when levigated, and diſpoſing it in proper drops or maſſes; which, where whiteneſs is required in the powders, ought to be of horn or ivory; – and chalk ſtones.

4. Thoſe ſerving for coction or boiling: which are pans of various ſizes; — pipkins; — large ſhallow pans for evaporation, and the preparation of unguents, plaiſters, *&c.* —proper chafing-diſhes, or iron ſtoves, for containing charcoal fires; — ladles for taking out, and ſpatulas for ſtirring, the matter, *&c.*

5. Thoſe neceſſary for filtering or ſtraining: which are flannel, and flannel bags in the form of cones, called Hippocrates's ſleeve; —linen cloth; —filtering paper; —a proper frame to ſuſpend the bags; —funnels of glaſs and tin; —and earthen cullendars; to this kind may be added a ſcrew-preſs with iron plates, for the expreſſing of oils and the ſtraining of ſtorax, *&c.*

6. Thoſe uſed for ſeparating oils from water, or other fluids; which are ſeparating glaſſes of two kinds; the one called a tritorium or ſeparating funnel, which is a bulbous glaſs, with a perforation at the top, to admit the ſtem of a common funnel, by which it muſt be filled, the bottom tapering in a long ſtem, whoſe bore muſt be ſo ſmall as to ſuffer only a thread-like ſtream to paſs from it. The other, or common ſeparating glaſs, is a deep glaſs, with a ſpout of the ſame height, and a little curving at each end, the lower orifice of which muſt open into the glaſs, cloſe to the bottom.

Thoſe ſerving common purpoſes: as funnels;---knives;---ſpatulas;---ſpoons, *&c.*

The inſtruments and utenſils uſed in the chemical operations of Pharmacy, are,

Retorts of various ſizes;--- receivers;---glaſs bodies;---ſublimers;---bolt heads, or matraſſes; ---tubulated glaſs heads; --- and bells, for diſtilling ſpirit of ſulphur;---crucibles;---proper tongs made in the manner of a forceps, for taking the crucibles out of the fire;---iron rings with a ſtem, for cutting the necks of retorts, or tops of bodies and ſublimers;--- furnaces, which are of three kinds; furnaces for ſand heats; furnaces for receiving retorts, or long necks; and thoſe called wind furnaces, uſed for calcinations and detonations, performed in crucibles, or veſſels which are to be placed in the open fire. The firſt are to be thus conſtructed: a ſand pot ſhould be firſt procured, which muſt be of caſt iron, and if of the moſt proper form, cylindrical (though thoſe in common uſe are a little conical) with a round bottom, and a rim round the top, by which it is to be hung. The ſand pot may be of any ſize, from 20 inches diameter or more, to 6, according to the magnitude of the retorts or glaſſes intended to be contained in it:---let the lower part of the furnace be then built in the ſame manner as thoſe for common coppers, *&c.* that is, a cylinder of brick-work muſt be made, of about the height of 18 inches, in which a proper area is left for the vacancy which contains the fuel, and the aſh hole; the magnitude of this area may be 8 inches long, and 6 broad, if the ſand pot be 14 inches diameter, and in proportion for thoſe of other ſizes. In this area let bars, and a proper door and frame be fixed,

fixed, ſo as to leave 6 inches height of the area above the bars for the fuel to lye in. Let a hollow cylinder of brick be then carried up, converging at the top, ſo as to take the rim, and yet leave an interſtice of 3 inches round the pot: the diſtance the pot ſhould hang from the top of the area, or ſurface of the fire, ſhould be 8 inches; and a proper ſlope ſhould be likewiſe made in the brick-work from the top of the area, which contains the fuel, to the ſides of the cylinder. The pot is to be hung by the rim in this cavity, and a courſe of bricks, or a proper frame of ſtone-work, raiſed over the rim, making a regular continuation of the hollow of the pot. At the back of the cavity of the furnace, juſt under the rim of the pot, muſt be made a hole to vent the ſmoke. Behind the ſand pot may be placed an iron plate for a ſand bath, which muſt cover an horizontal flew or chimney, of about the depth of 4 inches, and of a proper breadth to ſuffer the edges of the plate to reſt about 2 inches on the brick-work; this flew muſt be of the ſame level with the hole which vents the ſmoke of the furnace, which hole ſhould, in this caſe, be of the ſame depth with it, and as long as the figure of the furnace will admit; the extremity of this flew muſt vent itſelf into the chimney, which ſhould be of 6 or 8 inches diameter, and of 8 yards height, or higher, if a great heat be required. If there be no plate, the hole by which the chimney communicates with the furnace, may be a ſquare of 5 inches. Sand pots deſigned for making ſublimations of mercury, &c. in matraſſes, ſhould be made ſhallower than thoſe intended for retorts: the moſt proper proportion is ſomething more than half the diameter of the matraſs.---The furnace for retorts to be placed in the fire, may be made in the ſame figure as the above, being fitted to contain the retort, hanging by a rim of lute, in the ſame manner as the pots.---The furnace for long necks ſhould be with a ſquare area in the place of the cylinder, through the ſides of which proper holes ſhould be left, for the necks of the long necks to be put through, and a dome or covering of fire-ſtone muſt be put over the furnace, or, what is more durable, an iron frame filled with lute; the fire-place ſhould alſo be made bigger, proportionable to the cavity of the furnace: but as theſe are uſed at preſent only for making oil of vitriol, or *aqua fortis*, where large quantities are required, they almoſt ceaſe to be a part of the apparatus of Pharmacy.

The kind of wind-furnaces generally uſed, are only a high chimney, in which bars are placed horizontally, at a convenient diſtance from the bottom, with an iron frame and door in the front, through which the fuel and crucibles, &c. are put in. The front muſt likewiſe be open below the bars. Portable furnaces may eaſily be contrived, for buſineſs of a moderate extent; one of which, may by a little diverſity in the management of it, anſwer every purpoſe of the pharmaceutiſt. Lutes, which are of various kinds according to the degrees of heat to which their application ſubjects them: there are many compoſitions in uſe for each purpoſe, of which theſe following appear much the beſt. For luting retorts, ſtills, &c. in common diſtillation, take linſeed meal,

meal, or common flour one part, whiting two parts, ſolution of gum arabic in water ſufficient to bring them to proper conſiſtence to ſpread round the juncture: or a bladder ſmeared with the white of an egg or a ſtrong ſolution of gum arabic, and carefully put round the juncture, may, in general, be made to anſwer the ſame end. Where great nicety is required, and the leaſt eſcape of the vapour is to be prevented, quick lime, tempered with the drying oil uſed by painters, ſhould be ſubſtituted for the above: but this mixture muſt be made immediately before it is uſed: when this kind of lute is employed, great care ſhould be taken to guard againſt the burſting of the glaſſes, for it renders them the ſame as one entire veſſel. For luting together the iron pots employed in the diſtillation of *ſal cornu cervi*, *aqua fortis*, &c. and their heads, and all other veſſels, where they ſuſtain a burning heat, the following is extremely good; take vitriol calcined to redneſs, two parts, the ſcoria of a ſmith's furnace finely levigated, Sturbridge clay or Windſor loam dried, each one part, temper them with water to a proper conſiſtence, and beat them well together with a twentieth part of their weight of ſhort hair: this may be likewiſe applied to the luting retorts, or bodies which are to be put in the naked fire; but its place may be there ſupplied by the following, which is made with leſs expence and trouble: Take ſand, Windſor, or (if good) common loam, and horſe dung, each equal parts; temper them with water to a proper conſiſtence.

As moſt of the above utenſils, &c. are extremely common, and may be had in ſhops, or of workmen, in a proper form, I have omitted to deſcribe them: but where a variation from the uſual ſtructure fits them for peculiar purpoſes, or where ſuch as are uncommon better ſuit the end, deſcriptions, if not given above, will be found, either in the general account of the operations of Pharmacy, or in thoſe particular proceſſes where their uſe occurs.

SECT. VI.

The Operations of Pharmacy. Of Pulverization, or Comminution.

PULVERIZATION is that operation, by which cohering bodies are divided into minute parts, or reduced to powder.

PULVERIZATION is of two kinds: levigation or trituration, and contuſion or pounding. By levigation we mean the reducing to powder by attrition, or the abraſion of ſome hard body moving on the ſurface of another: the method of performing which, whether by a flat ſtone and muller, for ſmaller quantities, or mills for greater, is too generally known to leave occaſion for directions. By contuſion we mean when the comminution is effected by compreſſure, or the ſtroke of a falling body: but the mortar and peſtle, and

and their manner of uſe, are, like the former, too common to require any deſcription.

As it is generally neceſſary in levigation to add ſome fluid to the matter, the former editions of the Edinburgh, and ſome other Diſpenſatories, have directed, in particular preparations, the uſe of roſe, and other ſimple waters: but they have not the leaſt advantage over ſpring water; ſince, in drying the powders, they totally exhale, without having imparted any virtue to the preparation.

Subſervient to PULVERIZATION, where extreme fine or impalpable powders are required, two ſecondary operations are introduced, ſearcing and waſhing over. The firſt is ſuch a common practice, as renders a particular account of it uſeleſs; but the latter, whoſe name we have borrowed from the colourmen, is not ſo univerſally known, as to make a deſcription of it impertinent: It is thus performed. The matter being firſt well pounded and levigated, let it be put into a deep veſſel, almoſt full of water, and there well ſtirred. Then, having reſted a ſhort time, that the groſſer parts may ſink to the bottom, let the water, and finer part yet ſuſpended, be poured off into another veſſel; and ſuffered to ſtand at reſt, till the powder poured off with the water, has totally ſubſided: let the clear water be then poured back into the firſt veſſel, with great care not to diſturb the ſubſiding powder; and let the ſtirring, decantation, *&c.* be repeated as before, ſo often as ſhall be found neceſſary, to ſeparate all the powder which is of ſufficient fineneſs. The remaining groſſer part may be again ground, and the ſame treatment continued, till the whole is obtained fine. By this method, executed with care, impalpable powders may be had, with great eaſe, from even the hardeſt bodies; chalk, tobacco-pipe-clay, and other earthy ſubſtances, that grow ſoft in water, may be freed from ſand, or other impurities, and rendered fine without grinding.

The moſt neceſſary caution in regard to PULVERIZATION, is to be careful in accommodating the ſubſtance of which the inſtruments are made, to the nature of the matter ſubjected to the operation. For, on neglect of this, not only the inſtruments are liable to be damaged by eroſion, or abraſion, but the matter depraved, and the deſign of the preparation perverted, or fruſtrated. Earths and metals may be promiſcuouſly powdered in every kind: but ſalts, when great purity is required, and the ſalts and corroſions of mercury always, in thoſe alone which are made of marble or glaſs. By marble is here underſtood, not only what is ſtrictly ſo called, but porphyry, agate, or any other ſtone whatever; and hard wood may alſo be uſed, where the neceſſary attrition is gentle. When ſtones of a very hard ſubſtance, ſuch as the *lapis hæmatites*, are required to be powdered, an iron mortar and peſtle ſhould be employed; but if it is neceſſary they ſhould be extremely fine, a mortar of agate, or flint ſhould be uſed: for common marble, and the ſofter ſtones, are ſo extremely abraded by them, that they add almoſt an equal quantity of their own ſubſtance to the preparation before it is perfected.

Another general caution neceſſary to be inculcated, is, that no

ſeparation of the matter ſhould be made while it is under the operation; but that all the parcels of powder obtained from any quantity, ſhould be mixed together before any part be uſed. When this is neglected, as frequently happens, and thoſe parts which firſt become fine, are ſeparated by the ſearce from the groſſes remainder, and uſed apart, the different parcels may vary much in their virtue and efficacy; and both from the medicine when properly prepared. Thus the reſinous parts of jalap, ipecacuanha, and others, being more friable than the fibrous parts, would be firſt extracted from them; and the doſe thereby rendered erroneous, when either of them are uſed. The ſame inconvenience, but attended with more hazardous conſequences, would happen in the caſe of *Mercurius dulcis*; in which the acid riſing unequally, during the ſublimation, renders ſome part of the ſublimed cake extremely cauſtic: and this being of a more ſaline nature than the other part, which contains a greater proportion of the mercury, is much more friable; and conſequently liable to be ſeparated in powdering, and to occaſion, thence, very malignant qualities in the quantity firſt obtained.

For light dry ſubſtances, reſins, and the roots of tenacious texture, the mortar may in ſome caſes be previouſly rubbed with a little ſweet oil: this prevents the finer powder of the firſt from flying off, and the others from cohering under the peſtle. Camphor is commodiouſly powdered by rubbing it with a little rectified ſpirit of wine.

SECT. VII.

Of Expreſſion.

EXPRESSION is, the extracting fluids from ſolid bodies by violent compreſſure.

The preſs is chiefly made uſe of for forcing out the juices of ſucculent herbs and fruits; and the inſipid oils of the unctuous ſeeds and kernels. The harder fruits, as quinces, ſhould be previouſly beat or ground: but herbs are to be only moderately bruiſed: the ſubject is incloſed in a canvas bag, and preſſed in the common ſcrew preſs. Juicy fruits in general yield their virtues in tolerable perfection to this proceſs; but aromatics ſeldom afford any of their peculiar taſte and ſmell; and the fragrance of tender flowers is abſolutely deſtroyed by it.

Where oils are not deſigned for internal uſe, nor any extraordinary elegance in their flavour or ſcent required, the operation may be much facilitated, by heating moderately the iron plates of the preſs, betwixt which the matter is compreſſed: and in the caſe of linſeed, rape, &c. thoſe who make large quantities, uſually warm the materials from which the oil is to be expreſſed: but when oils are to be uſed internally, or where any particular ſcent or flavour of the ſimple is to be retained, all uſe of heat is to be avoided.

SECT.

SECT. VIII.

Of Exſiccation.

EXSICCATION is the reducing bodies to a required ſtate of dryneſs, by ſeparating from them all ſuperfluous humidity.

EXSICCATION is generally performed by means of heat; by COCTION, INSOLATION, and TORRIFICATION. The firſt evidently relates only to fluids: the ſecond to fluids and ſolids promiſcuouſly, the laſt to ſolids only. In regard to COCTION or BOILING, directions are needleſs; unleſs to take care that, at the cloſe of the operation, the fire be duly ſuppreſſed; otherwiſe, the matter being left dry, will be heated beyond the juſt degree; and either conſumed, or damaged. This precaution is particularly neceſſary in the caſe of vegetable extracts; where the leaſt over-heat is apt to make them burn and acquire an empyreumatic ſcent and flavour.

INSOLATION, or perhaps more properly EXHALATION, is effected by expoſing the body to the heat of the ſun, till it be ſufficiently dry. There is nothing particularly neceſſary to be obſerved in the manner, except to increaſe the ſurface of the matter as much as poſſible; for in proportion to that will the exſiccation be completed in a greater or leſſer time.

TORRIFICATION (or, as it is ſometimes called in the caſe of rhubarb, TOASTING) is, the expoſing ſolid bodies to the heat of a fire, at ſuch a due diſtance as will not endanger their being burnt; in order to make them of ſufficient dryneſs to admit of their being powdered. When roots or woods are thus treated, it is proper firſt to cut them into ſlices.

DECANTATION and FILTERING are uſed ſubſerviently to exſiccation, where large quantities of fluid are to be ſeparated from the ſolid matter; this is practiſed in the caſe of precipitations. There is one kind of filtering appropriated to exſiccation; which may be called filtering by attraction; and is thus executed: a twiſt of cotton thread being made wet, one end of it is put into the veſſel containing the matter to be filtered, and the other ſuffered to hang over the veſſel below the bottom. The thread thus managed will act as a ſyphon, and draw off the fluid, which will drop from its end till the greateſt part be exhauſted. This method is uſed in the preparation of *Elaterium*; and where the quantity of matter is ſmall, may be found convenient in many others.

The uſe of the CHALK-STONE is another method of exſiccation, but confined chiefly to the drying of powders after their levigation. It is done by laying the powder, in troches, or large drops, on the ſtone, and ſuffering them to remain there till they are of ſufficient dryneſs. As the limitation in the ſize of which chalk-ſtones can be procured, is frequently the cauſe of delay where larger quantities of matter are to be dried; this inconvenience may be remedied by the following expedient. Take a wooden box, of about three inches depth, and ſufficiently large, in reſpect of length and breadth, to afford room for all the

matter, when laid on it in drops; fill it with chalk well dried, and pounded, and cover it with any thin paper of a ſpongy texture; on this paper lay the drops, and they will be dried as quickly as if chalk-ſtones had been uſed.

SECT. IX.

Of Depuration.

DEPURATION is the ſeparating or freeing any fluid from all heterogeneous matter or feculencies, and thereby rendering every part of it of a ſimilar conſiſtence and appearance.

This operation is of three kinds; the firſt and moſt ſimple is DECANTATION. It is performed, by ſuffering the fluid to ſtand at reſt, till every thing that will ſubſide is collected at the bottom, and then pouring off from the ſediment, by a gradual inclination of the veſſel, all that part of the fluid which appears clear. This is the general method, where ſmaller quantities are in queſtion; but in the caſe of larger, the greater part may with care be taken off by a proper bowl or diſh, and the reſt put into a leſſer veſſel, and ſeparated by inclination.

When fluids are to be freed from oils, or ſuch matter as floats, an inſtrument called *tritorium*, or ſeparating funnel, is uſed. Theſe may be made of any form, by which the heavier fluid can be drawn off from below, and the oil, or other lighter matter left in the veſſel.

When oils, whoſe viſcid conſiſtence is apt to detain impurities, and prevent their ſubſiding, are to be depurated, it is proper, previouſly to decantation, to let them ſtand ſome time within a moderate digeſting heat; by which means, being much more liquified, they will frequently let fall a ſediment not otherwiſe ſeparable.

The ſecond method of depuration is, by deſpumation. It is performed by adding whites of eggs, firſt well beat together, to the fluid to be clarified, and after a perfect commixture, making them coagulate by means of heat; and thereby carried to the ſurface all the heterogeneous matter which is entangled by them in their coaleſcence. The impurities, together with the concreted whites of eggs, appearing as a ſcum on the ſurface of the fluid, is to be taken off by a ſpoon, or other convenient inſtrument.—This method is likewiſe called clarification.

The third manner of depuration is called filtration, or percolation, and is performed by paſſing, without preſſure, the fluid to be purified, through ſtrainers of flannel, linen cloth, or paper; which retaining the groſſer parts or feculencies, ſuffer only the clearer fluid to be tranſmitted,

When flannel is uſed, it is moſt generally made into a bag in the form of a cone, and then called Hippocrates's ſleeve; the baſis whereof being turned upwards, and expanded by means of three or four poſts, from which it is made to hang, it is then filled with the fluid, which drops from the apex, or ſmall end, into a veſſel placed under it. This is moſtly uſed in the caſe of decoctions, extracts,

and

and all gelatinous and ſaponaceous preparations, where extreme clearneſs is not neceſſary; where deſpumation has been previouſly uſed; or, where the conſiſtence of the matter renders it unfit to paſs through paper. As the tenacious conſiſtence of many of theſe preparations renders their tranſmiſſion even through flannel difficult, it is proper, in ſuch caſes, to filter them while of a boiling heat.

In ſolutions of ſalts, ſpirits, and other limpid fluids, where great tranſparency is expected, paper, or decantation ſubſequent to the filtering through flannel, are alone capable of perfectly anſwering the end.

The manner of filtering through paper, is moſt generally, to put it into a tin or glaſs funnel, to whoſe form it is adapted in the manner of a lining; which, where ſmall quantities are to be filtered, will well enough ſerve the purpoſe: but where greater quantities are in queſtion, this method is attended with great inconveniences and delay. The reaſon is this: if large funnels be employed, the great column of fluid bearing on the middle of the paper, which is unſupported, and being forced by the incumbent weight to adapt itſelf to the form of the funnel is much creaſed and bent, ſeldom fails to burſt it, before any conſiderable quantity has paſſed through. This may entirely be remedied, by ſubſtituting, in the place of the funnel, an earthen cullendar; which every where ſupporting the paper, ſecures it from the violence of the incumbent preſſure, without in the leaſt impeding the paſſage of the fluid: and by this means very large quantities may with great eaſe and expedition be diſpatched.

The filtering through paper, where the operation ſucceeds, never fails completely to anſwer the purpoſe; but there are many fluids, whoſe conſiſtence renders it impracticable; ſuch are all viſcid fluids, and thoſe that are in a great degree ſaponaceous. For theſe, therefore, a flannel alone can be employed, and even that will in many caſes fail, if the matter be not previouſly made more liquid by a boiling heat.

It is very neceſſary to be careful in the choice of the kind of paper uſed for this purpoſe: there is none at preſent manufactured, whoſe texture and ſtrength are perfectly adapted to it; but amongſt the kinds which are to be procured, that commonly called bloom paper is much the beſt. The common ſorts are of ſo ſlight a ſubſtance, and have ſo little tenacity, except what is owing to gums, that, as ſoon as they are wet, and the gum is waſhed from them, they fall to pieces in ſuch manner, that neither the form of the cullendar, nor any other artifice, can make them good.

Linen cloth is alſo uſed for this purpoſe, though very ſeldom, as it purifies much leſs effectually than woollen, and has no advantage over it except in thoſe caſes where woollen is liable to be choaked, and become impervious to the fluid, as in the ſolution of gums, and gummy extracts: but it may with great advantage in ſome caſes, be added to paper, where the relaxing quality of what is filtered weakens the texture of the latter; as happens in volatile ſpirits, and all other ſaponaceous fluids. In this caſe the paper ſhould be put over it, and both together laid carefully into the cullendar: and, by this expedient, they will be

found to remedy each other's defects, and make a filter proof againſt all common accidents.

In the depuration of ſome fluids, two of theſe ſeveral methods are uſed conjointly; as filtering thro' flannel may be practiſed after deſpumation, and is indeed generally more expeditious and effectual than ſcumming. Filtering through paper or flannel is alſo proper to recover the fluid, which remains mixed with the ſediment after decantation: and decantation is ſometimes employed to make a perfect depuration of thoſe fluids, which the flannel fails to make perfectly clear, and whoſe viſcid conſiſtence forbids their being filtered through paper.

It is proper to obſerve that the common filtering paper is apt to communicate a diſagreeable flavour, and to ſome things its colour. Hence in filtering liquors whoſe paleneſs and colour is of conſequence, the part which paſſes through firſt ought to be ſet aſide for inferior purpoſes.

SECT. X.

Of Digeſtion.

DIGESTION is the ſubjecting bodies, included in proper veſſels, to the action of a gentle and continued heat.

The application of this operation, in regard to its end, is very various. In ſome caſes it is uſed with a view to the producing a change in ſome one ſingle body, as in the inſtance of the preparation called *Mercurius Precip. per ſe*; in others, to promote ſolutions or other combinations; but moſt frequently, for extraction, or ſeparation by means of fluids, of the required parts of ſome ſolid bodies, whoſe texture impeding the quicker acceſs and effect of menſtrua, renders a long infuſion, and the relaxation of a gentle heat neceſſary, in order to their being penetrated; or for accelerating the ſolution of bodies by menſtrua, whoſe action when cold is not ſufficiently vigorous.

The veſſels generally uſed to contain the matter to be digeſted are MATRASSES or BOLT-HEADS, and ſometimes GLASS BODIES; but where the heat is ſo gentle, as to make no evaporation, the ſtructure is indifferent. In caſes where an evaporation does happen, and the exhaling fluid is of any value, the veſſels are to be conſtructed ſo as to confine the vapour and return it back whence it aroſe, in a condenſed ſtate. This is called CIRCULATION, and is commonly executed by inverting the neck of a ſmaller matraſs, into that of a larger, in which caſe the conjoined glaſſes are called a PELICAN.

There are ſeveral other kinds of pelicans of a more complex ſtructure; but the flaſk uſed for Florence wine, diveſted of the ſtraw work, and inverted into a matraſs with a very long neck, will very conveniently anſwer all the purpoſes.

This operation is moſt generally performed in a ſand-heat; and no greater adjuſtment of the degree of heat is neceſſary, for the purpoſes of Pharmacy, than can be there effected.

The degree of heat requiſite in digeſtion, differs according to the kind

kind of the ſubject: in tinctures made with ſtrong ſpirit of wine or volatile ſalts, and in ſolutions where a great efferveſcence is apt to ariſe, a very gentle one ſhould never be exceeded; in aqueous ſolutions, and moſt other caſes, a greater may be allowed. But it muſt always be underſtood to be leſs than will make the matter boil: otherwiſe the operation comes not within the proper meaning of the word digeſtion; which is diſtinguiſhed from coction.

In circulatory digeſtions, it is proper to lute the veſſels, to prevent the eſcape of the vapours through the junctures. But in many caſes this precaution is extremely neceſſary; that a ſmall aperture or vent be left: otherwiſe, an incondenſible vapour which ariſes, will, if it cannot force the lute, burſt the glaſſes. This precaution is neceſſary in all commixtures of acid ſpirits with earths, metals, or alkaline ſalts; or of ſalts with any ſubſtances that can be acted on by them: but in ſolutions of ſalts in water, and in extracts of gums or reſins, made with volatile ſalts, wine, or ſpirits of wine, it may be ſafely omitted. The college of London have in their Diſpenſatory, as well according to the laſt reviſion as the former, uſed the word digeſtion in a ſenſe different from that of the above definition: meaning by it, only the ſuffering the ingredients of certain mixtures to be continued together, without employing the uſe of heat; which they expreſly order on each occaſion to be applied or omitted, by ſaying digeſt with heat, or, digeſt without heat. By this leſs technical uſe of the word, they confounded the ſenſe of it with that of the word infuſe, and have deprived us of the eſtabliſhed name of a diſtinct operation, viz. the acting on bodies by a heat leſs than that of coction. But as the term, in the ſenſe I have given to it, is uſeful, has the ſanction of a more general acceptation, and is according to the original application of it, (having been introduced firſt by the alchemiſts, to expreſs ſuch an operation on mineral ſubſtances, as they ſuppoſed analogous to that of the human body on its aliment, in which they ſuppoſed a gentle heat the principal medium, and ſince extended to ſignify, in the language of chemiſtry, the ſame treatment of any other ſubſtance;) I have choſe rather to retain it in this meaning, than to give it up.

SECT. XI.

Of Solution.

SOLUTION is an intimate commixture of ſolid bodies with fluids into one equable ſimilar liquor.

The ends of ſolution are ſometimes only the procuring a fluid form of the matter diſſolved, without any farther change either in that or the ſolvent; as in the ſolutions of ſalt, gums, reſins, &c. where the menſtruum is to be conſidered only as a vehicle: at others, the producing new combinations of ſuch bodies, as when thus compounded, either acquire properties which they had not while ſeparate, or loſe ſuch as they then poſſeſſed; as in the inſtances of fixed

alkaline or volatile ſalts diſſolved in vinegar, to form the *Sal Diureticus*; or Mindererus's ſpirit, where the acid or alkaline qualities of the ingredients are loſt, and a neutral ſalt with peculiar qualities is produced. Solution is alſo indiſpenſably requiſite, in order to the cryſtallization of ſalts.

As the nature of ſolvents or menſtrua, as well as the bodies required to be diſſolved, are extremely various, the manner of effecting ſolutions is conſequently different. In many caſes, ſimple commixture, by frequently ſhaking the veſſel if ſmall, or ſtirring the contents if larger, is found ſufficient: in others, the aid either of a digeſtive, or boiling, heat is abſolutely neceſſary.---Sea-ſalt;---nitre;---all the vitriolic ſalts;---*ſal ammoniacum*;---alum;---ſoluble tartar;---ſugar;---vitriolate tartar;---crude tartar; where a ſtrong ſolution is not required;---fixed alkaline and volatile ſalts;---all the gums ſoluble in water;---camphor;---*ſal diureticus*;---in ſpirit of wine; and metals in their proper menſtrua, may be diſſolved cold, though not with equal expedition, as when heat is employed.

Calces of metals and mercury in acid ſpirits;---mercury ſublimate in water;---and ſeveral of the hardeſt gum reſins, are beſt diſſolved by digeſtion.

Alum---Glauber's ſalts---vitriolate tartar---where the ſolution is not intended to be very weak; borax, and all other ſalts, where a ſtrong ſolution is demanded; and iſing-glaſs---require to be boiled.

Solution is much facilitated by the powdering ſuch tenacious bodies as are friable; or ſlicing, or raſping into ſmall parts, ſuch whoſe texture admit not of being powdered: and this is in ſome caſes of ſuch importance, that the operation is extremely tedious if it be neglected.

In ſolutions of metals, earths, or ſalts in acid ſpirits, care ſhould be taken that they be not mixed too haſtily: otherwiſe the ebullition will occaſion the mixtures to overflow the veſſels; or in ſome inſtances, an unmanageable heat, and noxious fumes will enſue.

The form of the veſſels is not material in this operation; but the ſubſtance of the containing veſſel is to be regarded; leſt, from the action of the menſtruum, it may either be damaged, or the medicine depraved.

Beſides the ſolution made by the adding fluids to bodies to be diſſolved, there is another kind called deliquation or ſolution *per deliquium*. It is performed by expoſing the matter to the air, from which attracting water, it collects in time a ſufficient quantity to diſſolve itſelf. Cellars, or other damp places, are the moſt proper for this purpoſe. Butter of Antimony, which is not ſoluble in water applied in its groſſer form, is eaſily liquified by this ſlow action of the moiſture in the air.

Table of the Quantities of Water which different Salts require for their Diſſolution.

Eight Ounces by Weight of diſtilled Water diſſolved

	oz.	dr.	gr.
Of refined ſugar —	24	0	0
Green vitriol — —	9	4	0
Blue vitriol — —	9	0	0
White vitriol — —	4	4	0
Epſom ſalt — —	4	0	0
Purified nitre — —	4	0	0
Soluble tartar — —	4	0	0
Common ſalt — —	3	4	0
Sal gemmæ — —	3	4	0

Of

	oz.	dr.	gr.
Of Sal catharticus Glauberi	3	4	0
Seignettes — —	3	0	0
Alum — —	2	4	0
Sal Ammoniac —	2	4	0
Vitriolated tartar —	1	4	0
Salt of hartſhorn —	1	4	0
Sugar of lead — —	1	2	0
Cream of tartar —	1	0	0
Borax — —	0	4	20
Fixt alkaline ſalt, above	8	0	0
Sal diureticus —	8	0	0
Sugar candy both brown and white	9	0	0
Sugar of milk —	0	2	40
Eſſential ſalt of ſorrel	0	1	20

Though care may have been taken in the above experiments, the ſame iſſue is not always to be expected, much difference ariſing from the temperature of the atmoſphere, the purity, dryneſs, and perfection of the ſalts: the vitriols and artificial compound ſalts differ remarkably in this reſpect, as they are more or leſs impregnated with the acid ingredient. In hot weather, the water will take up near two thirds more of nitre, than it will in very cold: but it is obſervable, that common ſalt is leſs affected in its ſolubility, by a variation of heat, than any other.

When water is ſaturated with one kind of ſalt, it will ſtill diſſolve ſome portion of another, and in ſome inſtances hath taken up a third, after refuſing any farther addition from the two former, and that without any conſequent precipitation.

Water 32 parts by Weight, fully ſaturated with	Diſſolved afterwards			
Nitre - - - -	Sal ammoniac	10		
Common ſalt - -	Nitre - -	10	Sal ammoniac	2
Nitre - - - -	Fixt alkali -	7	Common ſalt	2
Common ſalt - -	Nitre near -	2	Fixt alkali -	2½
Volatile alkali - -	Nitre - -	4	Sugar - -	2
Sal ammoniac - -	Common ſalt	2½		
Soluble tartar - -	Nitre - - -	2		
Vitriolated tartar -	Fixt alkali -	2		
Glauber's ſalt - -	Nitre - -	1	Sugar - -	1
Epſom ſalt - - -	Sugar - -	6		
Borax - - - -	Fixt alkali -	2		

Solutions made in water, and in ſpirit of wine, poſſeſs the virtues of the body diſſolved; hence, are the proper menſtrua of the native virtues of vegetable and animal matters.

SECT. XII.

Of Fuſion.

FUSION is the reduction of metals, ſalts, &c. into a ſtate of fluidity by fire.

This operation is ſo extremely ſimple, and ſo commonly practiſed, that is appears needleſs to give directions in regard to it, unleſs ſuch as relate to particular proceſſes, which will of courſe be there found.

SECT. XIII.

Of Corroſion.

CORROSION is the acting on bodies, by means of proper menſtrua, ſo as to produce new combinations, and a change of their form, without converting them to fluidity.

This operation depends on the ſame principles as ſolution, and only differs from it in reſpect to the form the new combinations aſſume.

The ſubject of this operation, as it is uſed in Pharmacy, is principally metals: and the manner in which it is generally performed, is of two kinds. The firſt, and moſt ſimple, is when the body to be corroded, is put into a fluid menſtruum, and either taken out inſtantly, and ſet in a moiſt place, as in the method commonly practiſed in the making ceruſs; or continued therein, till the whole of the matter be corroded; as in the preparation of turbeth mineral from oil of vitriol and mercury. This may be properly called CORROSION by IMMERSION. The other, called in docimaſtic Chemiſtry CEMENTATION, is performed by expoſing the body to be corroded to the action of vapour or ſteam, expelled by heat, from what is uſed as the menſtruum; as in the proceſs given by the Edinburgh Diſpenſatory for making ceruſs.

There are nevertheleſs other methods by which corroſions are in ſome inſtances made; as in the *rubigo chalybis* of the London diſpenſatory, where ſprinkling or rubbing the body over with the menſtruum is ordered in the place of dipping which the form of ſteel-filings made inconvenient; and ſome others which from the particular texture of the matter become neceſſary. Thus, in the corroſion of mercury by ſulphur, in the preparation of Æthiop's mineral, trituration, or ſometimes fuſion, is employed; and in the *chalybs cum ſulphur. præparat.* the heated ſteel is only touched with the ſulphur.

SECT. XIV.

Of Extraction.

EXTRACTION is the ſeparating by means of ſolution ſome parts of a ſubſtance from others; and if the humidity is evaporated the remainder is called an extract.---Thus if plants containing a reſin are digeſted in ſpirit of wine, a reſinous extraction is produced, and if the ſpirit is evaporated, a reſinous extract remains.

Some ſubſtances yield their virtues totally to water, as ſaffron; others to ſpirits of wine; and ſome partly to one and partly to the other—*vide menſtrua.* Heat greatly expedites extraction; but proves injurious to ſome ſubſtances by occaſioning the menſtruum to take up their groſſer and more ungrateful parts. The Peruvian bark requires a boiling heat; but even a ſmall degree of heat is greatly prejudicial to the fine bitter of *carduus benedictus:* this plant infuſed in boiling, or lukewarm water gives out a nauceous taſte capable of exciting vomiting, but yields to cold water a grateful balſamic bitter.

As heat promotes the diſſolving power of liquids; ſo cold diminiſhes

it,

it. Hence tinctures, extractions made by a conſiderable heat, depoſite in cold weather part of their contents, and thus become proportionably weaker, a circumſtance that deſerves to be attended to.

Extracts are rarely to be depended on as medicines; their ſtrength is uncertain, being frequently injured by the heat uſed in preparing them. Though placed over a heat not exceeding that of boiling water, as the evaporation proceeds, the conſiſtence of the evaporating fluid increaſes, and thus it retains more and more heat, of which the operator not being aware, or the ſubject not well admitting it, is conſiderably injured in its qualities, yea often ſuffers a degree of burning.

SECT. XV.

Of Precipitation.

PRECIPITATION is the reſeparating ſolid bodies from any fluid menſtruum wherein they are diſſolved, by the addition of a third body, which, counter-acting the power of the menſtruum, cauſes that which was diſſolved to regain its ſolid form, and ſubſide in the ſtate of a powder.

This is to be performed by a mixture of the precipitant with the ſolution ſo to be precipitated, only with this caution, in reſpect of bodies which produce much ebullition on their mixture, that the precipitant ſhould be added gradually, leſt they overflow the veſſel.

After the precipitated ſediment is perfectly formed, it muſt be recovered from the fluid by a proper method of exſiccation; to which, in the caſe of ſaline bodies, edulcoration is likewiſe previouſly neceſſary. This is beſt performed by filtering off the fluid, and laying out the wet powder, when of a conſiſtence, in drops or pieces, as was before directed in the preparation of powders by levigation.

SECT. XVI.

Of Diſtillation.

DISTILLATION is the condenſing, and collecting in a fluid form, by a proper apparatus, the ſteam or vapour of bodies previouſly rarified by the application of heat.

The principle on which this operation is formed is too obvious to demand any illuſtration: ſince the evaporation of fluids by heat, and their reduction to their former ſtate as they grow cold again, are facts which fall within the notice of every one.

There are two kinds of diſtillation; by one the more ſubtile and volatile parts of liquors are ſeparated from the groſſer; by the other, liquids incorporated with ſolid bodies are forced out from them by vehemence of fire.

Diſtillation is performed by ſeveral kinds of apparatus, for all which the general name is, an ALEMBIC; to form each kind whereof, two, or more, veſſels are conjoined.

The veſſels required are of three kinds:

kinds: a proper body or reſervoir to contain the matter while the heat acts on it,---a refrigerant to condenſe the vapour as it riſes,---and a receiver to contain it when condenſed. Theſe three intentions are, in moſt kinds of alembics, executed by three diſtinct veſſels: but in the inſtance of the retort and receiver, the whole is effected by two; the neck of the retort, and the increaſed magnitude of the receiver, performing the office of a condenſer.

The alembics moſt generally in uſe are the WORM-STILL and RETORTS. The firſt is of modern invention, and may be eſteemed as one of the moſt conſiderable improvements of the chemical art; ſince it has furniſhed a method of executing, in ſeveral caſes, one of the moſt uſeful operations with the greateſt convenience and expedition, and with an extent in regard to quantity that has no limitation: whereas, the kind of ſtills uſed before for the ſame purpoſes, from the defect of a greater ſurface, were liable to have the condenſers heat beyond the condenſing point; and thence to be blown off, with great loſs of the matter, and danger to the operator.

The other general method is by the uſe of RETORTS and RECEIVERS: which will very commodiouſly perform all kinds of diſtillations, where the limitation of quantity and time are not of importance; but in ſuch caſes, they muſt give place to the worm-ſtill, in regard to thoſe ſubſtances which admit of its uſe; the defects of the other being entirely remedied in this. In all thoſe inſtances however, where the corroſive power of the matter permits the uſe of the glaſs only, retorts are preferable to every other kind of alembic hitherto invented. In the diſtillation of different ſubſtances, and for different ends, the form of the retorts ought to vary. For the diſtillation of acid ſpirits, whoſe fumes can be ſuſpended only in a great degree of heat, they ſhould be made with a large bulb and low long neck, and placed deep either in the fire or the ſand, that the vapour may paſs into the depending part of the neck, and not circulate in the body of the retort. But when retorts are employed for the rectification of volatile ſpirits, vinous ſpirits, or ethereal oil, as thoſe of turpentine or amber; the contrary is then proper; that the body being tall, and riſing far out of the ſand, may condenſe the vapour of the groſſer and heavier matter, and ſuffer the more volatile to paſs pure into the neck.

The greateſt part of the diſtillations in retorts may be made in a ſand heat, which indeed is moſt ſuitable to them: but where a very intenſe degree of heat is required, the retort, being firſt coated with a proper lute, muſt be ſet in the naked fire; but they are much leſs manageable in this way than when placed in ſand. They are to be fixed however by means of a rim formed of a lute, and projecting from it in ſuch manner, that the retort may hang thereby when it is put into the furnace. But great care muſt be taken, that the lute be thoroughly dry, and the texture of the rim of a ſufficient tenacity, before the firing the retort be attempted; for otherwiſe an unavoidable deſtruction of it will follow. But unleſs in experiments, for which coated retorts may well enough ſerve the purpoſe, the methods mentioned below,

low, of iron pots of earthen long necks are to be preferred.

For the diſtillation of animal ſubſtances,---acid ſpirits from ſalts, ---and ſuch bodies as require a great degree of heat, when larger quantities are demanded, a deep iron pot, with a head of caſt-iron or earthen ware, is employed: to which is ſometimes fitted, for the increaſe of condenſing ſurface, a large earthen jar, with a receiver fixed to it But where only ſmaller quantities are deſired, a coated retort, placed in the fire, with a large receiver adapted to it, may ſerve the ſame end.

Earthen pots, called long-necks, are likewiſe uſed for the diſtillation of oil of vitriol,---*aqua fortis*,--- and other bodies which acquire a very great heat; but they are now much diſuſed in Pharmacy; oil of vitriol being made by perſons who carry on large works; and *aqua fortis*, by thoſe who want it for the purpoſes of medicine, by Glauber's method, which admits of the uſe of the retorts in ſand. Long-necks are placed naked in the fire, and the necks being put through a hole in the ſide of the furnace, a receiver is there fixed to them.

Theſe are the general methods by which diſtillation is performed; though for particular proceſſes others have been contrived: as the bell for the diſtillation of oil of ſulphur; and the refiner's alembic for quickſilver; but as they relate only to thoſe ſingle proceſſes, I ſhall ſpeak of them as they occur. Diſtillation in *balneo Mariæ* is performed by putting a ſmall metalline ſtill into another veſſel, properly formed to boil water, with which its vacuity left by the ſtill is filled.

The ſubſtances proper to be diſtilled by the worm-ſtill are vinous ſpirits,---ſimple waters,---oil of turpentine,---and other ethereal or eſſential oils, when made with water.

The ſubſtances proper to be diſtilled in retorts are, acid ſpirits, when made by Glauber's methods, ---*ſpiritus nitri dulc.*---volatile ſpirits,---and ſeveral others of particular kinds, as wax: amber, and antimony, when diſtilled with mercury ſublimate for the butter; mercury *per ſe* is ordered alſo by the college of London to be diſtilled in retorts, but without a particular management it is impracticable, and in all caſes troubleſome, and leſs eligible than the method uſed by the refiners, which I ſhall ſhew when I ſpeak of that proceſs.

Animal ſubſtances, when in quantities, require to be diſtilled in an iron pot; and *aqua fortis*, when made from crude vitriol, either in the ſame or long-necks; only the *aqua fortis* being leſs volatile, and requiring more heat, the veſſel uſed for the diſtillation of it muſt be ſet deeper in the fire than thoſe uſed in animal ſubſtances.

Diſtillation *in balneo Mariæ* being neceſſarily confined to thoſe ſubſtances, which ſhall riſe with a leſs degree of heat than will make water boil, is therefore only proper for ethereal or eſſential oils; volatile ſpirits; and vinous ſpirits. The new London Diſpenſatory orders this method to be uſed for the ſpirits of lavender and roſemary; and the Edinburgh Diſpenſatory directs it for the ſpirit of ſcurvygraſs;---the compound ſpirit of lavender;---and the ſaline aromatic ſpirit. But a gentle ſand-heat, if the fire be timely ſuppreſſed, when the proper quantity of the matter

is come over, is as effectual and more commodious.

The firſt ſubject of caution in regard to diſtillation is, to take care to leave ſufficient room in the containing veſſel, or body, for the expanſion and ebullition of the matter to be diſtilled: otherwiſe it is very apt to overflow into the neck, and break the veſſels, if of glaſs; ---hazard the firing the building in the caſe of vinous ſpirits,---and fuſtrate the operation in all. This is to be particularly guarded againſt in the diſtillation of *aqua fortis*, and the ſpirit of ſalt by Glauber's method; and of amber; as alſo in the rectification of the ſpirit of hartſhorn; all which, eſpecially in the beginning of the operation, are extremely ſubject to make a very great ebullition, and to froth up into the neck of the retort. In theſe caſes therefore, at leaſt one third of the retort ſhould be left unfilled; and even then, without a very careful management of the fire, rhey are not exempt from danger.

Another requiſite caution, is that the condenſing ſurface be ſufficiently large, and the heat accommodated to it; for if an error of this kind occur in the caſe of the worm-ſtill, the head will be blown off, and the vapour diſſipated with conſiderable loſs; and if in that of vinous ſpirits, to the great danger of thoſe who may happen to be in the place.

It is neceſſary likewiſe, in diſtillation as well as digeſtion, to avoid luting the veſſels too cloſely with any tenacious ſubſtance; for if a ſufficient vent be not left, the veſſels will be in extreme danger of burſting.

In order to complete the end of ſome diſtillations, another operation becomes neceſſary in many caſes; the ſeparating of the oil from the ſpirit. This is performed by one of the two kinds of ſeparating glaſſes before deſcribed. See inſtruments. The manner of uſing the one of which is to ſtop the lower ſtem of the *tritorium*, and fill the bulb through the hole at the top, by means of a common funnel, then covering this hole at the top with the thumb, and opening that at the end, the fluid, by giving a gradual admiſſion to the air at the upper hole, by raiſing a little the thumb which covers it, may be emitted by degrees, till only the lighter, which is required to be ſeparated, remains. The manner of uſing the other is only to fill the glaſs with the fluids to be ſeparated, and pour off the heavier through the ſpout: this is much the eaſier and more commodious method, where large quantities are to be ſeparated.

SECT. XVII.

Of Sublimation.

SUBLIMATION is, the condenſing, and collecting in a ſolid form, the fumes of bodies raiſed from them, by the application of a proper heat.

SUBLIMATION is in all reſpects the ſame with diſtillation; except that in the firſt, the produce is ſolid, in the latter fluid. The only variation thereof, neceſſary in the operation,

operation, is, the accommodating the recipient part of the apparatus to this difference, which admits, in moſt caſes, that one veſſel may perform the office both of condenſer and receiver; as the matter cannot, like fluids, flow to another part, but muſt remain where it firſt ſettles; except in ſome inſtances, where the matter is extremely volatile, or, where a fluid riſing with it, renders a depending receiver requiſite.

The veſſels proper, in reſpect of the different ſubjects of this operation, vary in their ſtructure and the ſubſtance of which they are made, as well on account of the degree of heat requiſite to be employed, as the nature of the matter to be ſublimed; ſince corroſions of them are here and indeed in all other caſes, to be carefully avoided. In ſublimations of mercury, whether combined with acids or ſulphur, of *ſal ammoniacum*, and of ſulphur alone, a ſingle veſſel may anſwer all the purpoſes; as the neceſſity of a great heat, to keep them in the condition of fumes, renders the upper part of the glaſs capable of detaining them, when they are raiſed thereto: but it is proper, in theſe inſtances, that a glaſs in ſand, or earthen-ware, ſhould be uſed. A glaſs body, in a ſtrong ſand heat, may very well ſerve for all theſe: but ſublimate of mercury is frequently ſublimed in a bolt-head, or matraſs; and the factitious cinnabar, by thoſe who make large quantities, in an earthen veſſel made in the ſhape of an egg. In the ſublimation of volatile ſalts, ſalt of amber, and flowers of benjamin, a container and condenſer are ſeparately neceſſary, and they may, in all theſe caſes, be extremely well ſupplied by a retort and receiver; though bodies, with alembic heads, and receivers of glaſs fitted to them, have been generally recommended in ſeveral of them: but the trouble of luting two junctures, the difficulty of fitting them to each other, with ſeveral other reaſons, make retorts far more convenient. A retort and receiver are likewiſe proper in the caſe of cinnabar of antimony; for though the cinnabar might be eaſily retained in one glaſs, the butter of antimony makes a receiver neceſſary.

In ſublimations of factitious cinnabar, mercury ſublimate, and *ſal ammoniacum*, &c. it is ſufficient to cover the aperture, or neck of the veſſels with a piece of tile, and in the ſublimation of cinnabar of antimony, and flowers of benjamin, in retorts, it is unneceſſary to lute on the receiver; but in the ſublimation of volatile ſalts, it is requiſite to lute the veſſels as ſecurely as poſſible, leaving only a ſmall vent, till they attain the greateſt heat they are to ſuffer during the operation.

The requiſite degree of heat in ſublimation, varies almoſt in every different ſubject of the operation. The limits are from the greateſt degree that can be given in ſand, to a degree ſomething leſs than that which will make water boil. If the matter ſublimed concretes into a maſs it is called ſublimate, if into a powdery form, flowers.

SECT.

SECT. XVIII.

Of Cryſtallization.

CRYSTALLIZATION is, the reducing ſalts to their proper ſpecific or CRYSTALLINE form, ſo called from its reſemblance to cryſtals.

In order to underſtand this definition, it is neceſſary previouſly to know, that it is a property of all kinds of ſalts, when they are diſſolved in ſuch a quantity of water as is not ſufficient to keep them in that ſtate, and prevent their coaleſcence, to form themſelves, into ſimilar figures of a peculiar kind, each according to its ſpecies; and theſe, in ſeveral inſtances, having the exact reſemblance of cryſtals, gave occaſion to their borrowing that name.

As the nature of ſaturation, and the variation of the diſſolvent power of hot and cold water, which are principles on which this operation depends, have been before explained, under the heads of *Solution* and *Menſtrua*, it is needleſs to repeat the ſame here, or to be more explicit than to ſay, that it is effected by the difference of the quantities of the ſalts which hot and cold water will diſſolve.

The intentional end of cryſtallization is, to render the ſalts pure and diſtinguiſhable, as well by freeing them from feculencies, and giving them their proper form, as by ſeparating each kind from every other with which they may happen to be mixed. This it effectuates completely, if well executed; and it is attended with this particular advantage, that in this ſtate the ſpecies of any ſalt may certainly be diſtinguiſhed, in general, by the appearance only.

The manner of performing it is, to make a ſaturate ſolution of the ſalts in boiling water, either by adding the ſalts, if dry, to the water; or, by evaporating the redundant water, if they were before diſſolved: this is known by a pellicle on the ſurface of the liquor; and then putting the ſolution into a proper veſſel, and ſuffering it to ſtand at reſt in a cool place till the cryſtals are formed. This generally requires ſome days; but it is perfected in a longer or ſhorter time, according to the degree of heat or cold of the weather. It is always beſt not to be too haſty in taking out the cryſtals; for there will be ſome continuance of their increaſe for a conſiderable length of time, and the quantity thereof obtained by each operation proportionably greater. When the full quantity of cryſtals is formed, the remaining ſolution (called in this caſe the *mothers)* is to be poured off, and what the cryſtals retain muſt be drained from them; which may be beſt done by putting them into an earthen cullendar, on a ſheet of filtering paper. After they are thus freed from all the fluid which will drain from them, they muſt be ſpread on a clean board or table to dry: but great care muſt be taken, that no duſt or ſulphureous ſteam be ſuffered to approach them, for the ſlighteſt circumſtance of that kind will deprave their colour; on which, though

not their efficacy, their commercial value greatly depends.

In refining ſalt-petre, which is done by cryſtallization, where the quantity is great, large iron, or copper plates, placed obliquely over a gentle fire, are made uſe of, to dry the ſalts with more expedition: but as the quantities demanded for the purpoſes of Pharmacy, may with little trouble be diſpatched by the common method, it is unneceſſary here to enter into a deſcription of them.

The cryſtals being taken away, the mothers, or remainder, may be again evaporated, or dry ſalts may be added to them whilſt boiling, till a ſaturation of the hot ſolution is again produced: and on their being treated as before, a ſecond quantity of cryſtals will be obtained. By the ſame method repeated, nearly the whole quantity of ſalts may be converted into cryſtal: and the ſmall remainder may be either kept to be added to ſome future quantity, or the ſalts recovered in a dry ſtate by evaporation.

All the alkaline ſalts are excluded from this operation; fixt alkalies never aſſuming a cryſtalline form, and the volatile ones eſcaping before the water evaporates. Some of the neutral kind, with certain metallic bodies for their baſis, are ſo ſtrongly retained by the aqueous fluid, as not to cryſtallize, unleſs ſome other ſubſtance is added with which the water has a greater affinity. By the table of affinities it appears, that ſpirit of wine is ſuch a ſubſtance—if as much ſpirits of wine as equals a twentieth part of the liquor be added, or rather leſs, large and beautiful cryſtals, ſcarce to be had by any other means, will be obtained.

This is all which is neceſſary when the ſalts are pure: but if they are mixed with any heterogeneous matter, or feculencies, it is requiſite that, before the ſolution is ſet to ſhoot, filtration ſhould be uſed. See Depuration.

When it is neceſſary to filtre nitre, *ſal ammoniacum*, and ſuch other ſalts as water will diſſolve in a large proportion, it is proper that the quantity of ſalts ſhould be conſiderably leſs than the whole of what the boiling water could diſſolve. For if the ſolution be then ſaturate, the ſalts are apt, as it cools in the filter to ſhoot there, and choak it.

In cryſtallizing larger quantities of ſalts, ſticks are uſually put croſs the veſſels; on which the ſalts form, and their figure is thereby the more perfect.

There is no particular form neceſſary for the veſſels which are employed in cryſtallization. But it is very proper to have regard to the ſubſtance of which they are made; otherwiſe a corroſion of the veſſel, and conſequent depravation of the ſalts, or an unneceſſary waſte thereof, will frequently happen. For Glauber's ſalts, vitriolate tartar, ſea ſalt, nitre, and green vitriol, provided they contain no redundant acid, iron may be uſed for their ſolution; but the cryſtallization ſhould be made in glaſs receivers with wide necks, wood being liable to give a brown hue to the ſalts. But *ſal ammoniacum*, regenerate tartar, and the ſalts of metals, require to be diſſolved in glaſs. Copper veſſels ſhould be always rejected: but earthen ones may, in default of

others,

others, be uſed for both purpoſes; eſpecially where the coſt of the ſalt is inconſiderable: though a waſte always follows their uſe in conſequence of their imbibing the ſolution, and ſuffering an exhalation of it on their exterior ſurface.

SECT. XIX.

Of Fermentation.

FERMENTATION is the effecting that change in certain vegetable juices (of a ſaccharine nature) whereby vinous and acetous liquors are produced.

By fermentations, the following productions are obtained from vegetables, viz. *vinous liquors*, *inflammable ſpirit*, *tartar*, *and vinegar*, and an incoercible vapour, uſually called *fixable air*.

This operation, in reſpect of its great ends, the production of vinous ſpirits and vinegar, ceaſes now to be any longer a part of the practice of Pharmacy; as they may be procured from thoſe who prepare them for common purpoſes, with leſs expence and trouble, and are therefore, at preſent, conſidered in medicine as ſimples. The only place fermentation retains in the modern practice is, where it is uſed preparatorily to the diſtillation of ſimple waters; and it is even there omitted in the preſcriptions of the London Diſpenſatory. It is, however, in that caſe thus performed. The ſubſtances, being firſt bruiſed, are to be infuſed in water, to which a quantity of yeaſt, ſufficient to excite a ferment, ſhould be added, and continued there, till from the efferveſcence and froth it appears that the fermentation is begun; and then the whole ſhould be immediately committed to diſtillation. There are no other rules or cautions neceſſary in regard to this operation, but that the matter ſhould be ſo carefully obſerved as to be taken at the due time; and that the yeaſt contain nothing capable of imparting an improper flavour to the diſtilled water; which may otherwiſe very eaſily happen, when it is procured from the brewers.

SECT. XX.

Of Incorporation.

INCORPORATION (as the name of an operation) means the uniting oleous and terebinthinate ſubſtances with water, into one equal body, by the mediation of a third.

The principle on which this operation is performed is obviouſly the menſtrual powers before explained. The intention of it is to reduce thoſe bodies, which are of diſſimilar conſiſtence and averſe to combining, into one equal regular form. The matter which is employed mediately to produce this conjunction, is volatile or lixiviate ſalts, ſimply (in which caſe the union is not permanent) or actuated with the ſaline part of lime;—the yolks of eggs;—and ſometimes ſugar. The method of commixing them, when alcaline

alkaline ſalts are uſed, is to ſhake the whole well together: but when the yolk of an egg is employed, the balſam or oil ſhould be firſt united with it, by means of trituration, and then both added to the water, and the whole afterwards well ſhaken together: ſugar is only uſed for this purpoſe in the caſe of balſams and eſſential oils; with the firſt it is to be mixed by trituration, and then added to the intended fluid; the latter is to be dropt upon the ſugar, and then treated as the other.

SECT. XXI.

Of Calcination.

CALCINATION is the ſeparating by means of heat, or fire, the more fixed from the volatile parts of any compound body.

Calcination has, by ſome, been very improperly called chemical pulverization, as if the whole intention conſiſted in the reducing bodies to powder by means of heat. But this is an extreme great miſtake; for though the deſtruction, or diminution of the tenacity, is often the conſequence, and ſometimes, perhaps, the intentional end of calcination; yet it is in many caſes otherwiſe, ſince *lapis calaminaris*, and other bodies, after they have ſuffered what is every where called calcination, are yet very far from the condition of a powder: and if the making bodies fit, by means of fire, to undergo pulverization, alone conſtituted calcination; then that kind of exſiccation which is employed on rhubarb, and called torrifying, would of courſe come within the meaning of the term, contrary to the univerſal uſe of the word.

There are others that, not even making the aſſiſtance of fire neceſſary, call all the methods by which bodies are reduced to the ſtate of powders, calcination. But ſuch diffuſive extenſions of the ſenſe of terms, where they are made to comprehend a multiplicity of things not allied by any juſt analogy, are highly prejudicial; obſtructing thoſe clear and communicable notions which diſtinct and properly limited terms afford; and introducing that perplexity and confuſion which generally ſo much abounds in medical writers.

There are ſeveral ſpecies of calcination, which differ in regard to the effect with which the fire is ſuffered to operate on the calcined matter. As ſometimes, the whole of the volatile parts are expelled by the continuance or violence of the heat; while at others, by a gentler degree, or ſhorter duration, ſome of the moſt volatile only are raiſed; and others, which, by a greater degree or prolongation of it, would alſo follow, are retained. Thus, in the calcination of tin, all the ſulphureous, which is the only volatile part of it, is drove off; and an earthy calx, no longer changeable by any degree or duration of the heat is left behind. But in the calcination of *lapis calaminaris*, the crude ſulphur and arſenic alone are diſſipated; while the zink, which with a greater degree of fire would be all likewiſe drove off, is left with the earthy

part. Calcination may therefore be divided into perfect, or where the utmoſt change (except vitrifaction) which can be effected by heat, is brought about; and imperfect, where the degree of heat is limited, and only a part of the alteration it is capable of producing is ſuffered.

CALCINATION by COMBUSTION is where the body being kindled, ſupports, with the aſſiſtance of the air, the fire which calcines it: as in the inſtance of coals in a culinary fire.

Vegetables are the only ſubſtances calcined for the purpoſes of pharmacy, which admit commodiouſly of this method: and when they are ſo treated, the operation is by ſome called incineration. The manner of performing it is only to dry the materials, and having placed them ſo that the acceſs of air may be as great as poſſible, to ſet them on fire.

CALCINATION by CALEFACTION is where the calcining heat is not generated in the body itſelf, but imparted to it from ſome external fire.

The methods of performing it vary almoſt as often as the different kinds of matter, which are made ſubjects of the operation, and will be exhibited when we treat of the ſeveral reſpective proceſſes; only theſe general directions may be attended to with advantage. That regard ſhould be had to the ſubſtance of the veſſel uſed to contain the matter. For earths, or metals, any ſort whatever, may be promiſcuouſly uſed: for ſalts of metals, ſuch as the vitriols, diſſolved mercury, &c. only earthen ware or glaſs. The regulation of the degree of fire is equally important: after antimony and lead are reduced to powder, the heat muſt be kept moderate, or a vitrifaction will enſue: in reſpect of iron and copper, a greater may be ſuffered; provided it be under that which would bring them to fuſion: in the caſe of hartſhorn, tin, or the incineration of vegetables, any degree producible in ſuch furnaces as are commonly uſed, may be allowed.

Calcinations of this kind are greatly expedited by the increaſe of ſurface which is given to the calcined matter, and the copious admiſſion of air through that part of the furnace wherein it is placed: the ſame end is alſo anſwered, by frequently ſtirring it with an iron ſpatula, or ſome ſuch inſtrument. This, in the caſe of lead and antimony, is particularly neceſſary. Calcination is much facilitated by pulverizing the bodies to be calcined; except in the caſe of tin and lead, which are unavoidably fuſed in the operation.

CALCINATION by DETONATION differs from CALCINATION by COMBUSTION only in this; that, whereas in the latter, the aſſiſtance of the air is requiſite, in this, that want is ſupplied by adding nitre to the matter; which, producing a much quicker and more intenſe fire, renders the operation much ſhorter, and in ſome caſes more effectual.

In order to underſtand the principle of this operation, it is neceſſary previouſly to know, that the afflux of air, or a proper ſubſtitute, is always neceſſary to ſupport a fire; that nitre is ſuch a ſubſtitute, and the only one hitherto known: that if nitre be added to any matter containing phlogiſton, or the ſulphureous principle, and a heat be imparted to the mixture, ſufficient

cient to bring the nitre to fuſion, fire will be produced, and a calcination effected, even though all air be excluded, as perfectly as if its free admiſſion were allowed.

The manner in which this operation is generally performed is as follows: a ſufficient quantity of nitre is mixed with the matter deſtined to the operation; a crucible, or other veſſel capable of bearing the fire, is then to be heated red-hot, and the matter gradually thrown into it: an exploſive effervescence ſoon follows the injection of each quantity; the ceſſation of which effervescence each time is the proper limits of the intervals which muſt be obſerved, till the whole is thrown in, and the operation conſequently finiſhed. This is the moſt expeditious, and a very efficacious, method of perfect calcination, but is generally attended with a conſiderable loſs of the matter, the intenſeneſs of the heat, and the violence of the exploſion, contributing to its diſſipation. But the greater facility with which it may be performed in many caſes, ballances the loſs, and renders it preferable to other methods; and in ſome preparations, as the *crocus metallorum*, the ſame effects cannot be otherwiſe produced.

It is neceſſary to know, that whenever nitre is thus uſed, there remains after the detonation, a quantity of fixed alkaline ſalt, which was before the baſis of the nitrous ſalt, and being now freed from the acid ſpirit, which in burning leaves it, and combines with the phlogiſton, or proper ſulphur, re-aſſumes its own nature; or a neutral ſalt formed from this and the vitriolic acid, if the body contained common ſulphur. A proportion of this ſalt, in ſome preparations, as in the laſt mentioned, joins with the calcined matter; but the reſt in that, and the whole in almoſt all other preparations, is to be ſeparated from them by water. This waſhing or ablution is generally called EDULCORATION; and is uſed likewiſe for the ſeparating ſalts from any other preparations not calcined.

Rules of the London *Diſpenſatory, in relation to Weights and Meaſures.*

THERE are two kinds of weights in preſent uſe; the one by which gold and ſilver, the other by which moſt other commodities are ſold: the firſt is called *Troy* weight, the latter *Avoirdupois* weight. In theſe the pounds are divided in a different manner, the pound in *Troy* weight having only 12 ounces, in *Avoirdupois* 16. They vary alſo in the weight of the pound, as well as the ounce; the goldſmith's pound being leſs than the other, the ounce greater.

In Pharmacy we uſe the goldſmith's pound, though not divided as by them; but in the following manner:

The pound,	is equal to	twelve ounces.
The ounce,		eight drams.
The dram,		three ſcruples.
The ſcruple,		twenty grains.

The liquid meaſures in uſe are likewiſe different; ſome being applied to the meaſuring beer, others wine; we employ the latter, or wine pint, for which the *Latin* word uſed in Pharmacy is *Libra.*

This pint we divide in this proportion:

The pint, } is equal to { ſixteen ounces.
The ounce, } { eight drams.

A gallon contains eight pints.
A ſpoonful is equivalent to half an ounce.

As the *Latin* word *Libra* is uſed promiſcuouſly to ſignify either a pound or a pint, which in moſt kinds of liquors are not really equal; is is always neceſſary, when the word is uſed in medicinal preſcriptions, to prefix P. or M. to diſtinguiſh when we mean weight, and when meaſure.

Weights and Meaſures of the Edinburgh *Diſpenſatory with their Characters.*

gr. a grain,
℈ a ſcruple,
ʒ a dram,
℥ an ounce,
℔ a pound,
} is equal to {
twenty grains.
three ſcruples.
eight drams.
twelve ounces.

By a Spoonful, is underſtood half an ounce weight in ſyrups, and three drams weight in diſtilled waters.

A Gallon is equal to eight pounds.

Ana ſignifies, that each of the ingredients, which immediately precede it, is to be taken in the quantity next expreſſed.

Though the pint is called by Latin writers *Libra* or pound, there is not any known liquor of which a pint meaſure anſwers to the weight; a table of the weights of certain meaſures of different fluids may be uſeful and is therefore inſerted.

Table of the Weight of different Liquids.

	Pint weighs			oz. meaſ. weighs	dr. meaſ. weighs
Inflammable ſpirits.	oz.	dr.	gr.	gr.	gr.
Ætherial ſpirit of wine	11	1	36	336	42
Highly rectified, ditto	12	5	20	380	47½
Common rectified, ditto	13	2	40	400	50
Proof ſpirit	14	1	36	426	53
Dulcified ſpirit of ſalt	14	4	48	438	55
Dulcified ſpirit of nitre	15	2	40	460	57½
Wines.					
Burgundy	14	1	36	426	53
Red Port	15	1	36	456	57
Canary	15	6	40	475	59½
Expreſſed oils.					
Oil olive	14	0	0	4 0	52½
Linſeed oil	4	2	8	428	53½
Eſſential oils.					
Oil of Turpentine	12	1	4	364	45½
Orange peel				408	51
Juniper berries				419	52
Roſemary				430	54
Origanum				432	54
Caraway ſeeds				432	54
Nutmegs				436	54½
Savin				443	55½
Hyſſop				443	55½
Cummin ſeed				448	56
Mint				448	56
Pennyroyal				450	56¼
Dill ſeed				457	57
Fennel ſeed				458	57
Cloves				476	59½
Cinnamon				476	59½
Saſſafras				503	63
Alkaline liquors.					
Lixiv. Saponar. Ph. Lond.	16	0	0	480	60
Spirit of ſal ammoniac	17	1	10	515	64½
Strong ſoap-boiler's ley	17	6	24	534	67
Lixivium of Tartar	24	0	0	720	90
Acid liquors.					
Wine vinegar	15	3	44	464	58
Beer vinegar	15	6	56	476	59
Glauber's ſpirit of ſalt	17	4	0	525	65½
Glauber's ſpirit of nitre	20	2	40	610	76
Strong oil of vitriol	28	5	20	860	107½
Animal fluids.					
Urine	15	5	20	470	59
Cows milk	15	6	40	475	59½
Aſſes milk	16	0	0	480	60
Blood	16	1	4	484	60½
Waters.					
Diſtilled water	15	1	50	456	57
Rain water	15	2	40	460	57
Spring water	15	3	12	462	58
Sea water	15	5	20	470	59
Quickſilver.	214	5	20	6440	805

A Table of the Specific Gravity of different Solids.

Aloes wood	1,177	Mercury	14,000
Alum	1,738	Mercury ſublimate corroſive	8,000
Amber, pellucid	1,065	Yellow emetic	8,235
Ambergris	1,400	Merc. dulcis, ſublimed twice	12,353
Antimony	4,000	thrice	9,882
Crocus of	4,500	four times	8,234
Glaſs	5,280	Mother of Pearl	2,480
Regulus	6,622	Myrrh	1,250
Balſam of Tolu	,896	Nitre	1,900
Bezoar, Occidental	1,500	Opium	1,363
Oriental	1,530	Peruvian bark	7,784
Biſmuth	9,700	Potaſh	3,112
Borax	1,720	Rhodium wood	1,125
Box wood	1,031	Sal Ammoniac	1,453
Calamine	5,000	Enixum	2,148
Campeachy wood	,913	Gemmæ	2,143
Camphor	,996	Mirabilis Glauberi	2,246
Ceruſſe	3,156	Polychreſtus	2,148
China root	1,071	Prunellæ	2,148
Cinnabar of Antimony	6,044	Salt of Steel	1,830
Factitious	8,100	Common	2,125
Copper	9,000	Volatile of hartſhorn	1,496
calcined	5,453	Saſſafras	,482
Coral, red	2,689	Saunders, Red	1,128
white	2,500	White	1,041
Crab's eyes	1,890	Yellow	,809
Fir	1,550	Scammony, reſin of	1,200
Frankincenſe	1,071	Silver	10,500
Gold	19,640	Sugar thrice refined	1,606
Guiacum wood	1,333	Sulphur	1,800
Bark	1,250	Tartar, crude	1,849
Reſin	1,224	cryſtallized	1,900
Gum Arabic	1,375	emetic	2,246
Tragacanth	1,333	vitriolated	2,298
Hæmatites	4,360	Tin	7,156
Ichthyocolla	1,111	Tutty	4,615
Iron	7,632	Vitriol, Green	1,764
Lead	11,310	White	1,900
Litharge of Gold	6,000	Engliſh	1,880
Silver	6,044	Dantzick	1,715
Maſtich wood	,849	Calcined red	1,900

Table of the Specific Gravity of Liquids.

Antimonial cauſtic	2,470	Oil, expreſſed of Olives	,913
Aqua fortis	1,300	Oil of Vitriol	1,877
Aqua regis	1,234	Spirit, acid, of Nitre	1,338
Honey	1,450	dulcified	1,000
Milk, Cows	1,039	of common Salt	1,154
Goats	1,009	dulcified	,951
Oil, diſtilled of Caraway Seeds	,940	of Vitriol	1,203
Cinnamon	1,035	Spirit of Hartſhorn	1,073
Cloves	1,034	Honey	,895
Cummin Seed	,975	Sal Ammoniac	,952
Dill Seed	,994	Silk	1,145
Fennel Seed	,997	Tartar	1,073
Hyſſop	,986	Urine	1,120
Juniper berries	,911	Wine, proof	,927
Mint	,975	common rectified	,866
Nutmegs	,948	very highly rectified	,825
Orange Peel	,888	Vinegar, of Beer	1,034
Origanum	,940	of Wine	1,013
Pennyroyal	,978	diſtilled	1,030
Roſemary	,934	Water, diſtilled	,993
Saſſafras	1,094	Rain	1,000
Savin	,986	River	1,009
Spike	,936	Sea	1,030
Tanſy	,946	Wine, Burgundy	,953
Turpentine	,792	Canary	1,033
Oil, expreſſed of Linſeed	,932	Red Pontack	,993

Table of the Quantity of fixt alcaline Salt neceſſary to ſaturate different Acids.

64 parts of	Oil of Vitriol	ſaturate	83	parts of Alkali.
	Spirit of Nitre		51	
	Spirit of Salt		25	
	Concentrated Spirit of Vinegar		26	
	Diſtilled Vinegar		3	
	Vinegar		from 1 to 2	

Table of the Quantity of Acid deſtroyed by different Abſorbents.

Ten grains of		deſtroyed the acidity of	Drops of Spirit of Salt.
	Some kinds of Limeſtones		160
	Oyſter-ſhells		120
	Chalk		100
	Shells of Garden Snails		100
	Calcined Cray Fiſh		100
	Pearl		80
	Tooth of Sea Horſe		80
	Volatile Salts		80
	Fixt Salts		60
	Coral, red and white		60
	Crabb's eyes		50
	Egg-ſhells		50
	Mother of Pearl		50
	Crabb's claws		40
	Jaw-bone of the Pike Fiſh		30

Table of the Quantity of abſorbent Earths ſoluble in Acids.

		grains
576 grains of Spirit of Salt diſſolved of	Crabs eyes	216
	Mother of Pearl	144
	Pearls	128
	Oyſter ſhells	156
	Hartſhorn	165
	Coral	180
	Oriental Bezoar	118
	Occidental Bezoar	123
	Quick Lime	199
	Slaked Lime	193
576 grains of Spir. of Nitre diſſolved of	Crabs eyes	297
	Mother of Pearl	202
	Pearls	219
	Oyſter-ſhells	236
	Hartſhorn	234
	Coral	233
	Oriental Bezoar	108
	Occidental Bezoar	144
	Quick Lime	180
	Slaked Lime	216

Table of the Quantity of essential Oil obtainable from different Aromatics.

1. Exotic Species.

640 parts of		yield of oil	from	to
	Agallochum		2	
	Canella alba		1	
	Cardemom seeds		25	30
	Cascarilla		4	
	Casia lignea		1/2	
	Cinnamon		8	10
	Cloves		90	100
	Dictamnus Creticus		3/4	1/2
	Galangal		4	5
	Ginger		5	6
	Mace		25	30
	Nutmegs		25	40
	Pepper		6	10
	Pimento		4	
	Rhodium		3	20
	Sassafras		12	15
	Saunders, yellow		10	
	Zedoary			5

2. Aromatics of our own growth.

640 parts of		yield of oil	from	to
	Angelica root		2	5
	Calamus aromaticus		3	5
	Caraway seeds		30	
	Chervil seeds		1/2	
	Elecampane root		3	
	Fennel seed			14
	Juniper berries		16	
	Lavender, flowers of the broad leaved		25	30
	flowers of the narrow leaved			10
	Lovage root		5	6
	Marjorem leaves			10
	Masterwort roots			3
	Mint leaves			16
	Parsley seed			4
	Rosemary leaves		3	5
	tops in flower			40
	Damask roses			1/4
	Saffron			2 1/2
	Sage leaves		4	
	Smallage seeds		5	
	Thyme		5	

PART I.

BOOK II.

Of the Diſtribution, general Nature, and medicinal Virtues of Simples.

The INTRODUCTION.

Of the Diſtribution of Simples.

HAVING finiſhed what was thought neceſſary to eſtabliſh a true and rational Pharmacy, it is proper, in the next place, to take a particular ſurvey of the materials which come under the management of this profeſſion; as they are the productions of nature, before their properties are altered by preparation and compoſition. But as the number of theſe is prodigiouſly multiplied, through the injudicious luxuriancy of ſome writers; they having had ſomewhat to ſay of the medicinal virtues of many thouſand ſimples, which have never been brought into uſe; and as the ſpace intended for this part will not admit of ſuch a length; we ſhall here, in the beſt method we can, and much better fitted to practice than any other hitherto contrived, endeavour to ſet in view ſuch ſimples only, as have, by reaſon of long trial, obtained a place in the compoſitions of the beſt Diſpenſatories, and are now found in the preſcriptions of greateſt note and eſteem.

To this purpoſe they are diſtributed under diſtinct heads, according to the general denominations they have obtained in medicine, either of cephalics, diaphoretics, cathartics, &c. which muſt be of much more eaſe to the reader, than turning to almoſt ſo many different places by the directions of an index, when he would collect or take a ſurvey of all the materials of the ſame efficacy. But the principal advantage of this method, is its ſuitableneſs to exhibit the intended explications of their virtues,

in anſwering a preſcriber's intention, becauſe of the general denomination affixed at the head of each diviſion, which leaves no want of a repetition under the particular ſimples; which has hitherto never been done by any Diſpenſatory writer.

The whole *Materia Medica* is certainly reducible under the three diſtinctions of alteratives, evacuants, and reſtoratives. The firſt comprehends all that has any power to alter the conſtitution, without ſenſibly increaſing or diminiſhing any of the natural evacuations; the ſecond, whatever viſibly promotes thoſe diſcharges; and the laſt, all that contributes to leſſen them, and make the increaſe greater than the waſte. But as theſe denominations are ſomewhat too general, we have broke them into ſub-diviſions; although, for the greater convenience upon other accounts, beſt ſuiting our own ſcheme ſuch ſub-diviſions fall not exactly under thoſe reſpective heads. The firſt, third, fourth, and eleventh ſections, include what belongs to alteratives: the fifth, ſixth, ſeventh, eighth, and ninth, what comes under evacuants: and to the laſt belong the ſecond and tenth. And as even theſe diviſions are ſome of them too general, we have found it convenient to diſtinguiſh them farther into different claſſes, under more reſtrained denominations.

In this part, ſome authors ſeem to have taken a great deal of pains, though not to any great purpoſe. The method here made uſe of, is the neareſt to that of Ludovici of any that have gone before; as to the general denominations the ſimples are ranged under: although in this diviſion of alteratives into primary and ſecondary, wherein he imitates Schroder, and is afterwards copied by Etmuller, we have not followed his example; becauſe the grounds of ſuch a diſtinction are too trifling to deſerve the trouble. Too contracted a diſtribution occaſions the ſame ſimple, in ſome reſpects, to be placed under every head; and too large a one multiplies hard terms, and occaſions ſo many breaks, as are both tedious and troubleſome; for there is almoſt no end in the ſub-diviſions ſome make; and were all the appellations, introduced into medicine, to have ſome ſhare in the diſtribution of the *Materia Medica*, there would hardly be a ſimple for each. In this manner therefore a mean is here endeavoured, between the obſcurity of too great a conciſeneſs, and the perplexity of too many ſubdiviſions; ſo that though a ſimple in many places might, upon ſome account or other, be reckoned in another ſection or claſs; yet it is expected it will be commonly found, that where it ſtands it has the moſt right, by reaſon of its moſt predominant quality.

The cuſtomary diſtinction drawn from precedency in the three kingdoms, as they are called, is neglected here; not only as ſuch regard is trifling, but becauſe, according to the method we have taken, that has been thought moſt proper to be put firſt, which ſupplies us with moſt materials for the preſent work. For which reaſon the vegetables ariſe foremoſt: next the animal; and laſt of all the mineral productions, which have any ſhare in the medicine.

There is one great error which has run through the whole tribe of Diſpenſatory writers; when in the diſtri-

diſtribution of ſimples, and the explanations of their virtues, they introduce ſuch things from the animal and mineral kingdoms, which are never made uſe of in medicine, without great alteration. For what avails it to be acquainted, that there are peculiar virtues in the hair, nails, hoofs, or bones of ſuch particular creatures, when no ſuch things are ever met with in preſcriptions, nor are to be procured in the ſhops? Such accounts may be amuſing enough to thoſe who read books of this kind for no other end, and anſwer the mean purpoſes of ſuch wretched collectors of rubbiſh, and compilers, as the late Salmon: but they can never ſupply any one with the means of doing good, or increaſing any uſeful knowledge; and therefore ought long ago to have been expunged. For the ſame reaſon, in this part, when we come to the preparations of ſimples, no more will be taken notice of concerning minerals, and metals, than what is of real uſe; although ſome authors have injudiciouſly ſwelled their writings with theſe materials.

Cuſtom has ranked many of the ſimples together, under general denominations; which being often inſerted in preſcription, without naming of them ſingly, it may not be amiſs juſt to mention them here.

5 Emollient Herbs: Mallows, Marſhmallows, Violets, Mercury, Pelitory of the wall.

4 Greater hot Seeds: Aniſe, Fennel, Caraway, Cummin.

4 Leſſor hot Seeds: Biſhop's weed, Stone Parſley, Smallage, Wild Carrot.

4 Greater cold Seeds: Cucumber, Cucurbit, Citruls, Melon.

4 Leſſer cold Seeds: Endive, Scariola, Lettuce, Purſlane.

5 Greater opening Roots: Smallage, Fennel, Aſparagus, Parſley, Butch. Broom.

5 Leſſer opening Roots: Graſs, Madder, Eryngo, Capers, Cammock.

4 Cordial Flowers: Borage, Bugloſs, Roſes, Violets.

Theſe claſſes are found in the Edinburgh Diſpenſatory in the ſame manner as here, except that the five leſſer opening roots are omitted, and that butcher's broom is among the other five, in the place of pelitory of the wall.

To this diſtribution of ſimples, it may not be amiſs to give a few uſeful hints concerning their gathering and preſervation.

1. AROMATIC plants ſhould be collected from warm, dry, ſandy ſoils; FETID, from moiſt and rich ones.
2. VEGETABLES, particularly herbs and flowers, are to be collected in a clear, dry day, as ſoon as the morning dew is gone off from them.
3. ROOTS are in greateſt perfection in the ſpring. Biennial roots are to be taken up in the ſpring after the ſeeds were ſown; annual ones, before they have ſent out any ſtalk.
4. HERBS are to be gathered when the leaves have come to their full growth; before the flowers unfold, or at leaſt before they begin to fall off.
5. FLOWERS are to be plucked when moderately expanded.
6. SEEDS ſhould be collected when growing dry, before they begin to fall off ſpontaneouſly.
7. FRUITS are to be gathered when fully ripe.
8. WOODS are to be felled in the winter.
9. BARKS alſo are moſt conveniently ſhaved, or taken off, in the winter, as at this time they ſeparate moſt freely from the wood.

General Rules for the Preſervation of Simples.

1. ROOTS are to be waſhed clean from dirt, freed from the decayed, or rotten fibres, and hung up in a dry, ſhady, airy place, till moderately dried.

   The thicker roots require to be ſlit longitudinally, or cut tranſverſely into thin ſlices, and freed from the pith.

   Such roots as loſe their virtue by exſiccation, may be preſerved in dry ſand.
2. LEAVES are to be dried in the ſame manner as roots: if exſiccated in the ſun, they loſe greatly of their colour, and quality. The leaves of plants, in general, are reduced by exſiccation to about one fourth their original weight: the more juicy ones to leſs.
3. FLOWERS preſerve their colour and virtue in greateſt perfection when dried haſtily by a gentle heat.

Method

Method of Simples.

I. Vegetables.
II. Animals.
III. Minerals.

SECT.	Claſs
I. Nervous ſimples.	1. Cardiacs and Cephalics. 2. Carminatives. 3. Hyſterics.
II. Strengtheners.	1. Agglutinants. 2. Aſtringents. 3. Abſorbents.
III. Stomachics.	
IV. Balſamics.	1. Emollients. 2. Reſtoratives. 3. Vulneraries. 4. Detergents.
V. Diuretics.	
VI. Diaphoretics.	
VII. Emetics.	
VIII. Cathartics	1. Laxatives, or milder. 2. Draſtics, or ſtronger.
IX. Sternutatories.	
X. Narcotics.	
XI. Coolers.	
XII. Topics	1. Repellents. 2. Suppuratives. 3. Detergents. 4. Cauſtics.
XIII. Simples omitted, or not reducible under the foregoing heads.	
XIV. Of waters.	

See the officinal Simples, according to this order, in the fourteen ſucceeding Sections.

SECT.

SECT. I.

Of Nervous Simples.

THIS term is very compreſive, and may take in all thoſe parts of the *Materia Medica* by which the nerves are effected; but here it is uſed in a more reſtrained ſenſe, and is to be underſtood only of thoſe things which have an immediate effect upon the ſpirits, or which contribute to accelerate and quicken the motion of the ſolids: ſo that the ſenſations at the head, ſtomach, or heart, become forthwith much more lightſome and agreeable than before. Whatſoever anſwers this end, paſſes commonly under the appellations of *Cephalic* and *Cardiac*; and therefore we ſhall join thoſe together, in explaining the manner by which ſuch ſimples operate, as come under theſe general terms.

Claſs 1. *Of Cardiacs and Cephalics.*

The reaſon why theſe are placed together, is both from the difficulty of making any material diſtinction, and from the affinity of thoſe ſimples which are generally ranged under theſe two denominations. What in a proper ſenſe is a cordial, muſt be alſo a cephalic; as the head hath the principle ſhare in agreeable ſenſations. And indeed, in ſome reſpects, whatſoever is grateful and ſerviceable to the ſolids in any parts, may be termed *Cephalic*; ſince in the head is the origin; whereby, as it partakes of their uneaſineſſes at a diſtance, ſo it alſo very agreeably ſympathizes in their releaſement therefrom.

There are medicines indeed, both ſimple and compound, preſcribed properly for diſtempers of the head, from the operation of which nothing ariſes ſtrictly to denominate them cordial; but they rather have the contrary effect; ſince, for the preſent, eſpecially, they ſink and depreſs the ſpirits: ſuch are cathartics, and other evacuants. But as the head is the better for them only ſecondarily, or by accident, they cannot come under the denomination of cephalics, as we here uſe the word. And as the ſame difference may occur in other things, the whole claſs of detergent balſamics being accidentally diuretics; ſo it is moſt proper to keep to thoſe general terms, according to their juſt and chief intention.

Whatſoever raiſes the ſpirits, and gives ſudden ſtrength and chearfulneſs, is termed cardiac, or cordial; as comforting the heart. To underſtand the operation of which upon a human body, it is neceſſary firſt to conſider, that a languor, or faintneſs, muſt either be the conſequence of too much exerciſe, too long watching, or too great a hurry of the animal functions, as in many diſtempers; all which ſo far waſte or diſſipate the nervous fluid, or animal ſpirits, that the ſolids cannot repeat, with wonted vigour, their neceſſary motions.

tions. Or ſuch depreſſion muſt ariſe from an obſtruction of ſome natural evacuation; and this is generally that of perſpiration, from external cold; which lays a load upon the conſtitution, and produces the ſame ſenſation, as a diminution of ſtrength would do, when the uſual weight remained.

In both theſe caſes, the manner by which a cordial acts, is the ſame; ſince it muſt produce its effects by adding to the ſpringineſs and force of the fibres. And as this change is moſt remarkably occaſioned by ſpirits, or ſpirituous liquors, it may be of uſe firſt to examine how they came to obtain ſuch a denomination: whereby we may the better underſtand how the parts of ſuch ſimples, or ingredients, taken in ſubſtance, operate to produce the ſame effect. To this purpoſe it is of great moment to conceive, as near as our ſenſes and reaſonable deductions from them will carry us, the make and contexture of thoſe fine threads or fibres, of which the ſolids of a human body are compoſed; and how that fluid which is called animal ſpirits, or nervous juice, is prepared and conveyed to them: but this would take up too much room here, and muſt therefore be referred to other authors; ſuch as Baglivi *de Fibra Matrice*, Bellini *de Villo Contractili*, in his *Opuſcula*; and to a digreſſion concerning the elaſticity of an animal fibre, in a late edition of Sanctorius's *Medicina Statica*, with explanations.

It may be ſufficient to our preſent purpoſe, to attend only to what is in every one's experience; that the more ſpiritous any thing is which enters into the ſtomach, the ſooner a perſon feels its cordial effects. For that increaſe of vigour which a man obtains from common food, although it is the moſt naturable and durable, is not ſudden enough to procure the inſtruments thereof, the appellation of cordials; ſince they muſt paſs through ſeveral comminutions, or digeſtions, and be a long time ere they arrive to ſuch a fineneſs, as renders them diſpenſable to the nerves: whereas a ſpirituous ſubſtance is ſo fine and ſubtile in all its parts before it is taken, that it ſeems to enter or ſoak into the nerves as ſoon as it touches them; whereupon their vibrations are invigorated, and all ſenſe of faintneſs is removed. And upon the ſame account it is, that volatiles affect the noſe; being ſo extremely ſubtile, as to penetrate the olfactory nerves as ſoon as they come at them. And thus it is, that the effluvia, or ſteams of flowers, fruits, and all things deemed cordial, operate upon the organs of ſmelling.

By the ſame means we may eaſily conceive how all thoſe things affect the body, which are ranged in the following claſs. For by the pungency of ſuch ſubſtances, both upon the taſte and ſmell, it is manifeſted they are ſtocked with many ſubtile parts, which by their fineneſs, when diſſolved by digeſtion, and mixed with the animal fluid, are moſt fit to enter into the ſlendereſt fibres, and recruit that waſte their continual motions make of their neceſſary moiſture. Thus all aromatics and ſweet-flavoured engredients have a title to this rank; and more or leſs conduce to this end, in proportion to the ſubtility and volatility of their component parts. And thus when we ſay, ſuch a thing comforts the heart, ſtrengthens

ens the brain, or is a cephalic; we underſtand, that it is ſuitable to make a part of the nervous fluid, and maintain the due vigour and motion of the ſolids. As a conſtitution becomes weak by age, artificial helps (by which we underſtand all that is uſed as medicine) are more and more needful: for when the digeſtive faculties grow languid, and are not able to furniſh a due ſupply from uſual diet, for the waſtes that are daily made in the animal œconomy, then theſe auxiliaries are the more wanted. And whatſoever means, at any time, occaſion a diſtemperature in this fluid, ſuch aſſiſtances as come under this denomination are neceſſary: they being fitted by degrees to wear out ſuch undue mixtures, and invigorate the whole nervous ſyſtem, by a new ſupply of ſpirits.

Upon another account likewiſe it is, that ſeveral ſubſtances come into this claſs, beſides thoſe that ſupply the deficiency of the animal ſpirits; and theſe are ſuch as have a deterſive quality, joined with ſuch a *ſtimulus*, that although they are too fine to be perceptible any where elſe, yet when they enter into ſmall fibres, by their little vellications, they excite their vibrations, and prevent any uſeleſs matter from lodging in their interſtices, and clogging their motions. This quality, when it is in groſſer bodies, paſſes under other denominations; and may prove a vulnerary, diuretic, or the like, according to the different texture of the ſubſtances wherein it reſides. There are likewiſe under this head dryers, or abſorbents; by reaſon they prevent thoſe ſuperfluous moiſtures, which the nerves are frequently overcharged with, and occaſion rheums, with many other inconveniences attending the glands; particularly about the head, where they are large and numerous, and very apt to be affected.

Folia, Herbs:

Asclepiadis, Swallow-wort. Dioſcorides hath it by this name, and it is the *Vincetoxicum* of Mathiolus; but known moſt by the name of *Hirundinaria*, whence the Engliſh term. It grows in warmer climates, on a gravelly and ſandy ſoil; and flowers in July and Auguſt. The root hath a ſtrong ſmell when freſh, like that of valerian, or nard; the taſte is aromatic at firſt, but ſoon becomes diſagreeable. The Germans uſe it ſometimes as a ſuccedaneum to the Rad. Contrayerva. Its virtues are ſimilar, but inferior to thoſe of valerian.

Betonicæ, Betony. *Sylveſtris*, wood betony, the *Betonica Purpurea* of C.... B.... *Betonica officinalis ſpica interrupta, corollarum laciniæ labii intermedia emarginata*. Lin. It grows in gardens, meadows, and ſhady places, and flowers in June and July. It is accounted a dryer, and is much uſed with tobacco under that notion, but its ſternutatory quality proceeds not from any ſtimulus in the plant, but from the rough hairs on the leaves. Though great things have been ſaid of the cephalic virtues of this plant, experience ſhews, that if it has any virtue at all, it is only that of a mild *corroborant*.

Camphoratæ, Stinking Ground-pines, diſtinguiſhed by C... B... *hirſuta*, the hairy ſtinking ground-pine is to be met with in the phyſic-gardens; and

is recommended by ſome writers for a cephalic, in ſtrengthening the nerves, and recruiting the ſpirits: but the modern Pharmacy uſes it not.

Cheiri, Wall-flower; *Leucoium luteum vulgare* of C . . . B . . . *Flore ſimplici* of J . . . B . . . and *Viola Lutea* of Gerhard. It grows on walls and houſes, and flowers in June. It is ſaid to be good in apoplectic and paralytic diſorders, to eaſe pains, and forward the *menſes*

Euphragiæ, Eye-bright, is alſo ſometimes wrote *Euphraſia*, and *Eutraſia*, and by ſome called *Ophthalmica*, and *Ocularia*, eye-wort. The *Euphraſia Officinarum* of Linnæus, is the eye-bright here intended; it flowers in June, July, and Auguſt ſometimes. It is reckoned a great dryer, as the former, and in that reſpect a cephalic: for which reaſon likewiſe it is ſmoaked as tobacco. It is of great eſteem in diſtempers of the eyes: but its juice is much preferable to the diſtilled water; which uſed outwardly, is affirmed to take off all ſpecks, films, miſts, and ſuffuſions.

Majoranæ, Majoram. It is the *Origanum foliis ovatis obtuſis ſpicis ſubrotundis compactis pubeſcentibus* of Linn. the ſweet Marjoram. It is raiſed annually in our gardens; and flowers in June or July. It is a moderately warm aromatic. From three drams to to half an ounce of the tops are infuſed in a pint of boiling water, and the liquor is drank occaſionally, againſt diſorders of the head and nerves, humoural aſthmas, and catarrhous complaints in aged people. The powdered leaves are an agreeable errhine.

Malabathri. *Folium cinnamomi ſive canellæ Malavaricæ et Javanenſis* C . . . B . . . Indian-leaf. It is of a green colour, firm texture, ſmooth on one ſide, leſs ſo on the other, on which run three ribs through its whole length. When rubbed, they emit an agreeable ſpicy odour; in chewing they are found to be mucilaginous. Thoſe which are the greeneſt are the beſt. The London College ſubſtitutes mace inſtead of theſe leaves; indeed the mace is far preferable.

Mari, Herb Maſtich, vulgar by Parkinſon; and *Sampſachus ſive Marum Maſtichen redolens*, C . . B . . . It is a ſhrubby plant, full of round, ſlender, broad ſtalks, a foot high, with two ſmall leaves at a joint, ſomewhat larger than thoſe of thyme, but otherwiſe like them: it is of a grateful odour. It is planted in gardens, and continues ſeveral years, if not deſtroyed by cold. It flowers in June and July. The leaves and heads are uſed. It is much of the nature of marjoram; but differs from it in this, that it is ſuppoſed of great ſervice in too great a flux of the menſes; a dram of it being given in powder, with a glaſs of rough red wine.

Mari Syriaci, [Syrian Maſtich Thyme—*Syriacum ſeu Creticum* of Gerhard; and the *Majorana Syriaci vel Cretica* C . . . B . . . This is a lower and tenderer plant than the marum, or herb maſtich; having white hoary branches, and ſmaller leaves; green above, and hoary below. It has a very quick, piercing, and grateful ſcent. It is ſaid, that the cats admire this plant ſo much as to eat it up, if not defended from them. It grows natural in Candia and Syria.] It is reckoned a kind

kind of marjoram, agreeing therewith in virtue and figure; inſomuch that by ſome they have been confounded for the ſame plant. But what we have now cultivated in our gardens, is much more volatile, and is a good errhine, in ever ſo ſmall a quantity put up the noſe. Its ſcent is very grateful and pungent, and makes an excellent *ſal volatile*; and in ſuch a compoſition is the beſt of cephalics.

ORIGANI VULGARIS, Common Origanum; diſtinguiſhed, *Anglicum*, Engliſh wild marjoram. It grows a foot high, having many hairy, brown, brittle ſtalks; with two broad, round, pointed leaves, larger than marjoram, ſet at a joint on very ſhort foot-ſtalks, and of a browniſh green colour. It grows in hedges and thickets, and flowers in July. This *origanum* is not ſo ſtrong as the Candy ſort, yet good in obſtructions of the breaſt and womb, in the jaundice, and ſuppreſſion of the menſes.

[ORIGANI CRETICI, *Origanum*, or wild marjoram of Candy; diſtinguiſhed *Origanum Onites* C... B... The *origanum* found in the ſhops, grows taller than common ſweet marjoram, with longer and whiter leaves; and larger and longer ſcaly heads, among which grow ſmall white flowers, like thoſe of ſweet marjoram; of a pleaſing, ſtrong, aromatic odour. It grows in the iſland of Candy or Crete, and other parts of Greece; and flowers in June. Theſe are what ſhould be uſed when the *Flores Origani* are ordered.] It is a very hot ſpicy plant, but not quite ſo gratefully ſcented as the marjoram. It has been much recommended in baths, both for diſtempers of the head, and hyſteric caſes; as likewiſe for cutaneous eruptions.

ROS SOLIS, Sun-dew. This plant is divided into two kinds; the *folio rotundo*, with a round leaf; and the *folio oblongo*, with a longiſh one; but the former as deſcribed by C.. B.. is that moſt in uſe. [It is a ſmall low plant, with a fibrous root; from whence ſpring ſmall, round, hollowiſh leaves, on foot-ſtalks about an inch long, covered and fringed with ſhort red hairs, which give a red caſt to the whole leaf.] It grows in champaign and marſhy grounds, in a pale red moſs, and flowers in May. It is accounted very hot; and, according to the old cant, in the fourth degree, which anciently occaſioned its uſe to be forbid. It is reckoned by ſome a great reſtorative, and a provoker to venery. By its hot, and conſequently drying qualities, it is plain what affections of the nerves it is of uſe in. Mr. Ray takes notice, that its hot eſcharotic quality makes it very hurtful to ſheep, in rendering their viſcera ſchirrous; whereby, in ſome countries it is called by the common people red-rot.

SALVIÆ, *Sage:* called *Herba ſacra*, the holy herb. It flowers in July and Auguſt. There are ſeveral ſorts of this plant, but only two in uſe. One is the *Salvia major hortenſis*, or *latifolia*, moſt uſed in the ſhops. This grows of two colours, red and green: the former is preferred; though the difference is but little. The ſpecies according to Linnæus is the *Salvia foliis lanceolato ovatis integris crenulatis, floribus ſpicatis, calycibus acutis.* The other is the minor, or *anguſtifolia*, little uſed in the ſhops, but much in private fami-

lies, under the name of ſage of virtue, and tea-ſage. There is alſo a *Salvia ſylveſtris*, deſcribed by C..B.. which is the *Scordonia*, or *Salvia agreſtis* of Gerhard, or *Scorodotidis ſive ſcordii foliis ſalviæ*, J..B.. or wood-ſage; but it is not uſed in the ſhops, although much recommended by ancient writers for poſſeſſing the ſame virtues as cloves. This herb has been in ſuch eſteem, as to occaſion the verſe,

Cur moriatur homo, cui ſalvia creſcit in horto?

It is undoubtedly a very good cephalic, of the detergent kind; and thereby it likewiſe comes under the claſs of vulneraries, diuretics, *&c.* It has an auſterity upon the palate, and makes a very good gargariſm; eſpecially if ſharpened with a little acid. It makes an excellent liquor, after the manner of tea, in fevers, and is mighty grateful and cooling, with the addition of a little lemon-juice, which with the red ſage, makes it of a delightful colour. Its real effects are to warm and ſtrengthen the veſſels, and promote an appetite; and for theſe purpoſes the beſt preparation is an infuſion of the dry leaves, drank as tea.

Schoenanthi, *Squinanch*; called alſo *Juncus odoratus*, ſweet ruſh, *Fœnum*, or *Stramen camelorum*, camels hay, or ſtraw. It grows in ſome parts of India, as common as the graſs here, and is in plenty likewiſe in many parts of Arabia, whence it is brought into Europe. It is a grateful aromatic, of volatile and ſubtile parts; and upon that account ranked in this claſs of cephalics. By long keeping it loſes its flavour. Diſtilled in water it yields much eſſential oil.

Serpylli, Wild Thyme. *Thymus floribus capitatis, caulibus repentibus, foliis planis obtuſis baſi ciliatis.* Linn. There are various kinds of this as diſtinguiſhed by botanic writers; but the Ἑρπιλλος of Dioſcorides, the *Serpyllum Sylveſtre* of Mathiolus, and the *Serpyllum vulgare minus*, the common leſſer wild thyme of C..B.... ſeem to be the ſame; and are what is referred to under this name by our modern Diſpenſatories. It has a ſmall, ſtringy, creeping root, whence ſpring numerous ſlender woody ſtalks, with two ſmall, roundiſh, green leaves, ſet at a joint on ſhort foot-ſtalks. The flowers grow on the top of the ſtalks, among the leaves. Both leaves and flowers have a ſtrong pleaſant ſmell. It grows upon heaths and commons; and flowers in June and July. It is not much uſed; although it enters the *Aq. Stephani*. It is hot, pungent and a drier. Some commend it as a good uterine, and ſay it promotes the *menſes*; and that it is very helpful in many diſtempers of the head, being uſed in baths.

Thymi, Thyme. There are ſeveral ſorts of this, but the *Vulgaris folio tenuiori*, the common thyme, with a ſmall leaf, of C... B... is moſt in uſe; and that intended in officinal compoſitions. It flowers in July. It is the *Thymus erectus foliis revolutis ovatis, floribus verticillato ſpicatis.* Linn. It is ſo much of the nature of *Serpyllum*, that, in caſe of want, they may be uſed for one another.

Flores, Flowers:

Anthos, of Roſemary. Theſe are the *Flores Roſmarini anguſtiore folio*, the narrow-leaved roſemary of C..B.... *Roſmarinus hortenſis, anguſtiore folio.* Linn. They blow

blow in April. Theſe are reckoned the principal aromatics of our own growth. They are uſed in almoſt all nervous complaints; eſpecially ſuch as ariſe from too great moiſture and cold, as they are hot and drying. In epilepſies, palſies, and all diſeaſes of that kind, they are hardly ever omitted in preſcription, under ſome form or other. They abound with a ſubtile detergent oil, which makes them univerſally deobſtruent and opening. They are therefore preſcribed in uterine obſtructions, in the jaundice, and even in the gout. With theſe is made the celebrated Hungary water; a ſmall quantity of which, diluted with common water, is reckoned excellent in diſlodging and bringing away wax, which hardens in the ears, and hinders the hearing. It is to be injected warm, with a ſyringe made on purpoſe for that uſe. The leaves and tender tops are ſtongeſt; next to theſe the cup of the flower; the flowers are the weakeſt, but moſt agreeable. Aqueous liquors extract by infuſion the greateſt part of the virtues of this plant. Diſtilled with water, a large quantity of eſſential oil ariſes. Pure ſpirit extracts the whole aromatic flavour of the leaves, but raiſes very little from them by diſtillation. The flowers give over their flavour by diſtillation with ſpirit.

Aurantiorum, of Oranges. The *Aurantia major* of C..B.... the kind here intended, They are of an admirable ſcent, though, like all ſuch perfumes, too powerful for ſome perſons; and therefore prejudicial. They are now but little uſed in medicine: however, where the ſpirits are almoſt quite extinct in malignant and putrid fevers, they are ſometimes very cordial and refreſhing. The diſtilled water is called by foreign writers *Aqua Naphæ*. An oil is diſtilled from the flowers, called *Oleum*, or *Eſſentia Neroli*.

Caryophylii Aromatici, cloves, are the flower cups (not as is generally ſuppoſed the fruit) of a bay-like tree, growing in the Eaſt Indies. In ſhape they ſomewhat reſemble a ſhort thick nail: in the inſide of each clove are found a ſtylus and ſtamina with their apices, as in other flower cups: at the larger end ſhoot out from the four angles four little points like a ſtar, in the middle of which is a round ball, compoſed of four little leaves, which are the unexpanded petala of the flower. Cloves have a very ſtrong, agreeable, aromatic ſmell, and a bitteriſh pungent taſte, almoſt burning the mouth and fauces. The Dutch, from whom we have this ſpice, frequently mix with it cloves which have been robbed of their oil: theſe, tho' in time they regain from the others a conſiderable ſhare both of taſte and ſmell, are eaſily diſtinguiſhable by their weaker flavour and lighter colour. Cloves conſidered as medicines, are very hot ſtimulating aromatics, and poſſeſs in an eminent degree the general virtues of ſubſtances of this claſs. An extract made from them with rectified ſpirit is exceſſively hot and pungent; the diſtilled oil has no great pungency; an extract made with water is nauſeous and ſomewhat ſtyptic: the oil of cloves is much uſed likewiſe for the toothach, dropt upon a little cotton or lint, and ſtuffed into the hollow, or held as near as can be to the part affected.

Caryophylli Hortensis, clove-

clove-gilliflowers; the *altilis major* of C..B.... *Dianthus floribus ſolitariis, ſquamis calycinis ſubovatis breviſſimis, corollis crenatis.* Linn. They blow in July; they are a fine aromatic, and very grateful to the ſmell and taſte. They have a place in a ſyrup which is uſed in moſt cephalic and cordial juleps. By a very light coction, they loſe their flavour. There is alſo a conſerve made of them, but hardly ever uſed.

Jasmini, or jeſſamy. The plant which produces theſe is the *Jaſminum*, and *Apiana* of Dodonæus, the *Gelſaminum* of Mathiolus, and *Jaſminum vulgatius flore albo*, the white flowered jeſſamy of C..B.... The flowers blow almoſt the whole ſummer. Theſe are but little uſed, and of the ſame nature as thoſe of oranges, rather a perfume than a cordial. But in that reſpect they are very excellent.

Lavendulæ, of lavender. The plant which produceth theſe was anciently moſt known by the name of ſpica, divided into the male and female; the latter is the lavender of the ſhops, and diſtinguiſhed by C..B.... by the name of *Lavendula anguſtifolia*, the narrow-leaved lavender. *Lavendula foliis lanceolatis integerrimis ſpicis nudis*, of Linnæus. The flowers blow in June and July, and are much of the nature of the roſemary flowers, only more ſweet, or approaching to a perfume. There are no diſeaſes in the head in which they are not employed under ſome form or other; they are alſo very grateful and cordial to the ſtomach. In all paralytic affections they are reckoned to give place to nothing; and in loſs of ſpeech they do wonders. The eſſential oil mixed with oil of almonds, and applied by means of ſpongy paper, in one night will deſtroy any kind of inſects that infeſt the ſkin. The celebrated palſy-drops, are the compound ſpirit of lavender of the ſhops; and are a moſt noble cephalic and cordial medicine. But in the caſe Rulandus ſpeaks of, it is much better dropped upon ſugar, to be gradually diſſolved in the mouth, then ſwallowed at once. From the *Lavendula latifolia* C..B.... greater or broad-leaved lavender, is obtained the oil of ſpike.

Lilii Convallii, Lilies of the valley, or May lilies. This plant is the *Lilium Canvallium, ſeu Vernum*, of Theophraſtus, and the *Lil. Conval. album* of C...B... The flowers blow early, by the beginning of May. They are of a mighty fragrant ſcent, but it is ſo languid and volatile, that in drying it is quite or very near loſt. Therefore where they enter into the compoſition of waters, they ought by all means to be put into the ſpirit of wine, as ſoon as ever gathered, and, if poſſible, before the very dew is off them.

Pæoniæ, of Piony. *Pæonia fol. lobatis ex ovato lanceolatis, floribus ſimplicibus kermeſinis, ſeminibus nigris lucidis.* Linn. This plant is divided into male and female; the former of which is preferred in medicine; they are diſtinguiſhable both in the root and leaves; the male is deſcribed by C...B... *folio nigricante ſplendido*, with a ſhining blackiſh leaf, from which the female differs in being lighter coloured. The root of the male kind is likewiſe more bulbous, ſhorter and branched; whereas the other runs out into few, longer, and thinner ſhoots. The flowers blow in May and June. They are much in eſteem for convulſions in children,

children, and accounted good in all nervous diſtempers.

Rosarum Damascenarum, of Damaſk roſes. The flowers blow in May and June. In this claſs they obtain a place as the orange and jeſſamy, being of much greater efficacy in medicine, by reaſon of their cathartic quality; under which diviſion, they will be conſidered more at large.

Stæchados, of Arabian Stæchas, or French Lavender; diſtinguiſhed by C . . . B . . . *Purpurea*, the purple cotton weed. *Lavendula ſtæchas purpurea, foliis lanceolato linearibus, ſpica comoſa pedunculis brevioribus.* Linn. The Arabian, or purple Stæchas, is the flower of a beautiful ſhrub, growing three or four feet high, and clothed with long hairy leaves, leſs than thoſe of common lavender; two at a joint. The ſtalks are ſquare, bare of leaves to the tops, on which grow thick round hairy ſpikes, or purple heads. Both the leaves and flowers, or heads, have an aromatic flavour. It grows naturally in the ſouth of France and in Spain. The name, according to Dioſcorides, came from the Stæchades, or iſlands in the Mediterranean, near Marſeilles. With us it is planted in gardens, and eaſily increaſed; and with moderate ſhelter will endure the ſevereſt winters. It flowers in June, and its heads ſhould be gathered when they are firm and hard, which is about the end of July. The freſh flowers of our own growth, are to be preferred to thoſe that come from abroad, which are ſeldom freſh. It is cordial, cephalic, and ſtrengthening to the nerves. They are by all ranked amongſt the cephalics; and ſome aſcribe to them the ſame virtue as to hyſſop, which comes under another claſs, as a pectoral.

Tiliæ, of the Lime-tree. The kind here meant is the *Fœmina folio majore*, C . . . B . . . The female with a larger leaf. *Tilia Europæa folio majore, floribus nectario deſtitutis.* Linn. They are univerſally recommended in epilepſies, and all nervous diſtempers; and upon that account make a part of the compound piony water. Ray alſo aſcribes to them a nephritic quality; and ſays they help in ſome diſorders in the womb.

Semina, Seeds:

Sinapios, Muſtard. This plant is divided into garden, and wild muſtard. The former is chiefly uſed, and diſtinguiſhed by John Bauhine into the *Sinapi ſiliquâ latiuſculâ glabrâ, ſemine rufo ſive vulgari*, the rough broad-podded muſtard, with a brown ſeed. The Edinburgh college directs the ſeeds of the *Sinapis ſiliquis hiſpidis, noſtro obliquo longiſſimo*, of Linnæus, and the *Sinapi album, ſiliquâ hirſutâ ſemine albo*, rough-podded muſtard with a white ſeed. The former is moſt uſed, and its ſeeds make a very pungent deterſive cephalic. They are much more uſed in ſauce, than in medicine: although they are mighty efficacious in ſtimulating the fibres, and looſening and diſcuſſing viſcidities: and therefore excellent in all paralytic caſes, and the decays and defluxions attending old age. They are alſo very diuretic, and ſerviceable in aſthmas, as well as dropſies.

Thlaspius, of Treacle, or Mithridate-muſtard, as Mr. Ray calls it. Caſper Bauhine diſtinguiſhes that which ought to be uſed, by *arvenſe ſiliquis latis*, the field muſtard with broad pods. *Thlaſpi arvenſe*,

arvenſe, foliis oblongis dentatis glabris, floribus albis, ſiliculis orbiculatis. Linn. The ſeeds of this are ſeldom uſed in medicine, unleſs in the Venice treacle. Schroder aſcribes to them pretty much the ſame qualities as the former.

Fructus, Fruits:

ANACARDII, ORIENTALIS, or the Malacca Bean. It is a ſeed growing a-top of a conical fruit in the Eaſt Indies. It is in ſhape and colour like a bird's heart; and covered with a tough ſkin, including a ſpongy ſubſtance full of a cauſtic oil; and underneath, incloſed in another ſkin, lies the kernel, which taſtes like an almond. It is ſaid to be hot and dry, and a provocative to venery. It is ſeldom to be met with in England; the *Mel Anacardium* being long ſince dropt in the College Diſpenſatory.

ANACARDIUM OCCIDENTALE, the Weſt Indian Anacardium; called Cajous by C...B..., and in Jamaica, the Caſhew Nut. It grows at the end of a fruit like a ſmall ripe apple; in ſize and figure reſembling a hare's kidney. The outer rind, which is tough and browniſh, contains a large proportion of a fiery cauſtic oil: and under that in a ſoft ſhell, a white pleaſant kernel, which is eaten in Jamaica, after the nut has been roaſted in the embers to diſcharge its cauſtic oil. This kernel is ſaid to have the ſame virtues as the Eaſt India ſort. They are both ſuppoſed to heat and dry, and to have cephalic virtues: but they are both now rejected by the modern Diſpenſatories.

ALKERMES, of Alkermes. It is like a berry which adheres to the branches of the *Ilex aculeata cocci glandifera*, of C...B... and the *Ilex coccigera* of Cluſius, called *Coccum infectorium* by Mathiolus, and *Coccus baphica* by Dioſcorides. The juice is wonderfully grateful to the palate, and a fine cordial. The confection in which it is the principal ingredient, and to which it gives name, is not at all better, if ſo good as the clarified juice alone. This juice, or rather the confection made with it, is in great requeſt amongſt our midwives, for aſſiſting in delivery. It is reckoned likewiſe a bringer out of the meaſles and ſmall-pox.

BANILLI, Vanelloes, or Banilloes. This is the fruit of the *Aracus aromaticus*, diſtinguiſhed by Mr. Ray, *Volubilis ſiliquoſa Mexicana foliis Plantaginis:* it comes from New Spain; and is chiefly mixed with chocolate, to which it gives a flavour agreeable to ſome, but hurtful to many as a perfume. [They are dark brown, flat pods, or ſheaths, five or ſix inches long, and ſcarce one inch broad; wrinkled on the outſide, and full of numerous ſmall black grains, almoſt as fine as ſand; and ſmelling like balſam of Peru.]

CERASORUM, of Cherries. Luxury has prodigiouſly multiplied and improved the kinds of theſe in our own country. Many of the ſorts, and particularly the Kentiſh red cherries, are a very wholeſome fruit, and grateful to the ſtomach; but the black only are uſed in medicine. They are preſcribed in all diſeaſes of the head and nerves; and by ſome are alſo accounted diuretic, eſpecially the water diſtilled from them.

COFFEÆ, the Coffee-berries. The fruit of an oriental ſhrub.—*Coffea Arabica floribus quinqueſidis diſpermis, albis odoratiſſimis, caſtaneæ folio, fructu baccis lauri ſimili.* Linn. They are not employed in medicine;

medicine; yet they are ſo much in every one's way, (that is, the liquor made of them) that it may be worth a perſon's while to know that they are very drying; and therefore in diſorders of the head from fumes, and too great moiſtures, very ſerviceable by their abſorbent qualities. This moſt experience, who try them, after a debauch of wine or ſtrong liquors. But in thin and dry conſtitutions they are very hurtful; as they dry the nerves too much, and are apt to make them tremble, as in palſies: by the ſame means, likewiſe, they promote watching, by bracing the fibres too tenſe for that relaxation which is neceſſary for ſleep. Although in a caſe of extraordinary defluxion of rheum from the glands about the head and ſtomach, in a cold conſtitution, which occaſioned a great hindrance to the perſon's ſleeping, I once adviſed them; and, according to expectation, they procured ſleep, by abſorbing the ſuperfluous and continually diſtilling rheum. So that the ſame thing may have different effects, according to the conſtitution to be operated upon.

Cubebæ, of Cubebs. They are ſmall ſpicy grains, or berries, like pepper, brought chiefly from Java in the Eaſt Indies, and pretty much of the like virtue. It is much queſtioned of what theſe are the fruit. Some will have them to be of the pepper kind, and the *Piper rotundum* of Theophraſtus; others the fruit of the *Ruſcus*; and others the *Carpeſium* of Galen; but *Cæſalpine* affirms them to be the fruit of the tree *Amomum*. However it be, the natives, it is ſaid, will not export any of them till boiled, to prevent their culture and growth in other countries. In aromatic warmth and pungency they are inferior to pepper.

Nucis Moschatæ, Nutmegs, *fructu rotundo* C...B... Nutmegs. *Myriſtica Moſchata, vel Myriſtica, arbor nuces Moſchates et Macem gerens*. Weſton. The kernel of a roundiſh nut which grows in the Eaſt-Indies. The outſide covering of this fruit is ſoft and fleſhy like that of a walnut, and ſpontaneouſly opens when the nut grows ripe; immediately under this lies the mace, (ſee the article Macis) which forms a kind of reticular covering, through the fiſſures whereof appears a hard woody ſhell that includes the nutmeg. Theſe kernels have long been made uſe of both for medicinal and culinary purpoſes, and deſervedly looked upon as a warm agreeable aromatic. They are ſuppoſed likewiſe to have an aſtringent virtue; and are employed in that intention in diarrhœas and dyſenteries. Their aſtringency is ſaid to be increaſed by torrefaction, but this does not appear to the taſte: this treatment certainly deprives the ſpice of ſome of its finer oil, and therefore renders it leſs efficacious to any good purpoſe; and if we may reaſon from analogy, probably abates of its aſtringency. Nutmegs diſtilled with water, afford a large quantity of eſſential oil, reſembling in flavour the ſpice itſelf; after the diſtillation, an inſipid ſebaceous matter is found ſwimming on the water: the decoction, inſpiſſated, gives an extract of an unctuous, very lightly bitteriſh taſte, without any ſenſible aſtringency. Rectified ſpirit extracts the whole virtue of nutmegs by infuſion, and elevates very little of it in diſtillation: hence the ſpirituous extract poſſeſſes the flavour of the ſpice in an eminent degree.

Nutmegs

Nutmegs yield to the preſs (heated) a conſiderable quantity of limpid yellow oil, which in cooling concretes into a ſebaceous conſiſtence. In the ſhops we meet with three ſorts of unctuous ſubſtances called oil of mace, though really expreſſed from the nutmeg. The beſt is brought from the Eaſt Indies in ſtone jars; this is of a thick conſiſtence, of the colour of mace, and an agreeable fragrant ſmell: the ſecond ſort, which is paler coloured and much inferior in quality, comes from Holland in ſolid maſſes, generally flat and of a ſquare figure: the third, which is the worſt of all, and uſually called common oil of mace, is an artificial compoſition of ſevum, palm oil, and the like, flavoured with a little genuine oil of the nutmeg. Theſe oils yield all that part in which their aromatic flavour reſides, in diſtillation to water, and to pure ſpirit by infuſion: the diſtilled liquor and ſpirituous tincture nearly reſemble in quality thoſe prepared immediately from the nutmeg.

Piperis, of Pepper. Mathiolus, the Bauhines, and other botanic writers, deſcribe a white pepper; but what we have of that name is only the black pepper manufactured by our induſtrious neighbours the Dutch. It is done by putting full ripe black pepper in a trench for two or three days, till the outer bark or black ſkin rots off; and then waſhing it in water to ſeparate the bark which floats a-top; and afterwards drying the pepper with white aſhes, and winnowing it. It is the weakeſt of the peppers. It comes from Malabar, Java, Sunda, and other parts of the Eaſt Indies. There is alſo the Piper Indicum, called Capſicum, and Guinea pepper, which grows in large pods, and is uſed by the Spaniards, in their ſauces and pickles; but medicinal preſcriptions take no notice of it. This is much of the ſame nature as cubebs, but rather hotter and drier. It enters therefore not only into many compoſitions as a cephalic, but alſo into cathartics, as a corrector; it aſſiſting the bowels the eaſier to endure the vellications of a purging medicine. Hoffman commends it in the colic, to be drank whole in a little brandy. And our country people have got a trick of curing agues with a large doſe of the ſame, taken juſt before the fit comes: but they require good athletic conſtitutions, who ſubmit to be ſet on fire, to be cured of a contrary extreme. It ſometimes likewiſe will relieve the tooth-ach. The long pepper (uſed too in medicine, though not by a great deal ſo much in ſauces as the other) is pretty much of the ſame virtues; but by far hotter. The black pepper grows upon a plant that climbs and twiſts about its ſupport, and bears large, oval, ſharp-pointed leaves, full of large nerves; and oppoſite thereto grow long ſpikes of monopetalous flowers, cut into three parts, and ſucceeded by bunches of the grains of pepper, round, of a dark brown colour, with their outſide bark wrinkled. The black pepper tree is the *Piper rotundum nigrum, foliis ovatis ſubſeptem nerviis glabris, petiolis ſimpliciſſimis.* Linn.

Long pepper grows upon a plant that twiſts and climbs like the black; having large, oblong, round-pointed leaves, ſet alternately on the ſtalks; and oppoſite to them grow monopetalous flowers, divided into five ſegments, which are ſucceeded by the fruit. It grows in Java,

Java, Malabar, and other parts of the Eaſt-Indies. It is the *Piper Indicum longum, fol. cordatis petiolatis ſeſſilibuſque.* Linn.

Pimento: this is called by the common people All Spice; and indeed it has in its taſte and flavour ſomewhat reſembling moſt of the ſpices. It comes to us chiefly from Jamaica, and is generally ſold by the name of Jamaica pepper. It is accounted a ſpecies of the *Caryophyllus aromaticus Americanus, lauri acuminatis foliis, fructu orbiculari.* It is the *Myrtus Jamaicenſis, fol. oblongo ovatis glabris alternis, racemis terminalibus & lateralibus, fructu orbiculari.* Linn. We meet not with it in either ancient or modern Diſpenſatory compoſitions, unleſs in the laſt edition of our college. But it is pretty much got into the ſhops, as a *ſuccedaneum* to ſome ſpices which are dearer; and ſome have found a way to uſe nothing elſe in the *Aqua Mirabilis*, though none of it is ordered; and it anſwers ſo well, that if it be carefully diſtilled, and the ſpirit be good, it is hardly to be perceived from that which is genuine; and may, perhaps, not be inferior in its medicinal virtues.

Balſamum, Balſam:

Balsamum Peruvianum. The common Peruvian balſam is ſaid to be extracted by coction in water, from an odoriferous ſhrub, growing in Peru, and the warmer parts of America. *Toluifera Carthaginenſis, foliis ceratiæ ſimilibus, flore luteo.* Linn. This balſam, as brought to us, is nearly of the conſiſtence of thin honey, of a reddiſh brown colour inclining to black, an agreeable aromatic ſmell, and a very hot biting taſte. Diſtilled with water, it yields a ſmall quantity of a fragrant eſſential oil, of a reddiſh colour; and in a ſtrong fire, without addition, a yellowiſh red one.—Balſam of Peru is a very warm aromatic medicine, conſiderably hotter and more acrid than copaiba. Its principal effects are, to warm the habit, to ſtrengthen the nervous ſyſtem, promote the circulation, and attenuate viſcid humours. Hence it is uſed in ſome kinds of aſthmas, gonorrhœas, dyſenteries, ſuppreſſions of the uterine diſcharges, obſtructions of the viſcera, and other diſorders proceeding from a debility of the ſolids, or a ſluggiſhneſs and inactivity of the juices. It is alſo employed externally, for cleanſing and healing wounds and ulcers; and ſometimes againſt palſies and rheumatic pains. —This balſam does not unite with water, milk, expreſſed oils, animal fats, or wax: it may be mingled in the cold with this laſt, as alſo with the ſebaceous ſubſtance called expreſſed oil of mace; but if the mixture be afterward liquefied by heat, the balſam ſeparates and falls to the bottom. Alkaline lixivia diſſolve great part of it; and rectified ſpirit the whole.

There is another ſort of balſam of Peru, of a white colour, and conſiderably more fragrant than the former. This is very rarely brought to us. It is ſaid to be the produce of the ſame plant which yields the common or black balſam; and to exſude from inciſions made in the trunk.

Ladanum, or Labdanum. This is a balſam or gum ouzing out of the leaves of the *Ciſtus Ladanifera*, which is common in Cyprus, and ſome parts of Arabia. Dioſcorides ſaith, it is pulled off from the beards of goats, who feeding upon thoſe leaves, the viſcous juice, by degrees, gathers and hardens into little

little lumps upon the hair. M. Tournefort, in his voyage to the Levant, deſcribes the method of gathering this gum in Candia. He ſays it is bruſhed off the leaves of the ſhrub, in a calm day, by a ſort of whip compoſed of many ſtraps, to which it adheres: and after it is ſcraped off the ſtraps, it is made into cakes of different ſizes. That which is brittle, of an aſh-colour, ſweet-ſcented, and cleareſt from droſs, is the beſt. It warms, dries, and deterges; but is moſt uſed outwardly, and enters many of the plaſters which are accounted warm, emollient, and digeſtive.

Lignum, Wood:

AGALLOCHI, called alſo *Xyloaloes*, Aloes wood. *Cordia Sebeſtena*. Linn. It is a tree in the Eaſt Indies, brought to us in ſmall bits, of a very fragrant ſcent. The beſt is accounted of a blackiſh purple colour, and ſo light as to ſwim upon water. But there is ſcarce any ſuch to be found; it is hot and drying, and eſteemed a great ſtrengthener of the nerves in general; but particularly of the head and ſtomach. Ang. Sala was a great admirer of this wood; and made an extract from it with ſpirit of wine, which is wonderfully commended. It alſo affords a very extraordinary chemical oil, containing the full aromatic virtues of the wood.

ASPALATHI, or *Rodii*, Roſe-wood. This is a wood, or rather perhaps a root, that comes from the Canaries, of a yellowiſh colour, a hard woody ſubſtance, full of knots. It is accounted aſtringent and drying; but though much in uſe amongſt the ancients, it is almoſt quite rejected as an internal medicine now. An oil drawn from it, is of an admirable ſcent, and very comfortable to the head, where perfumes are not offenſive; for this may be reckoned one of the principal. It is chiefly uſed in ſcenting pomatums and liniments.

Cortices, Barks.

MACIS, Mace. It comes off from the nutmeg, and is a kind of bark or covering thereto. See NUTMEG. It is much of the ſame virtues, and uſed both in cardiac compoſitions, and in cathartics, as a corrector.

WINTERANUS, Winter's bark. This is a warm aromatic drug, which takes its name from the perſon who firſt brought the Europeans acquainted with it. The true Winter's bark is rarely met with in the ſhops, the CANELLA ALBA being generally uſed for it. However ſimilar their virtues may be, the Winter's bark is much more warm and pungent than the Canella Alba is. The Canella Alba, or white cinnamon, is a bark rolled up into long quills, thicker than cinnamon, of a whitiſh colour lightly inclining to yellow. The ſhops diſtinguiſh two ſorts of Canella, differing in the length and thickneſs of the quills; they are both the bark of the ſame tree, the thicker being from the trunk, and the thinner from the branches.—This bark is a warm pungent aromatic, but not very agreeable. Its chief preſent uſe is to cover the diſagreeable flavour of aloes in the *Spec. Hiera Picra*.

Radices, Roots. *Acori, vel*

CALAMI AROMATICI, ſweet ſcented flag; the roots. *Acorus Varietas. Linn.* This flag reſembles, as to its leaves, the common iris, but in other reſpects differs greatly

greatly from it: the ſtalk grows at a little diſtance from the leaves; the lower half, up to where the flowers come forth, is roundiſh; the part above this, broad like the other leaves: the flowers are very ſmall, whitiſh, and ſtand in a kind of head, about the ſize of the finger. This plant grows plentifully in rivulets and marſhy places, about Norwich and other parts of this iſland; in the canals of Holland; in Switzerland; and in other countries of Europe. The ſhops have been uſually ſupplied from the Levant with dried roots, which are not ſuperior, if equal to thoſe of our own growth.

The root of acorus is full of joints, crooked, ſomewhat flatted on the ſides, internally of a white colour, and looſe ſpongy texture: its ſmell is ſtrong; the taſte warm, acrid, bitteriſh, and aromatic; both the ſmell and taſte are improved by exſiccation. This root is generally looked upon as a carminative and ſtomachic medicine, and as ſuch is ſometimes made uſe of in practice. It is ſaid by Haller to be ſuperior in aromatic flavour to any other vegetable that is produced in theſe northern climates: ſuch as we have had an opportunity of examining, fell far ſhort in this reſpect, of many of our common plants. There is ſomething manifeſtly unpleaſant in its flavour, inclining, as Geoffroy juſtly obſerves, to that of leeks or garlick: nor have our experiments diſcovered any preparation of it that was truly grateful: the moſt agreeable is a preſerve made after the manner directed in our Diſpenſatory for candying eryngo root; in this form it is uſed at Conſtantinople as a preſervative againſt epidemical diſeaſes.

GALANGÆ, of Galangal. It is a ſmall knotty root. This is diſtinguiſhed into the greater and leſſer ſort; the latter of which is preferred. Cluſius and ſome others judge it to be a ſpecies of the Iris; and others of the *Acorus*. And the leſſer kind is by the modern Greeks called Cyperus Babylonica. That which is heavy, well-ſcented, and of a reddiſh colour, is beſt. It is much warmer than the *Acorus*, and is much eſteemed in flatulencies and indigeſtions. It is uſed, with ſucceſs, in all indiſpoſitions either of the head, ſtomach, or womb, ariſing from weakneſs of the nerves. It is a very good ingredient in ſtomachic bitters, and in all compoſitions that anſwer the intentions of a cardiac or cephalic.

GINSENG, called alſo Ninzig, is a root brought from Japan, China, and North America, and by ſome paſſed for a cephalic, and a promoter of venery; but modern practice takes little notice of it. [See Philoſ. Tranſact. N° 337.]

PÆONIÆ, of Piony. This root, as well as the flowers before mentioned, is accounted a good cephalic. The good women highly eſteem necklaces made of it to hang about children's necks for convulſions, and difficult breeding of the teeth. It is likewiſe aperient, and upon that account reckoned amongſt diuretics and detergents: as alſo alexipharmic; upon which account it had a place in the College plague-water.

SATYRII, *ſeu Orchitis Satyrion. Orchis bulbis indiviſis, nectarii labio quadrilobo crenulato: cornu obtuſo, petalis dorſalibus reflexis.* Linn.— Dioſcorides diſtinguiſhes between theſe, and ſaith, the Satyrion hath a ſingle root, but the Orchis a double bulbous one. Pliny however confounds

confounds them; and our countryman Mr. Dale ranks them under the ſame tribe. It paſſes for a great cordial and reſtorative. And amongſt all who have been influenced by whimſies, it has been judged, from its ſignature, to be a great provoker to venery. The root which we have from the laſt, called Saleb or Salap, is the roots of different ſpecies of Orchis: and with a little care might be produced in England at a very ſmall expence, and of as good a quality, as that from abroad.

ZEDOARIÆ, of Zedoary. *Coſtus Arabicus.* Linn. This is diſtinguiſhed by ſome into various kinds; but the long and round are the moſt remarkable: though Lobelius ſays they differ only in form. The beſt is white, fragrant, heavy, ſound, and of a ſpicy bitteriſh taſte; which brings it under the claſs of cephalics. But it is alſo reckoned by many amongſt the alexipharmics; for which reaſon it comes to have a place in the cardiacs; and it is ſaid even to prevent infections, by holding it only in the mouth. By reaſon of its agreeable bitterneſs, it is preſcribed likewiſe as a ſtomachic; and for its ſpicy warmth it is commended alſo in colics and hyſterical affections, and likewiſe for promoting the menſes. Rectified ſpirit extracts the whole of its warmth and aromatic flavour; leaving the bitter entire and capable of being extracted by water proof ſpirit extracts them both together.

ZINZIBER, Ginger. *Amomum Zinziber.* Linn. A root, brought from China and the Eaſt and Weſt Indies; of a fragrant ſmell, and a hot, biting, aromatic taſte. Rectified ſpirit extracts its virtues by infuſion, in much greater perfection than aqueous liquors; the latter elevate its whole flavour in diſtillation, the former little or nothing. Ginger is a very uſeful ſpice in cold flatulent colics, and in laxity and debility of the inteſtines; it does not heat ſo much as thoſe of the pepper kind, but its effects are more durable.

Claſs 2. *Of Carminatives.*

Theſe have a place among the nervous ſimples, by reaſon the nervous parts are frequently under great diſorders from flatuſes, or wind pent up: and therefore, what diſſipates and expels ſuch vapours, muſt be reckoned of great ſervice to thoſe parts.

A great many ſeem to be ſtrangers to this term; as it does not appear to carry in it any thing expreſſive of the medicinal efficacy of thoſe ſimples which paſs under its denomination. This term had certainly its riſe, as thus applied, when medicine was too much in the hands of thoſe jugglers, who, for want of true knowledge in their profeſſion, brought religion into their party; and what through their ignorance they were not able to do by rational preſcription, and the uſe of proper medicines, they pretended to effect by invocation and their intereſt with heaven. Which cant being generally, for the ſurprize ſake, couched in ſome ſhort verſes; the word *carmen*, which ſignifies a verſe, was made alſo to mean an inchantment: which, as it was a very good cover for their ignorance, as well as knavery, was frequently

frequently made uſe of to ſatisfy the people of the operation of a medicine they could not account for. And as thoſe medicines, now under this name, are of quick efficacy; and the conſequences thereof, in many inſtances, very great and ſurpriſing; and the moſt violent pains, ſometimes ariſing from pent up wind, immediately ceaſing upon its diſperſion: for theſe reaſons, I ſay, ſuch medicines as give relief in this caſe, are more properly termed *carminatives*, as if they cured by inchantment; the complaint removed by them being ſo ſudden, that the ordinary means of the operation of a natural cauſe are not eaſily imagined to take place ſo ſoon.

But howſoever this term came into the profeſſion, common uſe has ſufficiently determined its meaning; ſo that every one underſtands by it ſuch things as conduce to expel wind. How they do ſo, may be conceived, when we conſider that all the parts of the body are perſpirable. *Sanctorius*, in his *Medicina Statica*, determines all we call wind in the bowels, to be ſuch perſpirable matter as makes its eſcape through the coats of the ſtomach and inteſtines. Between the ſeveral membranes, likewiſe, of the muſcular parts may ſuch matter break out, and lodge for ſome time. Now, whatſoever will rarify and render ſuch collections of vapours thinner, muſt conduce to their utter diſcharge out of the body; and conſequently remove thoſe uneaſineſſes, which ariſe from their detention. And as all thoſe things in medicine which paſs under this denomination, are warm, and conſiſt of very light ſubtile parts, is is eaſy to conceive how a mixture of ſuch particles may agitate and rarify thoſe flatulencies, ſo as to facilitate their expulſion: and eſpecially when we conſider what a help to promote this end thoſe grateful ſenſations may be, which ſuch medicines give to the fibres; which cannot but invigorate their tonic undulations ſo much, that, by degrees, the obſtructed wind is diſlodged, and at laſt quite expelled. But if the obſtruction is not great, as it ſeldom is in the bowels, by reaſon of the large vent both upwards and downwards, the rarification and diſcharge are often extremely quick and ſudden.

All the things under this claſs being warm and diſcuſſive, are much uſed in the compoſitions of Cathartics, of the rougher ſort eſpecially. For the irritation occaſioned by thoſe, would be ſcarce tolerable without the mitigation of ſuch grateful ingredients. Many likewiſe of this ſortment are in the compoſitions of diſcuſſive topics: as they warm, rarify, and attenuate the obſtructed humours.

Folia, Herbs.

Angelicæ, Angelica. It is the *Angelica fol impari lobato.* Linn. Alſo the *Angel. fol. æqualibus ovata lanceolatis ſerratis*, Linn. It flowers in July. This is a warm, fragrant, aromatic plant. But at preſent it is regarded little otherwiſe than as a carminative; and therefore we give it a place in this claſs. Bohemia and Spain produce the beſt.

Chamæmeli, Camomile. John Bauhine diſtinguiſhes it by *Flore ſimplici*, in oppoſition to the *Flore multiplici*, the double camomile; which latter hath, of late, much obtained in the ſhops through mere error: for the ſingle flower is much the ſtrongeſt and beſt. It is the

the *Anthemis fol. pinnato compoſitis linearibus acutis ſubvilloſis.* Linn. It flowers in June and July. It has great carminative virtues, and is alſo accounted a good anodyne, and excellent againſt cramps, and ſuch like ſpaſms. The powdered flowers have cured agues when the bark failed. The flowers are very antiſeptic. Outwardly it is a good emollient and ripener, in cataplaſms. It is uſed with ſucceſs, likewiſe, againſt the tooth-ach, applied hot, in a bag, to the cheek. A compound water of camomile-flowers, in the late Diſpenſatory, is a moſt excellent compoſition, as a cardiac and a carminative.

The flowers enter the *fotus communis*, & *decoctum commune pro clyſterii* of the preſent Diſpenſatory.

Foeniculi, Fennel, two ſorts, *Vulgare Germanicum. Anethum fructibus ovatis var.* B. Linn. and *dulcæ offic.* C . . . B . . . . *Anethum fructibus ovatis.* Linn. The common Fennel flowers in June and July. It is ſaid to be diuretic, and good againſt the ſtone in the bladder and kidneys. The common fennel is generally planted in gardens to be ready at hand, but grows wild in many places towards the ſea-coaſt. The leaves, roots, and ſeed, are in uſe; the root being one of the five opening roots, and the ſeed one of the greater carminative ſeeds. The ſweet fennel grows not ſo tall as the common, otherwiſe they are nearly alike, except in the ſeed; which in the ſweet fennel is longer and narrower, of a yellow colour, and much ſweeter taſte. The ſeed is brought to us from Germany, and accounted better than that of the common fennel. Boerhaave ſays, that the root of this plant exactly agrees in ſmell, taſte, and medical qualities with the celebrated ginſeng of the Chineſe, and may be uſed inſtead of it.

Levistici, Loveage. This is the *Liguſticum vulgare* of C. and the *Vulgare foliis Apii* of J . . . B . . . . It is called *Laſerpitium* by Gerhard; but the *Laſerpitium* of Dioſcorides, whence the gum *Laſer* of the ancients, which is unknown to us, was produced, is of another kind. The loveage of Linnæus, in the *Liguſticum foliis multiplicibus: foliolis ſuperne inciſis.* Linn. This flowers in July. The root hath a hot biting aromatic bitter and ſweetiſh taſte. The whole plant may be uſed inſtead of the milder fetid gums, particularly the opoponax. In Italy, where it is native, the root is much uſed in hyſteric diſorders: the doſe ʒj; in ſubſtance, two drams in infuſion.

Semina, Seeds:

Anethi, *Anethi hortenſis* C . . . B . . . . of Dill. *Anethum fructibus compreſſis.* Linn. This greatly reſembles common fennel, both in ſtalk, leaf, and root; but ſeldom grows ſo tall, or ſo much branched. The leaves and ſeeds are uſed; it is heating, drying, and carminative; a little more aromatic than thoſe of fennel. The ſeed is accounted a ſpecific in the hiccup and vomiting. The beſt preparations are the diſtilled oil; and a tincture, or an extract made with ſp. vini r.

Anisi, of Aniſe. The officinal kind hath little other diſtinction than that of *Aniſum Herbariis*, by C . . . B . . . . *Pimpinella fol. radicalibus trifidis inciſis.* Linn.

There

There is an Indian aniſe deſcribed from many botanic writers, by Dale; but it is little, if at all, uſed in our preſent Pharmacy. This is much cultivated in Malta, and thence chiefly brought to us. The common ſort flowers and ſeeds in July; the root dying every year, after it has given the ſeed. It is cultivated in Germany; but the beſt ſeed, which is the ſmaller ſort, comes from Spain. The ſeed only is uſed; being one of the four greater hot ſeeds. Water extracts very little of their flavour, rectified ſpirits the whole. Theſe ſeeds are uſeful in cold flatulent diſorders; and in the gripes to which children are ſubject.

Carui, of Caraway. This hath very few diſtinctions of note. Gerhard deſcribes it by the name of *Careum:* John Bauhine, by that of *Caros*; but Caſpar Bauhine by *Cuminum Pratenſe*, Meadow Cummin; *Carum*. Linn. which is the Caraway of the ſhops. It grows in meadow and paſture grounds, and flowers in June. The greateſt part of the ſeed uſed comes from Germany. It is one of the greater hot ſeeds: it is ſtomachic, carminative, and good in the colic.

Coriandri, of Coriander. The—*Vulg.* of Park.. and *Majus* of C... B.... *Coriandrum fructibus globoſis*. Linn. It is found in the fields, and flowers in June. The plant, whilſt green, has a nauſeous diſagreeable ſcent, like bugs; but the ſeed, when dry, ſmells very gratefully. The ſeed is ripe in July and Auguſt. It is ſtrengthening to the ſtomach, and carminative: and for that reaſon frequently uſed along with purging medicines.

Cymini, of Cummin. The —*Vulg.*... of Park... the—*Semine longiore* of C... B... *Cuminum*. Linn. It is one of the four greater hot ſeeds; and gives name to the *Emplaſtrum è Cymino*. It is much cultivated in the iſland of Malta, it flowers in June, and is reckoned a good carminative.

Dauci Cretici, Daucus of Crete, or *Cretenſis verus*, Candy carrots, or true Daucus. *Athamanta foliolis linearibus planis hirſutis petalis bipartitis, ſeminibus oblongis hirſutis, vel, Daucus Creticus*. Linn. The ſeed is long, and ſlender at both ends, ſwelling in the middle; of a pleaſant ſmell, and ſharp hot taſte. It grows originally in Candy, and other places in the Levant. The ſeed is only uſed; being aperient, and good in diſorders of the kidneys.

Dauci Sylvestris, diſtinguiſhed *noſtras vulgaris*; our wild Carrot, or Birds-neſt. *Daucus ſeminibus hiſpidis, petiolis ſubtus nervoſis*. Linn. The ſeed, when ripe, is rough, flattiſh, and hairy. It grows in paſture grounds, and fallow fields. Infuſed in ale, it is accounted a good diuretic; and greatly relieves in fits of the gravel and ſtone. It is alſo uſeful in uterine and hyſteric diſorders, it is weaker than the former, but ſtronger than the garden carrot ſeed.

Foeniculi, of Fennel. See the plant before deſcribed, in this claſs, amongſt the herbs.

Cardamomi, Cardamoms are a ſeed which botaniſts diſtinguiſh by different names according to their various kinds. *Cardamum majus offic.* which comes from Java in India, is hardly ever met with in the ſhops; but the grains of paradiſe are ſubſtituted for it. The —*Minus offic.* of Bontius and Johnſon, the *Minus vulgare* of Gerhard

hard and Parkinſon, the *Simpliciter in offic. dictum* of C... B.... are the common Cardamoms, and are brought to us from Malabar, and other parts of India. They are the ſeeds of the *Amomum ſcapo ſimpliſſimo breviſſimo, fructeis alternis laxis.* Linn. But the—*Maximum* of Gerhard, the *Melleguetta* of Johnſon, the *Paradiſi offic.* of C... B.... and *Granæ Paradiſi* of Parkinſon, are common grains of Paradiſe. Cardamom ſeeds are a very warm, grateful, pungent aromatic, and frequently employed as ſuch in practice: they have this peculiar advantage, that notwithſtanding their pungency, they do not, like thoſe of the pepper kind, immoderately heat, or inflame the bowels. Both water and rectified ſpirit extract their virtues by infuſion, and elevate them in diſtillation; with this difference, that the tincture and diſtilled ſpirit are conſiderably more grateful than the infuſion and diſtilled water: the watery infuſion appears turbid and mucilaginous: the tincture made in ſpirit, limpid and tranſparent. The huſks of theſe ſeeds, which have very little ſmell or taſte, may be commodiouſly ſeparated, by committing the whole to the mortar, when the ſeed will readily pulverize, ſo as to be freed from the ſhell by the ſieve: this ſhould not be done till juſt before uſing them; for if kept without the huſks, they ſoon loſe conſiderably of their flavour.

Lauri Baccæ, of Bayberries. Theſe are the fruit of an aromatic oily-leaved tree, very commonly known; it is the *Laurus vulgaris* C... B.... *Laurus fol. lanceolatis venoſis perennantibus, floribus quadrifidis.* Linn. The berries are ſtronger than the leaves, and afford much more oil. They are a warm carminative, and as ſuch are uſed in flatulent colics, and ſome hyſteric diſorders.

Theſe all agree in their carminative qualities, and are therefore frequently uſed in compoſitions of that intention; as alſo in glyſters and diſcutient topics. The Aniſeſeed was ſo much in favour with Helmont, as to obtain the name from him of *Solamen inteſtinorum.* The Coriander, as they do not ſo much abound with oil as the other, are more drying, and therefore frequently uſed for that intention. The Cardamoms of both kinds are much hotter, and upon that account ſtand frequently in compoſition with the ſimples of the foregoing claſs; and are alſo accounted provokers to venery. The cummin have a diſcuſſive plaſter from their name in the College Diſpenſatory.

Angelica-Roots are likewiſe very efficacious in this intention; eſpecially thoſe from Spain; which are wonderfully diſcuſſive, and of a fragrant odour.

Claſs 3. *Of Hyſterics and Emmenagogues.*

What we reduce under this head, may perhaps be more properly ſtiled Uterines; for we ſhall here include, not only all that are called Hyſterics by the writers of phyſic, but alſo ſuch ſimples as are accouuted ſerviceable in menſtrual obſtructions: for ſuch diſorders bring on a great many ſymptoms which are always reckoned hyſterical;

cal; and conſequently, the means of removing them juſtly come into this claſs.

All of this kind are very remarkable for their ſtrong ſcent; and have been by ſome diſtinguiſhed into odoriferous and fœtid medicines. But of the former, ſuch as muſk, ambergriſe, and the like, there are ſo extremely few conſtitutions with which they will agree, that we have refuſed moſt of them a place here.

Diſorders of the womb, all which come under the name of Hyſterical Affections, ariſe from too titillating or from too uneaſy ſenſations. The former proceed from that irritation of the nerves, which the make and ſecretion of thoſe parts have naturally ſubjected them to: this in ſome ſort of conſtitutions ariſes to that degree, as to draw the whole ſyſtem into diſorder, and occaſion a ſurpriſing variety of ſymptoms, as ſeveral ſorts of convulſions, and ſpecies of madneſs; which therefore are by ſome termed *Furores Uterini*. Now theſe diſorders ſeem to be moſt effectually allayed by ſuch things as are, in a manner, the reverſe of cordials; and both in ſmell and taſte very offenſive and diſagreeable. And they ſeem to anſwer this end, by ſuffocating, as it were, the ſpirits, and damping their inordinate ſallies; ſo that ſuch ſtimulation ceaſes, and the fibres return to their natural tone and motions. For, as what is grateful to the ſenſes gives an inexpreſſible emotion to the fine nervous filaments; ſo does what is fœtid and diſagreeable quite deſtroy that emotion, and deaden it. And as the former kind conſiſt chiefly of fine, ſubtile, volatile parts, by which, as was before explained, they are fitter to penetrate the nerves; ſo theſe are generally of a clammy viſcous contexture; and therefore fitter to envelope and entangle that ſubtile juice; whereby its motion is much retarded, and conſequently the fibres rendered leſs ſpringy.

In the latter caſe, the uneaſineſs of the burthen in geſtation, and often the diſorders of the fœtus itſelf, bring the womb, and by degrees the whole nervous ſyſtem, into convulſive diſorders; which admit of little or nothing to be done by way of medicine; but are beſt remedied by contributing to the eaſe, and gratifications of all the deſires and cravings of the mother. But the worſt miſchief to theſe parts, is from a lodgment of ſome diſagreeable matter upon their glands, whereby they are frequently apt to grow cancerous; or from an obſtruction of the diſcharges, which at certain times nature (that is the conſtitution) requires to be made from thoſe parts. In the firſt of theſe, all ſuch things come to be deemed Hyſterics, which by their deterſive qualities open thoſe glands, and by degrees wear away the obſtructed humours. In the latter are employed ſuch as either give a greater force to the circulating blood, whereby it is enabled to break through the capillaries; or which ſo attenuate it, as to fit it, upon that account, the eaſier to flow through, and make the diſcharge required. And thus whatſoever in medicine, either ſimple or compound, contributes to any of theſe ends, though very different in their operations (as the original cauſe of the diſorder may differ) they all come under this general appellation of Hyſterics or Uterines.

Folia, Herbs:

Artemisiæ, Mugwort, *Vulgaris major*, C... B... Its appearance ſomewhat reſembles the common wormwood; the difference moſt obvious to the eye, is in the flowers, thoſe of wormwood hanging downwards, whilſt the flowers of mugwort ſtand erect. It is the *Artemiſia foliis pinnatifidis planis inciſis ſubtus tomentoſis, racemis ſimplicibus recurvatis, floribus radio quinquefloro*. Linn. It is much uſed in complaints peculiar to the female ſex. It is ſaid to be opening and diſcuſſive; to promote the menſes. In ſome places it is eat as a pot-herb. The Moxa, mentioned by Sir William Temple, is the production of this plant in China, entitled *Artemiſia Chinenſis, cujus mollugo Moxa dicitur:* and is by ſome ſuppoſed to be the *Yzecuinpathi* of *Hernandez*.

Atriplicis Olidæ, *ſive Fœtidæ*, ſtinking Orache is a ſpecies of the Blitum, or wild Orache, and diſtinguiſhed by Ray, *Blitum fœtidum Vulvaria dictum. Chenopodium fol. integerrimis rhomboideo ovatis, floribus conglomeratis axillaribus*. Linn. It grows about dunghills, and flowers in Auguſt; but is of very little uſe in the preſent practice, though of ſome conſiderable repute for the ſame occaſions as the former.

Basilici, *ſive Ocimi*. Baſil. This is likewiſe an ill-ſcented plant; and is found in very few compoſitions of medicines. It is reckoned of the ſame efficacy as the former in promoting the menſtrual diſcharges.

Buphthalmi, Ox eye. This name is given to various diſtinctions of plants, of the *Chryſanthemum* kind, or the wild camomile: but the — *Cotulæ folio* of Bauhine and Herman, is the kind referred to here, and comes under this claſs of Hyſterics; by the ſame right as other like fœtid plants: but is hardly ever uſed.

Cardiacæ, Mother-wort. In the catalogue of the botanic garden at Oxford, this is diſtinguiſhed by *Marrubium Cardiaca dictum:* which makes it a ſpecies of the Horehound. It is the *Leonurus Cardiaca, vel Leonurus fol. caulibis lanceolatis triolobi*. Linn. It grows in gardens, and places where dung is laid; and flowers in June and July. It is ſaid to be cardiac, and good againſt many hyſteric diſorders; but is leſs noticed than it deſerves.

Cyperi, Cyprus. This is by botaniſts divided into ſeveral kinds, of which the Indian ſpikenard is one: The moſt conſiderable of the other are the long and round; and they are both recommended for diſorders of the nerves, of many kinds; but neither are much regarded in the preſent practice.

Dictamni Cretici, Dittany of Candy. *Dictamnus flore albo*. Linn. This is of little uſe likewiſe, but in the fore-mentioned intentions.

Lupini, Lupines; the ſeed of a plant diſtinguiſhed into *Sativus* and *Sylveſtris*; but the former only is what the preſent catalogue of the College refers to; but it is not much uſed, though recommended for the ſame intentions as the reſt of this claſs.

Matricariæ, Feverfew, called alſo *Parthenium. Matricaria fol. compoſitis planis, foliolis ovatis inciſis, pedunculis ramoſis floribus albis*. Linn. It flowers in June and July. This is near a-kin to the mugwort; but much more fetid. It is of no uſe but as an ingredient in the bryony water.

Nepetæ,

Nepetæ, called alſo *Mentha felina ſive Cataria*, by Gerhard; Cat-mint. *Nepeta Cataria*. Linn. It flowers moſt of the ſummer months. This plant is of an offenſive ſmell, and very little uſed, unleſs in the bryony-water: it has aſcribed to it the ſame virtues as mugwort and orache.

Pulegii, Penny-royal, *Latifolium* by C. B. *Mentha floribus verticillatis, foliis ovatis obtuſis ſub crenatis, caulibus ſubteretibus repentibus, ſtaminibus corolla longioribus*. Linn. It flowers in July and Auguſt. It is a very warm plant, of very ſubtile and penetrating parts, and is therefore aperitive, diſcutient, and carminative; but its chief virtues are in hyſterical affections, and for promoting the menſtrual evacuations. It is alſo of known efficacy in pleuriſies and the jaundice; as indeed in all diſorders ariſing from obſtructions. It is an excellent pectoral, and given with great ſucceſs in aſthmas, and all difficulties of breathing. Some likewiſe commend its application outwardly in pains of the head. For its many good qualities, it has a place in ſeveral of the ſhop-medicines now in uſe: and for the abundance of oil which comes over with it, the ſimple water drawn from it is very efficacious for many of the forementioned purpoſes; though ſomewhat inferior to a decoction, but not ſo unpleaſant. It is obſervable, that both water and rectified ſpirit, extract the virtues of this herb by infuſion, and elevate them in diſtillation.

Sabinæ, Savin. This plant is an ever-green, and diſtinguiſhed—*Vulgaris*, or *Sterilis*, by Parkinſon, Gerhard, and John Bauhine, in oppoſition to the *Sabina Bacciſera, folio Cupreſſi. Juniperus fol. oppoſitis erectis decurrentibus oppoſitionibus pyxidatis*. Linn. This is hot, attenuating, and very detergent. It is a moſt powerful cleanſer, and therefore good in all obſtructions of the *Viſcera*, where a conſtitution can bear its efficacy. It promotes the glandular ſecretions in general. Its eſſential oil is very powerful and peculiarly uſeful in lax or ſluggiſh habits. It is likewiſe eſteemed of great ſervice againſt worms; and its eſſential oil, of which it affords great plenty, is frequently uſed for that purpoſe, in outward applications to the belly.

Rutæ, Rue. *Hortenſis Latifolia*, C . . . B . . . The common garden rue. *Ruta foliis decompoſitis, floribus lateralibus quadrifidis*. Linn. It flowers in June. Schroder commends it as an alexipharmic and a cephalic; ſays that it is good in all convulſive caſes. It is replete with a fat viſcous juice: and therefore yields little to any good purpoſe in diſtillation, unleſs where firſt digeſted in a ſpirituous menſtruum. Hence its ſimple water in the ſhops does not contain the full virtues of the plant; how much ſoever valued by ſome. It may be eat alone, freſh gathered, as many do with bread and butter; or made into a conſerve. It is of excellent ſervice in all nervous caſes; and particularly in ſuch as ariſe from the womb; as it deterges the glands, and by its viſcidity bridles thoſe inordinate motions which frequently begin there, and affect the whole conſtitution. An extract made by rectified ſpirit of wine, contains in a ſmall compaſs, the whole virtues of the rue.

Semina Pæoniæ, Piony Seeds, are often uſed with this intention, and ſeem to owe their virtues of this kind to the ſame tenacity and

diſpoſition of parts, as moſt of this tribe do.

Asafoetida, the concrete juice of a large umbelliferous plant growing in Perſia. The *Ferula Perſica umbellifera, foliolis alternatim ſinuatis obtuſis, floribus ex viridi luteis.* Linn. This juice exſudes (from wounds made in the root of the plant) liquid and white like milk; on being expoſed to the air, it turns of a browniſh colour, and gradually acquires different degrees of conſiſtency. It is brought to us in large irregular maſſes, compoſed of various little ſhining lumps or grains, which are partly of a whitiſh colour, partly reddiſh, and partly of a violet hue. Thoſe maſſes are accounted the beſt which are clear, of a paliſh red, and variegated with a great number of elegant white tears. This juice has a ſtrong fetid ſmell, ſomewhat like that of garlic; and a bitter, acrid, biting taſte. It loſes with age its ſmell and ſtrength, a circumſtance to be particularly regarded in its exibition.—This juice conſiſts of about one third pure reſin, and two thirds of gummy matter; the former is ſoluble in rectified ſpirit, the other in water: proof ſpirit diſſolves almoſt the whole into a turbid liquor: the tincture in rectified ſpirit is tranſparent.—Aſafœtida is the ſtrongeſt of the fetid gums, and of frequent uſe in hyſteric complaints. It is likewiſe of conſiderable efficacy in flatulent colics; and for promoting all the fluid ſecretions in either ſex. The ancients attributed to this medicine many other virtues, which are at preſent not expected from it.

Galbanum, is a gum, brought from ſome parts of Syria, of a yellowiſh hue. The tree which produces it is of the ferulaceous kind; the *Bubon foliolis rhombeis, dentatis glabris ſtriatis, umbellis paucis.* Linn. Our druggiſts compliment the apothecaries by ſelling it to them ready ſtrained; but moſt of that ſo managed is to be ſuſpected of adulteration; as it is much inferior in ſtrength and ſmell to the genuine gum, which is warm, emollient, reſolving, and good in all hyſterical affections; but it is chiefly uſed plaſterwiſe to the navel. It looſens the belly, both inwardly and externally uſed. The beſt diſſolvent of the drug is two parts of ſpirit of wine and one of water.

Myrrha, Myrrh. This is a reſinous gum, and comes from the Eaſt-Indies. Suppoſed to be the produce of the *Scandix ſeminibus ſulcatis angulatis, floribus albis.* Linn. That which is moſt clear, brittle, light, and fragrant of ſmell, is beſt. It is of great uſe in medicine; inſomuch as to enter into compoſitions almoſt of all intentions. It is warm and bitteriſh, and upon that account found helpful to the bowels and ſtomach. It will frequently, by a prudent adminiſtration, remove agues. It promotes the ſecretions in general, and is very ſerviceable in languid caſes, diſeaſes ariſing from inactivity, thoſe female diſorders that proceed from a cold, mucous, ſluggiſh indiſpoſition of the humours, cachectic complaints, &c. &c. It is a powerful reſiſter of putrefaction, and in malignant and peſtilential fevers, it has always been reckoned excellent in times of the plague, people carry it and chew it in their mouths, to prevent infection. It is of manifeſt ſervice in ripening the ſmall pox; eſpecially that ſort where the puſtules riſe with a pellucid humour. Its bitter taſte makes it difficult to give to children

in

in ſuch caſes; otherwiſe there is nothing more ſafe and efficacious; as likewiſe in abating that reſtleſſneſs which ariſes from tickling defluxions of rheum: and by the ſame quality it is good in all catarrhs. Its peculiar bitterneſs makes it effectual againſt worms. And the *Elixir Proprietatis* is much the better medicine, for what it has of this in its compoſition. It is likewiſe reckoned, outwardly applied, a great detergent. It is alſo an excellent dentifrice; and keeps the gums from waſting and ſtinking. But its moſt celebrated virtues are what give it a place in this claſs, *viz.* being both a great cleanſer and ſtrengthener of the womb. It promotes the menſes; and is indeed good in all hyſterical affections, adminiſtered either in pills, boluſes, or tinctures; it not conveniently agreeing with any other forms. Rectified ſpirit of wine extracts the fine aromatic flavour and bitterneſs of the myrrh, and does not elevate any thing of either in evaporation: the gummy ſubſtance left by this menſtruum has a diſagreeable taſte, with ſcarce any thing of its peculiar flavour; this part diſſolves in water, except ſome impurities which remain. In diſtillation with water, a conſiderable quantity of a ponderous eſſential oil ariſes, reſembling in flavour the original drug.

Radices, Roots of,

ARISTOLOCHIÆ LONGÆ, Long Birthwort. *Ariſtolochia longa vera, foliis cordatis petiolatis integerrimis obtuſiuſculis, caule in firmo, floribus ſolitariis.* Linn. It is of a ſubacrid aromatic taſte, and by all accounted a provoker of the menſtrual diſcharges. It hath aſcribed to it alſo ſome alexipharmic qualities. Both this and the round ſort, heat, ſtimulate, attenuate viſcid phlegm, and promote the fluid ſecretions in general.

ARISTOLOCHIÆ ROTUNDÆ, Round Birthwort. *Ariſtolochia foliis cordatis, caule erecto floribus axillaribus confertis.* Linn. It differs not from the former, but in ſhape, has the ſame virtues aſcribed to it, and enters into the ſame compoſition as the former. This grows chiefly in France, as the former does in ſome parts of Italy.

BRYONIÆ, Bryony. *Brioniæ fol. palmatis utrinque calloſo ſcabris.* Linn. The root of this plant is often mentioned as a powerful purger, and chiefly of water: the doſe is a dram in ſubſtance, or half an ounce infuſed in wine. A cataplaſm of the root is a powerful diſcutient. It is now ſcarce uſed in any compoſition but the *Aq. Bryoniæ comp.* which is preſcribed in almoſt all hyſterical complaints. The active virtues of this plant ſeem to claim more attention than is now beſtowed upon it.

BELLIDIS MAJORIS, the greater, or Ox-eye Daiſy, in diſtinction from *Bellis Minor*, the leſſer common daiſy. The firſt only is uſed in medicine; and is ranked by ſome authors under this intention. It is reckoned a vulnerary, and particularly an uterine.

CASSAMUNAIR, Caſſamunair. This is made a ſpecies of the galangals, and by ſome is called Ryſagon. It comes to us from the Eaſt Indies, and ſtands recommended in all nervous affections. Some make it a ſpecies of the zedoary; and the preſent practice takes notice of it as a good ſtomachic. Rectified ſpirit of wine extracts all its virtues.

Animals.

Claſs 1.

Moschus, Muſk: a grumous ſubſtance like clotted blood, found in a little bag, ſituated near the umbilical region of a particular kind of animal met with in China, Tartary, and the Eaſt-Indies: The *Moſchus folliculo umbilicali*. Linn. The beſt muſk is brought from Tonquin, an inferior ſort from Agria and Bengal, and a ſtill worſe from Ruſſia.

Fine muſk comes to us in round, thin bladders; which are generally about the ſize of a pigeon's egg, covered with brown ſhort hairs, well filled, and without any appearance of having been opened. The muſk itſelf is dry, with a kind of unctuoſity, of a dark reddiſh brown, or ruſty blackiſh colour, in ſmall round grains, with very few hard black clots, and perfectly free from any ſandy or other viſible foreign matter. If chewed and rubbed with a knife on paper, it looks ſmooth, bright, yellowiſh, and free from grittineſs. Laid on a red hot iron, it catches flame, and burns almoſt entirely away, leaving only an exceeding ſmall quantity of light greyiſh aſhes; if any earthy ſubſtances have been mixed with the muſk, the quantity of the reſiduum will readily diſcover them.

Muſk has a bitteriſh ſubacrid taſte; a fragrant ſmell, agreeable at a diſtance, but when ſmelt near to, ſo ſtrong as to be diſagreeable, unleſs weakened by the admixture of other ſubſtances. If a ſmall quantity be infuſed in ſpirit of wine in the cold for a few days, it imparts a deep, but not red tincture: this though it diſcovers no great ſmell of the muſk, is nevertheleſs ſtrongly impregnated with its virtues; a ſingle drop of it communicates to a whole quart of wine a rich muſky flavour. The degree of flavour which a tincture drawn from a known quantity of muſk, communicates to vinous liquors, is perhaps one of the beſt criteria for judging of the goodneſs of this commodity. Neumann informs us, that ſpirit of wine diſſolves ten parts out of thirty of muſk, and that water takes up twelve; that water elevates its ſmell in diſtillation, whilſt pure ſpirit brings over nothing.

Muſk is a medicine of great eſteem in the eaſtern countries; among us, it has been for ſome time pretty much out of uſe, even as a perfume, on a ſuppoſition of its occaſioning vapours, &c. in weak females, and perſons of a ſedentary life. It appears, however, from late experience, to be, when properly managed, a remedy of good ſervice even againſt thoſe diſorders which it has been ſuppoſed to produce. Dr. Wall has communicated (in the Philoſophical Tranſactions, No. 474.) an account of ſome extraordinary effects of muſk in convulſive and other diſeaſes which have too often baffled the force of medicine. The doctor obſerves, that the ſmell of perfumes is often of diſſervice, where the ſubſtance taken inwardly, and in conſiderable quantity, produces the happieſt effects: that two perſons, labouring under a *ſubſultus tendinum*, extreme anxiety, and want of ſleep, from the bite of a mad dog, by taking two doſes of muſk, each of which was ſixteen grains, were perfectly relieved from their complaints. He likewiſe obſerves, that convul-

five

ſive hiccups, attended with the worſt ſymptoms, were removed by a doſe or two of ten grains: and that in ſome caſes, where this medicine could not, on account of ſtrong convulſions, be adminiſtered to the patient by the mouth, it proved of ſervice when injected as a glyſter. He likewiſe adds, that under the quantity of ſix grains, he never found much effect from it; but that given to ten grains and upwards, it never fails to produce a mild diaphoreſis, without at all heating or giving any uneaſineſs; that, on the contrary, it eaſes pain, raiſes the ſpirits, and that after the ſweat breaks out, the patient uſually falls into a refreſhing ſleep; that he never met with any hyſterical perſon, how averſe ſoever to perfumes, but could take it, in the form of a bolus, without inconvenience. To this paper is annexed an account of ſome farther extraordinary effects of muſk, obſerved by another gentleman. Repeated experience has ſince confirmed its efficacy in theſe diſorders. I have myſelf frequently exhibited it with remarkable ſucceſs; and ſometimes increaſed the doſe as far as twenty grains every four hours, with two or three ſpoonfuls of the muſk juleps between. There are not perhaps many examples of its proving ineffectual, unleſs where the muſk (which too frequently happens) was of a bad kind.

Ungula Alcis, Elk's Hoof. This is alſo eſteemed of mighty efficacy in diſtempers of the head; and is an ingredient in the *Pulvis de Gutteta* of Riverius before mentioned; but in little elſe. Naturaliſts tell us that the creature itſelf firſt gave to mankind a hint of its medicinal virtues; for they ſay, whenever it ails any thing in the head, it lies in ſuch a poſture as to keep one of the tips of a hoof in its ear; which after ſome time effects a cure. But this I leave to be credited by thoſe of more faith than myſelf.

Claſs 2.

Castoreum, Caſtor. This is generally taken for the beaver's teſticles, (*Caſtor cauda ovata plana.* Linn.) which is an amphibious animal, not much unlike an Engliſh otter: but this is a vulgar error; for it is the inguinal gland of this animal. It is brought from Hudſon's Bay, New England, and Ruſſia: the latter is much the beſt. The cods are much rounder than the other, and harder; and the incloſed caſtor is of a much redder colour, and a more fragrant, volatile, and pungent ſcent. This is of very extenſive uſe in medicine, and enters into almoſt all the nervine compoſitions of the ſhops, as well as the extemporaneous preſcriptions of like intentions. It is extolled as a capital nervine and antihyſteric medicine. Its virtues are conſiderable, but far ſhort of what ſome ſuppoſe them. In the height of fevers, when the nerves begin to be convulſed, it is very effectual not only to keep off a *delirium*, but to forward a *diaphoreſis*, and bring the diſtemper to a criſis. The tincture which is made of it, is an excellent medicine; but what chemiſts pretend to ſell for a ſpirit of Caſtor, is good for little or nothing, as being too fat and tenacious a ſubſtance, to riſe over the helm with any menſtruum whatſoever. It is therefore much the beſt if given in ſubſtance, or tincture; wherein it will almoſt entirely open and diſſolve.

Of

Of Minerals.

Claſs 1.

AMBRAGRISEA, Ambergriſe. Naturaliſts much differ about the production of this ſimple; though it is generally agreed to be a kind of *bitumen*, generated in rocks which are waſhed by the ſea, and thrown upon the ſhore by the waves: yet it is probably an animal ſubſtance, matter much reſembling it having been found in the urinary bladder of the ſpermaceti whale. It is diſtinguiſhed into *Griſea* and *Nigra*; but the former only is in eſteem and uſe, and is known to be genuine by its fragrant ſcent, when a hot needle or pin is thruſt into it; and its melting like fat of an uniform conſiſtence: whereas the counterfeit will not yield ſuch a ſmell, nor prove of ſuch a fat texture. We have not room here to enter into a detail of opinions, of but little moment to our preſent deſign: we ſhall only obſerve it to be much of the ſame medicinal virtues as muſk (which ſee above) to be uſed in the ſame intentions, and generally to enter into the ſame compoſitions; but it is of a ſomewhat weaker ſcent.

SUCCINUM, Amber. This is a bituminous juice or reſin, which from a fluor grows hard and brittle; for that it was once in a ſtate of fluidity, is manifeſt from the ſeveral parcels of it, which have incloſed ſtraws and inſects of various kinds. The largeſt quantities are found on the ſhores of Poliſh Pruſſia and Pomerania; the whiteſt and moſt tranſparent is accounted beſt. It is of no great uſe in medicine *per ſe*; as its texture ſeems too compact to open and yield to the natural elaborations of the body; though ſome have a great opinion of it as a balſamic, and give it in gonorrhœas particularly: and it is alſo an ingredient in the Gaſcoign's powder. But certain it is, that what the art of Pharmacy extorts from it is of wonderful efficacy, eſpecially in nervous caſes. The ſalt of amber is an incomparable medicine, as we ſhall farther ſee hereafter: and the oil likewiſe is very powerful in many caſes, outwardly uſed. The *Caput Mortuum*, which remains after the ſalt and oil are gone over, is, by ſome ingenious perſons, who have been very inquiſitive into this matter, conjectured to afford that powder, which has been ſo induſtriouſly quacked upon the world for a ſpecific in convulſions; and is ſold under the title of Dr. Morton's Antiſpaſmodic Powder.

CINNABAR. NATIV. Native Cinnabar. It is very heavy; and of a beautiful red colour. It is a compoſition of quickſilver and ſulphur; it is an ore of quickſilver; and we have it chiefly from Hungary, and ſome parts of Germany; it is taken out of the mines as it comes to us. It is by many accounted a good remedy in epilepſies; but others aſſert it to be inert. The factitious ſhould always be preferred to the native cinnabar in medicine, as the former ſometimes contains ſome arſenical particles. It is indiſſoluble in the animal fluids, or in any known acid, alkaline, or other menſtrua—its action ſeems to be only in the *primæ viæ*, and thereby removes many complaints, which, though appearing elſewhere, have their origin there, in foulneſs of the ſkin, as in the itch

itch and leproſies, there is not any one thing better. It may be given in conſiderable doſes, without any danger of thoſe inconveniences which ſometimes happen from mercurials; it is likewiſe by many reckoned good againſt worms.

SECT. II.

Of Corroboratives.

BY ſtrengtheners, we would be underſtood to mean ſuch things as add to the bulk and firmneſs of the ſolids: and theſe differ from what has been ranged under the preceding ſection, as a bandage does from a fleſh-bruſh. The former are ſuch as facilitate and drive on the vital actions; but theſe ſuch as confirm the *Stamina*, and maintain the ſolids in a condition to exert themſelves into action on all proper occaſions, with the greateſt force and vigor.

The continual waſte which conſtant motion makes in the conſtitution, were it not for frequent and proper ſupplies, would ſoon wear the body quite out. The attritions and abraſions of the circulating fluids would quickly carry away the canals in which they circulate, were not ſomewhat furniſhed and conveyed to them, which is ſuited to fall into and adhere with them, and to recruit what is waſhed off. And thoſe particles muſt be much more diſpoſed to do ſo, whoſe adheſions are greateſt when once they come into contact; ſuch are thoſe of the bodies we call glutinous; and which eaſily form themſelves into jellies, and ſuch like conſiſtencies: for the parts of ſuch bodies are very light, by reaſon of the over-proportion of their ſurfaces to their ſolidities: whereby their motions are both more languid when in circulation; and when once they ſtop, their coheſions will be ſo much the ſtronger with whatſoever they happen to fall into contact. Medicines of this tribe are, therefore, of great ſervice in hectics, where the ſwift motion of a thin ſharp blood wears away the ſubſtance of the body, inſtead of nouriſhing it; for they not only retard the inordinate motion, but give ſuch a weight and conſiſtence to the juices, as fits them alſo for nouriſhment.

There are likewiſe other cauſes, which may weaken the ſolids, by admitting, or occaſioning them to relax too much. Whatſoever therefore acts as a ſtimulus, and criſps and corrugates the fibres into a more compacted tone (which moſt auſtere and pointed bodies do) will remove ſuch weakneſs, and increaſe ſtrength: and as alſo too much moiſture may contribute to ſuch relaxation, what has no other quality but abſorbing and drying up ſuch ſuperfluous humidity, may deſerve, though accidentally, to come under this denomination.

And thus we have a clear notion of the three ſubdiviſions made under this head, and the manner by which they ſeverally operate in bringing about the main intention. This therefore, it is hoped, may

ſerve

ſerve for an explication of the three ſubſequent claſſes; obſerving that under the laſt do very naturally fall all thoſe things which uſually paſs for ſweeteners: for that term can have no other meaning, than that the animal fluids are by them rendered leſs ſharp; and this cannot be done but either by breaking off the points or aſperities of their particles, or by abſorbing them, by ſoft and porous bodies, that they cannot be perceived. Increaſe of motion conduces to the former; and what comes under the third claſs of this diviſion, will do the latter.

Claſs 1. *Of Agglutinants.*

Folia, Herbs or leaves of,

Amaranthi. Maranth, or Love-flower; of its various kinds, the *Amaranthus maximus ſimplici panticula*, the greater love-flower with a ſimple pannicle, of C. B. is the moſt noted. It is cultivated in the gardens, and flowers in Auguſt. It is moderately drying and reſtringent; and is recommended in fluxes of all kinds. Some aſcribe to it a virtue to breed milk in the breaſts of women who give ſuck. But it is of no uſe in modern practice.

Aparines, Clivers. *Galium aparine fol. octonis lanceolatis, carinis ſcabris retrorſum aculeatis, geniculis villoſis fructibus hiſpidis.* Linn. It flowers in May and June. It is ſaid to warm and dry, and is recommended in cachexies and ſcrophulas; but modern practice hath no regard to it.

Argentinæ, Silver-weed, Wild-tanſy or Gooſe-graſs. It is without ſmell or taſte, and grows plentifully by hedges or highways, as alſo in meadows. It flowers in May and June: and is recommended for its cooling reſtringent qualities.

Auriculæ Muris, Mouſe-ear. Botaniſts diſtinguiſh many ſorts of it, but the officinal kind is: he—*Major repens hirſuta*, the greater creeping hairy Mouſe-ear of C. B. *Hieracium foliis integerrimis ovatis ſubtus tomentoſis, caule repente, ſcapo unifloro.* Linn. It ſtands recommended for an aſtringent and vulnerary; but the modern practice does not much uſe it in any intentions.

Bursæ Paſtoris, Shepherd's Purſe; is a ſpecies of the *Thlaſpi*, called by Ray, *Thlaſpi fatuum.* It is the *Thlaſpi majus, foliis radicalibus, pinnatifidis, ſiliculis obcordatis* Linn. It flowers in April. Its juice is ſaid to be very aſtringent and glutinous; to ſtop bleeding at the noſe; alſo good againſt ſpitting of blood, in diarrhœas, dyſenteries, and bloody urine. But experience does not eſtabliſh theſe qualities.

Caudæ Equinæ, Horſe-tail. *Equiſetum Paluſtre longioribus ſetis.* C. B. the Great Marſh Horſe-tail, its virtues are ſuch as may properly rank it in this claſs; but the preſent Pharmacy is a ſtranger to it. It is aſtringent in a low degree.

Centinodii, Knot-graſs, otherwiſe called *Polygonum*; by the Bauhines *latifolium. Polygonum aviculare floribus octandris trigynis axillaribus, foliis lanceolatis, caule procumbente herbaceo.* Linn. It grows in ſandy places; and is ſaid to

to be aſtringent and vulnerary; but is very little uſed.

Cinaræ, the Artichoke; otherwiſe called *Scolymus*, and diſtinguiſhed— *Hortenſis foliis non aculeatis & aculeatis* by C. B. *Cynara ſcolymus*. Linn. It is too commonly known to want farther deſcription; but although it is by ſome accounted a diuretic, and good againſt the jaundice, yet it is in eſteem only as food: wherein it is valued for thoſe virtues which belong to this claſs.

Corni, the Cornelian-tree, *Sativa ſive domeſtica* by J. B. Its fruit aſtringes, cools, and agglutinates; but common practice takes no notice of it.

Coronopi, is a ſpecies of the Plantain, *Cornu cerviuum vulgo Spicâ Plantagineâ*, J. B. *Plantago coronopus*. Linn. Buckſhorn Plantain. It grows in ſandy places, and is recommended for the ſame virtues as belong to this claſs in general; but it enters very little into the preſent practice.

Cotyledon, called alſo *Umbilicus veneris*, Navel-wort diſtinguiſhed by Caſpar—*major*, and by J. B. *Cotyledon umbilicus tuberoſa*. Linn. It grows on ſtones and walls; and flowers in April. But is but little regarded in our preſent Pharmacy.

Cynoglossi, Hounds-tongue. It flowers in July. It is reckoned to cool and incraſſate; and therefore has been uſed in catarrhs, fluxes, and gonorhœas. It is not now much in uſe.

Galii, diſtinguiſhed *luteum* and *verum* by the Bauhines; Ladies Bed-ſtraw. *Galium verum, vel Galium foliis octonis linearibus ſulcatis, ramis floriferis brevibus, flore luteo*. Yellow Ladies Bed-ſtraw, or Cheeſe-rennet. Linn. It grows in dry paſturage, and flowers in June and July; but though it is by ſome commended for ſtopping hæmorrhages, yet it is not much in uſe. The juice changes blue vegetable infuſions of a red colour, and coagulates milk, and thus diſcovers an acidity.

Galeopsis, Archangel. It flowers in May and June. There are many ſorts, but moſtly the white is uſed in medicine.

Geranii, Cranes-bill, diſtinguiſhed into *Columbinum*, called alſo *Pes Columbinus folio Malvæ rotundo*,—*Moſchatum cicutæ folio*, and— *Robertianum murale*, called likewiſe *Gratia Dei*; which is the herb Robert of the Wall. *Geranium Robertianum pedunculis biſloris, calycibus piloſis decemangulatis*. Linn. But though all theſe are recommended for virtues belonging to this claſs, yet they are ſeldom met with; either in officinal or extemporaneous preſcriptions. This ſpecies, i. e. the herb Robert, is conſiderably aſtringent. Bruiſed, and applied to places where bugs are, it drives them away.

Hormini, Clary, *Hortenſe Salvia Sclarea*. Linn. It flowers in June and July. It is of a pleaſant ſcent, and is much in eſteem amongſt the good women for weakneſſes they are ſubject to; and chiefly the whites. The ſhops have a ſpirit under its name, which is drawn from an infuſion of the herb in ſpirit of wine, and is very pleaſant, and a good cordial. Etmuller will not have it give place even to Caſtor, in hyſterical affections; and affirms there is not a better remedy in colics.

Musci Pixidati, Cup-moſs. This, with ſome other moſſes of like kind, have been mightily in vogue amongſt the good women for

for their children's coughs; but they have not obtained in officinal nor extemporaneous preſcriptions. Dr. Willis is the beſt authority we have for their wonderful virtues: and he makes them almoſt infallible, in that which is commonly called the chin-cough.

PLANTAGINIS, Plantain, is diſtinguiſhed into *latifolia*, called *ſeptinervia*; and *anguſtifolia*, or *quinquenervia*, ſometimes denominated rib-wort. The Coronopus is a ſpecies of it, but the firſt ſort only is uſed in medicine. i. e. *Plantago latifolia major, foliis ovatis glabris, ſcapo tereti, ſpicafloſculis imbricatis.* Linn. This flowers in May and June. It is reckoned a great cooler and ſtopper of fluxes; particularly of blood; whether from the noſe, mouth, or uterus.

SCOLOPENDRII, Spleen-wort. *Aſplenium Ceterach.* Linn. It is the ſame as the Aſplenium and Ceterach of the ſhops, but is little uſed in medicine; though it is accounted binding and ſtrengthening. Formerly it has paſſed for a detergent, and been reckoned ſuch a ſcourer of the ſpleen, (from whence the name of ſpleen-wort) that Dioſcorides relates, ſteeping it in hot vinegar, and drinking it forty days together, it has waſhed away the whole ſubſtance of the ſpleen.

Flores, Flowers:

CONSOLIDÆ MAJ. Comfrey. This is the ſame plant as the *Symphytum. Symphitum foliis ovato lanceolatis decurrentibus.* Linn. It blows in May. The name *Conſolida* is alſo given to ſome other diſtinctions of plants; as,—*Media* to the Bugle,—*Minima* to the common Daiſy, and—*Saracenica*, to a ſpecies of the Golden-rod, called Saracens Conſound: but theſe are very little required in Pharmacy. They are accounted good in ſeminal weakneſſes particularly. Etmuller obſerves them to be the only ingredients of this tribe, which very gently looſen the belly.

Semina, Seeds of,
AVENÆ, Oats.
FABÆ, Beans.
ORIZÆ, Rice.
PISI, Peaſe.
TRITICI, Wheat.
VERMECELLI.

SAGO. Theſe are very much of the ſame virtues. The five firſt are too well known in our own country to need any deſcription: Sago is a whitiſh brown, ſpherical, granulated ſubſtance, of the ſize of pearl-barley; having very little ſmell or taſte. It is obtained from the inward pith of a ſpecies of the palm-tree, or *Palma pruniferа*, or bread-tree. *Cycas Indica, frondibus pinnatis circinalibus, foliolis linearibus planis.* The Sago-tree. Linn. The manner of obtaining it, ſee in Dampier's Voyage, Vol. I. It is accounted very nouriſhing and reſtorative, eſpecially for people of weak ſtomachs, or thoſe in conſumptions, or ſubject to diarrhœas, or fluxes of any kind. Vermicelli is made of rice flour mixed with the whites of eggs, and paſſed through proper ſieves to give it its vermicular form; as it boils, the white hardens, and thereby the form is preſerved. They are all very nouriſhing in food. In medicine they are little uſed; unleſs in ſome particular intentions they are preſcribed in cataplaſms, and outward applications. Sago does not ferment in the ſtomach, ſo is preferable to wheat-

wheat-flour for the food of infants.

Gummi, Gums:

Arabici, Arabic. This gum is very common. That is accounted beſt which is in ſmaller pieces, and almoſt of a white colour. It flows from the Acacia, or Egyptian thorn. *Mimoſa Nilotica* of Linnæus. It very eaſily diſſolves in any aqueous liquor; and is good in all kinds of fluxes, particularly catarrhs, by thickening and ſoftening the thin humours.

The virtues of gum are ſimilar to all mucilaginous ſubſtances in general, and wherever a mucilage is required, this gum may be adminiſtered; one ounce renders a pint of water conſiderably glutinous, and four ounces gives it a thick ſyrupy conſiſtence. A great advantage we have from a mucilage made with gum arabic and water, in mixing various bodies with water, which, without the intervention of ſome proper medium, would never be made to unite with it. This mucilage joined with acids, both mineral and vegetable, with neutral ſaline mixtures, with oils, balſams, and reſins, with eſſential and expreſſed oils, readily unites them with water, and form an homogene mixture. But alkalines, both fixt and volatile, prevent the mucilage from thus acting as a medium, and if already mixed, will cauſe a ſeparation; and hard calcareous water too, render the mixture impracticable. Another advantage of this mucilage is, that it conceals diſagreeable taſtes, covers pungency, preſerves the ſubſtances that it is united with, and is not in danger of becoming rancid, a complaint often made againſt eggs.

The mucilage may be kept ready for uſe, conſiſting of one part of the gum to two parts water, or of the gum and water, equal parts. One dram of the ſtronger mucilage rubbed well with two drams of the oil of olives, lineſeed, or almonds, makes them readily mix with water into an homogene mixture, like the emulſions made of oily fruits and ſeeds. Balſam Peru, Capivi, Gilead, guaiacum, turpentines, and all reſinous tinctures, myrrh, balſ. Tolu. oil of aniſeeds, cloves, nutmegs, and camphor, and muſk, alſo ſpermaceti, oil of vitriol, elixir of vitriol, ſpirit. nitri dulcis all mix very readily with water, if firſt rubbed a little with from half to equal quantities of the mucilage ---Bees-wax, if firſt diſſolved in rectified ſpirit of wine over the fire, may be made to unite with any watery fluid by the uſe of this mucilage as a medium---the mixture of a little ſugar or ſyrup aſſiſts the mucilage, after which any ſpirituous water may be added, and laſtly the aqueous fluid.

Ichthyocollæ, Iſinglaſs. It is certain membraneous parts of ſeveral ſorts of fiſhes, diveſted of their native mucoſity, afterwards rolled and twiſted, and dried in the open air. The ſounds or air bladder is principally preferred, as it is the moſt flexible and tranſparent. In Iceland it is produced from the ſounds of the cod and ling fiſhes. In Ruſſia the ſounds of the ſturgeon are manufactured into this article. The beſt pieces are thoſe that are thin, whiteſt, and moſt tranſparent. It is very glutinous, whence uſed in thoſe diſorders which ariſe from too thin and ſharp a ſtate of the fluids. In female weakneſſes, or the fluor albus, &c. it is peculiarly uſeful. Alſo in hæmorrhages, and various defluxions.

Kino,

KINO. Alſo called *Gummi Rubrum aſtringens Gambienſe.* Red aſtringent gum from Gambia. *Sanguis Draconis ver. & offic. Gum. Senegal. ver. &c.* It is very friable, eaſily breaking between the fingers; of an opake, dark, reddiſh colour, appearing almoſt black in the maſs, and when powdered, it is of a deep brick-red. In chewing it firſt crumbles, then ſticks together a little, and in a ſhort time ſeems wholly to diſſolve, impreſſing a very conſiderable aſtringency, accompanied with a ſlight ſweetiſhneſs. It hath no ſmell. It differs from the red lumps of the common gum Senegal in being much more brittle; and from the dragon's blood, in diſſolving in water; and from both in having ſo remarkable a ſtypticity when taſted. It diſſolves both in water and in ſpirit; they each take up about two thirds of it. It hath been uſed in obſtinate chronicle diarrhœas; and ſeems calculated for uſefulneſs in many diſorders from laxity and acrimony. It exceeds the *Terra Japonica* in aſtringency.

OLIBANI, *Olibanum*, called alſo *Thus Maſculum*, or the male frankincenſe. This is a gum not greatly unlike maſtick, but not ſo white or brittle. It is very glutinous, and conſequently ſtrengthening; but partakes ſo much of the turpentine kind, as to be ſomewhat detergent; for we find it will make the urine ſmell, if taken inwardly in a conſiderable quantity.

SANGUIS DRACONIS, Dragon's-blood. The reſin of a tree in the Eaſt Indies. It readily melts and catches flame, and is not acted on by watery liquors. It totally diſſolves in pure ſpirit, and tinges a large quantity of the menſtruum of a deep red colour: it is likewiſe ſoluble in expreſſed oils, and gives them a red hue, leſs beautiful than that communicated by anchuſa. This drug, in ſubſtance, has no ſenſible ſmell or taſte; when diſſolved, it diſcovers ſome degree of warmth and pungency. The ſhops ſhew two kinds of this drug, which differ only in fineneſs; the beſt being wrapped up in flags. It is experienced to be of an agglutinating quality; and is preſcribed with ſucceſs in moſt fluxes and hæmorrhages.

TRAGACANTHI, Gum Dragant, Tragacanth, is a gum from the goat's thorn. *Aſtragalus Tragacantha orientalis humillimus, flore magno albo.* Linn. That is beſt which is whiteſt and lighteſt. It diſſolves eaſily in any aqueous menſtruum; to which it will give the conſiſtence of a ſyrup, in the ſmall proportion of a dram to a pint. It is ſmooth and ſoftening, and therefore good to obtund the acrimony of any humours; which makes it of ſervice in ſuch coughs as proceed from catarrhs and defluxions of rheum. It is alſo very ſtrengthening in ſome ſeminal weakneſſes, and prevalent againſt the whites in women; eſpecially if ſkilfully diſſolved in rough red wine: in which form I have often known it given in thoſe caſes with good ſucceſs.

Cortices, Barks of,

CASSIÆ LIGNEÆ, Caſſia Bark. This is a bark which by infuſion, or a little boiling, runs very much into jelly: and is of the ſame virtue with moſt things of the like nature. The tree from whence it is produced, is called *Canella Malavarica & Javanenſis*, or *Arbor Canellifera Malabarica.* It is the *Laurus Caſſia* of Linn. whoſe leaves are the officinal *Malabathrum.* This bark very much reſembles cinnamon

cinnamon in appearance and taſte, inſomuch as to entice ſome to uſe it in its ſtead; being much cheaper, though not by far ſo good. If chewed it ſeems to diſſolve into a ſlimy ſubſtance, by which it is diſtinguiſhed from cinnamon. The diſtilled oil hath the ſame qualities as that of cinnamon.

RAD. CONSOLIDÆ. Roots of Comfrey. *Symphytum foliis ovato lanceolatis decurrentibus flore purpureo.* Linn. Theſe are more efficacious in this intention than the flowers. They are ſometimes made into a conſerve in the ſhops; but ſuch ſlimy or glutinous bodies are very imprudently worked up into ſuch forms; becauſe the ſugar, in a little time deſtroys that very texture from whence their medicinal virtues ariſe. This root is very conveniently boiled up into a jelly; and if it be a little ſweetened, as it is uſed, is not at all amiſs. It is very ſtrengthening, and good againſt all fluxes whatſoever; but particularly ſeminal weakneſſes, old gleets, and the whites in women.

Claſs 2. *Of Aſtringents.*

Folia, Herbs of,

GLASTI, Woad. *Iſatis Tinctoria.* Linn. This is cultivated in many inland counties, and is much uſed in dying. It is what the antient Britons uſed to paint themſelves with. It is not much uſed in medicine, but accounted very aſtringent, and effectual in ſtopping hæmorrhages.

GNAPHALII, Cudweed,—*Vulgare majus*, and *Germanicum*, by the Bauhines. *Filago Germanica.* Linn. It grows in dry places, and flowers in June. It is drying and aſtringent; and recommended in dyſenteries, hæmorrhages, and all kinds of fluxes; but the modern pharmacy makes little uſe of it.

HERNIARIÆ, Rupture-wort. *Polygonum minus ſeu millegrana major*, C. B. *Herniaria Glabra.* Linn. It flowers in June and July. Schroder commends it in a diabetes; ſays it helps to diſſolve the ſtone, and abſterges the *mucus* from the ſtomach, and other parts where it is apt ſometimes to collect in too great quantities; and that it purges choler, and is therefore good in the jaundice. It is a very mild aſtringent.

MENTHÆ, Mint; diſtinguiſhed *Anguſtifolia ſpicata* by Caſp. Bauhine: there is alſo a *Mentha aquatica*, water-mint called *Siſymbrium*; and a *Mentha ſylveſtris*, called *Mentaſtrum*, horſe-mint. The mints in uſe are the *Mentha ſpicis oblongis, foliis lanceolatis nudis ſerratis ſeſſilibus, ſtaminibus corolla longioribus.* Linn. Spear mint, and the *Mentha floribus capitatis, foliis ovatis petiolatis, ſtaminibus corolla brevioribus.* Linn. Pepper-mint. The Spear Mint is juſtly eſteemed a ſtrengthener of the ſtomach, and is of great ſervice in taking off nauſeouſneſs and reachings to vomit; as alſo in ſtopping fluxes of the belly. Its fragrant ſcent makes it enter into many compoſitions as a cephalic. There are ſeveral medicines made of it in the ſhops; but the ſpirit, and the diſtilled water, are the principal. In the foremention-ed caſes, it is uſed with good ſucceſs in fomentations, outwardly applied with hot cloths to the ſtomach and belly. The Pepper Mint

is uſeful in flatulent colics, langours, and ſuch-like diſorders.

Millefolii, Yarrow, is diſtinguiſhed—*Vulgare album*, C. B. It is the *Achillea foliis bipinnatis nudis laciniis linearibus dentatis, caulibus ſulcatis*. Linn. It flowers in June. This plant is not much in uſe; yet Schroder highly extols it for a drier and an aſtringent; and ſays it relieves hæmorrhages, and defluxions of all kinds; whether of the noſe, womb, bowels, freſh wounds, ſpitting of blood, vomitting, diabetes, &c. and commends its outward uſe in ruptures, and all manner of weakneſſes.

Pimpinellæ, Burnet, or *Sanguiſorba minor hirſuta & lævis* of C. B. *Poterium ſanguiſorba inerme, caulibus ſubangulosis*. Linn. It grows on hilly paſtures; and flowers in July and Auguſt. It is hot, drying, and aſtringent; yet by the former qualities it obtains a place alſo among the detergents; as it has a quick pungency on the palate; ſo that it is ſaid to open, attenuate, and promote ſweat.

Saniculæ, Sanicle, called alſo *Diapentia*. *Sanicula Europæa*. Linn. It grows in woods and hedges, and flowers in June, when it ought to be gathered. It heats, dries, and aſtringes.

Urticæ, Nettles. Theſe are diſtinguiſhed into—*Urens vulgaris*, the common ſtinging nettle, and —*Romana ſive mas cum globulis*. The — *Mortua* is the *Lamium*, which ſee under that word. They are placed under this claſs, for their known properties in ſtopping hæmorrhages; and particularly ſpitting of blood, and bloody urine; the roots eſpecially: yet they are commended in other intentions, and are accounted diuretics, and breakers of the ſtone in the bladder. They are ſaid to have a ſingular property in removing the narcotic impreſſions of hemlock and henbane. Their uſe in compoſition is very little: the ſeeds are oftenеſt preſcribed.

Uva Ursi. *Arbutus caulibus procumbentibus foliis integerrimis*. Linn. Perennial leaved Strawberry-tree. Bear's wortle berry. This plant is found in the highlands of Scotland, and on the mountains of Wales. The ſtems are trailing, leaves very entire, cups purple, bloſſoms white. The berries are inſipid, pulpy, and mealy. It is diſtinguiſhed from the bilberry only by the number of chives in the flowers, thoſe of the Uva Urſi have ten in each, thoſe of the bilberry have only eight; and the berries of the Uva Urſi hath five ſeeds only, the bilberry hath frequently twenty.

Half a dram of the powdered leaves, given every day, or every other day, is often uſeful in calculous diſorders. Sometimes it affords no relief, but rather aggravates the ſymptoms. Perhaps its effects are no other than thoſe of other vegetable aſtringents, ſome of which have long been uſed in gravelly complaints with great advantage.

Flores, Flowers of,

Balaustiorum, Balauſtines. They are the flowers of the *Malus Punica ſylveſtris major*, the greater wild pomegranate, as the *Cytini* are of the *Malus Punica ſativa*, the cultivated pomegranate. They are very rough upon the palate, and much aſtringe; and are therefore uſed in many compoſitions of that intention. They are very ſerviceable in diarrhœas, and for ſuch caſes are frequently uſed in ſtrengthening glyſters,

Rosarum

Rosarum Rubrarum, Red-Roſes. *Roſa germinibus ovatis pedunculiſque hiſpidis, caule petioliſque triſpido, aculeatis.* Linn. The buds only before they are quite blown are uſed in the ſhops, unleſs for the diſtilled water, and the *Mel Roſarum*, becauſe then they are much rougher and more aſtringent. The conſerve made of them is deſervedly in great eſteem; but the common notion of its being the better for age, is an error: for their aſtringency very much decays by long lying in the ſugar. They are good in almoſt all diſtempers of the lungs; and particularly in defluxions of rheum, and ſpitting of blood. A very ſtrong tincture of them greatly helps the efficacy of the bark in intermitting caſes; and is an excellent pleaſant julep. The conſerve is judged uſeful in inflammations of the eyes, applied outwardly.

Fructus, Fruits of,

Berberis, Barberries. The tree or buſh producing theſe, was the *Oxyacanta* of the ancients, and particularly of Galen. It is the *Berberis pedunculis racemoſis, ſpinis triplicibus, floribus luteis.* Linn. They are fit to gather about autumn; and are of a delightful, cooling, aſtringent taſte. They are chiefly uſed in conſerve; they very agreeably quench thirſt, and fortify the ſtomach; and are good in diarrhœas and dyſenteries.

Castaneæ, Cheſnuts. The tree producing theſe is ſufficiently known. They are accounted aſtringent, particularly the outer ſkin; but the preſent practice takes no notice of them.

Cydoniorum, Quinces, alſo called *Mala Cotonia* by Gerhard, the Bauhines, and others. *Pyrus fol. integerrimis, floribus ſolitariis.* Linn. This is a very delicious fruit, which ripens at the latter end of the ſummer. They are a very rough aſtringent, eaten raw. They mightily cool and ſtrengthen the ſtomach; remove nauſeouſneſs, and ſtop fluxes of the belly. For theſe purpoſes they are much in uſe, eſpecially their juice made into a ſyrup, which is both very pleaſant, and agreeably aſtringing. The juice will keep a whole year very good, with oil upon it, in the manner that wine is kept in flaſks: and it is much better to preſerve it ſo, and make the ſyrup often; for all aſtringents rot or mellow by lying long in ſugar; ſo as to loſe their efficacy. Etmuller, after his uſual way of talking, aſcribes the aſtringency of this fruit to an acid auſtere ſalt, with which it abounds. Some of the ancients accounted it an antidote for ſome particular poiſonous qualities in hellebore. The ſeeds, bruiſed well in an aqueous liquor, afford a good mucilage, which is excellent in ſome foreneſſes of the mouth; and anſwers likewiſe all the intentions of the preceding claſs.

Gallæ, Galls. Theſe are the production of the *Quercus Gallum ferens*, the gall-oak, which grows in Hungary, and ſome parts of Italy. They are a kind of excrementitious tubercles, in which are hatched particular inſects. They are powerfully aſtringent, whether uſed internally or externally.

Glandes, Acorns. Theſe are pretty much of the ſame kind and quality as the galls. Some will have them to be ſtrong carminatives, and grate them into warm liquors, like ginger and other ſpices to expel wind.

GRANATORUM, Pomegranates, called by many botaniſts the *Malus Punica*, or Carthaginian apple. It is the fruit of the *Punica ſylveſtris Italica, foliis lanceolatis, caule arboreo.* Linn. Its different parts are differently denominated, as the flowers *Cytini*, and the peel *Malicorium*. This is a delightful fruit, not much differing in its medicinal virtues from quinces. The juice is preſcribed in weakneſſes of the ſtomach and bowels; and removes nauſeouſneſs, vomiting, and fluxes.

MESPILI, Medlars. Theſe are the fruit of a tree (*Meſpilus Germanica.* Linn.) cultivated in ſome gardens, though little uſed in medicine; but in diet they are a grateful fruit, though not eatable till rotten.

MORI, Mulberries. *Morus foliis cordatis ſcabris, fructu nigro.* Linn. Theſe are the fruit of a well known tree, and are grateful, cooling, and aſtringent. They are uſed only in a ſyrup, which is very pleaſant, and makes a mighty good gargariſm, with a ſimple cooling water; for which it is moſt in uſe.

MYRTI BACCÆ, Myrtle-berries. Theſe are the fruit of the common Italian myrtle, and they are very rough and aſtringent. They are not much in compoſition for inward uſe; but they enter ſeveral of the ſtrengthening plaſters. The ſyrup is eſteemed good againſt abortion; and is uſed in fluxes of all kinds.

MYRTILLI, Hurtle-berries. Theſe are of different kinds; but the *Vitis Idæa foliis oblongis crenatis fructu nigricante* of C. and *Idæa fructu nigro* of J. B. and the *Vaccinium Myrtillus.* Linn. is the ſort referred to here; which are called alſo Vaccinia, blackwhortles. They grow in ſtoney grounds, and are cooling and aſtringent; but little uſed in modern pharmacy.

PRUNELLORUM SYLVEST. Sloes. *Prunus ſylveſtris ſpinoſa fol. lanceolatis pedunculis ſolitariis.* Linn. Theſe are the fruit of a particular thorn-tree, which is the ſame as the Acacia Germanica; the inſpiſſated juice whereof is ſometimes ſold for the true Egyptian Acacia. We have in the ſhops a conſerve made with them; which with care is a very good one. For this purpoſe they are to be gathered before they begin to wither and mellow upon the trees; for after they are froſtbit, as the country-people call it, and made fit for eating, they are not ſo rough; and conſequently not ſo ſuitable for this intention in medicine.

RUBI IDÆI, Raſpberries, are the fruit of a particular bramble, differing not much from the *Rubus vulgaris fructu nigro*, the blackberry, unleſs in colour. *Rubus fol. quinato pinnatis ternatiſque, caule aculeato, petiolis canaliculatis, fructu rubro.* Linn. Theſe ripen about June. They are much like the mulberries for their medicinal virtues; but ſomewhat rougher, and of a more fragrant flavour. They are uſed chiefly in ſyrup, which is likewiſe much preſcribed in gargariſms; and is reckoned good againſt vomitings, and looſeneſs of the belly.

SORBI, Services, are the fruit of a tree cultivated in the gardens, and diſtinguiſhed *Sorbus ſativa, vel legitima*, in oppoſition to the *Cretago*, or *Sorbus torminalis* of Theophraſtus and Pliny; characterized by—*Apii folio ſylveſtris non ſpinoſa*, the wild ſervice-tree. It is the *Sorbus Domeſtica*, of Linn. Theſe are much of the ſame kind as medlars, and

and as little known in medicine; though as much valued in diet for the ſame qualities.

Succi inſpiſſati, Juices;

ACACIÆ, Thorn-Tree. There are three kinds of this mentioned by botanic writers; one is from the *Prunus ſylveſtris*, or *Acacia Germanica*, which is the ſloe-tree, or black-thorn: another is from the *Cytiſus ſpinoſus*, or *Acacia trifolia*, trefoil acacia; but the laſt and true ſort for medicinal uſes, is from the *Spina Egyptiaca* diſtinguiſhed by Herman in his catalogue of the Leyden garden---*foliis ſcorpoides leguminoſæ, ſiliquis albiis compreſſis, iſthmo interceptis, floribus luteis*; which is the Mirqueth of Hernandez, the Egyptian thorn. *Mimoſa Ægyptiaca, ſpinis ſtipularibus patentibus fol. bipinnatis partialibus extimis glandula interſtinctis, flore luteo, ſpicis globoſis pedunculatis.* Linn. The inſpiſſated juice of the unripe fruit of this tree is brought to us from Egypt, in roundiſh maſſes, wrapt up in thin bladders. It is outwardly of a deep brown colour inclining to black; inwardly of a reddiſh or yellowiſh brown; of a firm conſiſtence, but not very dry. It ſoon ſoftens in the mouth, and diſcovers a rough, not diſagreeable taſte, which is followed by a ſweetiſh reliſh.

This juice entirely diſſolves in water; but is ſcarce ſenſibly acted on by rectified ſpirit.

It is a mild aſtringent. The Egyptians give it in ſpitting of blood, to a dram, in any convenient liquor. With us it is rarely found; what is uſually ſold for it, is, the inſpiſſated juice of unripe ſloes, which is harder, heavier, of a darker colour, and a ſomewhat ſharper taſte.

HYPOCISTIDIS, is the inſpiſſated juice of a tree, or ſhrub, called alſo *Orobanche*, the holly-roſe. It is divided into male and female, the former of which only is the *Ciſtus Hypociſtidem ferens*, and diſtinguiſhed---*Mas folio oblongo incano* by Caſp. Bauhine. *Aſarum Hypociſtis*. Linn. Dioſcorides gives a very particular deſcription of this ſhrub, too long to inſert here. The officinal juice is blackiſh, and ſhines like the beſt Spaniſh juice of liquorice. It is reckoned more powerful in its aſtringent quality than the foregoing. But it is uſed in few officinal compoſitions; and never in extemporaneous preſcriptions.

Cortices, Barks of,

CINNAMOMI, Cinnamon, is the bark of a tree called *Canella Zeilaniaca* by Caſpar Bauhine; *Laurus Zeilaniaca Baccis caliculatis Hermanni* by Ray, and is the *Cunrdo* of Piſo. *Laurus fol. trinerviis ovato oblongis, nervis verſus apicem evaneſcentibus floribus parvis albis.* Linn. This, as was obſerved before, under the Caſſia bark, was by the ancients confounded with that: but it is of a much more aromatic flavour and taſte, and is rough upon the palate when chewed; whereas the other is quite ſlimy. This is not only an admirable aſtringent, and a great ſtrengthener of the ſtomach and bowels, but alſo a good cephalic. There are no kind of defluxions or weakneſſes but what it is of ſervice in. It affords an oil which will ſink in water, and is of great eſteem, and much preſcribed in extemporaneous practice. But its dearneſs ſubjects it very much to adulteration; which is generally done with a mixture of oil of cloves or clove-bark;

which are alſo ſpecifically heavier than water. The beſt way to know its goodneſs is by diluting it; which may be done by dropping it upon ſugar, and then diſſolving it in ſmall ſpirit. For before it is ſo managed, its extraordinary heat upon the tongue will not ſuffer one to diſcern its true taſte; but when it is thus diluted, it eaſily diſcovers any foreign mixture. This oil has of late been made genuine in England, from the common cinnamon of the ſhops; ſo as to far exceed that uſually brought hither from Holland.

GRANATORUM, Pomegranates, called alſo *Malicorium*. This is reckoned much more aſtringent than the juice, already taken notice of. It is therefore much ordered in decoctions againſt gonorrhœas, and fluxes; and often in aſtringent glyſters.

QUERCUS, Oak. *Quercus foliis deciduis oblongis ſuperne latioribus, ſinubis acutioribus, angulis obtuſis.* Linn. This has not a place any where in the Diſpenſatories that I know of; yet it is a powerful aſtringent. From its great aſtringency, and its affinity, upon that account, with the Peruvian bark, ſome imagine it will prevail againſt intermittents; but there do not appear any inſtance of trial to ſupport ſuch a conjecture.

SIMAROUBA. It is thought to be the bark of the *Piſtachia Terebinthus*. Linn. It is brought from Guiana, in long tough pieces, of a pale yellowiſh colour, and a pretty ſtrong bitter taſte. It is uſed in dyſenteric fluxes: a decoction of half a dram is given for a doſe, and repeated at intervals of three or four hours.

Radices, Roots of,

BISTORTÆ, Biſtort, or Snakeweed, diſtinguiſhed---*Major rugoſioribus foliis*, by J. and---*Radice minus intortâ*, by C. B. *Polygonum caule ſimpliciſſimo monoſtachio, foliis ovatis in petiolum decurrentibus.* Linn. This grows in ſeveral parts of England, in low grounds. Its root only is of uſe. It is one of the ſtrongeſt of the vegetable aſtringents; and therefore uſed againſt all kinds of fluxes, where aſtringency is the only indication. It is beſt in decoction. It is accounted good againſt vomiting, ſpitting of blood, and all hæmorrhages. It paſſes with ſome alſo for an alexipharmic, and is reckoned to promote ſweat; for which reaſon it is, that we ſometimes find it in compoſitions and preſcriptions of that intention. Of this root in powder the doſe is to a dram.

COLUMBOE. This root is thus named from the town of that name in Ceylon, whence the Dutch ſupply the world with it. It is brought to us in circular pieces, from half an inch to three inches in diameter, and divided into fruſta, which meaſure in length from two inches to a quarter. The ſides are covered with a thick corrugated bark, of a dark brown colour, on its external coat, but internally of a light yellow colour. The root ſeems to conſiſt of three lamina, viz. the cortical, the ligneous, and the medullary. A number of ſmall fibres run longitudinally through it, and appear on the ſurface. The thicker pieces have holes bored through them, for the convenience of drying. It hath an aromatic ſmell, but is diſagreeably bitter, and ſlightly purgent to the taſte, ſomewhat reſembling muſtard-ſeed, when

when it hath loſt, by long keeping, part of its eſſential oil.

It gives out its virtue by cold as well as by hot maceration. Rectified ſpirit of wine extracts its virtues moſt perfectly; brandy or wine do the ſame in a very uſeful degree; and even water for preſent uſe obtains a good degree of its medicinal parts. An ounce of the root may be infuſed in a pint of any proper menſtruum; and from one dram to ſix may be given for a doſe, and repeated according to the intention of giving it. Of the powder, the doſe is from three grains to a dram or more.

Bitters generally have a degree of aſtringency, and this root ſhares of this quality in a ſmall degree. It is not heating, ſo may be given in hectic habits, in purgings, vomitings, dyſenteries, bilious fevers, diſorders from indigeſtion, and flatulency, and where an averſion to the Peruvian bark renders the taking of it difficult, it is a good ſubſtitute for it. In theſe and many other complaints, after due evacuations, this root is eminently ſerviceable.

Tormentillæ, Tormentil,--- *Sylveſtris* C. B. *Tormentilla caule erectiuſculo foliis ſeſſilibus.* Linn. It grows in paſture grounds, and flowers in June. The root only of this plant is uſed in medicine. This is ranked amongſt the alexipharmics likewiſe; and is of great eſteem in malignant caſes, attended with any flux, either of the bowels, or the womb; all which it is reckoned to reſtrain. Schroder ſays there is not a better vegetable grows than this, for all ſuch intentions. It agrees mighty well with the white drink, and changes its colour to a very agreeable red; and much increaſes its efficacy in checking a looſeneſs in the meaſles, ſmall-pox, or fevers.

Osmundæ Regalis, Oſmund Royal, of Linnæus, is a ſpecies of the fern, and diſtinguiſhed by C. B. *Filix florida, ramoſa, non dentata*; it is to be met with in marſhes. The root is the only part of it uſed in medicine. It is moſt in eſteem for reſtraining the whites in women, and ſtrengthening the womb. Some eſteem it very powerful in diſperſing bruiſed blood, and taking away the blackneſs that ariſes therefrom: and Mynſicht made it the baſis of a cataplaſm for ſuch purpoſes.

Claſs 3. *Of Abſorbents.*

Ligna, Woods:

Buxi, Box. *Buxus major arboreſcens.* Linn. It is not much uſed in medicine, although a chemical oil is directed from it: and ſome ſay, boiled in decoctions, it is as efficacious againſt the venereal diſeaſe as guaiacum.

Santalorum *omnium*, all the Saunders. *Santalum.* Linn. There are three ſorts in the ſhops; the citrine or yellow, the white, and the red; though many think the two firſt to be of the ſame tree; the white being the cortical part, and the yellow the middle. They are warm and drying; and by that means take their place in this claſs.

Lentisci, Maſtich-Tree. *Piſtachia Lentiſcus.* Linn. Bellonius, in his Obſervations, lib. ii. cap. 8. affirms this plant to afford the Gum-maſtich, found no where but in the iſland of Chios: but Schroder contradicts

tradicts it, and ſays that he had a preſent of a large piece of it very replete with that gum, from his kinſman Johannes Glaſerus, a ſkilful apothecary, which he brought himſelf from a mountain in Helvetia. It is much of the ſame virtues as the ſaunders, and preſcribed in the like caſes; but as it approacheth ſomewhat nearer to the turpentine kind, it is rather more detergent, and paſſes in ſome meaſure by urine. A decoction of the wood is recommended in catarrhs, nauſea, and weakneſs of the ſtomach.

Guaiaci, Holy-wood, or Pockwood; *Guaiacum offic. vel Guajacum Jamaicenſe, foliolis bijugis obtuſis, flore coeruleo, fructu ſubrotundo.* Linn. This is the wood of a tree that grows very tall in the Weſt Indies. That which is heavieſt is beſt. It is very hot and drying, and therefore a great promoter of perſpiration, and perhaps the moſt certain diaphoretic hitherto known. Upon this account, it is reckoned a wonderful ſweetener and cleanſer of the blood; and therefore much preſcribed in cutaneous foulneſſes of all kinds. By the ſame hot penetrating quality, it is likewiſe eſteemed good in the gout, by diſſipating and inſenſibly waſting the humours thrown upon the joints; as alſo in dropſies and catarrhs, by drying up and waſting the ſuperfluous humidities. But in venereal caſes it is ſaid to do wonders; upon which account it has obtained its name of Pockwood.

It is not, nevertheleſs, capable of itſelf of abſolutely curing the venereal diſeaſe without the aſſiſtance of mercury; though it greatly palliates the ſymptoms, eſpecially in hot countries; but joined to mercury, the ſame is thereby determined to the ſkin, and thence rendered capable of eradicating cutaneous poxes, which reſiſt ſalivations, and all other methods hitherto known. In theſe caſes, the decoction or extract ſhould be uſed, and given continually with ſuch a proportion of mercury, as may be retained in the habit, without forcing its paſſage through the inteſtinal or ſalival glands, to which the guiacum, if the patient be kept warm, will contribute much to hinder. To have its full virtues by decoction, it ſhould either be freſh, or very long boiled.

Sassafras. It is the wood of a large tree, which grows in Florida, Virginia, &c. It is the *Laurus Saſſafras, vel Laurus fol. integris trilobiſque, floribus flavis, baccis coeruleis.* Linn. It is of an aromatic ſcent: ſome compare it to fennel. It is very drying and hot, though not quite ſo much as the guaiacum. It is uſed in all the ſame intentions, and is much more met with in extemporaneous preſcriptions than in the ſhop medicines; this is ſomewhat come into faſhion in families, by way of tea, which the ſhavings of it make agreeably enough; but the ſcandal of its being good in venereal caſes, is a great detriment to its credit; which prevents a great deal more good being done by it, than otherwiſe might be; for it is certainly (in the ſenſe we have explained the term at the head of the ſection) an admirable ſweetener. Though with ſome indeed it does not well agree, as firſt, eſpecially, and in a morning; as it effects the head like ſome perfumes, and occaſions pains, drowſineſs and vapours; but uſe and firſt drinking it in afternoons, will

with

with moſt conſtitutions wear off theſe inconveniencies.

The bark of GUAIACUM, is ſo much of the ſame virtue with the wood, as to need no particular account. They are given promiſcuouſly in the ſame intentions.

The bark of SASSAFRAS is much ſtronger in virtue than the wood.

Radices, Roots of,

CHINÆ, China. *Smilax China.* Linn. This root comes from the country whoſe name it bears; it is alſo brought from New Spain, and moſt of it from Peru; which is the true officinal ſort; and diſtinguiſhed by *Occidentalis*, in oppoſition to the former, called---*Orientalis:* the beſt is white within, light, and mealy. It is drying and promotes perſpiration; in many inſtances, where ancient authors ſpeak of theſe things being diaphoretic, they can be underſtood only of inſenſible perſpiration; for the largeſt doſes will not procure any viſible effect. It is reckoned likewiſe diſcutient, aperient, and hepatic; it is certainly good in all nervous caſes which proceed from too much humidity, and may deſerve to be recommended, as it much is in the gout, and ſome kinds of the palſy. It comes in for an antivenereal upon the ſame foot as ſome of the fore-mentioned woods. The great Veſalius wrote a treatiſe concerning it. Braſavolus ſays a great deal concerning its virtues, in his treatiſe *de Morbo Gallico.*

SARSAPARILLÆ, Sarſa, or Sarſaparil. *Smilax Virginiana hederæfolia, foliis inermibus ovatis retuſo mucro natis trinerviis.* Linn. This root is brought from the Spaniſh Weſt Indies. It conſiſts of a great number of long ſtrings hanging from one head; the long roots (the only part made uſe of) are about the thickneſs of a gooſe quill, or thicker, flexible, compoſed of fibres running their whole length, ſo that they may be ſtript into pieces from one end to the other: they have a glutinous, biteriſh, not ungrateful taſte; and no ſmell. That is moſt in eſteem, which is whiteſt within, and lighteſt: but not ſo dry as to run into powder. It is accounted abſorbent, and a great ſweetener, and much in uſe with ſome for a kind of tea. Some much queſtion whether there be really any medicinal virtues in this root, becauſe it diſcovers little in taſte, ſmell, or tincture; and ſuſpect it to have got into eſteem only as many other things have done of very little worth, by their bearing a good price, and being brought a great way. It is but in few of the ſhop compoſitions; though much found in extemporaneous preſcriptions; a decoction of this, after a patient has been ſalivated, or after taking a good deal of mercury without a ſalivation, ſeldom fails of totally eradicating the venereal diſeaſe.

Of Animals.

Claſs 1.

RASURA C. C. Shavings of Hartſhorn. This is much in eſteem amongſt family doctoreſſes; and in the ſhops too upon many accounts; but what moſt gives it a title to this place, is that jelly which it is eaſily boiled into in common water, and is accounted very nouriſhing and ſtrengthening. Thoſe who make it a trade to raſp it for uſe, have learned the art of mixing bones with it, to raiſe their profit; inſomuch that it is hard to buy any now in the

ſhops

ſhops that has not a daſh of it. The ſame cheat is put upon us frequently in the burned hartſhorn, with which they mix ſeveral ſorts of bone. But as for that, which is the commonly ſuſpected fraud, of drawing the ſpirit from them before they are burnt, and ſo diveſting them of their better part, they are not at all the worſe, were it ſo: for if they are put freſh into the potmaker's kiln, where they are generally calcined, the ſpirit is as much forced away, as in the chemical furnace.

Rasura Eboris, Shavings of Ivory. This is much of the ſame nature as the former, and boils in the ſame manner into a jelly.

Claſs 2.

Oculi Cancrorum, Crabs-eyes. Theſe are a ſtoney concretion in the head, or rather, the ſtomach of the craw-fiſh, and not the eye of the creature. They are much uſed both in the ſhop-medicines, and extemporaneous preſcriptions. They are abſorbent, drying, and correctors of acids. If counterfeit, they want the laminated texture which is ſeen on breaking the genuine ſort, or by their not at all or wholly diſſolving in acid liquors. The true ſort retain their ſhape, though they ſoften in acids, their earthy part only diſſolving.

Chelæ Cancrorum, Crabs-claws. They are of the ſame virtue as the former. They have the greateſt ſhare in the compoſition under the name of Gaſcoign's powder: which in the ſhops has the title from them of *Pulvis è chelis compoſitus*. So far of the tip of the claw as looks black is uſed; the reſt is thrown away.

Margaritæ, Pearls. Theſe are brought from ſeveral parts, but the oriental are reckoned the beſt; and of them, thoſe which come from Perſia. They are the produce of many oyſters, muſcles, and ſuch like ſhell-fiſh. They are only morbid excreſcences from the ſhells, and have no other qualities than the ſhell in which they are generated. They are very different in ſhape and bulk. The whiteſt and moſt glittering are moſt in eſteem. So far as they are manifeſtly abſorbent, and deſtroyers of acidities, we are juſtifiable in ranking them in this place.

Of Minerals.

Claſs 1.

Lapis Hæmatites, Blood-ſtone. This is found in many places in Germany, and in great plenty in England. It is a very heavy, reddiſh iron ore. It is aſtringent; and generally given in ſubſtance reduced to a fine powder. It is reckoned good in all hæmorrhages; and but little uſed in any other caſes. The *Heliotropium*, alſo called Blood-ſtone, and recommended for the ſame purpoſes, ſeems very different, and is of a duſky green, ſtreaked with red veins; and this latter ſort only ſeems to have been the true Blood-ſtone of the ancients, concerning which ſuch ſtrange things have been alleged.

Alumen, Alum. Some authors mention ſeveral ſorts; but the *Alumen Rupeum*, or Roch-alum, is made of an alum mineral mixed with urine and kali. It is extremely rough and aſtringent; as every one finds who taſtes it. It is apt to provoke vomiting, by vellicating the fibres of the ſtomach; upon which account it is not

not much uſed inwardly; and then not without ſome ſmooth aromatic ingredients in compoſition with it. I had it from a very worthy perſon, that he had removed a great many agues, with a large nutmeg, and its equal weight of alum powdered and divided into three doſes, giving one every morning faſting; and that it never failed; but upon ſome trials I have been diſappointed; although it has anſwered in many inſtances; moſtly, I have obſerved, in ſtrong tough conſtitutions: for it is offenſive to the ſtomach at firſt taking. It is likewiſe uſed outwardly in ſome aſtringent lotions, and enters into ſome compoſitions as a very good dentrifice, and a preſerver of the gums.

Claſs 2.

CRETA, Chalk. The fine ſoft chalk is the pureſt of the mineral earths which are uſed for abſorbing redundant acid in the human ſtomach, and is in general to be preferred. See earths capable of abſorbing acids. Its moſt experienced virtue is, in removing that uneaſineſs at the ſtomach, which is commonly called the heart-burn. Some commend it in drying of old ulcers; but that does not ſeem to be a very rational practice.

BOLUS ARMENA, Armenian Bole. This is a natural earth, and brought chiefly from Armenia, but the French is as good. That which is of a paliſh red, ſoft, and fattiſh to the palate, and ſtrongly adheres to the tongue, is the beſt. It is very much adulterated in the ſhops; it is ſomewhat aſtringent, and often preſcribed for diarrhœas, dyſenteries, hæmorrhages, catarrhs, and all kinds of defluxions. The boles contain, beſides the tenacious indiſſoluble earth, which is their principal characteriſtic, 1. a portion of an earth ſoluble in acids; 2. of acid, ſeparable by diſtillation in a ſtrong fire; this acid is of the ſame nature with that obtained from vitriol, ſulphur, and alum; 3. the coloured bolar and ochrous earths contain alſo a ſmall portion of iron, which is reducible by inflammable fluxes into its metallic form: in conſequence of theſe firſt ingredients, theſe earths may be conſidered in ſome meaſure as abſorbents; the acid appears to be united with a part of the abſorbent earth, into a ſaline compound approaching to an aluminous nature; whence they have ſome degree of aſtringency: the iron is in too ſmall a quantity to be uſeful as a medicine.

TERRA JAPONICA, Japan Earth. It is alſo called *Catechu*. It is an inſpiſſated juice; and not an earth, as is manifeſt from ſeveral conſiderations, but from none more than its diſſolving in water, and paſſing with it through a filtre, which an earth will not do. It is ſuppoſed to be the inſpiſſated juice of the fruit of the Areca palm-tree. By Japan earth, our apothecaries commonly underſtand the plain extract, or juice; and by *Catechu*, the ſame aromatized with muſk, ambergris, and the like. It is of a dark purple colour, very auſtere upon the palate, ſeems to melt, like the bole, in the mouth, and leaves ſomewhat of a ſweetiſh taſte behind it. When pure, it diſſolves totally in water, and almoſt totally in ſp. vini R. It is a mild aſtringent, and as ſuch is frequently uſed againſt alvine fluxes, uterine profluvia, laxity of the viſcera in general, and in coughs from thin acrid defluxions.

TER-

Terra Lemnia, Earth of Lemnos. *Amatus Luſitanus* confounds this with the Armenian Bole.

Terra Samina, Earth of Samos.

Terra Sigillata, Sealed Earth. Theſe are very much alike in their medicinal virtues, and are uſed in the ſame intention of drying and aſtringing; but are neither of them ſo good as the two former.

Lapis Granate, Granates.
Rubinus, Ruby.
Smaragdus, Emerald.
Hyacinthus, Jacinth.
Sapphirus, Sapphire.

Theſe are called the greater precious ſtones. They are not reducible into a powder fit for uſe without long levigation; and in the grinding they will neceſſarily wear off ſo much, even of the hardeſt marble, as to increaſe their weights ſometimes to double the quantity; whereby the levigating materials frequently make a conſiderable part of the medicine. And if it was not for this inconvenience, it is not eaſy to imagine what the animal digeſtion can draw out from ſuch hard bodies: theſe ſeem to have got a place in medicine pretty much in the ſame manner as gold, and ſome other things which are very dear, more to countenance an extravagant price of a compoſition, than to contribute any real efficacy thereto.

Corallium Rubrum, Red Coral. There are alſo corals of other colours; but this is chiefly uſed in the ſhops. Corals are animal productions. Linnæus ranks them amongſt the ſpecies of Helmintholithus, or petrified worms, as the honey-comb is the produce of bees, ſo the various corals are the produce of different polypes in the ſea. The brighter and higher the colour, the better it is accounted. We have it from many parts of the Mediterranean; and Naples is a great market for it. This alſo, by its extraordinary hardneſs, carries along with it ſome part of the levigating ſtones. It can only be conſidered as an abſorbent; and is frequently preſcribed to correct the acidities in the ſtomachs of young children; by which means it very probably has obtained the reputation of being good againſt fits; and eaſing the pain in cutting the teeth. For the convulſions which children are ſubject to, may have nothing elſe for their cauſe but thoſe vellicating juices in their ſtomachs and bowels. Kircher, in his *Mundus Subterraneus*, is very copious in his account of this drug; and Granſius has wrote profeſſedly *de Coralliis*.

Lapis Lazuli. This has been improperly reckoned an aſtringent; it owes its colour to copper, and ſometimes proves emetic and purgative.

Lapis Calaminaris, Calamine. This foſſil is found in many places, and is the ore of zinc. It is uſed as a great dryer, and abſorbent in outward applications; it is ſcarce at all uſed inwardly. It is employed in cerates and plaſters, as an incarner and cleanſer of ulcers; as alſo in collyriums, againſt inflammations of the eyes.

Tutiæ, Tutty. A calx, or ſublimate of zinc, produced in the furnaces where zinc is fuſed with copper. It is extremely hard, and loſes nothing in levigation. Its uſe is chiefly as the former, in lotions for inflamed eyes; and little elſe

SECT.

SECT. III.

Of Stomachics.

IT is not at all difficult to apprehend the operations of thoſe things which come under this denomination. All nervous medicines indeed have ſome claim to this diviſion; as whatſoever is good for the nerves cannot but be ſerviceable to the ſtomach; both upon account of its being ſuch a nervous part, and as it has generally the firſt effects of ſuch medicines. But as for ſuperior reaſons, they are diſtributed under other denominations, we ſhall rank under this only ſuch ſimples as are either ſeldom uſed in other intentions, or hardly ever omitted in this. Theſe are ſuch as, by a peculiar warmth, give both a grateful ſenſation, and a ſuitable tenſity to the fibrous coats of the ſtomach; whereby the ſenſe of hunger is not only excited, but alſo the ſtomach rendered more able to break and digeſt what is taken in to nouriſh the body. And as moſt bitters are of this tribe, and alſo as by that quality they contribute frequently to the deſtroying of worms, we have likewiſe given ſome ſimples, preſcribed ſcarce for any other purpoſes, a place here.

Folia, Leaves of,

ABSINTHII ROMANI, Roman Wormwood. *Abſinthium Ponticum tenuifolium incanum*, C. B. It is cultivated in gardens, and flowers in July. It is not by much ſo bitter as the common wormwood; but is a more grateful ſtomachic. But that called and uſed for Roman Wormwood in the ſhops, is the *Abſinthium marinum album* Gerard. *Artemiſia abſinthium marina fol. multipartitis tomentoſis, racemis cernuis floſculis fœminæis ternis.* Linn. and differs conſiderably from the Roman Wormwood, which is of the nature of common wormwood, but more grateful and milder; whereas the ſea-wormwood has a ſomewhat ſaltiſh taſte, and is much leſs bitter than the other; on which account it ſeems to be choſen; though the true Roman wormwood is ſuppoſed to be much the better medicine. A conſerve made of it is much uſed in the ſhops. And in extemporaneous preſcriptions, for weakneſs of the ſtomach, loſs of appetite, and bad digeſtion, it is hardly ever omitted.

ACANTHI, Bear's Breech, or *Branca Urſina*, Brank Urſin; *Acanthus Mollis*. Linn. Its leaves are of a ſhining dark green colour, about twelve inches long and three or four broad; elegantly and deeply cut in ſeveral parts: which occaſioned the ancients to take the pattern of their foliage-work about the capitals of their pillars from them. It is cultivated with us in England; but grows native in Italy, Spain, and the ſouth parts of France. It flowers in July and Auguſt. The herb-women commonly ſell the leaves of bear's-feet, *Sphondylium*, or cow-parſnip, for this. The whole plant has a ſoft ſweetiſh taſte, and abounds with a mucilaginous juice: its virtues the ſame as thoſe of Althea.

CARDUI BENEDICTI, Carduus, or Bleſſed Thiſtle, is the *Cnicus Sylveſtris*

Sylveſtris hirſutior of C. B. *Centaurea calycibus duplicato ſpinoſis lanatis involucratis, foliis ſemi decurrentibus denticulato ſpinoſis.* Linn. This officinal ſort flowers in June and July. A ſtrong decoction of this herb will vomit, and is often uſed for that purpoſe; but in compoſition with other ſtomachics, and drank not in too large quantities, it has no ſuch effect; and is a very good ingredient. The diſagreeable bitter in this plant is much abated by drying and long keeping: water in a little time extracts, without heat, the more agreeable part of the bitter, but if they ſtand long together, the diſagreeable part is alſo taken up. A light infuſion of this herb in water is peculiarly beneficial when the appetite is loſt by irregularities.

CENTAURII MINORIS, the Leſſer Centaury; diſtinguiſhed,---*minus flore purpureo*, by John Bauhine; and---*minus rubrum* in the Oxford catalogue. *Gentiana corollis quinquefidis infundibuli formibus, caule dichotomo.* Linn. It grows in dry paſture grounds, and flowers in July and Auguſt. It is an excellent bitter, and very ſerviceable to the ſtomach in all compoſitions of that kind; and is good by itſelf in decoction; or infuſion, which is beſt made in wine, or ſmall gentian water. It wonderfully diſcuſſes and abſterges viſcid humours, apt to abound in the firſt paſſages; the diſcharge of which it promotes by ſtool and urine; and in the glands of the extremities, and near the ſurface, it attenuates ſuch humours, ſo as to fit them for perſpiration. It is alſo very good, as indeed all bitters are, againſt worms. Some extol it very much for its alexipharmic virtues. It is alſo much uſed in diſcutient fomentations.

CAROLLINA. This is the *Muſcus Marinus*, Sea-moſs of Dioſcorides. It is hardly uſed in any other intention in medicine, than as a vermifuge, for which purpoſe it is much commended, but I believe without reaſon.

SEMINA SANTONICA, Wormſeed. This is the ſeed of a wormwood brought chiefly from Alexandria in Egypt, entitled, *Abſinthium Santonicum Alexandrinum*, C. B. *Artemiſia Santonicum*, Linn. They are hot, bitter, and drying; and are preſcribed ſcarce in any caſe but againſt worms; which experience ſhews they are effectual in deſtroying.

Cortices, Barks of,

AURANTIORUM, Oranges.

CITREORUM, Citrons.

LIMONUM, Lemons.

Theſe are much of the ſame kind. The fruits, of which the peels are uſed in this intention, are too well known to want any deſcription. They are very agreeable, bitter aromatics, which are always good to repair and ſtrengthen the ſtomach. Theſe give alſo a very grateful flavour to any infuſions or tinctures, into whoſe compoſitions they enter.

The *Aurantia Curaſſavenſia*, Curaſſao Oranges, are the ſmall young fruit of the Seville Orange-tree dried. They are moderately warm bitteriſh aromatics, of an agreeable flavour, and like the peel of the maturer oranges are well adapted for ſtomach tinctures, &c.

RADIX GENTIANÆ, Gentian Root. *Gentiana corollis ſubquinquefidis rotatis verticillatis, calycibus ſpathaceis.* Linn. No part of the plant beſides is uſed in medicine; and the root, Schroder tells us, ſhould be taken up in Auguſt and September.

September. It is extremely bitter; but leaves rather an agreeable, than nauſeous guſt behind. It deſervedly ſtands at the head of the ſtomachic claſs; as it wonderfully warms the ſtomach, and excites the appetite; and alſo as it enables it the better to digeſt what it receives. For killing and expelling worms it is in the beſt eſteem: and in chirurgery it not only goes for a diſcutient in fomentations, but is alſo uſed in fine powder to iſſues, to promote their running; and as a tent, both to enlarge and cleanſe ſome fiſtulous apertures. Some authors extol this, beyond all credibility, for its alexipharmic qualities; and rank it almoſt with the Peruvian Bark in intermittents. And for this reaſon, undoubtedly, we meet with it, not only in the *Theriaca Andromachi*, but in ſome other ſhop-compoſitions of the ſame intentions; although it now ceaſes to be preſcribed for ſuch purpoſes in extemporaneous practice. That it very much aſſiſts in ſome compoſitions for removing agues, and ſome kind of intermittents, I have found by experience in many inſtances; but it is not to be depended upon alone: and by its great ſubtilty and heat, if caution be not uſed, it will inflame in many caſes rather than abate the ſymptoms. With this only, and the outer rind of orange-peels, may be made a very good bitter, in any proper menſtruum.

SECT. IV.

Of Balſamics.

WHAT paſſes under this denomination, has a great ſhare in the *Materia Medica*. But the term is ſo general and lax, that we have brought this tribe into four ſubdiviſions.

Under Balſamics ſeem to be comprehended all that is meant by ſoftening, reſtoring, healing, and cleanſing: to all which intentions there ſeems this neceſſary requiſite, in the parts of all bodies which are uſed therein, viz. that they be ſoft, yielding, adheſive, and by their ſmallneſs have a ready diſpoſition to motion. It is not difficult to foreſee how many ends are to be anſwered by a medicine with all theſe properties; as likewiſe what a vaſt progreſs they muſt take in many inſtances, before they can arrive at the intended ſcene of action.

For in theſe intentions, the ſeat of the complaint is moſt commonly in the viſcera. Now it is certain a medicine cannot come at any of theſe, but by the common conveyance of the blood: and how long from its being taken into the ſtomach, it muſt be, before it can be prepared for, and goes its circuit that way, every one knows, who is but indifferently acquainted with the animal œconomy. And therefore, though the lungs are by their ſituation ſo near the ſtomach, yet it muſt be many hours before a medicine can arrive at them, after it is taken in by the ſtomach; becauſe it muſt paſs the uſual courſe into the lacteals, thro'

all

all the meanders of the meſentery, and go up with the chyle into the ſubclavian vein, and there fall into the blood before they can come near the place it is intended for: and even then it is but the chance of coming thither in ſuch a quantity as bears a proportion to the whole which comes into the blood, equal to that which the pulmonary artery bears to all the other arteries, into which the heart throws the blood in every pulſation.

But as to any particular ſubdiviſion of this general term, a medicine given inwardly muſt paſs thro' conſiderable alterations before it can anſwer its end, even in the ſtomach and bowels; and therefore nothing of this kind can be depended upon in a ſingle or few doſes; but muſt be followed and repeated until the animal juices are ſufficiently charged therewith to afford a continual ſupply, whether to any particular part, or to the whole. We ſhall the better underſtand the operations of theſe medicines from proper explanations under the ſeveral branches we have divided them into.

Claſs 1. *Of Emollients.*

Emollients are ſuch things as ſheathe and ſoften the aſperity of the humours, and relax and ſupple the ſolids at the ſame time: it is very eaſy to conceive how both theſe are brought about by the ſame medicine.

By what means ſoever, whether in the ſtomach or any other parts, the juices have obtained a ſharpneſs and aſperity, ſo as to vellicate and render uneaſy the fibres and nervous parts; which often happens; thoſe things which are ſmooth, ſoft, and yielding, cannot but wrap up their points, and render them imperceptible; whence they may gradually, by the proper courſe of circulation, be brought to ſome convenient emunctory, without doing any injury by the way. Such parts likewiſe draw the fibres into ſpaſms, keep them too tenſe, and frequently thereby occaſion obſtructions of the worſt kind. In all ſuch caſes, emollients lubricate and moiſten the fibres; ſo as to relax them into their proper dimenſions, whereupon ſuch diſorders ceaſe.

Folia, Herbs or Leaves of,

Althææ, Marſhmallows, called alſo Biſmalva, and Ibiſcus. *Althæa foliis ſimplicibus tomentoſis.* Linn. It grows on marſhy grounds, and flowers in July and Auguſt. This plant affords a very ſoft mucilaginous ſubſtance in decoction; which is therefore good in all complaints ariſing from acrimony. Thus it is of great ſervice in dyſenteries; where the mucus of the guts is abraded; and in many kinds of colics. It alſo greatly aſſiſts in obſtructions of the reins and urinary paſſages, from ſandy concretions; by lubricating the parts, and thereby making them yield better to the paſſage and expulſion of ſuch matter. It is likewiſe good in ſtranguries, and heat of urine, and with ſome perſons is a great ſecret in the gonorrhœa; inſomuch that they pretend to make a cure with it alone, if there be no great aggravation of ſymptoms. It is much uſed in glyſters, and ſometimes in maturating cataplaſms. Mr. Ray mentions it as pectoral; and

and it muſt certainly be of ſervice in ſome tickling defluxions, and eaſe the coughs thence ariſing; as alſo in pleuriſies.

Betæ, Beets. Theſe are diſtinguiſhed into white, which is the *Cicla offic.* of C. B. the black, and red. *Beta vulgaris.* Linn. But they are very little uſed, unleſs in the kitchen. The juice or powder of the root taken up the noſtrils, excites ſneezing, and occaſions a conſiderable diſcharge of mucus.

Betulæ, the Birch tree. This is commonly enough known, a wine being made of its juice; Schroder ſays it cools, cleanſes, and is good in all nephritic ailments: but modern practice takes no notice of it.

Malvæ, Mallows: diſtinguiſhed ---*vulgaris flore majore folio ſinuato*, By J. B. *Malva caule erecto herbaceo, foliis ſeptemlobatis acutis, pedunculis petioliſque piloſis.* Linn. It flowers in May, and continues ſo to do moſt part of the ſummer. It is of the nature of the former, but not reckoned quite ſo good. It is uſed very little either in ſhop-compoſitions, or extemporaneous preſcription; unleſs among the good women, with whom it is eſteemed for the gripes in children, and uſed frequently for that purpoſe in their food.

Mercurialis, Mercury; called alſo *Bonus Henricus*, and *Tota Bona*. *Chenopodium Bonus Henricus foliis triangulari ſagittatis integerrimis, ſpicis compoſitis aphyllis axillaribus.* Linn. This is a ſpecies of the blite; it very gently relaxes the bowels, is ſoftening, and ſomewhat deterſive, which makes it preſcribed ſometimes in the jaundice, and obſtructions of the viſcera. It is likewiſe, as the former, uſed by the nurſes in children's victuals, againſt coſtiveneſs and the gripes. Mr. Ray ſays, its juice will wear away warts.

Parietariæ; called alſo Helxine, Pellitory. *Parietaria foliis lanceolato ovatis, pedunculis dichotomis, calycibus diphyllis.* Linn. This grows much on old walls, and is therefore frequently called Pellitory of the wall. Its uſe is not very great either in ſhop-compoſitions or preſcription; unleſs in glyſters, and ſome external applications.

Tapsi Barbati; called alſo *Verbaſcum, Mullen*; diſtinguiſhed---*Mas latifolium luteum* by C. B. *Verbaſcum foliis decurrentibus utrinque tomentoſis, caule ſimplici.* Linn. It grows amongſt rubbiſh, and in ditches; and flowers in July. It is ſaid to ſoften tumours, cool inflammations, and eaſe pains; and is recommended in diſtempers of the breaſt, coughs, and ſpitting of blood.

Flores, Flowers of,

Lamii, is the *Urtica Mortua*, Dead Nettle. *Lamium album foliis cordatis, acuminatis, ſerratis, petiolatis, verticillis viginti floris.* Linn. called alſo *Galleopſis*, and *Archangelica*, Archangel. The plant itſelf is in no great eſteem; but the flowers, which blow about June, are chiefly in uſe. They are accounted not only ſoft and lubricating, but alſo ſtrengthening; and are therefore given in ſome female weakneſſes, as the whites; and in heat and difficulty of urine.

Liliorum Alborum, White Lilies; diſtinguiſhed---*Flore erecto & vulgare*, by C. B. *Lilium fol. ſparſis, corollis campanulatis; intus glabris.* Linn. Theſe blow in July. They are now quite out of uſe in internal medicines; and therefore we ſhall refer them to the topics.

Semina, Seeds of,

Foenugræci, Fenugreek. *Trigonella Monſpelienſis, foliolis obovatis, leguminibus ſeſſilibis ſtrictis erectiuſculis ſubfalcatis acuminatis, caule erecto.* Linn. Theſe are very little uſed inwardly. They are very mucilaginous; and therefore ſoften, relax, and heal. They are much uſed in emollient glyſters. Outwardly, they are in great eſteem for ripening, diſcuſſing, and digeſting tumours; and hardly ever omitted in cataplaſms of thoſe intentions. They are in the compoſitions alſo of many of the ſhop plaſters and unguents for the ſame purpoſes.

Lini, Linſeed, or Flax-ſeed. The plant is the *Linum calycibus capſuliſque mucronatis, petalis crenatis, foliis lanceolatis alternis, caule ſubſolitario.* Linn. They are cooling, ſoftening, and healing. They yield a fine ſmooth mucilage in decoction; which is wonderfully good in eroſions from acrimony, in defluxions of rheum, catarrhs, and tickling coughs; as alſo in pleuriſies, aſthmas, and many diſtempers of the breaſt. The oil expreſſed from them cold, is now in great eſteem; and very much in the common practice; not only in diſeaſes of the lungs, but in ſome colics, obſtructions of the urinary paſſages, and in all ſuſpicions of inward-ulcerations. It gently relaxes the bowels in moſt conſtitutions. In glyſters, and external remedies, it is uſed in all the intentions of the former.

Citrulli, Citruls; *Anguria Citrullis dicta*, by C. B. *Cucumis Anguria.* Linn. This is one of greater cold ſeeds. Beſides thoſe properties for which they are given a place under this claſs, and for which they are in ſome of the emollient compoſitions of the ſhops, they are alſo accounted aperient and diuretic; and preſcribed often where choler and acrimony abound.

Cucumberis, Cucumber. *Cucumis Sativus.* Linn. Theſe are alſo amongſt the greater cold ſeeds. They are not only cooling and emollient, but alſo reckoned abſterſive; they are uſed amongſt diuretics.

Cucurbitæ, Cucurbits, or Gourd; diſtinguiſhed---*Major ſeſſilis, flore albo*, by C. B. *Cucurbita aſpera.* Linn. See the next article.

Melonum, Melons. *Cucumis Melo.* Linn. Theſe are the two other of the greater cold ſeeds, and preſcribed in the ſame intentions as the former. Mathiolus ſays, that the green leaves of the gourd applied to the breaſt of lying-in women, prevent too great an increaſe of milk. And Schroder commends them in external inflammations, and pains of the gout: and the melon ſeeds in thirſt, ſtranguries, and heat of urine.

Peponum, Pompions. *Curcubita Pepo.* Linn. Theſe are a ſpecies of the former, but called Pompion, or common melon; in diſtinction from the other, generally termed muſk-melon: and they are both of the gourd kind; theſe are of the ſame virtues as the former, but not ſo much in uſe.

Sesami, the oily purging grain; diſtinguiſhed—*Semine fuſo & albo*, in Herman's catalogue. *Seſamum orientale.* Linn. The virtues of this are ſo variouſly told by botaniſts, that there is but little dependence upon them; and the preſent pharmacy makes little uſe of it. They abound with oil, but have no title to the appellation purging.

Fructus,

Fructus, Fruits of,

Amygdalarum Dulcium, Sweet Almonds. The fruit of the *Amygdalus fol. petiolatis, ſerratis, petalis florum emarginatis.* Linn. Theſe are of a ſoft, ſweet, grateful taſte; and are cooling, healing, and nutrimental. They are much preſcribed in emulſions; and are good in all diſorders from choleric and acrimonious humours. They cool and cleanſe the kidneys and urinary paſſages; and give eaſe in colic pains, and all irritations of the bowels. The oil expreſſed, which is ſo well known, and ſo frequently in uſe, is a ſafe and good remedy in nephritic pains, and may be given in large quantities; for it not only blunts and obtunds the ſharp points which irritate the membranes, but alſo relaxes and ſtretches the paſſages, ſo as very much to favour the expulſion of all ſuch matter. It is alſo in eſteem amongſt nurſes, for coſtiveneſs and the gripes in children; inſomuch that many give a ſmall quantity of it as ſoon as the child is born. It is ſometimes uſed in glyſters: but oils of a coarſer ſort are generally made to ſerve ſuch purpoſes.

Avellanæ, called alſo *Corylus*, the Hazel; *Corylus Sylveſtris*, C. B. the wood hazel. *Corylus Avellana*, Linn. Ancient botanic writers make a great many diſtinctions of this tree, and aſcribe many qualities to the different parts of the nut; but they are not worth recital here; for modern preſcription takes no notice unleſs of the expreſſed oil, and of that but very little.

Balanus Myrepsica, Ben Nut. This is the Βαλανος μυρεψικη of Dioſcorides; and the *Glans Unguentaria* of Mathiolus. It hath likewiſe many other appellations amongſt botanic writers, not worth notice here. The Italians draw an oil from this nut, which is brought to us by the name of Oil of Behen; but it is not uſed much in medicine. It is ſaid not to grow rancid with keeping; and therefore to be fit for perfumes, and other curious uſes.

Castaneæ, Cheſnuts. *Fagus Caſtanea* of Linn. Theſe are not uſed medicinally, though much in food. They are not ſo ſmooth and emollient as the former, but have ſomewhat of a roughneſs and aſtringency in their compoſitions; which occaſions a load at the ſtomach, and ſometimes a difficulty of breathing, if too many be eat of them at a time: but theſe inconveniences are prevented by roaſting them.

Juglandum, Walnuts. *Juglans Regia* of Linn. Theſe are much of the nature of almonds; and good in all the ſame intentions; but are not near ſo often preſcribed: and the expreſſed oil, which is ſometimes ordered, is generally ſupplied with that of ſweet almonds; as one is always in readineſs, and the other ſeldom drawn. They will neither of them keep long, eſpecially in warm weather, without turning rancid: and therefore the new drawn is much the beſt.

Claſs 2. *Of Reſtoratives.*

Theſe are not greatly different from thoſe of the firſt claſs in the ſecond ſection. And therefore their manner of operation may be accounted for much in the ſame way; only theſe are of a more ſubtile and adheſive nature, whereby they paſs the fineſt ſtrainers, or ſecretions, and enter into the nouriſhment of the remoteſt parts. All under this claſs are rather nutrimental than medicinal; and are more adminiſtered to repair the waſtes of the conſtitution, than to alter and rectify its diſorders. Whatſoever can anſwer this end, muſt be both endued with a diſpoſition to enter into, and mix with, the moſt ſubtile of the animal fluids, and to fall into, and adhere with, ſuch interſtices of the ſolids, as have been wore away by action, and ſtand in need of recruit.

Folia, Herbs of,

ADIANTHI ALBI, White Maiden-hair; called alſo *Ruta muraria*, and *Salvia vitæ*. *Aſplenium Ruta muraria*. Linn. It grows in many places in England, chiefly on rocky ground. It is a ſmall low plant; ſeldom riſing above the height of two or three inches. Its ſtalks are whitiſh; and its leaves few, ſtiff, and roundiſh, reſembling thoſe of rue. It is uſed in decays of the lungs; and therefore enters much into the compoſitions of pectorals, both in the ſhops, and common preſcription.

ADIANTHI NIGRI, Black Maiden-hair. This is called by Parkinſon,—*nigrum vulgare*, common black maiden-hair; and diſtinguiſhed by C. Bauhine,—*Foliis pulverulentis*, with duſty leaves; *Aſplenium adiantum Nigrum*. Linn. It grows about a ſpan high; its ſtalks are ſlender, ſmooth, black, and beſet with many firm, ſhining, green leaves, deeply notched, and ſharp-pointed; the top ending like fern. It grows in ſhady lanes, and at the roots of trees. This is alſo uſed in the ſame intentions as the former.

ADIANTHUM VULGARE, *ſeu Capillus Veneris*; Maiden-hair: called by Parkinſon---*Verum, ſive Capillus Veneris verus*, the true Maiden-hair. *Adiantum Capillus Veneris*. Linn. This is brought from the ſouthern parts of France; though it is ſaid alſo to grow in Cornwall. As this is the true *Capillus Veneris*, it ought to be uſed in the ſyrup of maiden-hair; and wherever the true is ordered: but for want of it we generally uſe the Trichomanes. It eaſily gives out all its virtues to boiling water. It is uſeful in coughs, &c. which proceed from thin acrid juices; and aſſiſts the expectoration of tough phlegm. The beſt method of uſing it is by way of decoction, and to drink it freely.

ERUCÆ, Rocket; is deſcribed *Latifolia alba ſativa Dioſcoridis* in C. B. It is ſown in gardens; but there is alſo a—Sylveſtris, wild rocket, deſcribed *Major lutea, caule aſpero*, and *tenuifolia, perennis, flore luteo*, by the Bauhines; but neither is much uſed, and the latter hardly at all.

PANICI, Panic, deſcribed---*Germanicum, ſive Panicula minore*, by C. B. They ſow it in the fields in ſome parts of Germany; and it is ſaid to ſtrengthen the bowels and cure fluxes; but our pharmacy takes no notice of it.

SCABIOSÆ, Scabious, deſcribed

pratenſis

Pratenſis hirſuta, by C. B. This is mighty common in the fields, and flowers in July. It has a great character amongſt Diſpenſatory writers; but ſeems to grow much out of uſe. It paſſes for a very good pectoral; and does great things in aſthmas and pleuriſies; and Etmuller gives it pre-eminence in inward abſceſſes. It has a place alſo amongſt the alexipharmics. But hardly any thing is in greater eſteem for all cutaneous foulneſſes; upon which account, it is often met with in decoctions amongſt ſuch as are called ſweetners.

TRICHOMANIS, Engliſh Maiden-hair, or Maidenhair of the ſhops. *Aſplenium fundibus pinnatis; pinnis ſubrotundis crenatis.* Linn. Its root conſiſts of ſmall fibres, whence ſpring ſeveral long leaves, with a ſlender ſhining black ſtalk. It grows in ſhady lanes, and on old ſtone buildings; and is in perfection about September or October. It is commonly uſed in the ſhops for the true *Capillus Veneris*, or Maiden-hair; as being to be had in greater plenty than that. It is accounted pectoral, reſtorative, and diuretic; and no bad ſubſtitute for the true *Capillus Veneris*.

TUSSILAGINIS, Colt's-foot, called alſo *Farfara*, is an herb very commonly known. It is the *Tuſſilago ſcapo imbricato uni floro, foliis ſubcordatis angulatis denticulatis.* Linn. It flowers early in the ſpring, before the leaves appear; which has occaſioned ſome perſons of conceit to call it *Filius ante Patrem.* It is by all received as an excellent pectoral; and enters many ſhop compoſitions of that intention; as well as frequently in extemporaneous preſcription. It makes a decoction ſmooth and healing. But Dr. Fuller, in his *Medicina Gymnaſtica*, thinks ſuch preparations of it are not enough charged with the herb; and is for having the decoctions made with it boiled to the conſiſtence almoſt of a ſyrup: which he commends for a wonderful reſtorative in waſtings of the lungs, or conſumptions. Lindanus valued it as a mighty ſecret in aſthmas; and many commended it in ſuch caſes to be ſmoaked in the manner of tobacco; which ſeveral put in practice, and think it good, ſo uſed, againſt defluxions of rheum, and ſuperfluous humidities.

VIRGÆ AUREÆ, Golden Rod; diſtinguiſhed — *Anguſtifolia minus ſerrata*, by C. B. *Solidago Virga aurea anguſtifolia* Linn. It grows on hills, in woods; and flowers in July and Auguſt. This has been much commended, formerly as a reſtorative and a vulnerary; and likewiſe for its diuretic and lithontriptic qualities; and was alſo preſcribed in diarrhœas and dyſenteries; but it is now little in uſe in any intention.

THEÆ BOHEHÆ, Bohea Tea. This is one of thoſe things which luxury has introduced into diet; but it is yet a ſtranger in medicinal preſcriptions. Simon Pauli took this to be the *Myrtus Brabantica*; and its leaves very much reſemble the myrtle, of which there are abundance of kinds, differing both in figure and flavour. An inſatiable curioſity after novelty, eſpecially in matters of ſenſual gratification, almoſt continually multiplies new kinds or diſtinctions of this plant upon us; but as the bohea and green include all other ſubdiſtinctions, we ſhall have regard to no other. This herb, by all relation, is prodigiouſly in eſteem, and uſed in the oriental countries which produce it. Schroder is very particular in the manner of their

management of it; but the chief way is more proper to the green ſort, and therefore we ſhall refer that to the ſection where it naturally falls; and only obſerve here, that the bohea, is found to be of a ſoftening nouriſhing quality; and is therefore much in eſteem for a breakfaſt, with or without milk. It very ſenſibly ſatisfies hunger, and affords a fine balſamic nouriſhment; and is therefore recommended, and very properly in all inward waſtings, decays, and ulcerations, eſpecially of the lungs. This has made ſome empirical impoſtors, with which this country very ſcandalouſly abounds, impoſe upon the wotld a pretended ſpirit of bohea-tea, for an infallible reſtorative, and a curer of all conſumptive caſes. But they muſt be very ignorant, who cannot ſee through ſuch a cheat: for ſuch balſamic qualities which eaſily draw out only with hot water, are the moſt remote imaginable from any thing of a ſpirituous nature; and therefore will not riſe in a ſtill under that denomination; and if they are endeavoured to be reduced to a ſpirit by fermentation, which ſeems altogether impracticable, yet by ſuch an operation they will be ſo broke and changed, as wholly to loſe their ſmooth, adheſive, and balſamic quality; and therefore can in no reſpect anſwer, in that form, the intention of a reſtorative.

Semina, Seeds of,

Ciceris, Chiches. *Cicer arietinum.* Linn. There are three ſorts in the ſhops, white, red, and black; as food they are very flatulent, and difficultly digeſted.

Hordei, Barley. *Hordeum diſtichon.* Linn. What is uſed in the ſhops, comes under the names of French and Pearl Barley; which are both of the ſame kind. The pearl barley is prepared in Germany and Holland, by grinding the ſhelled barley into little round granules, which appear of a kind of pearly whiteneſs. Boiled in decoction, they make it very ſoft and lubricating. It is chiefly uſed for emulſions in extemporaneous perſcription; and it is drank likewiſe alone, to ſlake thirſt, ſheath acrimonies, and lubricate the paſſages in colic and nephritic pains. This barley in its ſeveral ſtates is more cooling, leſs glutinous, and leſs nutritious than wheat or oats.—Common Engliſh barley is ſeldom or never uſed medicinally. Beſides its nutritive virtues, in which it agrees with all other grain of the like kind, it is reckoned to have ſomewhat more abſterſive in it. For which reaſon, thoſe who are not accuſtomed to it in bread, of which it makes the worſt ſort, will find it firſt to operate with them like a gentle cathartic. It is very probable, that a change from a finer and more nouriſhing bread to this, would, in many corpulent conſtitutions, be of great ſervice, in reducing their exorbitant bulk, and cleanſing the ſecretory paſſages.

Lupuli, Hops. This is diſtinguiſhed into—*Sativus*, and *Sylveſtris*, by Parkinſon; *Humulus Lupulus fœminea.* Linn. That part of the plant which is ſuch a mighty commodity in England, and uſed in our malt liquors, is reckoned very diſcutient, aperitive, and good in all obſtructions of the viſcera; and particularly of the liver and kidneys. And therefore that notion, of ſuch liquors from them receiving a diſpoſition to breed the ſtone in the bladder, can have

have no foundation. They are likewiſe an agreeable bitter, and upon that account good to ſtrengthen the ſtomach, and render thoſe liquors, in which they are brewed, much more grateful to it.

Orobi, Bitter Vetch; it is alſo called *Ervum, ſiliquis articulatis, ſemine majori*, by C. B. *Orobus ſylvaticus*. Linn. This is very little uſed; though ſometimes ordered in cataplaſms. The ſeeds are ſaid to be uſeful in nephritic complaints.

Fructus, Fruits of,

Cacao, Chocolate: called by John Bauhine, *Avellana Mexicana; Amygdalis ſimilis Guatimalenſis*, by Caſper Bauhine; and *Theobroma Cacao*, Linn. It is chiefly cultivated in the iſlands of Cuba and Jamaica; and is very well known here as a nouriſhing food; though it is little met with in medicine. It is very oily and ſoft, and cannot but afford a ſuitable nouriſhment to weakly and decaying conſtitutions; eſpecially if the ſtomach is not too far impaired to receive and digeſt it. It muſt be good likewiſe not only in all intentions as a nouriſher, and a reſtorative, but as an emollient, by lubricating and relaxing the paſſages.

From the kernels of the chocolate nut, as well as from the fruit of the palm oil tree, is obtained a groſs ſebaceous matter, or ſubſtance of a butyraceous conſiſtence. Theſe concretes are obtained by boiling the ſubject in water, from the ſurface of which they are ſkimmed whilſt hot, and on cooling reſume their proper conſiſtence. Theſe ſubſtances have the ſame general properties with expreſſed oils, but are leſs diſpoſed to become rancid in keeping.

Cynosbati, Hips. Theſe are the fruit of the *Roſa ſylveſtris*, called alſo *Cynhorrhodon*, and *Roſa Canina*; the common briar or dog-roſe. *Roſa Canina ſylveſtris humilior, germinibus ovatis, pedunculiſque glabris, caule petioliſque aculeatis, flore adorato incarnato*. Linn. They are uſed only in conſerve in the ſhops; which is very frequently preſcribed in conſumptive caſes, and diſtempers of the breaſt particularly. It is alſo found good in coughs, from tickling defluxions of rheum.

Pistachiæ Nuces, Piſtachio Nuts, are the fruit of the *Piſtachia peregrina fructu racemoſo, ſive Terebinthus Indica Theophraſti*, according to Bauhine. *Piſtachia vera*. Linn. They are ſometimes preſcribed in emulſions; into which form they enter as the ſweet almonds; and taſte very agreeably. They are accounted good in all diſtempers of the breaſt, being both healing and balſamic. They are likewiſe very nouriſhing and reſtorative in weakly conſtitutions.

Balſama, Balſams,

Tolutanum, of Tolu. The tree producing this, is a ſpecies of the pine, *Foliis Ceratæ ſimilibus*, C. B *Touluifera Balſamum*. Linn. This is a balſam of a deep yellowiſh brown colour, approaching near to red; and of a moſt delicate ſcent, much beyond any other balſam. We have it from the Weſt-Indies. It firſt flows from the tree which produces it, of the conſiſtence of ordinary turpentine; but by keeping, we meet with it in the ſhops frequently ſo hard as to be brittle: and it ſeems not the worſe for being ſo; its balſamic parts cohering too cloſely to fly off, it is a moſt excellent balſamic and

reſtorative; is very good in all decays, particularly of the lungs. It ſoftens the blood; and cures catarrhs, and coughs from tickling defluxions. Its healing virtues alſo extend to the remoteſt parts; and it is an extraordinary medicine in ſeminal weakneſſes and old gleets, in both ſexes. In ſhort, there is not a better, more agreeable, and more efficacious drug in the ſhops, in all the above mentioned intentions. Of all the balſams in uſe, it is the mildeſt. A ſolution of this balſam in æther, is the balſamic æther of Sterne.

Bdellium, Bdellium. This gum is ſomewhat bitteriſh to the taſte, looks tranſparent when broken, and if rubbed ſeems a fattiſh ſubſtance. It is thought to facilitate digeſtion, to diſcuſs, and promote perſpiration; and to be good in coughs and many diſorders of the breaſt. But its chief uſe now in compoſition, is in diſcutient plaſters.

Benzoinum, Benjamin. A concrete reſinous juice, obtained from a large tree (the *Laurus Benzoin.* Linn.) in both the Indies. The gum, which is beſt, is almoſt white; having lumps in it like almonds; for which reaſon it is called *Amygdaloides*, in diſtinction from other ſorts not ſo good, and darker coloured. It is a wonderful pectoral, and very effectual againſt catarrhs, coughs, and aſthmas. It appears to poſſeſs in a good degree, the virtues of ſtorax, and of balſam of Tolu. It will not diſſolve but in a ſpirituous menſtruum; and in the ſpirit of wine it makes a tincture, very much commended in taking freckles from the ſkin. It enters the compoſition of ſome plaſters as a diſcutient and ſtrengthener.

Styrax, Storax. The tree producing this is diſtinguiſhed by Caſper Bauhine, *Folio Mali cotonei*; It is the *Styrax officinale* of Linn. It grows in Italy, and other countries. Some diſtinguiſh between the *Styrax Calamita* and the red ſort; but Hoffman ſeems rightly to judge them the ſame, and to differ only in age; it growing higher coloured by keeping. There is alſo a liquid ſtorax, concerning which there are various opinions not worth reciting here; eſpecially ſince that which is now ſold in the ſhops under that name, is ſo juſtly ſuſpected to be fictitious, that it is hardly ever uſed. The former is both an excellent pectoral and cephalic. It is of a very fragrant ſcent, and looks of a reddiſh colour with ſome whitiſh clouds. The common Storax, that ſeems as if mixed with ſawduſt, is leaſt eſteemed, though when freed from the woody matter it is ſuperior in point of fragrancy to any of the other ſorts. Rectified ſpirit of wine diſſolves it, leaving the wood behind: nor does this tincture loſe much in being inſpiſſated to an extract; though aqueous liquors elevate almoſt all the fragrancy. Storax is one of the moſt agreeable of the odoriferous reſins, and may be adminiſtered to advantage in langours and debilities of the nervous ſyſtem.

Radices, Roots of,

Eryngii, Eryngo, or Sea-Holly. It is called alſo *Aſter Atticus*, and *Inguinalis*; [See Aster Atticus.] The *Eryngium vulgare* of C. B. is the Eryngo of the ſhops *Eryngium fol. radicalibus ſubrotundis plicatis ſpinoſis, capitulis pedunculatis, paleis tricuſpidatis.* Linn. This grows in ſandy places, and

and near the ſea-ſhore, &c. It flowers in July. The root only is in uſe; but it is now acknowledged only as a reſtorative; in which intention it is deſervedly in great eſteem. Some preſcribe it in venereal caſes, with the ſame view as ſarſaparilla, to ſweeten the acrimony of the humours, and prevent both their flux and eroſion upon the *proſtatæ*; or wherever they make thoſe ulcerations which are difficult to cure.

IREOS, Orris, or Flower-de-Luce. This is divided into *Vulgaris violacea ſive purpurea ſylveſtris*, which is cathartic, whoſe juice is uſed as an errhine. *Iris corollis imberbibus, petalis interioribus ſtigmate minoribus foliis enſiformibus.* Linn. and the *Florentina* or *Illyrica*, *Iris Florentina, caule foliis altiore ſubbifloro, floribus ſeſſilibus albis, corollis barbatis.* Linn. which is moſt uſed now in the ſhops and reckoned a good pectoral; on which account it is in many compoſitions of that nature; it is of a fragrant flavour; and moſt ſuch ingredients are carminative, eſpecially to infants, where the contents of the bowels are very ſour and rancid; and may be corrected by ſuch things as give a contrary ſenſation. It is alſo uſed as a coſmetic in cleanſing the ſkin.

PASTINACÆ, Parſnips. *Paſtinaca ſativa.* Linn. Theſe are only uſed in food, and well known to all perſons. They are reckoned of good nouriſhment.

SATYRII, *ſeu Orchitis*, Satyrion. We have already given an account of this amongſt the cephalics; but it is accounted alſo a wonderful reſtorative, in weak decaying conſtitutions; and therefore it was thought not amiſs to mention it again in this diviſion.

Claſs 3. *Of Vulneraries.*

What is collected under this denomination, is of that ſort of balſamics, which are not only ſoftening and adheſive, but alſo, by a peculiar activity or diſpoſition to motion, joined with a ſuitable configuration of parts, are apt to abrade and carry along with them ſuch particles as they lay hold on in their paſſage; ſo that they differ from the next claſs, Of Detergents, only in degree.

All medicines of this intention are ſuppoſed both to cleanſe and heal, that is, incarnate, or fill up with new fleſh, all ulcerations, and foulneſſes occaſioned thereby, both internally and externally. Now to do this, in all internal caſes eſpecially, the medicine muſt preſerve its primary properties, until it arrive at the place of action; as was before obſerved under the general term of balſamics; and there it does what entitles it to this appellation; firſt by its adheſive quality, which conſiſts in the comparative largeneſs of ſurface, and flexibility of its component parts. For by this it very readily falls into contact with, and adheres to, the ſlough of ulcerous exudations; which, by reaſon of their ſituation, are eaſily carried along with the medicine; and when ſuch matter is ſo carried away, which is the cleanſing or deterging part, what was inſtrumental in this office, will afterwards ſtick to, and adhere with the carneous filaments, until, by

by their addition, and the protuſion of proper nouriſhment, *ab interno*, to the ſame place, the waſte is made up; that is, the ulcer is healed.

After the ſame manner the operation of ſuch ſubſtances is to be accounted for in external application. By the warmth of their parts they rarify; and by their adheſive quality they join with, and take off along with them, in every dreſſing, what is thrown upon the place to which they are applied, until a more convenient matter is ſupplied; which it forwards in adhering to, and incarning the eroded cavities. Only this may be taken notice of, that internally, whatſoever of this kind is mixed with the animal fluids, by the known laws of circulation, they will be firſt ſeparated and left behind. For all thoſe parts, which are ſpecifically heavieſt, will move nearer the axis of the canals; becauſe the *momenta* are the greateſt; and will therefore carry them as near as can be in ſtrait lines; but the lighter parts will always be joſtled to the ſides, where they ſooneſt meet with outlets to give them vent; or are ſtruck into ſuch cavities as we are here ſpeaking of; in which they adhere, and make part of the ſubſtance.

Folia, Leaves of,

ABROTANI, Southern-wood. Of this there are two kinds, the —*Fœmineum foliis teretibus*, Lavender-Cotton; and the *Mas anguſtifolium majus*, Southernwood; the latter of which is moſt recommended in medicine. The Edinburgh College directs the *Artemiſia foliis ramoſiſſimis ſetaceis, caule erecto ſuffruticoſo* of Linnæus. It is of a volatile pungent ſcent; which ſome compare to camphor. Its pungent bitter matter is totally extracted by Sp. Vini. R. but leſs perfectly by watery liquors. It is uſed as an anthelminthic. In leucophlegmatic habits, it is ſtimulant and ſudorific. But the preſent practice almoſt wholly confines its uſe to external applications. The London College allows either of theſe ſorts to be uſed for the other in fomentations.

ACETOSELLÆ, Wood-ſorrel; it has alſo the name of Lujula (which ſee) with ſome, and *Oxys alba* with Gerhard.

AGRIMONIÆ, Agrimony. *Agrimonia Eupatoria*. Linn. It grows plentifully in many places, and flowers the greateſt part of the ſummer. The country people uſe the herb bruiſed, or its juice, in contuſions and freſh wounds. It is ſaid to ſtrengthen the tone of the viſcera, and hence hath been uſed againſt laxity of the inteſtines. Dr. Hill ſays, that ſix ounces of the crown of the root infuſed in a quart of boiling water, then ſweetened with honey, and half a pint of it drank three times a day, is effectual in curing the jaundice.

ALCHIMILLÆ, Ladies Mantle; *Alchimilla vulgaris*, the common Ladies Mantle of C. B. and of Linnæus. It grows in wet and moiſt paſture ground; and is tranſplanted from thence into the gardens. It flowers in May and June. The leaves are moderately aſtringent, and ſo are the roots: the whole plant may be uſeful where mild aſtringents are required.

ASTER ATTICUS; *ſeu Inguinalis*, Starwort; diſtinguiſhed—*Luteus verus* by Parkinſon, the true *After Attic*, or yellow ſtarwort; and by Caſper Bauhine—*Luteus, foliolis ad florem rigidis*; yellow ſtarwort

wort with little ſtiff leaves at the bottom of the flower. Its lower leaves are about four or five inches long, and one broad at the end; which is round-pointed, and grows narrower towards the root. The ſtalk is downy and hairy. The flower is like a mary-gold; and under each flower grows ſix or ſeven ſtiff, roundiſh leaves, in form of a ſtar; whence the name proceeds. The leaves only are in uſe; and were anciently recommended againſt buboes and ſwellings in the groin, as a cataplaſm; whence alſo the name *Inguinalis*.

Brassicæ, Coleworts, or Cabbage. The *Braſſica Oleracea* of Linnæus, and its varieties. Theſe are now out of uſe in medicine, although much taken notice of by ancient writers. As food they are not difficult to digeſt, not yet flatulent, as is generally ſaid. The red ſort is the moſt emollient and laxative. Etmuller ſays they have much nitre in their compoſition; which makes them diuretic. The authors of the *Schola Salernitana* make them of very different qualities; and will have them both to aſtringe and relax the bowels; and ſay alſo that they prevent drunkenneſs, from drinking ſpirituous liquors.

Chamæpityos, Ground-Pine; called alſo *Iva arthritica*, Gout-ivy; diſtinguiſhed—*Lutea vulgaris ſeu folio triſido* by C. B. *Teucreum foliis triſidis linearibus integerrimis, floribus ſeſſilibus lateralibus ſolitariis luteis, caule diffuſo*. Linn. It grows on a ſandy ſoil, but it is not very common; and flowers in July and Auguſt. It is of an ungrateful flavour to the ſtomach, and moſt ſo in decoction; yet it is preſcribed as an aperitive and diuretic, and an opener of inward obſtructions. But its chief excellency with moſt is thought to be in the gout; and it is much commended in rooting out and deſtroying the matter in the joints, which is ſuppoſed to cauſe thoſe vehement pains, ſwellings, and ſometimes chalky indurations; it is one of the ingredients in the famous gout, or Portland powder.

Chelidonii, Celandine; *Rotundifolia minor*, and *Schrophularia minor*, of the Bauhines; which is the Pile-wort, but hardly ever uſed in medicine. *Ranunculus ficaria fol. cordatis angulatis petiolatis*. Linn. This grows wild in the fields, flowers in April, and is by all allowed to abound with a ſharp acrid ſalt, which makes it deterſive; and is therefore recommended in the jaundice particularly, and all other obſtructions and diſorders in the viſcera. The juice is alſo in eſteem for taking clouds, films, and ſpecks off the eyes.

Digitalis, Fox-glove;—*Purpureo folio aſpero*, of C. B. is the kind referred to here. *Digitalis purpurea calycinis foliolis ovatis acutis, corollis obtuſis: labio ſuperiore integro*. Linn. But although this is ſaid to be both cathartic and emetic, the preſent practice takes no notice of it in either intention.

Dipsaci, Teaſel; is diſtinguiſhed into the *Sativus*, called alſo *Carduus Fullonum*, and *Sylveſtris, aut Virga paſtoris major*, the greater Shepherd's-Rod. *Dipſacus Fullonum*. Linn. We know no other uſe it hath but in dreſſing cloth; unleſs what the ſuperſtition of ſome common people give it, in uſing it as a charm againſt agues.

Epithymi, Dodder of Thyme, is the *Cuſcuta minor* of C. B. *Cuſcuta Europi epithimum lauri*. Linn. It hath a ſtrong ſmell, and roughiſh, ſomewhat

ſomewhat pungent taſte. Its virtues are yet undetermined.

Fungus Sambuci, Jews-ears; diſtinguiſhed *Fungus membranaceus auriculam referens*, by C. B and Ray. *Tremella Auricula.* Linn. Theſe grow out of the elder-tree. They are little uſed but in decoction, which they make detergent and vulnerary; and are eſteemed a good gargle in ſore throats, and inflammations of the tonſils.

Hederæ Terrestris, Ground-ivy; called alſo *Chamæciſſus. Glechoma fol. reniformibus crenatis.* Linn. It grows in ſhady places, and flowers in April. It is of a pungent, earthy taſte; and is very abſterſive and vulnerary. It is not only preſcribed in almoſt all diſtempers of the lungs and breaſt, but alſo accounted good in obſtructions in the viſcera. It is reckoned to do wonders in tubercles and tartarous indurations of the lungs. Willis, in his *Pharmacentica Rationalis*, part II. ſect. 2. cap. 6. mightily commends its powder in obſtinate coughs; eſpecially thoſe of young children. And Etmuller relates, that a maid was cured of a ſcorbutic conſumption, with nothing elſe but a ſtrong decoction of this herb, after a vomit had been firſt given. It is a very good cuſtom, which has mightily obtained, of infuſing it in malt liquors; for it not only helps to fine down thoſe liquors, but alſo communicates its ſalutary virtues thereto, and makes them very wholeſome. What goes by the name of gill-ale, is nothing but ſuch a compoſition. But in all ſuch caſes, the herb picked clear from its ſtalks, and carefully dried, is much better then when it is green; and will make the infuſion ſtronger and finer; becauſe its ſaline parts will not by much ſo ſoon mix with a foreign fluid, when they are as it were diſſolved in the natural juice of the plant while it is green, as after that juice is dried away; and in thoſe parts its medicinal efficacies conſiſt. And therefore it avails nothing to make this an ingredient in any thing which is to be managed by diſtillation: and conſequently, likewiſe, that muſt be a notorious impoſition which is quacked upon the world for a ſpirit of ground-ivy, under the notion of being a great reſtorative and curer of conſumptions; for the ſame reaſons as were given againſt the diſtillation of bohea-tea.

Hyperici, St. John's Wort; diſtinguiſhed *Vulgare caule rotundo, foliis glabris*, by John Bauhine. *Hypericum trigynis, caule ancipiti, foliis obtuſis pellucido punctatis.* Linn. It grows in thickets and hedges, and flowers in July. To the taſte it is rough and bitteriſh; to the ſmell not agreeable. It is ſaid to be corroborant and diuretic. It is much uſed in diſcutient fomentations; and the oil made of its flowers is in great eſteem amongſt our ſurgeons, both as an excellent diſcutient, and deterger. The flowery tops tinge expreſſed oils of a red colour, and communicate a blood red to ſpirit of wine rectified. Some authors, as Sala, have much commended the uſe of this herb in melancholy and diſtraction; which ſeems to have given occaſion to ſome enthuſiaſts to call it *Fuga Dæmonum.*

Marrubii, Horehound. Of this there are two ſorts; the — *Album*, which is alſo called *Praſſium*, under which name there is a ſyrup made of it in the ſhops.

Mar-

Marrubium dentibus calycinis ſetaceis uncinatis. Linn. This grows in the highways, and flowers in June. This herb hath a ſtrong and not agreeable ſmell, alſo a roughiſh very bitter taſte. It poſſeſſes the virtue common to bitters, and is uſeful in coughs and humoural aſthmas, and other chronical diſorders. It is an uſeful aperient and deobſtruent, promotes the fluid ſecretions in general, and freely taken, looſens the belly. The other ſort is —*Nigrum*, but this is little uſed in medicine, though recommended by ſome for hypochondriac and hyſteric affections.

Melilоti, Melilot; *Trifolium Odoratum flore luteo*, by J. B. *Trifolium-melilotus officinalis.* Linn. It grows by the hedge-ſides and in corn-fields, and flowers in July. It is diſcuſſive and aperitive, conſiſting of volatile and pungent parts, as is manifeſt by the ſmell; but as it is uſed only externally, we ſhall refer it to its proper claſs, under the topics.

Ophioglossi, Adder's-tongue, called *Lingua ſerpentina* by Parkinſon; grows in the meadows, and low grounds, and flowers in April and May. It is accounted vulnerary, both inrernally and externally uſed.

Perfoliatæ, Thorow-wax; *Vulgatiſſima ſive arvenſis*, by C. B. *Bupleurum rotundi folia.* Linn. It grows among corn, flowers in July, and is ſaid to be vulnerary; but it hardly ever occurs in modern practice.

Pini, Fir, or Pine. There are many kinds of this; but that referred to here, is the *Sativa oſſiculis duris, foliis longis* of J. B. *Pinus Pinea.* Linn. This is an ever-green. The tops are detergent, vulnerary, and diuretic. The nuts are moſt in uſe: they are emollient, agglutinant, very nutritive; and therefore good in conſumptions and inward waſtings. They are very conveniently given in emulſions; as almonds, and ſome other nuts of the ſame kind. Some take notice of them as ſtrengtheners of the genital parts; under which intention, Etmuller obſerves two ways of contributing to venery; one is by ſuch things as theſe, which ſtrengthen the parts, and increaſe the quantity of ſeed; and the other, ſuch as the warmer aromatics, which only like a ſpur ſtimulate and inflame the deſire, without adding to the ability of performance.

Polii Montani, Poley-mountain; *Montanum minus*, by Parkinſon: it grows in Italy and France, and flowers moſt part of the ſummer. There is alſo a *Polum Creticum auguſtifolium*, brought from Candy, where it grows in plenty, and flowers in May, often confounded with the former; although it differs in phraſe, but agrees in quality. The London College allows of either the *Polium maritimum erectum Monſpeliacum*, C. B. or the *Polium auguſtifolium Creticum*, C. B. The firſt is cultivated in our gardens, and is the ſort generally uſed. The Poleys are ranked by Linnæus under the genus of *Teucrium.* It is accounted deterſive, and therefore good in all the intentions of this claſs, particularly a vulnerary. But its uſe is not great, either in the ſhop-compoſitions, or extemporaneous perſcription.

Pulmonariæ, Lung-wort; and *Symphytum maculoſum ſive Pulmonaria latifolia*, by C. B. called alſo

alſo Sage of Jeruſalem. *Pulmonaria officinalis.* Linn. It is cultivated in gardens, and flowers in April. It has a glutinous juice, which helps it to conſolidate, and heal ulcerations and eroſions, which proceed from acrimony. It is commended in coughs, and ſpitting of blood. It is little uſed, either in the ſhops or preſcriptions.

PYROLÆ, Winter-green; diſtinguiſhed *Rotundifolia major*, by C. B. *Pyrola rotundifolia.* Linn. It grows on mountainous and woody places; and flowers in June: but though it is recommended for virtues belonging to this claſs, yet the preſent Pharmacy is an utter ſtranger to it.

VISCI QUERCINI, Miſletoe. *Viſcum Album.* Linn. This grows out of ſeveral trees, and bears a white berry; that which the oak produces, is reckoned much the beſt; although we ſeldom have it but from the apple or pear-tree, the white-thorn, aſh, lime, willow, or elm. This is both by the ancient and preſent phyſicians in great eſteem for epilepſies; againſt which ſome will have it a ſpecific. It is alſo frequently preſcribed in apoplexies and vertigoes. It has a place in Riverius's *Pulvis de Gutteta*; but in few compoſitions beſides. There hath been formerly publiſhed, in Engliſh, a treatiſe of the Miſletoe; wherein the author profeſſedly ſupports his opinion of its virtues both from facts and experience; and warmly recommends its uſe as a ſpecific in epilepſies, and many kinds of convulſions; alledging, where it fails it can do no harm: but its manifeſt qualities of aſtringency and viſcidity plainly ſuggeſt the rules for its application, and the caſes wherein it may do harm.

Gummi & Balſama, Gums and Balſams:

CARANNÆ, Gum Caranna. This is a hard, brittle, reſinous gum, brought from ſome parts of the Weſt Indies, as Carthagena and New Spain. It comes in little maſſes, rolled up in leaves of flags. It is ſaid to exude from a ſpecies of palm-tree. It is of an aromatic flavour; and has been preſcribed as cephalic. But is is now very little given inwardly; and its uſe being chiefly external, we ſhall refer it to the ſection of topics.

JUNIPERI, Juniper. *Juniperus Communis.* Linn. This is hard and reſinous, and reckoned the ſame as the *Sandaraca* of the Arabians. Its inward uſe is little. It is hot, detergent, and healing; and therefore it is not amiſs in ſome preſcriptions againſt old gleets, that proceed more from debility than any malignity. Its external uſe ſee amongſt the topics.

OPOPANACIS, Opopanax, is a gum which flows from a tree, affirmed by the beſt anthors to be the *Panax Herculea* of Gerhard: which being wounded in the ſtalk, near the root, emits the aforeſaid gum. According to Linnæus, it is obtained from the *Paſtinaca Opopanax*, the Italian Parſnip or Opopanax. The beſt is that which is clear, free from droſs, yellowiſh without-ſide, but whiter within, fattiſh, and of a fetid ſmell. It is not much uſed internally; and for the reſt ſee under ſect. 12.

SAGAPENI, Sagapenum. This is likewiſe the tear or gum of a ferulaceous tree, and chiefly comes to us from Alexandria. That is reckoned the beſt which has a pungent ſmell, ſomewhat reſembling

bling that of a leek. This is much uſed for the ſame purpoſes as Aſa-fœtida, and with ſucceſs. The largeſt darker coloured pieces of bdellium are often ſubſtituted for the Sagapenum.

Sarcocollæ, Sarcocol. Some ſay it comes from a ſiliquous plant, bearing a papilionaceous flower; others ſtom a thorny Perſian Tithymalus. The gum is granulated almoſt like maſtich; of a pungent taſte, but leaves a ſweetneſs behind it, much like liquorice. It is warm, drying, and conſolidating; but of little or no uſe inwardly. For its external uſe, ſee amongſt the topics.

Terebinthina *è Chio*, Chio Turpentine. This, as well as the Cyprus, flows from the true *Terebinthus*; deſcribed thus, *Folia pinata imparari numero, decidua floſculi flaminei tuberculis ramulorum in longis racemis*; which is a tree very different from any of the firs or pines, whence we obtain the ordinary turpentines. It is the *Piſtachia vera* of Linn. It takes the name of the place from whence it comes. It is harder and more fragrant to the ſmell than either the Venice, the Straſburgh, or the common; and is much the beſt as a ſtrengthener, and not ſo diſagreeable to the ſtomach as moſt of this tribe. There are almoſt as many kinds of turpentines as there are trees or plants of the fir-kind, of which there is abundance: and there is ſuch plenty of it in that fir which comes to us from Norway for building, that we ſee it frequently ouze out of the boards it is cut into; which make their chips or ſhavings deſervedly in eſteem with ſome, to be boiled in diet-drinks, againſt old venereal remains, and all thoſe caſes where the turpentine itſelf is good. This latter ſort is generally brought to us in large ſhells, like that of a gourd, and grows harder (as indeed they all do) with age, and is the better for it. The beſt of this kind, which is of an aromatic flavour, does not very much fall ſhort of the balſam of Tolu, in its moſt healing and ſovereign qualities.

Terebinthina, *è Cypro*, Cyprus Turpentine. This differs from the former, not ſo much in its medicinal efficacies as in conſiſtence; being thicker, and of ſomewhat more fragrant ſcent. It has its name from the place it is principally brought from. It is more aſtringing, and leſs deterſive than the common, and therefore more preſcribed in gleets.

Terebinthina, Turpentine. Of this there are various kinds: the common is from the *Pinus ſylveſtris*, or Mountain-pine; and what is thickeſt and moſt hardened without art, is the common frankincenſe, as the colophony, and black reſin, which is made by drawing off or exhaling the more liquid part. The Venice is from the larch-tree, which grows plentifully upon the Alps, and is diſtinguiſhed by John B.—*folio deciduo conifera. Pinus Larix Rubra.* Linn. This being for that reaſon called ſometimes *Reſina Laricis:* this is much better than the former. But what excels all the thin turpentines, is the *Terebinthina Argentoratenſis*, Straſburgh Turpentine; whoſe tree is diſtinguiſhed by C. B.—*Mas conis ſurſum ſpectantibus*; called by us the ſilver fir. *Pinus abies alba.* Linn. This is of a whitiſh green hue; clear, fragrant, and of a citron flavour. But the ſcarcity of this beyond the other,

other, tempts our druggiſts grievouſly to adulterate it with mixtures of the former and factitious ſcents; but it will not keep long without diſcovering the fraud, by running into thicker and thinner parts. The many purpoſes for which this is uſed in medicine, can hardly be enumerated. It is a great vulnerary, and very detergent; and therefore preſcribed in all ſuſpicions of abſceſſes and ulcerations, in what part ſoever. It mightily aſſiſts expectoration in diſeaſes of the lungs and breaſt; and is therefore good in aſthmas and pleuriſies. But it moſt of all is famous for cleanſing the urinary paſſages; and its diſpoſition to paſs that way is very manifeſt from its altering the ſmell of the water, though taken in ever ſo little a quantity, which it makes of a violet ſcent. Upon this account it is very good in all obſtructions of the reins, whether from ſand, or any mucous adheſions; and alſo in gonorrhœas, which it wonderfully cleanſes and heals; inſomuch that there is hardly a caſe of that kind now cured, which has not had ſome aſſiſtance from this ingredient; though in ſome caſes it may be over-done; as it is very warm; and upon that account will diſpoſe the teſticles to tumours and inflammations; and likewiſe ſometimes ſcour the paſſages ſo much as to make it difficult to bring them to their due tenſions and capacities afterwards; whence ariſe gleets, and involuntary emiſſions. To make it more agglutinating, and leſs detergent, it is ſometimes boiled in water, until it becomes hard and brittle as common reſin; and ſuch management makes it fitter alſo to give in other forms, as powders, electaries, or boluſes; which its tenacity and adheſive properties made it before unfit for. This is frequently in the compoſition of glyſters againſt colics; eſpecially if they are ſuſpected to proceed from the ſtone and gravel: into which form it is brought by mixing it firſt with the yolk of an egg; for that divides it, ſo as to make it eaſily unite with an aqueous vehicle: which of itſelf it will not do. Its uſe in chirurgery is likewiſe very extenſive, which ſee amongſt the topics.

Cortex Ulmi, Elm-tree bark. This is ſometimes preſcribed in decoction as a vulnerary. It makes a good gargariſm for ſore mouths, occaſioned by heat and ſharpneſs of humours; but is uſed in little elſe. Some have ſuppoſed it to poſſeſs great virtues in curing cutaneous foulneſſes.

Claſs 4. *Of Detergents and Digeſtives.*

Theſe differ only in degree of efficacy from the former claſs. They are of more ſubtile parts, and therefore fitter to mix with, attenuate, and wear away the contents of abſceſſes and ulcerations, and thoſe mucous and viſcid collections of humours, which are apt to adhere to and obſtruct the veſſels.

Folia, Herbs or Leaves of,

Abietis; diſtinguiſhed by Caſpar Bauhine—*Conis ſurſum ſpectantibus ſive mas*, the Male Fir. *Pinus abies alba* Linn. And the ſame which

which the Straſburg turpentine is produced from. The green tops are ſometimes preſcribed in deterſive diet-drinks and apozems.—They are good againſt all obſtructions of the viſcera, eſpecially of the kidneys, which they are effectual in cleanſing, by virtue of thoſe turpentine particles which are drawn from it in decoction. They are alſo accounted a good ingredient in anti-ſcorbutic compoſitions; as indeed are all deterſives and diuretics; becauſe the more they cleanſe the excretory paſſages, eſpecially by urine, the leſs will the capillaries be obſtructed by acrimonious juices; wherein the very eſſence of the ſcurvy conſiſts.

Absinthii vulgaris, Common Wormwood. *Artemiſia fol. compoſitis multifidis, floribus ſubglobоſis pendulis receptaculo villoſo*, Linnæi. This is ſufficiently known to all. It has been in great eſteem, but is now almoſt laid aſide, gentian and orange-peels being much preferred to it; both as they make a more grateful bitter, and are ſo extremely hot and drying: for wormwood, by theſe qualities, has been obſerved to hurt the ſight. This herb is in ſome of the ſhop compoſitions, and a good ingredient enough in cephalic diſtilled waters. By long keeping, and more effectually by coction, its offenſive ſmell is removed; and the bitter remains entire. Its extract is a grateful bitter, if prepared by long boiling in water.

Allii, Garlic. It is only the root of this which is in uſe. Each root is compoſed of a number of leſſer bulbs, called Cloves of Garlic, incloſed in one common membranous coat, and eaſily ſeparable from one another. It is the *Allium caule planifolio bulbifero, bulbo compoſito, ſtaminibus tricuſpidatis.* Linn. It is very aperient and diſcutient, being loaded with very ſubtile and volatile parts. It is likewiſe very diuretic, as appears by its ſmell in the urine; and upon that account ſerviceable in ſome dropſies. It is extremely penetrating and diſcutient in cataplaſms: it warms, and attenuates cold viſcid juices, hence it is a powerful expectorant. The liberal uſe of garlic is apt to occaſion headachs, flatulencies, thirſt, febrile heats, inflammatory diſtempers, and ſometimes diſcharges of blood from the hæmorrhoidal veſſels. In conſtitutions where the juices are already thin and acrid, or the viſcera unſound, this medicine never fails to aggravate the diſtemper. The pleaſanteſt form of adminiſtering garlic, is in a pill or a bolus.

Ammi Verri, Biſhop's-weed; called by ſome *Cuminum Æthiopicum*, Æthiopian Cummin. That referred to in our officinal preſcriptions, is the *Ammi ſemine Apii*, that with a ſeed like ſmallage deſcribed by C. B. *Ammi majus.* Linn. It is brought from Egypt. The ſeeds are ſtriated, of a reddiſh brown colour, a warm and pungent taſte, an agreeable ſmell, like that of origanum. They are warming, carminative, and diuretic.

Anagallidis Aquaticæ, Brook-lime. This is alſo called Beccabunga, and variouſly diſtinguiſhed by botaniſts; but the officinal ſort is commonly enough known, called *Aquatica minor folio ſubrotundo*, by C. B. *Veronica Becabunga racemis lateralibus, foliis ovatis planis, caule repente.* Linn. It grows in rivulets and flowers in May and June. It

abounds with pungent volatile parts; which enable it to abrade, and clear away thoſe little viſcoſities that obſtruct the capillaries, and occaſion ſcabs and blotches. It is alſo diuretic, and a cleanſer of all the viſcera; which gives it frequently a place in anti-ſcorbutic and deobſtruent compoſitions.

Anonis, Reſt-Harrow, is the Ἄνωνις of Dioſcorides, and the Ὄνωνις of Theophraſtus. It is by ſome writers called *Reſta Bovis*, *Anonis ſpinoſa flore purpureo* of C. B. *Ononis Antiquorum*. Linn. The herb and roots are both uſed. It grows in the fields near highways, and flowers in June and July. It is ſaid to heat, dry, diſcuſs, abſterge, and attenuate; and is preſcribed in obſtructions of all kinds. Some recommend its infuſion for the hæmorrhoides; as alſo in a gargariſm for ſcorbutic gums, and pains in the teeth; but the preſent practice gives little credit to it in thoſe caſes.

Apii, Smallage. This ſeems to be a kind of parſley, and is alſo called *Eleoſelinum*, and *Paludapium*; diſtinguiſhed—*Paluſtre*, by Caſp. Bauhine. *Apium graveolens*. Linn. It conſiſts of many volatile and ſubtile parts; and is therefore aperient and diſcuſſive. Its root is one of the five great openers.—There needs no trouble to reduce it into any medicinal forms, becauſe it is ſo convenient and agreeable in ſallads. It is very good in groſs conſtitutions, and infarctions of the lungs; eſpecially if eat with oil and muſtard. It helps to attenuate and diſlodge the viſcid humours, and ſuit them to paſs off by urine and tranſpiration. It alſo aſſiſts in cleanſing the liver, and is good in the jaundice.

Aquilegiæ, Columbine. There are various ſpecies of this, differing moſtly in their flowers; but the officinal ſort is the *ſimplex ſeu ſylveſtris flore cæruleo* C. B. the ſimple or wild columbine with a blue flower. *Aquilegia vulgaris*. Linn. The herb, flowers, and ſeeds are uſed in the ſhops. It grows without culture in the woods; but is often planted in the gardens; it flowers in June and July. It moderately warms, dries, and opens: whence it obtains a place in preſcriptions againſt the jaundice, and ſuch like ill habits from obſtructions.

Artanitæ, Sowbread; *Cyclamen orbiculato folio inferne purpuraſcente*, or *Hederæ folio* C. B. *Cyclamen autumnale hederæ folium flore purpureo*. Linn. Its root is moſt in uſe, and is to be gathered in autumn. The root hath, when freſh, an extremely acrimonious burning taſte, which it almoſt entirely loſes on being dried. It is ſaid very powerfully to open and deterge; for which reaſon it is recommended in the jaundice, gravel, and all obſtinate obſtructions; Externally it hath been uſed to diſcuſs ſcrophulous tumours; and indeed its acrimony and pungency fits it more ſafely for external uſe than internal. It hath alſo had a place amongſt errhines.

Asperulæ Odoratæ, Linn. Woodroof; that deſcribed by C. Bauhine by the diſtinction of *Aſperula ſeu Rubeola montana odorata*, Woodroof, or ſweet mountain madder, is the officinal kind. It grows in woody places, and flowers in April and May. It is warm and drying, and recommended as a good hepatic and detergent. It ſtrengthens the tone of the bowels. It is improved by moderate drying.

Asplenii,

Asplenii, Spleen-wort. This is the ſame as the *Scolopendrium Verum. Aſplenium Ceterach.* Linn. The *Scolopendria Vulgaris* is the hart's-tongue. *Aſplenium Scolopendrium.* Linn. They are neither of them much in uſe. See Section II. Claſs 1.

Botryos, Jeruſalem-oak. This is alſo called Ambroſia. It is a ſpecies of the blitum, *Ambroſoides Vulgaris*, C. B. *Chenopodium Botryos.* Linn. It hath anciently been of great account in diſeaſes of the breaſt, and particularly in difficulty of breathing; as we find in Dioſcorides and Paulus Ægineta. An infuſion of it is drank as tea

Capparis, Capers; *Caparis ſpinoſa, fructu minore, folio rotundo*, C. B. *Capperis Spinoſa*, Linn. Theſe are buds of the fruit of a tree, which are brought over to us in pickle. They are in ſome ancient Diſpenſatory compoſitions; but their uſe in any medicinal form is now quite laid aſide; and we meet with them only in ſauces. It is probable the pickle in which they are preſerved, may alter their natural qualities; but as we have them in that, they are cooling and grateful to the ſtomach, conducive to digeſtion, and are cleanſing, aperient, and diuretic.

Caprifolii, called alſo *Matriſylva*, and *Periclymenum*; is the woodbine, or honeyſuckle. *Lonicera capitulis ovatis imbricatis terminalibus, foliis omnibus diſtinctis.* Linn. It flowers in June; and the places of its growth are commonly enough known. Its medicinal virtues, however, although ſaid to be detergent and cleanſing, are not regarded at preſent.

Chamædryos, Germander, otherwiſe called *Triſſago*; and by Caſp. Bauhine—*minor repens*,—*Teucrium foliis ovatis inciſo crenatis petiolatis, floribus ſubverticillatis ternis, caulibus procumbentibus.* Linn. It is cultivated in gardens, and flowers in June. The whole plant hath a bitteriſh, ſomewhat aſtringent taſte, and alſo a ſlightly aromatic flavour. It is recommended as alexipharmac, diuretic, and for ſtrengthening the ſtomach and viſcera in general.

Cardamines, Cuckow-Flower, Meadow-Creſſes or Ladies-Smock. This is a kind of *Naſturtium*; and is diſtinguiſhed *Naſturtium pratenſe, magno flore*, by C. B. *Cardamine pratenſis fol. pinnatis: foliolis radicalibus ſubrotundis caulinis lanceolatis.* Linn. Some think it poſſeſſes great virtues againſt epilepſies, and I believe experience has found it ſerviceable in ſome epileptic caſes. See Lond. Med. Tranſ. vol. i.

Cochleariæ Hortensis, Garden Scurvy-graſs; diſtinguiſhed by moſt botaniſts, *Folio ſubrotundo*, or *rotundifolia*; and alſo—*Batava*; being moſtly the produce of Holland, though it is frequent enough in our gardens. *Cochlearia fol. radicalibus ſubrotundis, caulinis oblongis ſubſinuatis.* Linn. It flowers in May. It is very ſubtile and volatile; inſomuch that there is no bearing one's noſe any longer over the herb when bruiſed, than over the ſtrongeſt ſpirit of hartſhorn. For which reaſon it is very powerful in cutting and deterging viſcid and tough humours, and enabling them to paſs through their proper conveyances. This makes them good in all infarctions of the viſcera, eſpecially from phlegm; and in ſuch cutaneous obſtructions, as produce ſcorbutic eruptions and ſcabs. Its manifeſt efficacy in all theſe caſes,

which are the foundation of many chronical diſtempers, has brought it into uſe both in the ſhops and extemporaneous preſcription, almoſt in all manner of medicinal forms. The conſerve made of it ſeems to be the beſt preparation of it in the ſhops; though the freſher, the better it is; the more volatile parts making their eſcape in time. This property alſo ſuits it very much for diſtillation; and the plain ſpirit of ſcurvy-graſs, which is in ſuch mighty eſteem amongſt the common people, has the beſt part of the herb in it. Indeed the weightier ſaline parts may not riſe, whence it will not be ſo effectual a diuretic; yet it will rather the better anſwer all intentions as a diſcutient, and an opener; particularly of the minuteſt paſſages, ſuch as the cutaneous glands. But it is by no means good in thin, dry, and hectical conſtitutions: for as it will add to the heat and motion of the blood, it cannot but increaſe all thoſe complaints and diſorders which ariſe from that extreme.

Cochleariæ, Marinæ, Sea Scurvy-graſs. This is more particularly diſtinguiſhed—*Britannica folio ſinuato*, by C. B. *Cochlearia Anglica*. Linn. and is a ſmaller-leaved ſort, of the ſame virtue with the former, but ſomething leſs powerful; and it is not ſo volatile and ſubtile. It is not uſed ſo much in the ſhop-medicines; but is frequently ordered in the ſame intentions as the other, in preſcription. But as it leaſt abounds with the ſalt, which is volatile, it ſeems to have more of what is of fixed nature, and upon that account may be a better diuretic than the former.

Crithmi, Samphire; called likewiſe *Fœniculum marinum.*—*Chrithmum Maritimum*. Linn. It grows on precipices and rocks near the ſea; and flowers in July. It is recommended againſt obſtructions of the viſcera, and urinary paſſages; but it is more uſed as a ſauce in pickle, than in medicine.

Erysimi, Hedge-muſtard; otherwiſe called *Eryſimum vulgare*, common *Eryſimum*. *Eryſimum officinale*. Linn. It grows in great plenty in many parts of England; and flowers about July and Auguſt. It is biting and pungent, not much unlike common muſtard; and in like manner it is aperient and diſcuſſive. It is preſcribed chiefly in aſthmas, infarctions of the lungs, and chronical coughs.

Eupatorii, Maudlin. This is the *Eupatorium* of Meſue. *Achillea Argeratum*. Linn. That of Avicen being the *Eupatorium Cannabinum* Linn. before-mentioned. It flowers about July. Among the Arabian phyſicians, both were in wonderful eſteem. But it hath been ſo long in neglect, that we hardly ever meet with it ordered in any intention.

Fumariæ, Fumitory, diſtinguiſhed—*Purpurea*, by Gerhard. *Fumaria pericarpiis monoſpermis racemoſis, caule diffuſo*. Linn. It is to be met with plentifully in many places; and it flowers in May and June. Two ounces of the juice given in whey, gently opens the body. The extract is the beſt preparation; of which one dram looſens the belly. It alſo ſtrengthens the bowels and promotes urine. It is an herb difficult to dry; and its juice, which is uſed as an anti-ſcorbutic, with whey, in the ſpring-time, will not keep; ſo that it is now little uſed in the ſhops.

Genistæ

GENISTÆ, Broom; diſtinguiſhed—*Anguloſa & Scoparia*, by C. and—*Anguloſa trifolia*, by J. B. *Spartium foliis ternatis ſolitariiſque, ramis inermibus angulatis.* Linn. This grows much upon heathy ground; and is in flower almoſt all the ſummer. Many gather the yellow buds, and pickle them with ſalt and vinegar, in the ſame manner as capers; from which they are not then to be diſtinguiſhed. The flowers are moſt in uſe; they cleanſe away gravel and ſerous humours, both by ſtool and urine, and are accounted extraordinary in cachexies and dropſies. For this reaſon they are a chief ingredient in ſome medicinal ales. Their aſhes, which are made by calcination, and are ſo much extolled for purging off waters in dropſies, are no better than any other aſhes made in the ſame manner; for all lixivious ſalts are diuretic.

GRATIOLÆ, Hedge-hyſſop; called by C. B. *Centaurioides. Gratiola Officinalis.* Linn. It is cultivated in gardens; and flowers in July. The infuſion of a handful of the freſh leaves, or a dram of the dry, is purgative Kramer ſays (Tentam. Botanic. p. 18.) that the virtues of the root are ſimilar to that of ipecacuhana.

HEPATICÆ, Liverwort; called alſo Lichen, and diſtinguiſhed *Metreum latifolium, ſive Hepatica fontana*, by C. B. It grows near ſprings, wells, and watery places, very low, almoſt like moſs, and puts out flowers about June, not unlike ſtars. It is not much in the ſhop-diſpenſations; but frequently preſcribed in anti-ſcorbutic and medicinal ales and drinks in ſpring time.

LICHEN TERRESTRIS CINEREUS. *Lichen Caninus*, or *Lichen coriaceus repens lobatus obtuſus planus: ſubtus venoſus villoſus, pelta marginali adſcendente.* Linn. It conſiſts of thick crumpled hollow leaves, aſh-coloured on the upper-ſide, and ſomewhat whiter below. It is accounted a ſpecific for the bite of a mad dog; and enters the *Pulvis Antilyſſus* of the College. It is met with on commons, open heaths, and dry barren places all the year round, but the beſt time to gather it is betwixt autumn and winter.

HYSSOPI, Hyſſop; diſtinguiſhed—*Cærulea ſive ſpicata*, by C. B. *Hyſſopus ſpicis ſecundis foliis lanceolatis.* Linn. It is cultivated in gardens, and flowers in July and Auguſt. It is warm and detergent; and therefore good in many kinds of coughs and diſorders of the lungs and breaſt, which ariſe from phlegm and viſcid humours. It is good in aſthmas, promotes expectoration, and gives relief in difficulty of breathing. It is almoſt a conſtant ingredient in pectoral apozems. This is one of thoſe very few ſimples, of which there is a diſtilled water good for any thing in the ſhops. For there comes over with it ſo much of a warm eſſential oil, as not only preſerves it from mother and ſtinking (which moſt ſimple waters are ſubject to), but alſo makes it a good pectoral, and efficacious to all thoſe purpoſes, which the herb is given for in any other forms.

HIPPOSELINI; thus called by Theophraſtus, and *Smyrnium* by Dioſcorides: *Smyrnium Oluſatrum* Linn. Alexanders. It grows in rocky places; flowers in June, and is recommended for virtues belonging to this claſs. It is ſomewhat

more powerful than ſmallage, but of very ſimilar qualities with it.

IBERIDIS, Sciatica-creſſes; diſtinguiſhed—*Latiore folio*, by C. B. *Lepidium Iberis.* Linn. It agrees in virtues as well as in tribe, with the common creſſes. Externally it hath been applied againſt the ſciatica, whence its name.

LIGUSTRI, Privet. *Liguſtri vulgare.* Linn. It commonly grows in woods and hedges, and flowers almoſt all the ſummer; but although it is recommended for the virtues belonging to this claſs, it is not at all uſed in the preſent practice.

MENTASTRI, Horſe-mint. *Mentha Sylveſtris.* Linn. This is almoſt unknown in medicine. Its virtues, as alſo the plant itſelf, have ſome reſemblance to the Spear-mint: but it is ſtronger and bitteriſh. See MINT.

NASTURTII AQUATICI, Water-Creſſes. *Siſymbrium ſiliquis declinatis, foliis pinnatis: foliolis ſubcordatis.* Linn. There is alſo the *Naſturtium Hortenſe*, garden-creſs; but it is only uſed in ſallads; and is of the ſame virtues as the other in a lower degree. The *Naſturtium aquaticum* grows, as the *Anagallis Aquatica*, in rivulets or ſprings; flowers in July and Auguſt; and keeps green, and in ſome meaſure growing the whole winter. This hath a ſharp penetrating taſte, and is reckoned very deterſive. It is therefore uſed in all chronical diſeaſes, which ariſe from glandulous obſtructions; and particularly the ſcurvy; for which end its juice is amongſt the antiſcorbutics, which ſome undergo a courſe of in the ſpring-time. Hoffman recommends this herb for accelerating the circulation, ſtrengthening the viſcera, opening obſtructions of the glands, and promoting fluid ſecretions; for theſe purpoſes he orders the expreſſed juice, which contains the peculiar taſte and pungency of the herb, which may be taken to one or two ounces for a doſe, every day.

PANACIS, All-heal; denominated *Herculeum majus* by Gerhard. It is to be met with in the gardens of the curious; and hath aſcribed to it virtues which entitle it to this claſs; but the preſent pharmacy takes no notice of it. There is the *Panax Coloni*, Clown's All-heal, which the common people uſe to freſh wounds with ſucceſs.

PORRI, Leeks. *Allium Porrum.* Linn. Theſe are uſed much more in food than in phyſic. Theſe are ſo much of the ſame nature as garlic, mentioned in this ſection, that the reader may turn thither for its other properties. The leeks are a weaker kind of garlic.

RUSCI, Butcher's-Broom. It is alſo called *Bruſcus. Ruſcus aculeatus.* Linn. It grows in thickets and hedges; is of an auſtere and bitteriſh taſte, and accounted aperient and deterſive. It hath no place in medicine now, but upon the merits of its roots, which are one of the five greater openers.

SAMBUCI, Elder; diſtinguiſhed *Fructu in umbello nigro*, by C. B. *Sambucus cymis quinque partitis caule arboreo.* Linn. This tree hath not one part but is uſed in pharmacy. There has been a treatiſe wrote by one Martinus Blockwitzius, called the Anatomy of the Elder; but as its ſeveral parts are ſomewhat different in their efficacies, and moſt naturally, according to our method, fall under other ſubdiviſions, we ſhall juſt take notice here, that the leaves

are

are only uſed in the ſhops to make an oil and ointment for ſome external intentions; and that they are ſometimes, by way of cataplaſm, applied hot to an eryſipelas, and inflammatory tumours. The young buds or rudiments of the leaves are ſtrongeſt and purgative.

SATUREIÆ, Savory; diſtinguiſhed—*Hortenſis ſive Cunicula ſativa Plinii*, by C. Bauhine. *Satureja Hortenſis* Linn. It is much cultivated in our gardens; but little uſed in medicine. It is reckoned warm and diſcuſſive; good againſt crudities of the ſtomach, aſthmas, and menſtrual obſtructions.

SCROPHULARIÆ, Fig-wort; called —— *Major vulgaris*, by Parkinſon. *Scrophularia nodoſa*. Linn. It grows in the hedges, flowers in July, and hath the virtues of this claſs belonging to it; but it is very little uſed.

SECALIS, Rye. *Secale cereale hybernum*. Linn. This is not in any medicinal diſpenſation; but it is the common bread among the meaner ſort in ſome countries. It purges thoſe who are not uſed to it; and is reckoned more detergent than any other grain of which bread is made. It is by ſome uſed in ſuppurative and diſcutient cataplaſms; and not always without ſucceſs to the parts affected with the gout.

SOPHIÆ CHIRURGORUM, Flax-weed; with Caſp. Bauhine—*Naſturtium ſylveſtre tenuiſſime diviſum*; Wild creſs with leaves very finely divided. *Siſymbrium ſophia*. Linn. The ſtalks riſe two feet high; and are beſet with numerous long-winged, and very neatly divided green leaves; reſembling thoſe of the true Roman wormwood; and adorned with very fine ſhort hairs: it grows commonly in ſandy ground, or among rubbiſh, and flowers in June. The ſeed is the chief part in uſe; and ſaid, if boiled without bruiſing, to cure the bloody flux: and to be good in the ſtone and gravel.

TANACETI, Tanſey. *Tanacetum foliis bipinnatis inciſis ſerratis*. Linn. This hath many diſtinctions in botanic writers; and by ſome is made a ſpecies of the *Artemiſia*; but the *Tanacetum Vulgare* of Parkinſon is the only ſort cultivated amongſt us. It flowers in June and July. It diſcuſſes, is uterine, and nephritic. It is accounted, by many, efficacious in deſtroying worms; particularly the ſeed, which is, for that reaſon, frequently made a *ſuccedaneum* to worm-ſeed, or the *Semina Santonica*. It is a moderately warm bitter, and is uſed by many againſt hyſteric diſorders from a deficiency of the menſes, or from their ſuppreſſion. The ſeeds are leſs bitter, but more acrid and aromatic than thoſe of rue, to which they are ſimilar, as a medicine.

TRIFOLII PALUSTRIS *ſive Paludoſi*, Marſh trefoil, or buck-beans. *Menyanthes paluſtris latifolia, foliis ternatis*. Linn. the leaves. This plant grows wild in moiſt marſhy places: it has three oval leaves, ſtanding together upon one pedicle, which iſſues from the root; their taſte is very bitter, and ſomewhat nauſeous. Marſh trefoil is an efficacious aperient and deobſtruent, promotes the fluid ſecretions, and, if liberally taken, gently looſens the belly. It has of late gained great reputation in ſcorbutic and ſcrophulous diſorders: and its good effects in theſe caſes have been warranted by experience: inveterate cutaneous diſeaſes have

been removed by an infuſion of the leaves, drank to the quantity of a pint a day, at proper intervals, and continued for ſome weeks. Boerhaave relates, that he was relieved of the gout by drinking the juice mixed with whey.

VERBENÆ, Vervain, chiefly diſtinguiſhed into male and female. *Verbena Officinalis.* Linn. It flowers in June and July. It is of a ſub-aſtringent and bitteriſh taſte, is detergent, and reckoned good in all indurations and obſtructions of the liver, ſpleen, reins, or meſentery: but it is little uſed inwardly. Externally it is of great uſe in pains of the head, applied various ways. Foreſtus gives an almoſt incredible inſtance of its virtues for this purpoſe, in Lib. IX. Obſervat. 52.

VERONICÆ MARIS, Paul's Betony, or Male Speedwell. *Veronica Officinalis.* Linn. This is in flower about June. It is accounted a good deterging vulnerary; and given in eroſions and obſtructions of the lungs, both to expectorate and heal. It is alſo preſcribed in ſome antiſcorbutic decoctions, and reckoned good to cleanſe the blood, and wear away blotches and cutaneous eruptions.

Flores, Flowers.

FLORES SAMBUCI, Elder Flowers. *Sambucus nigra.* Linn. They blow from May to July. Theſe are emollient, diſcutient, and anodyne; though little uſed inwardly, unleſs in the water that is diſtilled from them; which is very good, and will keep well enough if they be ſprinkled over with a little ſpirit before diſtillation; elſe it will decay before freſh flowers come again, as moſt ſimple waters do. They are uſed in many external applications, in erysipetalous inflammations, and arthritic ſwellings. There is an excellent ointment to be made with them; but there is ſeldom care enough taken in the ſhops to order it right; which ſhall be directed in the following part. Simon Pauli likewiſe gave them inwardly to be drank in milk, in inflammations.

Semina, Seeds of,

AMMEOS, Biſhop's-Weed. There are two kinds of this, the —*Vulgatius* of Parkinſon, and —*Majus* of C. B. and the *Ammi verum offic.* diſtinguiſhed—*Semine Apii* by C. and—*Odore Origani* by J. B. the laſt of which comes from Egypt about Alexandria; and is the true officinal ſort; *Ammi Majus.* Linn. though the other is ſometimes uſed for it. Theſe ſeeds are of ſubtile parts, opening and diſcuſſive: hence they are not only uſed in colics and windy diſorders of the ſtomach, as carminatives; but likewiſe in obſtructions of the menſes and urine.

ERUCÆ, Rocket. See Section IV. Claſs 2.

FRAXINI, Aſh. *Fraxinus excelſior.* Linn. Theſe are incloſed in what the country people call the Aſhen-keys. They are very little uſed in compoſition; but accounted good in the jaundice, pleuriſy, and the ſtone.

NASTURTII, Creſſes. They are of the ſame virtues as the herb; and, for the convenience of keeping them dry in the ſhops, are more in uſe in the officinal compoſitions; though the other much more in extemporaneous preſcriptions.

Fructus,

Fructus, Fruits.

Amygdalæ Amaræ, Bitter Almonds. *Amygdalus communis*, Linn. Theſe are aperient, deterſive, and diuretic; and therefore commended in obſtructions of the liver, ſpleen, meſentery, and womb. The oil differs not from the oil of ſweet almonds. They are of very little account in the preſent practice, unleſs among thoſe artiſts who have learned to make black-cherry-water with them: for they give very much the ſame reliſh in diſtillation as the kernel of the cherry-ſtones. And for the ſame reaſon we have them frequently in ratafia, inſtead of the apricot kernels.

Ficus Communes, Common Figs. The fruit of the *Ficus Carica*, or the *Ficus Communis*, *fol. palmatis*, Linn. Theſe are deterſive and vulnerary; they are therefore in many preſcriptions for diſtempers of the lungs and breaſt; and are an uſeful ingredient in pectoral decoctions, becauſe they very much promote expectoration; and are therefore good in all humoural aſthmas, and difficulties of breathing. They are alſo reckoned to be diuretic, and to cleanſe the urinary paſſages of gravel and ſandy concretions. They have with ſome been in great repute for ſuppurating and cleanſing peſtilential buboes. Some uſe them, being only toaſted by the fire, for impoſthumations in the ears and gums.

Jujubæ, Jujebs. *Rhamnus Zizyphus*. Linn. Theſe are an Italian fruit, pretty much of the ſame virtues as the former; and therefore uſed in moſt of the ſame compoſitions for the like purpoſes. The tree producing theſe, which alſo grows in ſome parts of Spain, is called *Zizyphus* by ſome botaniſts; and by John Bauhine the *Zizypha Sativa*.

Sambuci Baccæ, Elder-Berries. *Sambucus Nigra*. Linn. Of theſe we have a ſyrup and a ſpirit made in the ſhops; the former is reckoned antiſcorbutic, and therefore preſcribed in cachexies and dropſies; for which purpoſes the latter is alſo accounted good by ſome; but the fermentation which they undergo, alters thoſe natural properties, and leaves it with no other virtues than thoſe of any other ſpirituous liquor. See Rob of Elder-berries.

Passulæ Solis. Raiſins of the ſun. Theſe are dried grapes. The fruit of a variety of the *Vitis vinifera*. Linn. They are a grateful fruit, and very deterſive; for which reaſon they are in moſt compoſitions, to promote expectoration, and diſlodge obſtructed viſcidities in the bronchia; as alſo to cleanſe the viſcera, and particularly the kidneys and urinary paſſages. The *Paſſulæ minores*, or *Corinthiacæ*, Currants, are of the like nature, but from a ſmaller and different coloured grape: however, they are not ſo much uſed in medicine.

Pini Nuces, Pine-Nuts. Theſe are of a moderate warmth, gently detergent and vulnerary. They are therefore recommended in ſome coughs and in conſumptions; as alſo in ſtranguries and ſharpneſs and heat of urine; and are reckoned good in ulcerations of the kidneys.

Sebesten, Sebeſtens. *Coria Sebeſten*. Linn. Theſe are a fruit not much unlike the Damaſcus prunes; and are brought from Syria and Egypt. They are moderately cooling and emollient, and help to obtund the acrimony of the

the humours; therefore they are recommended in tickling defluxions, catarrhs, ſharpneſs of urine, bilious fevers, and coſtiveneſs. But for their deterſive qualities, they are generally uſed in pectoral medicines, for the ſame intentions as figs, raiſins, and the like.

Dactyli, Dates. Theſe are a fruit of the palm-tree, called *Palma dactylifera. Phœnix dactylifera*, Linn. which grows in Syria, Judea, and other hot countries. The beſt are brought from Tunis. Thoſe are beſt which are large, full, flat, and of a yellowiſh colour. They are ſomewhat aſtringent, until thoroughly ripe, and then much of the ſame nature as figs. They are ſaid to be good in hoarſeneſs, infarctions of the lungs, and ſandy obſtructions of the reins and bladder.

Juniperi Baccæ, Juniper-berries. The tree is the *Juniperus fol. ternis patentibus mucronatis, bacca longioribus.* Linn. The juniper was ſo much in the good eſteem of Etmuller, that he thought it deſerved a whole treatiſe All the parts of this tree are of a balſamic nature; as indeed are in ſome meaſure all the ever-greens. This by ſome has been confounded with the cedar; and Van Helmont, in his medicines to prolong life, for the cedar ſubſtitutes the juniper. The gum flowing from this tree, was the Sandaracha of the Arabians. The berries are ſuppoſed to contain the virtues of the whole; and are very much uſed for many medicinal purpoſes. Some will have them to be great ſtrengtheners of the ſtomach, and effectual againſt malignities and epidemical infections. The rob made of their expreſſed juice when green, is called the *Theriaca Germanorum*; ſo much were they in eſteem amongſt them for their antipeſtilential qualities. They are certainly carminative, and very much contribute to diſſipate wind, and flatulencies in the ſtomach and bowels. But their moſt celebrated and remarkable properties are, in deterging and ſcouring the viſcera, and particularly the reins and urinary paſſages; as all indeed of the turpentine kind do. For this reaſon they are frequently met with in compoſitions, both officinal and extemporaneous, for the jaundice, cachexies, dropſies, and difficulty of urine. They are very convenient in decoction; and in diſtillation part with thoſe qualities, as much as any of the like ſubſtances do, inſomuch that their ſpirit is ſerviceable the ſame way, and much promotes urine. They afford a conſiderable quantity of oil in diſtillation, effectual to the ſame purpoſe, and not greatly differing from oil of turpentine in ſmell and virtue. Theſe are mightily uſed in medicated ales and diet-drinks, for all the above-mentioned intentions.

Gummi, Balſama, & ſimilia; Gums, Balſams, &c.

Ammoniacum, Gum Ammoniac. This is a gum from a ferulaceous plant growing in ſome parts of Aſia. That is beſt which is freeſt from droſs, of a yellowiſh colour without, and white within, of a bitteriſh taſte and caſtor ſmell. Such tears as are large, dry, free from little ſtones, &c. ſhould be picked out, for internal uſe. It very much attenuates and deterges; and is therefore properly uſed in all diſtempers ariſing from grumes and viſcidities, which ſtuff up the veſſels; and particularly prevent

a due

a due motion of the nervous fluids. For this reaſon it is found of mighty ſervice, not only in aſthmas and infarctions of the lungs, but in nervous caſes, and particularly thoſe termed hyſterical. The moſt convenient form to preſcribe it, is by way of pills. Some diſſolve it in vinegar and other liquors, and call it *Lac Ammoniacum:* which is much uſed in aſthmas; but that form is nauſeous to ſome. In long and obſtinate colics proceeding from viſcid matter lodged in the inteſtines, this gummy reſin has produced happy effects, after purges and the common carminatives have been uſed. It is alſo in the compoſition of many topics as a ſuppurative.

Capivi, Id. This is the produce of the *Balſamum Americanum* of Caſpar Bauhine, *Copaifera Officinalis.* Linn. and it grows moſt in Braſil. The balſam is of a thinner conſiſtence than the common turpentine; but much more fragrant and deterſive. It is extremely quick in paſſing off by urine, and mightily cleanſes thoſe paſſages; for which reaſon it hath obtained very much in gonorrhœas, and all obſtructions and ulcerations of thoſe parts. It is ſo good a diuretic, that it hath ſometimes ſucceeded in dropſies, when every thing elſe had failed. It is likewiſe a powerful balſamic, and good in many diſtempers of the breaſt. The yolk of an egg will mix it in any liquid form; but thus managed it becomes very nauſeous to the taſte; the mucilage of gum arabic is preferable. The moſt agreeable way of taking it, is either in powdered ſugar, or dropped into water. Fuller ſays, that the true balſam capivi does not give the violet ſmell to urine, as is obſerved by all other turpentines, but that it renders this excretion intenſely bitter.

Gileadense, Balm of Gilead. It is alſo called—*Judaicum*, and—*è Mecha*, from the places whence it is brought; and *Oleum Balſami*, and *Opobalſamum*, for the great eſteem it hath held with ſome writers; it being an exudation from the true *Balſamum Syriacum Rutæ folio* of C. B. This is the fineſt balſam we know, of the conſiſtence of a ſyrup, but of extremely fine and ſubtile parts; it is very fragrant, though of the turpentine kind. It is ſo greatly eſteemed where it is produced, that it is accounted a rich preſent from the chief prince of Arabia Felix (to whom Mecha is ſubject) to the Grand Seignior; as likewiſe to others of the greateſt rank. Its price and ſcarcity is the reaſon why it ſometimes comes to us very much adulterated. When genuine, it is a moſt noble medicine. It wonderfully opens obſtructions of the lungs, and heals eroſions from acrimony, and the worſt kind of ulcerations. There is nothing exceeds it in humoural aſthmas; and whatſoever elſe requires expectoration. It cleanſes the urinary paſſages, through which it readily paſſes. It eaſily mixes with watery liquors, if it is firſt triturated with a thick mucilage of gum arabic.

Mastiches, Maſtich. This is a reſinous gum of the Lentiſcus tree. *Piſtachia Lentiſcus.* Linn. It grows chiefly in the iſland of Chios; it is in ſmall *granulæ*, tranſparent and white, if good; though age makes it turn yellowiſh. It hath an agreeable flavour, particularly when heated or ſet on fire. It ſtops cattarrhs, tickling coughs, ſpitting

ſpitting of blood, and blunts the acrimony of the humours. It is very ſtrengthening to the reins, as well as cleanſing; and is a good ingredient in preſcriptions againſt ſeminal weakneſſes, gonorrhœas, and the whites. But it is ſo much of the turpentine kind, as to deterge, and paſs by urine.

TACAMAHACÆ, Tacamahac. This is a reſinous gum, from New Spain. It diſtills from a tall tree not unlike the poplar; diſtinguiſhed *Populo ſimilii fructu, colore Pæoniæ ſeminis*, by John Bauhine; *Populus Tacamahacca*, of more modern writers; and called Tecomhacca by Hernandez; and differs not much from the galbanum; but is of a more pungent and acrid ſcent; which makes it too offenſive to be much uſed inwardly. The ordinary kind is in ſemi-tranſparent globes, of a whitiſh, yelloviſh, browniſh, or greeniſh colour. It is reckoned good, being burnt upon coals, for hyſterical fits in women; and likewiſe applied to the belly in the form of a plaſter. It is by ſome applied to the temples in the ſame manner and to the nape of the neck for pains of the head, defluxions of rheum upon the throat, and inflammations of the eyes; as alſo in the tooth-ach. It is of ſo ſubtile and penetrating a nature, that it is greatly uſed in external applications, to ſuppurate or diſſolve tumours; and is accounted effectual even in thoſe which are ſcrophulous. It is likewiſe applied to aſſuage arthritical pains with ſucceſs. Indeed the Indians uſe it for all kinds of pain, according to the report of Monardes; and Schroder affirms, that he has known intolerable pains in the leg removed by it. The finer ſort is in ſhells, and of an agreeable odour.

OPOBALSAMUM. This is the ſame as balm of Gilead.

SAPO, Sope. This, ſtrictly ſpeaking, is rather a compoſition than a ſimple. It is made by an incorporation of oil, or fat ſubſtances, with alkaline lixivia. Thoſe kinds which are moſt appropriated to medicinal purpoſes, and given inwardly, are from Venice, or from Caſtile. This drug is of a penetrating, cleanſing nature; and readily mixes with animal fluids of any kind; wherein, by the ſubtilty of its parts, and the aſperity of its ſalts, ſomewhat ſoftened with oil, it penetrates and deterges the moſt minute paſſages. It divides and rarifies the moſt obſtinate and viſcid grumes, ſo as to fit them for expulſion. For this reaſon it is good in all obſtructions of the viſcera, and infarctions of the veſſels; and is particularly diuretic. But its moſt celebrating virtues are cleanſing the liver in the jaundice, in which caſe there is not a better medicine in the world, if the patient does not ſpit blood: which, for reaſons too long to inſert here, is a ſympton in the jaundice of a deſperate caſe; and this medicine, given in ſuch a ſympton, would rather increaſe it. This is capable of being given in many convenient forms, as pills, or draughts; for it eaſily diſſolves in boiled milk, or any other liquor.

Triturated with oily, or with reſinous matters, it renders them miſcible with water. Boerhaave generally mixed it with reſinous medicines when formed into pills, in order to their more ſpeedy ſolution in the ſtomach. The efficacy

of

of ſoap is often conſiderable on the human calculus. See Mrs. Stephens's medicine, in the appendix.

The ſoft ſoaps are more penetrating and more acrimonious than the hard, and are only uſed in external applications.

TEREBINTHINÆ *omnes*, all the Turpentines. There are abundance of plants and trees of this kind, which are moſt of them green the whole winter. They are different ſpecies of the *Pinus* and *Piſtachia*. As for flavour or ſcent, there are of this tribe from the moſt fragrant and aromatic, through the ſeveral degrees, to the moſt rank and fetid; and from the ſofteſt and ſmootheſt, to thoſe which are very hot and deterſive. All theſe are more or leſs good in the forementioned intentions, of cleanſing the viſcera, in proportion to their heat and deterſive qualities; which are to be diſtinguiſhed by their quickneſs and warmth upon the palate. For the uſes of theſe externally, *vide* Sect. XII. Claſs 3. See No. 569.

Cortices, Barks:

BERBERIS, Barberry. *Berberis Vulg.* Linn. The fruit of this tree is acid, cooling, and aſtringent; and of ſingular efficacy in bilious fluxes, and other diſeaſes from heat and acrimony, or thinneſs of the juices. The bark is opening and deterſive. That part which grows neareſt the tree is bitter, and moſt valued. The outward bark of the branches, and the leaves, have an aſtringent acid taſte.

CAPPARIS, Caper. *Capparis Spinoſa.* Linn. This is an exotic, whoſe buds, ſent over to us in pickle, are ſo much uſed in common ſauces. The bark is in ſome few compoſitions under the ſame intentions as the former; but is hardly known in extemporaneous practice.

EBULI, Dwarf-elder. *Sambucus Ebulus.* Linn. called alſo *Chamæacte*, and *Sambucus humilis.* It grows in highways, and flowers in June. The inner bark is much eſteemed in the jaundice, and reckoned likewiſe a great purger of watery humours; for which reaſon it is given amongſt hydragogues; and is found to be very diuretic. All the parts of this plant are too violent in their operation for general uſe.

SAMBUCI, Elder. *Sambucus Nigra.* Linn. The inner green bark is gently cathartic, if taken in the manner of an infuſion in wine.

TAMARISCI, Tamariſk. *Tamarix Gallica, vel Narbonenſis.* Linn. It grows in France, and chiefly about Narbonne; for which reaſon, by ſome botaniſts, it is diſtinguiſhed—*Arborea Narbonenſis.* Both the leaves and the bark are moderately aſtringent.

Radices, Roots of.

ARI, Cuckow-pint; diſtinguiſhed—*Vulgare* by Gerhard. *Arum acaule foliis haſtatis integerrimis, ſpadice clavato* Linn. It grows in hedges and ſhady places. This plant appears very early in the ſpring. It is moſt violently pungent and volatile; inſomuch that the leaſt touch of its juice upon the tongue, is ſcarce tolerable, and almoſt cauſtic. This quality makes it recommended in all viſcidities, and in phlegmatic and ſcorbutic caſes; becauſe it penetrates and rarifies tough concretions and infarctions of the glands and capillary veſſels. In

chlorotic complaints; weakneſs of the ſtomach occaſioned by viſcid phlegms; humoural aſthmas, and obſtructions of the bronchia, it is very uſeful; and, by the great force and activity of its parts, it breaks through and wears away thoſe little ſtoppages in the extremities and cutaneous glands, which occaſion itching aud ſcabs; and is therefore juſtly ranked amongſt the moſt powerful antiſcorbutics. Miller obſerves, that the roots are generally gathered in ſpring, when the leaves are in full vigour, that the roots ſhrink, and ſoon loſe their pungent quality; but thoſe which are taken up when the leaves decay, will continue good a whole year, and retain their pungency the ſame as when firſt taken up. When ſtimulating medicines are proper, which at the ſame time increaſes the ſecretions, as in ſome ſpecies of aſthma and dropſy, this root will be ſerviceable. In rheumatiſm of the fixed kind, that are deep ſeated, it gives great relief, in which caſes from ten grains to a ſcruple of the freſh root is to be given, two or three times a day, mixed with ſome unctuous or mucilaginous ſubſtance.

Ceparum, Onions. *Allium ſepa ſcapo nudo inferne ventricoſo longiore foliis teretibus.* Linn. Onions differ from all the other bulbous rooted plants, in having ſingle roots, or ſuch as cannot be parted ſo as to encreaſe the plant; whence they were formerly called *uniones*. Onions are frequently employed in food: they afford little or no nouriſhment, and when eaten liberally produce flatulencies, occaſion thirſt, headachs, and turbulent dreams: in cold phlegmatic habits, where viſcid mucus abounds, they doubtleſs have their uſe; as by their ſtimulating quality they tend to excite appetite, attenuate thick juices, and promote their expulſion; by ſome they are ſtrongly recommended in ſuppreſſions of urine, and in dropſies. The chief medicinal uſe of onions in the preſent practice is in external applications as a cataplaſm to ſuppurate tumours.

Curcumæ, Turmeric; called *Cyprus Indica*, by Gerhard, and is brought to us from the Eaſt Indies. There are two ſorts, the long and the round; the former is uſed in the ſhops. *Curcuma Indica, foliis lanceolatis, nervis lateralibus numeroſiſſimis.* Linn. Its taſte is bitteriſh, and inclining to acrid; and therefore it muſt attenuate, open, and diſcuſs. It is alſo eſteemed a ſpecific in the jaundice and dropſy.

Filicis, Fern. Of this there is a male, diſtinguiſhed *Mas non ramoſa dentata*, by Caſpar Bauhine; which is reported a ſpecific in the rickets; and the female, diſtinguiſhed *Ramoſa major, pinnulis obtuſis non dentatis*, by the ſame author. The *Filix Florida*, or *Oſmunda Regalis*, is a ſpecies of the latter; but notwithſtanding the many ſuperſtitious conceits concerning the medicinal virtues of theſe, the preſent pharmacy gives no credit to them.

Glycyrrhizæ, Liquorice; diſtinguiſhed—*Siliquoſa radice repente*, by the Bauhines. *Glycyrrhiza leguminibus glabris ſtipulis nullis, foliolo impari petiolato.* Linn. It grows in many parts of Europe, and we have enough of it in England for our own ſupply, although a great deal of its inſpiſſated juice is imported. Its chief place of growth is here about Pontefract, in Yorkſhire. It is alſo cultivated about London; eſpecially in the fields

fields near White-chapel, and Well-cloſe-ſquare. It is very ſweet upon the palate, even more than ſugar and honey, and yet it quenches thirſt; for which reaſon alone, Galen ordered it in dropſies. It is very balſamic and detergent; inſomuch that there is hardly any officinal medicine, or occaſional preſcription for any of the diſtempers of the breaſt, but what have more or leſs of this for an ingredient. It is in great eſteem in coughs of all kinds; it promotes expectoration, and is ſerviceable in aſthmas, and difficulties of breathing. For theſe intentions it enters into pectorals of all forms. It is almoſt as conſtant likewiſe amongſt the deobſtruents; and is preſcribed in the jaundice, in hypochondriacal affections, and amongſt diuretics. It has its ſhare alſo as a corrector of ſome cathartics; and infuſions of ſena and rhubarb are ſcarce ever ordered without it. Its inſpiſſated juice is the moſt convenient form to keep in the ſhops, for moſt purpoſes: but what is made here from our own roots, is much the beſt; although what comes from abroad is cheapeſt, and therefore moſt frequently to be met with.

ENULÆ CAMPANÆ, Elicampane. It paſſes alſo by the name of Helenium. *Inula foliis amplexicaulibus ovatis, rugoſis, ſubtus tomentoſis, calycum ſquamis ovatis.* Linn. This grows in many places of England; but not by much in ſuch plenty as in Germany, according to the writers of that country, where they make a wine of it, which they have in great eſteem: and Platerus, for its ſpicy taſte, calls it the *Aroma Germanicum*, for as ſuch they prefer it to ginger. It is very warm, opening, and deterſive; and is reckoned of great efficacy in cleanſing the lungs; it promotes expectoration in coughs and humoural aſthmas; Dr. Hill, aſſerts, that a decoction of the freſh roots, ſweetened with honey, relieves the hooping cough; beſides which quality, it has alſo ſomewhat ſo glutinous, tenacious, or adheſive, as makes it ſerviceable in waſtings. Some think its warmth promotes perſpiration; and for that reaſon commend it after a courſe of mercurials in venereal caſes, to carry off the dregs, as they term it, of the mercury. This ſimple is capable of being reduced into almoſt any form: but the conſerve is the moſt common, and probably the beſt; for boiling will be apt to diſſipate and waſte a great deal of its moſt ſubtile and fine parts.

LAPATHI ACUTI, Sharp-pointed Dock. This is called alſo *Oxylapathum*, and diſtinguiſhed *Folio acuto plano*, by C. B. *Rumex acutus floribus hermaphroditis; valvulis dentatis graniferis, foliis cordato oblongis acuminatis.* Linn. It is frequently in occaſional preſcriptions for the jaundice and ſcorbutic caſes; and found very efficacious for ſuch intentions; being a powerful detergent. Willis commends it as an excellent antiſcorbutic in diet-drinks, and medicated ales. But its moſt celebrated virtues appear in external compoſitions, for cleanſing the ſkin from ſcabs and tetters: and we have an unguent that takes its name from it. Etmuller extols it greatly in ſuch caſes; but down to this time they have all been ignorant of the neat, ſafe, and efficacious preparations which mercury has furniſhed for thoſe intentions. There are many other ſpecies of this taken notice of by botaniſts, and uſed in medicine;

par-

particularly the—*Præſtantiſſimum, Rhabarbarum dictum*, which is the ſhop Rhubarb; the—*Hortenſe latifolium* of Caſp. Bauhine, Monks Rhubarb; and the—*Aquaticum*, called *Hydrolapathum*, Water-dock, ſuppoſed to be the *Britannica* of the ancients; and a ſpecific in the ſcurvy; its root being made into a decoction with water; and the liquor uſed as a diet-drink. This laſt is the *Rumex floribus hermaphroditis; valvulis integerrimis nudis, foliis cordatis glabris acutis.* Linn.

Pentaphylli, Cinquefoil; diſtinguiſhed by the Bauhines, *Quinquefolium vulgare, majus repens. Potentilla reptans.* Linn. It is aſtringent, and relieves coughs which ariſe from catarrhs; it is given internally againſt diarrhœas; and is uſed in gargariſms, to render them leſs ſpongey.

Polypodii, Polypody. *Polypodium vulgare.* Linn. It grows, in an odd manner, out of old walls, and ruins; as likewiſe out of many trees; but that from the oak is reckoned beſt. This is placed by many Diſpenſatory writers amongſt the cathartics; but its power, that way, is no more than what is common to moſt of this claſs of detergents.

Porri, Leeks. *Allium Porrum.* Linn. Theſe are ſo much like onions, mentioned above, that there needs little farther explication of their virtues; only they are ſomewhat of a ranker ſcent, and rather more deterſive.

Rhapontici, Rhapontic; diſtinguiſhed—*Folio Lapathi majoris glabro*, by Caſp. Cauhine; which is the Rha and Rheum of Dioſcorides. *Centaurea Rhapontica.* Linn. It has a large root, thick at the head, divided into ſeveral branches, of a dark brown on the outſide, and of a deep yellow within; and of a bitteriſh taſte. If this root be carefully dried, it nearly reſembles the fine Turky Rhubarb. This is what ought to be uſed in the ſhops as being the true Rhapontic; whereas that formerly ſold for it, was the *Rhaponticum folio Helenii incano* of Caſp. Bauhine; which is a ſpecies of the greater centaury; and much inferior in virtue. The true rhapontic is a weaker purgative than rhubarb, but held more aſtringent; proper in fluxes, ſpitting of blood, bloody urine, and weakneſs at the ſtomach.

Rubiæ Tinctorum, Madder. *Rubia foliis annuis, caule aculeato.* Linn. This is a root ſo much uſed in the dyers buſineſs, that it takes their name. It is round, branched, as thick as a ſmall gooſe-quill, and of a reddiſh colour, having a ſlender, tough ſtring in the middle, of a ſweetiſh taſte, mixed with bitter. It is planted in fields and gardens, and flowers in May. It is powerfully detergent and aperient, whence recommended in viſceral obſtructions, and in coagulations of blood internally from bruiſes, and in the jaundice, and beginning of dropſies. From its tinging the moſt ſolid bones of animals that feed on it, it is evidently of ſubtil parts, whence its medical virtues demand inquiry.

Saponariæ, Sope-wort. This is a ſpecies of the Lychnis; diſtinguiſhed—*Major vulgaris ſimplex*, by moſt botaniſts, and particularly in Herman's Catalogue. *Saponaria officinalis, calycibus cylindricis foliis ovato-lanceolatis.* Linn. It grows in water-currents; and flowers from July to September. It is opening and deterſive in a great degree;

degree; inſomuch that it ſometimes procures a plentiful diaphoreſis. It is of ſervice in aſthmas, and all diſorders of the breaſt which require expectoration. Outwardly likewiſe it is commended for diſcuſſing and ſuppurating tumours. Stahl deems it ſuperior to the ſarſaparilla in the lues venerea.

Of Animals.

Claſs 2.

VIPERÆ, Vipers. Schroder, and many other Diſpenſatory writers, ſpeak of this animal under the general name of ſerpents. It is impoſſible even juſt to hint at the many odd opinions which have been by ſome one or other propagated concerning the viper; both as to its medicinal virtues, and the nature of its poiſon. The general opinion at preſent is, that they are highly reſtorative, and that they provoke venery; but that they really differ from other nutritive diet, is nevertheleſs a reaſonable doubt. The fat, which comes in plenty from the entrails, is reckoned that ſecret whereby our viper-catchers prevent the miſchiefs of a bite from them. The method of uſing the fat for this purpoſe, is to rub ſome of it as ſoon as poſſible upon that part that is bitten; and to repeat the operation, once or twice, at the diſtance of half an hour or leſs It is much commended by ſome in ſtrumas; as likewiſe in dimneſs or decay of ſight, gently to rub the eye-brows with it. Their *exuviæ*, or ſkins, which they yearly ſhed, are ordered for ſome purpoſes; but there does not ſeem to be much in them. Yet ſome have found the ſecret, to make them turn to very good account in medicine.

LIMACES, Snails. Theſe ſeem to be much more in uſe now than formerly. They abound with a ſlimy adheſive juice; and therefore are experienced very good in weakneſſes and conſumptions; eſpecially in children and tender conſtitutions. They are beſt boiled in milk, or ſome ſuch liquor. They are conveniently enough brought into the form of a ſyrup. The common way amongſt the good women of tying them up in a bag with ſugar, and letting the liquor drop through, ſeems to be the beſt; though it is to be feared, that the ſugar is not very agreeable to ſubſtances of ſuch a texture, and whoſe efficacy conſiſts in the ſoft adheſive quality of their parts; becauſe it divides them, and makes the mixture more deterſive, and leſs nutritive; which is the main intention of all under this claſs. How conveniently they are to be managed by diſtillation, we ſhall more properly conſider in the next part.

LAC VACCINUM, Cow's-Milk.
ASININUM, Aſs's.
OVINUM, Sheep's.
CAPRINUM, Goat's.

What theſe are in food, is known enough to all, but they likewiſe often come under medicinal conſideration; and are preſcribed as proper to alter a ſharp thin blood into a craſis more ſoft, balſamic, and nutritive; and in conſtitutions where they agree in the firſt paſſages, they cannot but be proper for ſuch an end; becauſe they are already prepared into nouriſhment, as far as is required for their admiſſion into the blood. All that is done in the *primæ vitæ* to our common food, is by reducing it into chyle, which is a kind of milk: But where the juices are very

ſharp, and the glands of the ſtomach over-charged with them, they are very apt to turn theſe ſubſtances into curd. By this means, the ſerous or thinner part ſoon changes into the ſame condition as the juices which join with it; and the moſt nutritive part is hardened into a ſubſtance, which will be ſo far from admitting any nouriſhment through the lacteals, that it is a chance if the periſtaltic motion of the bowels is ſufficient to procure its ejectment by ſtool. Where, therefore, milk, of what kind ſoever, is ordered in conſumptions, and as a reſtorative, it is with very good reaſon joined with the teſtacea, and ſuch things as are proper to deſtroy thoſe acidities. As for the difference of milks, from the different creatures which produce them, there ſeems as much owing to their different food and manner of living, as to any ſpecific difference in the creatures themſelves. That which is moſt common in our food, cow's-milk, ſeems to be of the moſt ſubſtance, and the moſt nutritive of all. In the uſe of theſe, there is a great deal in being more or leſs accuſtomed to any particular ſort; for at firſt, with many, it is frequently purgative; but this does not continue. In ſhort, experience is the beſt guide in theſe courſes; and phyſicians of the beſt ſkill and penetration ſometimes are balked in their expectations from their uſe. There are ſome other intentions likewiſe for which milk-courſes are directed, beſides that of a reſtorative; for they are gone into frequently as correctors and ſweeteners: but they muſt be very indifferently acquainted with the *Materia Medica* who truſt to ſuch aids in thoſe caſes; or the patient's caſe muſt be mighty peculiar and difficult, which will admit of no other means; although theſe are certainly good helps, together with more effectual means.

Sperma Ceti, Parmafity, improperly ſo called; an unctuous flaky ſubſtance, of a ſnowy whiteneſs, a ſoft butyraceous taſte, without any remarkable ſmell: prepared from whale oil by boiling and purifying it with alcaline lixivia.

That Parmafity, or *Sperma Ceti* (for they are both arbitrary names, and equally improper, *Adeps* or *Oleum Ceti* being more expreſſive of the thing ſignified) is the beſt, which is whiteſt and ſweeteſt, that is, freeſt from rancidity. It is a noble medicine in many caſes, tho' chiefly uſed in bruiſes, inward hurts, and after delivery. It is an excellent balſamic in many diſtempers of the breaſt; and gently deterges and heals. In coughs from ſharp rheum, eroſions, and ulcerations, it is very ſafe, pleaſant, and effectual; where the mucus of the bowels has been abraded by acrimony and choler, as in diarrhœas and dyſenteries, this is a very good healer. In ulcerations of the kidneys and bloody urine, it is likewiſe a very ſuitable medicine; and by ſoftening and relaxing the fibres, it contributes frequently to the expulſion of gravel, by enlarging the paſſages. It is moſt conveniently made up into the form of electaries and boluſes, with proper conſerves, and things of the like kind: and in ſuch forms, if it be ſkilfully mixed, it gives them an agreeable ſmoothneſs: with the yolk of an egg, or with the mucilage of gum arabic, it diſſolves into a fine ſmooth emulſion. In liquids, it is not to be mixed, unleſs

unleſs in linctuſes and eclegmas; where it does well enough. It is emollient and healing, outwardly uſed; but its greateſt uſe that way is in the ſmall-pox, melted with oil of almonds: with this the puſtules are juſt kept moiſt when they begin to harden; and it wonderfully prevents thoſe ſcars they are apt to leave, by ſoftening and healing them up ſmooth. Although this is but a modern practice in this diſtemper, yet Schroder takes notice of its uſe in his time, in ſmoothing and filling up the fiſſures and cavities made by blotches or ſcabs.

Claſs 3.

LUMBRICI TERRESTRES, Earth-worms. Theſe are often uſed in compoſitions for cooling and cleanſing the viſcera. They are accounted much of the ſame nature with ſnails; but they ſeem to have more of an earthy or nitrous ſalt; which makes them afford parts more penetrating and deterſive.

Of Minerals.

Claſs 4.

LAPIS HIBERNICUS, Iriſh-Slate. It is a black, ſoftiſh, flaky ſtone (not much unlike what is called Coal-ſtone) that comes into the ſhops under this name. Its efficacy in medicine does not appear to have reached far; and in our own country, it ſeems only in eſteem with the common people, who have a mighty opinion, from cuſtom, and its frequent uſe in ſuch caſes, of its healing virtues in bruiſes, and inward injuries. It is an argillaceous earth impregnated with ſulphur, and with iron. It is ſomewhat aſtringent. Boerhaave calls it an ore of alum.

SULPHUR CABALLINUM, Common Brimſtone. This is little uſed but in the flowers, which are made by ſublimation: though ſome eſteem it more when crude in particular intentions; as having then more ſalt in it, and conſequently being more deterſive. This is uſed in little elſe beſides unguents for the itch, and ſuch cutaneous eruptions, in which it is a good ingredient, but a very ſtinking one. See more under its preparations at the latter end of this part. Sulphur is found native in ſeveral countries, ſometimes in tranſparent pieces of a greeniſh or bright yellow colour; but more commonly in opake grey ones, with only ſome ſtreaks of yellow: this laſt is the *Sulphur Vivum* of the Edinburgh Diſpenſatory; but that which is uſually met with in the ſhops is only the droſs remaining after the ſublimation of ſulphur for the flowers.

Claſs 5.

PISSELÆUM INDICUM, or *Petroleum Barbadenſe*, Barbadoes Tar. It has a ſtrong ſcent, not unlike the common tar, and is not very pleaſant to the ſight or taſte: but it is certainly a good balſamic, and, where the ſtomach will diſpenſe with it, will do great ſervice in ſome diſorders of the breaſt. It is effectual in obſtinate tickling coughs, and ſometimes ſucceeds where more elegant medicines have failed. The ſame has been experienced of our common tar. This petroleum flows from the rocks into a river in Barbadoes, and is taken from the ſurface of the water.

Some commend this in burns, ſcalds, and inflammations; but the regular practice does not much juſtify any ſuch uſe externally. Amongſt the country people it is in mighty requeſt for ſcald-heads; which is a thing troubleſome enough to cure, and often puzzles a good phyſician. It is with ſome alſo a ſecret to apply to the ſoles of the feet in agues, as alſo to the wriſts; and I have known inſtances where it has ſucceeded. That medicine commonly ſold by the name of Oil of Spike, is nothing but oil of turpentine tinged with this ſimple. The pureſt kind of this mineral ſubſtance is called *Naptha*, a leſs pure is called *Petroleum*, and the leaſt pure, which is alſo more conſiſtent, is called *Bitumen*.

Sal Commune, Common Salt, It is needleſs to ſay what uſe this is of in diet. In medicine, ſtrictly ſpeaking, it is of very little uſe. It is ſometimes uſed to check the operation of emetics; which it will certainly do, and make them run off by ſtool. The reaſon of which we ſhall better underſtand, when we come to conſider the operations of the medicines which fall under that denomination. It is likewiſe ſometimes uſed to quicken the operations of glyſters; which it does by irritating the fibres of the rectum; and thereby ſoliciting that motion, which forwards the expulſion of its contents.

Sal Gemmæ. Thus the ſame ſalt which is diffuſed in the waters of the ocean is called, when found in the bowels of the earth, as in the ſalt rocks in Poland, &c. alſo thoſe at Nantwich, &c. in England. Its qualities are the ſame as that from the ſea, or the common ſalt.

Hydrargyrum, Quick-ſilver. This is a metallic mineral found in mines, ſometimes fluid, and ſometimes mixed with other mineral matters; from whence it is ſeparated by diſtillation. It comes next in ſpecific gravity to gold. It is often adulterated with lead; in which caſe, it cannot ſafely be truſted for internal uſe. The way of ſeparating it from the lead, or other heterogeneous matter, is by diſtilling it in a retort, either *per ſe*, or with the addition of quick-lime, &c. When pure, it appears perfectly bright, and will totally evaporate upon an ignited fire-ſhovel, or the like. The uſe of mercury in medicine was not known till the latter end of the fifteenth century. The ancients looked upon it as a corroſive poiſon, though perfectly void of acrimony, taſte, and ſmell. There are many examples of its having been lodged ſeveral years in cavities both of bones and fleſhy parts, without its having injured or affected them. Taken into the body in its crude ſtate, and undivided, it paſſes through the inteſtines unchanged, and has not been found to produce any conſiderable effect. It has indeed been exhibited in aſthmas and diſorders of the lungs; but the virtues attributed to it in theſe caſes have not been warranted by experience.

Notwithſtanding the mildneſs and inactivity of crude quickſilver undivided; when reſolved by fire into the form of fume, or otherwiſe divided into very minute particles and prevented from re-uniting by the interpoſition of proper ſubſtances; or combined with mineral acids; it has very powerful effects; affording the moſt violent poiſons, and the moſt excellent remedies

medies that we are acquainted with. It is reckoned by ſome very powerful in killing of worms, only by being boiled in water; and that, although it communicates ſuch a wonderful efficacy to the water, it loſes nothing perceivable in its weight by ſuch boiling. *Vide* Prepar. of Mercury.

SECT. V.

Of Diuretics.

UNDER this head will be examined thoſe ſimples whoſe moſt remarkable properties appear in their increaſing the diſcharge of urine; or which are ſuppoſed to have any power in removing obſtructions in the urinary paſſages, from what cauſe ſoever, whether humours or gravel.

The beſt way to underſtand how a medicine operates to anſwer his intention, will be firſt to conſider by what means it comes to be wanted. This muſt happen either from a fault of the paſſages, or of the liquid which ought to make its way through them. The paſſages may be in fault from any cauſe which contracts them, and draws them up too ſtrait; which of courſe leſſen their diameters, and will not let particles through, of the ſame bulk as they would before: and they may alſo, in their natural capacities be obſtructed by the caſual intruſion of particles too big to go forward; or by the concretion of particles attracting one another in their progreſs. The fluid alſo which ought to go off this way, may be prevented by its groſſneſs; and by being united with other particles too bulky for thoſe outlets.

In this view, diuretics come under theſe following kinds. They are either ſuch as ſoften and lubricate the fibres that compoſe the urinary glands and canals; by which means they yield and relax into their due dimenſions and capacities; and of theſe kinds are many of the emollients, Sect. IV. Claſs 1. already explained: or they are ſuch as, by their attenuating and deterſive properties, rarify and thin viſcid humours, and adhere to and carry them along with them in their paſſages; which thoſe of the fourth claſs of the ſame ſection have been ſhewn to do, and upon that account prove diuretic: or again, they muſt be ſuch as have a power of altering the craſis of the humours; ſo as to fit thoſe to paſs, which could not get through before; and this remains yet to be explained, and has particular regard to moſt of the ſimples collected under this ſection.

Without venturing out too far, for the compaſs here allotted, into the nature of ſecretion, it may be proper to take notice, that the thinner ſeparations increaſe in proportion to the blood's velocity; for the ſwiftneſs of its motion not only keeps the parts more divided, but alſo brings them oftener to the ſecretory orifice; which every

where is what takes off the thinneſt of the blood at that part; ſome of the viſcid and thicker ſecretions requiring, for the ſame reaſon, a vaſt check of the blood's motion, before they can be performed; that is, before the blood has obtained ſuch a conſiſtence, by the ſlowneſs of its motion, that what is to be ſeparated is the thinneſt at that part; for no other will go off any where. If therefore from any cauſe the blood does not move with its due velocity; its parts will attract one another, and make the whole too thick to part with any thing by the kidneys, or ſo much as it ought. Nature indeed ſeems particularly to have provided againſt this inconvenience, by ſo near a ſituation of the kidneys to the heart, that the blood's motion cannot be retarded when it comes to them, unleſs it moves ſlower through the heart itſelf. In this caſe ſuch things prove diuretic, which not only forward the blood's motion by their itritation of the ſolids, and quickening their vibrations; but are ſo ſubtile as to keep the blood in as fluid a ſtate as poſſible. Many things therefore under the firſt claſs of the firſt ſection come into this rank; becauſe their volatility gives them ſuch properties. But beſides the ſmallneſs and aptitude to motion of ſome parts which keep the blood fluid, there are others which do it by their roughneſs and rigidity; for thereby they hinder ſuch particles of blood from coming into contact, which would make them cohere; and ſuch are of the nature of alkaline and lixivious ſalts; which, for this very reaſon, in all ſluggiſh and viſcid habits of blood, prove diuretic; and procure ſometimes very large diſcharges by urine.

Another way of forcing urine, is to increaſe the quantity of ſuch ſalts in the blood, as ſeem fitted, by their ſpecific gravities, to paſs more eaſily by the kidneys than any where elſe; for the largeneſs and ſwiftneſs of the ſtream in which the blood comes to them, cannot admit of a ſeparation of any particles but ſuch as are ſmall and heavy, of which kind are all nitrous and acid ſalts. For theſe, joining with the ſerum, cauſe it more plentifully to attract and unite the ſalts diſperſed in the blood, and help the ſooner upon that account, viz. by adding to their gravities, to determine them thro' their kidneys into their bladder.

But ſuch ſeem to be the moſt natural and ſafe medicines for this intention, which have in their compoſitions ſalts nearly of this kind, and ſomewhat, at the ſame time, ſo emollient, as to guard them againſt vellicating the membranes; and to lubricate and facilitate their paſſages, with what they take with them into their proper emunctories. Thus all of the mallow kind; and the *Syrupus de Althæa*, have a great deal of a penetrating ſalt wrapt up in a ſoft mucilaginous juice. Dr. Grew, an able phyſician, and a moſt faithful recorder of experiments of this nature, obſerves more ſalts to be in plants of this kind, than many others which ſeem to diſcover more of them to the taſte. If then nature be allowed to be the beſt compounder, thoſe of her productions which have theſe two properties ſo well blended together, muſt be the beſt that can be contrived for the purpoſes under conſideration. For ſuch plants or

ſimples

ſimples ſeem fitted to anſwer both theſe important intentions at once, viz. of lubricating and relaxing the paſſages; and of precipitating, at the ſame time, the proper fluids through thoſe paſſages. And this may ſerve as a good hint, to teach us, in the uſe of thoſe means which art contrived to anſwer the ſame end, not to be too buſy with ſuch things as ſtimulate much, and are forcing that way, leſt, inſtead of making a paſſage, thoſe irritations ſhould contract and ſtraiten what was too ſtrait before; and therefore, that we always join them with ſuch things, as are at the ſame time ſoftening and emollient; that the veſſels may be enlarged when a greater quantity of fluid is intended to be protruded through them.

It has been a long diſpute how ſome things, which manifeſtly paſs off by urine, can do it in ſo ſhort a time as they are often obſerved; eſpecially thoſe of the turpentine kind: which will very ſoon diſcover themſelves by their ſmell, wherein nobody can be deceived in the urine: but this will take up too much room in this place; and it does not ſeem greatly to our purpoſe to determine ſuch difficulties. Some hints this way, and eſpecially how large quantities of liquors drank ſuddenly, will ſoon make their way through theſe parts, may be met with in the Explications of *Sanctorius*'s *Medicina Statica*.

Folia, Leaves of,

Chærefolii, Chervil, is the *Cærefolium ſativum* of Parkinſon and Gerhard. *Scandix Cerefolium*. Linn. It grows in the gardens, and flowers in May. It is recommended for opening the urinary paſſages, promoting the menſes, and ſuch like intentions; but is now very ſeldom preſcribed. *Myrrhis*, ſweet Cicily, is of the ſame kind and virtues.

Fragariæ, Strawberry. *Fragaria Sylveſtris*. Linn. This plant is too well known to want deſcription: the leaves are ſlightly aſtringent, frequently uſed in gargariſms for ſore mouths, quinſies, and ulcers of the throat: and the fruit is moderately cooling and cleanſing, chiefly by urine.

Kali, Glaſs-wort. *Salſola Kali*. Linn. This has its Engliſh name from the pungent and almoſt cauſtic ſalt with which it abounds, of the nature of the *Cineres Clavellati*, or pot-aſhes, which is ſo much uſed in glaſs-making. It has no place now in medicine, unleſs in external application: for as it is very hot and penetrating, it is uſed ſometimes in diſcutient fomentations, and by ſome recommended in cataplaſms for arthritic pains.

Oxyacanthæ. Under this is generally underſtood the Barberry, but Mr. Ray makes it the *Spina Alba*, White Thorn. For the virtues of the former, ſee Sect. IV. Claſs 4. and of the latter, under the diviſion of fruits in this ſection.

Persicariæ *non maculatæ*, Arſmart. It grows in watery places, and flowers in September. It is alſo called Hydropiper, or Water-pepper. It is the *Polygonum Hydropiper floribus hexandris ſemidigynis, fol. lanceolatis, ſtipulis ſubmuticis*. Linn. It is extremely hot and penetrating; inſomuch that the taſte is hardly tolerable. This has made it obtain in ſcorbutic caſes, hypochondriac affections, and all diſorders from a ſluggiſh circulation of the fluids. It is called Hydropiper from its hot and

biting taſte, which ariſes from its eſſential oil diſperſed in little cells all over the plant. This is the only perſicaria that hath any pretenſions to be an active medicine: given in infuſion or decoction it proves diuretic, hence it is uſed in the jaundice and dropſy. The ſeeds are inſipid and nutritive. Its great warmth has alſo made it recommended by ſome in external applications; particularly to diſſipate bruiſed blood; and ſome uſe it for the tooth-ach, as pepper and other hot things.

Petroselini, Parſley. *Apium foliolis caulinis linearibus, involucellis minutis.* Linn. This ſtands with moſt authors for a leſſer ſmallage; and is reckoned much of the ſame virtues. It is well enough known in our gardens, where it is cultivated in great plenty, and comes to us much oftener in food than phyſic, it being better thus uſed for any medicinal intention; as it is agreeable to eat in ſubſtance, almoſt in any thing; and as the ſtomach is the beſt preparer of ſuch ingredients; for all vegetable ſubſtances eaſily reſolve therein, and yield their native properties. And there is no form in medicine which can draw out the virtues of this herb to ſuch advantage, as they reſide in its own ſubſtance. This is ſometimes uſed outwardly, by the common people in cataplaſms, to diſcuſs and reſolve; which it is frequently ſucceſsful in doing. There is hardly a better ingredient in our ordinary ſallads; for cooling and cleanſing the viſcera. It alſo abſterges much ſlime and viſcid adheſions from the ſtomach and bowels; cleanſes all the paſſages; keeps the juices fluid; and greatly aſſiſt their diſcharge by urine. The roots likewiſe are very good in decoctions, diet-drinks, and medicinal ales, for cleanſing the blood as it is commonly called; and draining off ill humours by urine. There is a *Petroſelinum Macedonicum*, referred to in ſome compoſitions, and particularly in the *Theriaca*, where the ſeeds are directed; but this is ſo little cultivated, that the ſeeds of the common ſort are generally ſubſtituted in their ſtead.

Theæ Viridis, Green-Tea. We have given ſome ſhort account of this elegant exotic under the article of Bohea-Tea. But this ſeems to have been the ſort much longeſt known; and is meant by moſt authors who have mentioned tea in their writings. It is certainly in great eſteem among the natives of China, Japan, and other places which produce it, for its ſanative properties: they uſe it almoſt in all their complaints; and many live to a healthful old age by its benefit. Schroder, or his editors, have been at the pains, in his account of this plant, to give its uſe and virtues in various languages.

This herb has prodigiouſly obtained in the uſe and eſteem of moſt people in our own country; and it certainly deſerves very great commendation. It is admirably grateful to the ſmell and taſte; and carries an agreeable roughneſs along with it into the ſtomach; which gently aſtringes the fibres, and gives them ſuch a tenſity as is requiſite to a good digeſtion. This roughneſs indeed may be increaſed ſo far as to make the ſtomach ſometimes contract and throw up its contents; for which reaſon it is ſometimes uſed as an emetic: and in many caſes, where the delicacy and tenderneſs of a conſti-

tution

tution will not admit of harſher and more nauſeous doſes, there is not any thing more proper: for it generally deterges the over-quantity of ſlime from the membranes, and leaves ſuch a moderate reſtriction behind, as prevents all nauſeouſneſs, and that continual drain of irritating juices, which flows in frequently after the uſe of other emetics, and is hard to ſtop. It is wonderfully ſerviceable after crapulas, by gradually helping off the viſcid remains which nauſeate and ſicken the ſtomach, and again by drawing up their fibres ro their due tone. Its uſe therefore after dinner, or eating, is of great ſervice in aſſiſting digeſtion, and preventing the uneaſineſs which attends a full weakly ſtomach. It fates the blood and juices with ſuch gently deterging parts, as keep clean all the emunctories; and is reckoned by ſome to carry its influences to the remoteſt parts, and prevent arthritic pains. The diſcharge it moſt remarkably promotes is by urine; but in ſome thin conſtitutions it is thought too cleanſing; and in the exceſs that ſome drink it, it may poſſibly abrade and wear away the ſubſtance of the ſolids, as well as ill humours, and thereby bring on a conſumption. It likewiſe too ſenſibly vellicates the bowels of ſome very nice and tender conſtitutions, and occaſions colic pains; but there are few inſtances of this; it being one of the beſt, pleaſanteſt, and ſafeſt herbs, that was perhaps ever introduced into food or medicine; and in the frequent uſe of which, perſons generally enjoy a confirmed health. It is beſt in the morning and after dinner, and not ſo good at night; reſt and the uſual poſture of the body at time not ſo well favouring its moſt common and natural tendency.

Saxifragæ Albæ, white Saxifrage. The ſort referred to is called —*Rotundifolia alba*, by C. Bauhine. *Saxifraga granulata foliis caulinis reniformibus lobatis, caule ramoſo, radice granulata.* Linn. But there is another ſort alſo, which comes into the ſhops, which is the *Seſeli pratenſe* of Caſpar Bauhine; but to both are aſcribed the ſame virtues; denoted by the name, ſignifying Stone-breaker. It hath been much controverted what was the ſaxifrage of the ancients, which was certainly different from either of thoſe kinds. Dioſcorides deſcribes it a buſhy ſhrub growing on rocky places, like the *Epithymum*. Mathiolus makes it a ſpecies of *Satureia*: but Dodonæus and Gerhard takes the ſaxifrage of Dioſcorides, to be the *Serpillum Vulgare*. It is too long to enter here into the reaſons which theſe ſeveral opinions are ſupported by.

Pimpinella Saxifraga, Burnet Saxifrage; with Parkinſon, *ſaxifraga bircina major*; great German Burnet Saxifrage; and with Caſpar Bauhine - *Major umbella candida. Pimpinella fol. pinnatis: foliolis radicalibus ſubrotundis, ſummis linearibus.* Linn. Its root is thick at the head, and branched, ſtriking deep into the ground; of a whitiſh colour, and agreeable ſpicy taſte. Its leaves are pinnated; large, narrower, and more deeply cut than thoſe of the common burnet. The ſtalk grows a yard high, ſtiff, jointed, and full of branches. It is found plentifully in Kent; but not very common near London; whence the common burnet and meadow ſaxifrage are uſually ſold for it. It is

accounted good in the colic, weakneſs of the ſtomach, ſtone, and gravel, as alſo in the ſcurvy. Its roots are an ingredient in the *Pulvis Ari compoſitus.*

Semina, Seeds.

EBULI, Dwarf-Elder, called alſo *Chamæacte*, *Sambucus humilis*, and —*Herbacea* by Gerhard and the Bauhines. *Sambucus Ebulus.* Linn. It grows in the highways, and flowers in June. This is ſo much of the ſame virtue with the ſeveral parts of the elder, as to need no farther explication than what may be found already given under them. The ſeeds only of this ſort are chiefly eſteemed for their diuretic quality; and therefore they are ſometimes preſcribed in dropſies, and diſtempers which ariſe from too much humidity, and a cold habit.

LITHOSPERMI, Gromwell, called alſo *Milium ſolis*. *Lithoſpermum Officinale.* Linn. It grows in the highways, and on the borders of plowed lands; and flowers in May. The ſeeds are ſmall, hard, round, of a ſhining whitiſh colour, and of a pungent acrid taſte. They are powerful diuretics, and force, by the urinary paſſages, very much; and are therefore very conveniently made into the form of an emulſion with barley-water, or ſuch ſoftening liquor, becauſe that guards the tender parts againſt their pungency; which otherwiſe might be too ſenſible. Some pretend to cure agues with theſe, given juſt before the fit; but common practice does not juſtify any ſuch opinion.

BARDANÆ, Burdock. *Arctium foliis cordatis inermibus petiolatis.* Linn. This is in every one's knowledge; and ſome parts of the plant are much in uſe amongſt the country people; as the leaves for burns and inflammatory tumours. The ſeeds are, by all authors of the beſt note, eſteemed extremely diuretic; and ſome reckon them effectual in carrying off, by thoſe diſcharges, what is very much the occaſion of arthritic pains, when it is once depoſited upon the joints. The *Bardana major*, called alſo *Lappa major*, which is the *Arcium* of Dioſcorides, is the ſort intended in modern preſcriptions. The roots are aperient, diuretic, and ſudorific; decoctions of them are preferred by ſome to thoſe of ſarſaparilla.

Fructus, Fruits.

ALKEKENGI, called alſo *Halicabaum*; and by Caſpar Bauhine, *Solanum veſicarium. Phyſalis Alkekengi.* Linn. It is cultivated in gardens, and flowers in June. The fruit, called Winter-cherries, are by ſome much celebrated for their lithontriptic qualities; and are ſaid powerfully to cleanſe and ſcour the urinary paſſages of all gravel, and whatſoever is apt to obſtruct them; and likewiſe by their deterſive qualities, to be good in the jaundice, and other affections of the viſcera. Four or five of the cherries are a doſe, or an ounce of their expreſſed juice.

SPINÆ ALBÆ, White-Thorn. This is made a ſpecies of the Medlar-Tree, and diſtinguiſhed by C. B. *Meſpilus, Apii folii Sylveſtris Spinoſa, ſive Oxycantha. Cratægus Oxycantha.* Linn. It fruit is called Haws by the country people, and too well known to want any deſcription. There is little uſe made of them in medicine, and yet they have obtained a name of being very diuretic, and powerful expel-

lers

lers of the ſtone and gravel. The mighty nephritic water, ſo much in the good opinion of the late Dr. Ratcliffe, was made from the flowers of this plant, which blows in May. But whether this will be able to hold its credit by its own merit now its great promoter is gone, may very much be queſtioned. The receipt for that water is ſaid to be this: take white-thorn bloſſoms four pounds, ſherry a gallon, nutmeg an ounce, common water, *q. ſ.* and diſtil a gallon of the water.

Lignum Nephriticum, Nephritic Wood diſtinguiſhed—*Cærulea & flavo tingens* by John, and —*Peregrinum Aquam cerulæam reddens* by C. B. It is brought to us from New Spain; and comes from a tree reckoned of the aſh kind. Though the wood is hard, and coloured almoſt like ſaunders, it tinges water blue. Its name denotes it virtues, though it is but little uſed at preſent.

Radices, Roots.

Althææ, Marſh-mallows. *Althæa Officinalis*. Linn. Theſe are much of the nature of the herb before deſcribed, Sect. IV. Claſs 1. but accounted ſomewhat more efficacious. They yield a great ſlime or mucilage to any decoction or infuſion, which renders it very ſmooth and emollient; whereby it makes the parts give way to almoſt any thing which preſſes upon them, and wonderfully facilitates the paſſage of any ſharp particles through the minuteſt canals; without ſuffering their points to wound and irritate the membranes. Sometimes they are given inwardly, not ſo much to promote urine, as to ſheathe, with that mucilage they afford, the ſharpneſs and acrimony of the humours; and with ſome I know this to be a mighty ſecret in gonorrhœas; and certainly it is very beneficial in ſuch caſes, as it cannot but wonderfully heal, and guard the injured parts from thoſe corroſive ſalts, which would otherwiſe erode and ulcerate them. The ſyrup in the ſhops, is good in the ſame intention; but not ſo efficacious as the ſame ingredients in decoction only; becauſe the ſugar is improperly mixed with all medicines of a mucilaginous nature, as has been already obſerved in the Firſt Part, and will farther appear in the following. They are very emollient, and ſuppurative in outward applications.

Asparagi, Aſparagus. *Aſparagus Officinalis*. Linn. Almoſt every one is acquainted with this, as being a part of food; and knows that the heads, which are ſo made uſe of, if eat in any quantity, will diſcover themſelves by the ſmell of the urine. But the roots are yet more diuretic; becauſe they have more of that ſalt from whence they derive that quality, than any part which grows above ground; into which it cannot riſe in ſuch plenty, as the root itſelf receives it from the earth. And this may, by the way, paſs for a reaſon why moſt roots are more endued with this property than their plants. This is deſervedly reckoned one of the five opening roots; and is a good ingredient in all compoſitions intended to cleanſe the viſcera; eſpecially where their obſtructions threaten the jaundice and dropſy. They are likewiſe good in many diſorders of the breaſt, as operating by urine is of ſervice in moſt ſuch caſes; and are therefore with good ſucceſs joined with pectorals

in

in many extemporaneous preſcriptions; amongſt which we oftenest met with them. There are alſo two kinds of wild aſparagus mentioned by botaniſts; one diſtinguiſhed by Caſpar Bauhine—*Sylveſtris tenuiſſimo folio*, which grows about Montpelier in France, differing little from the garden ſort; and the other—*Petre & Corruda foliis acutis*, growing in ſome parts of Italy; the tops of which are eat as our's here, having alſo aſcribed to them the ſame virtues.

Colchicum, Meadow Saffron. *Colchicum autumnale purpureum.* Linn. *Folii planis, lanceolatis, erectis, &c. Colchicum commune*, C. B. *Colchicum Anglicum purpureum & album*, Ger. and Park. It grows wild in meadows that are rich and moiſt in many parts of England, but more particularly in the ſouthern and weſtern counties. It is a plant with two fleſhy bulbous roots, the one producing from its lower part a ſmaller bulb, from this laſt ariſes in autumn, along a furrow in the ſide of the old root, a ſlender, hollow, tranſparent pedicle, widening at the top into a flower like thoſe of the crocuſes, divided into ſix ſegments, of a purpliſh and whitiſh colour withering in two or three days: from the ſame root next ſpring come forth three or four upright leaves like thoſe of the lily, in the middle of which appears on ſhort pedicles, commonly three triangular pods about the ſize of ſmall walnuts divided into three cells full of roundiſh dark-coloured ſeeds; when the root is young and freſh it is extremely acrid and poiſonous, yet may be ſo corrected as to become a ſalutary medicine; when it is old it is mealy and faint. For medical purpoſes it is beſt to uſe the root when full of ſap. This root digeſted in vinegar loſes its acrimony, and communicates it to the vinegar: and vinegar is a proper antidote againſt its poiſon when taken imprudently. Its principal uſe is as a diuretic, and as ſuch it is very conſtant and remarkably powerful. It is made into a vinegar; and more completely to moderate its natural violence, an oxymel is made thereof. See *Acetum colchicum*, and *Oxymel colchicum*.

Foeniculi, Fennel. *Anethum Fœniculum.* Linn. This is another of the five opening roots; it is often preſcribed occaſionally in cleanſing and deterging drinks and decoctions. They are of a grateful flavour and taſte; making nothing unpleaſant they are put into, which many of this tribe do.

Filipendulæ, Dropwort. It is queſtioned by ſome, whether this was not the *Molen* of Pliny. It is diſtinguiſhed only by—*Vulgaris. Spiræa Filipendula.* Linn. It grows in meadows and paſture grounds; and flowers in June. The root is ſaid to be very deterſive and diuretic, and good in tartarous obſtructions of the lungs, as well as the kidneys; whereby it often relieves aſthmas and difficulty of breathing. Some will have its deterſive efficacy ſtill reach farther, and to ſcour even the joints; ſo as to prevent and eaſe the gout, and to clear the brain and nervous appendages from ſuch diſorders as bring on epilepſies and convulſions. But notwithſtanding theſe aperitive properties, many will have this root effectual in checking ſome fluxes: and particularly that of the menſes, when it is too large, and the *Fluor Albus*. But we do not now meet with it often enough

enough in practice, to warrant any of theſe extraordinary virtues.

Graminis, Graſs. The ſort referred to here is the—*Caninum*, diſtinguiſhed—*Spica triticea repens vulgare*, by Mr. Ray, which is the quick-graſs. *Triticum repens*. Linn. The roots are much of the ſame kind as the aſparagus; and uſed only in the ſame intentions; but not reckoned quite ſo efficacious.

Pareira Brava. This is the root of an American convolvulus, brought to us from Brazil, in pieces of different ſizes: *Convolvulus Brazilianus, flore octopetalo, monococcus*. Raii. It is crooked and variouſly wrinkled on the ſurface; outwardly of a dark colour, internally of a dull yellowiſh, and interwoven with woody fibres; ſo that upon a tranſverſe ſection, a number of concentric circles appear, croſſed with fibres, which run from the centre to the circumference: it has no ſmell; the taſte is a little bitteriſh, blended with a ſweetneſs like that of liquorice. It is greatly extolled as a diuretic, againſt ſuppreſſions of urine, and nephritic pains. Large quantities of gravel have been voided, and alſo ſmall ſtones, ſoon after its uſe: this effect is from its diſſolving the viſcid mucus, by which the ſabuſous matter was detained. It has been found uſeful in healing ulcers of the kidnies and bladder, where the urine came away purulent and mucous, and could not be voided without pain: though where ulcers are ſuſpected the uſe of Balſ. Capiv. ſhould accompany this medicine. Its attenuating quality renders it uſeful in humoural aſthmas where expectoration is difficult; jaundices proceeding from thick bile. The powder of this root is from twelve grains to half a dram for one doſe; and from one to three drams in decoction.

Petroselini, Parſley. *Apium Petroſelinum*. Linn. They are much of the nature of the herb, already deſcribed in this ſection; and ſo near the taſte and flavour of the fennel roots, as hardly to be diſtinguiſhed from them. They are alſo good, in the ſame manner in decoctions and diet drinks, for cleanſing the viſcera, and particularly the kidneys. It is alſo one of the five opening roots.

Raparum, Turnips. *Braſſica Rapa*. Linn. Theſe are much more known in food than in medicine. They are certainly very cooling and cleanſing, and agreeably abſterge the viſcid and mucous adheſions, which often nauſeate the ſtomach, and diſorder the firſt paſſages. They afford a very innocent and light nouriſhment to conſtitutions extremely weakened; and the liquor preſſed out of them, when boiled, is accounted good in hectics, tartarous obſtructions, and tubercles of the lungs.

Raphani Hortensis, Garden-Radiſh. *Raphanus ſativus brevifolius*. Linn. This comes much in diet at the proper ſeaſon amongſt our ſpring ſallads; but is little uſed in medicine. Radiſhes abound with a penetrating nitrous juice, which makes them diuretic and cleanſing to the inteſtines and viſcera. They have ſomewhat alſo in their own ſkin, which is hot and biting; both which qualities help to make them a good anti-ſcorbutic.

Raphani Rusticani, Horſe-Radiſh, called alſo *Raphaniſtrum. Cochlearia offic. vel Cochlearia foliis radicalibus lanceolatis crenatis, caulinis inciſis*. Linn. Theſe roots are in virtue very much like the ſcurvy-

ſcurvy-graſs and creſſes, deſcribed in Claſs 4. Sect. 4. and are extremely volatile and pungent, when bruiſed. By this quality it diſcuſſes and opens all little viſcoſities and infarctions of the veſſels; but becauſe ſuch ſubtile bodies are leſs ſenſible in the larger paſſages and glands, where they eaſily get through, their efficacies are moſt remarkable in the capillaries; for which reaſon, this and all of the ſame tribe, are moſt valued for their ſcouring the cutaneous glands, and breaking through ſuch little ſtoppages there, as occaſion deformities, and all the ſymptoms of the ſcurvy. This root is alſo powerfully diuretic; but moſt when ſo joined with ſome convenient acids, which add ſomewhat to the weight of its particles, and determine them ſooner through thoſe deſcending emunctories. Upon this account the compound water in the ſhops, which from hence has the name of *Aqua Raphani compoſita*, is very ſkilfully ordered; the extremely ſubtile particles of this ingredient, with others of the like nature, joined with ſuitable acids, making it a noble diuretic. This root in decoction ought to be carefully managed; becauſe its chief parts will eaſily fly away. Its virtues are therefore beſt drawn out by ſimple infuſion; which hot water poured upon it, and ſhut down in a cloſe veſſel, will ſo effectually do, as to make it as pungent almoſt as ſpirit of hartſhorn. Its great activity and warmth alſo make it good in all ſuch nervous caſes as ariſe from cold and viſcid juices; and induce heavineſs of the ſenſes, or inaptitude to motion, in the ſame manner as muſtard, and all ſuch *ſtimuli*.

Of Animals.

Millepedes, called alſo *Aſelli*, and *Oniſci*, Wood-lice, Sows, or Church-bugs. Theſe are ſo much in the acquaintance of the common people, that they ſeem to be maſters of their medicinal virtues; and uſe them in many caſes without any other direction. They are by all experience found to be very diuretic and abſterſive; which makes them not only frequent in preſcriptions for diſorders of the reins, but alſo in obſtructions of the viſcera; and in the jaundice particularly. They are good in palſies, epilepſies, and all nervous diſtempers: and likewiſe in ſtrumas, ſcrophulous tumours, and inveterate ulcers. Very remarkable cures have been performed in theſe caſes by a long uſe of them. They are much the beſt taken in ſubſtance, or bruiſed in white wine; the liquor being drank without ſettling fine; elſe a great deal of ſaline matter will fall to the bottom. Theſe are greatly in uſe amongſt all practical authors; and frequently to be met with in the preſent occaſional preſcriptions. Riverius gives inſtances of wonders performed by them in inveterate ſtrumas and ulcers; as does alſo that honour to our country, Mr. Boyle, who takes notice of them for the ſame intention, in his Diſcourſe of the Uſefulneſs of Experimental Philoſophy.

Cantharides, Spaniſh Flies. Theſe are ſufficiently known to moſt people; and that their chief uſe is for raiſing bliſters. They abound with a ſubtile cauſtic ſalt, which gives them this property. Hence, when they are applied to the ſkin, the heat and motion of what

what perſpires ſets them in action; whereby they penetrate the cutis, and ſo wound and ſtimulate the fibres, as to bring, according to the Bellinian doctrine, ſuch a flux of fluids, as raiſes up the *Cuticula* or ſkarf-ſkin, through which it cannot paſs, into a bliſter. But although this is the only purpoſe to which common practice knows how to apply them; yet they are of wonderful efficacy in ſome inward intentions, in the hands of thoſe who have ſkill to manage them. They extremely provoke urine; which they do more by ſtimulating the parts into ſuch motions as are neceſſary for the protruſion, or ejectment of the water, than by facilitating its paſſage; and this makes them ſo difficult to be given, without occaſioning a ſtrangury: for, even in bliſter-plaſters, they ſend enough of their acrid ſalt into the blood, to have frequently this effect. Where, therefore, theſe are adminiſtered as a diuretic, ſuch means are to be uſed at the ſame time, as may guard the ſenſible membranes from their vellications; and ſuch are proper in broths and emulſions. But the particular caſes where theſe flies are neceſſary, and moſt ſafe to ſcour the urinary paſſages, is when they are obſtructed with ſloughs, and ſuch viſcidities as are apt to be waſhed off from the ulcerated parts; and this frequently happens, eſpecially in women; for the womb is very much ſubject to ſuch foulneſs, and ſtands in need of the moſt efficacious cleanſers. In theſe caſes, the ſolid parts do not lie ſo bare, as to be liable to the eroſions of the cantharides, until they have deterged away the filth, and then it is time to leave them off; the intention being anſwered. There are inſtances of this practice in authors of the beſt credit. Etmuller ſpeaks of them as good in ſuppreſſion of urine, to carry off water in dropſies, in gonorrhœas, and the ſtone, and fabulous obſtructions of the ureters: and he gives a form of their exhibition, which is an infuſion of them in wine; the liquor being poured off clear for uſe. Dr. Groenvelt, who publiſhed, in vindication of his own practice, a ſmall treatiſe, *De tuto Cantharidum uſu interno*, ſuffered much by a proſecution for giving them inwardly; being charged with, and ſued for, malepractice. The iſſue ruined the unhappy doctor; and taught his envious proſecutors the ſafety and value of his practice. They are now frequently in extemporaneous preſcriptions for the above mentioned intentions. But it is not every one who muſt think himſelf qualified to meddle with ſuch remedies, which are ſure to do good, or hurt, according as they are adapted. There are ſome ill perſons who have learned to procure abortions by theſe flies; and to play a great many other unwarrantable tricks with them.

Stercus Porcinum, Hog's-dung.

Minerals.

Nitre, Salt-petre. It is a neutral ſalt, conſiſting of an acid, leſs powerful than that of vitriol, and more powerful than that of ſea-ſalt, but very different from both, and the fixed alkaline ſalt of vegetables; as may be made evident from the analyſis of it. It may be prepared any where, by properly expoſing putrifying vegetables to the air, and waſhing out the ſalts,

ſalts, when formed, by a weak ſolution of fixed alkaline ſalts: but it is brought from the Eaſt Indies at a much leſs expence than it can be prepared here. Crude nitre was not, till lately, in common uſe in medicine, though it was known to be diuretic, and was by ſome reputed to correct the bile, aſſuage thirſt, and alleviate inflammations and pains; but modern practice has given it a principal place amongſt the capital remedies. The frequent uſe of it was firſt introduced in Germany, and ſince eſtabliſhed here; where it is now regarded under the notion of an antiphlogiſtic, as a general remedy of every kind of inflammation; and therefore given, not only in pleuriſies, quinſies, peripneumonies, *&c.* but in every kind of fever attended with heat; and in all other diſorders, either general or topical, where the leaſt, even ſymptomatic inflammation, is ſuſpected to enſue; as likewiſe in hæmorrhages, which it is ſuppoſed to mitigate, by checking the motion of the blood by its refrigerating quality. But, beſides the extenſive power of overcoming inflammations, there are others more extraordinary attributed to it: a ſurgeon in conſiderable practice has, in conſequence of many trials made in a public hoſpital, offered it as a remedy, when taken as an internal alterative, for thoſe inveterate phagedænic ulcers which have hitherto, in general, baffled the art of healing: and others aſcribe to it virtues not leſs extraordinary; ſo that, on one account or other, no one ſimple in the whole *Materia Medica* enters more preſcriptions. As nitre is given in ſuch a variety of caſes, ſo the doſes, of courſe, are extremely different: I have known half an ounce taken ſeveral times in a day, and in a few inſtances even more: an ounce taken at once produces a palſy in the lower extremities; but the general doſes do not exceed a dram, and frequently reach not even a ſcruple. That it is of great efficacy, when given in larger quantities, in pleuriſies, &c. where the inflammation is owing to a glutinous ſtate of the blood, is not to be queſtioned: but whether from any ſpecific or peculiar power, or from the ſolvent quality, in reſpect of the viſcidity of the blood and humours, which it has in common with other neutral ſalts, is not ſo clear. It is certain, that all the neutral ſalts formed from fixed or volatile alkalies, have this febrifuge power; and perhaps it is only from a more frequent adminiſtration of nitre in this intention, that it has been ſuppoſed to have different properties and effects. But whatever nitre may perform, when given in larger doſes, doubtleſs ſuch trifling quantities as five, and even ten grains, which are frequently ordered, muſt be entirely inſignificant.

SECT. VI.

Of Diaphoretics.

UNDER this name of Diaphoretics, are included what are underſtood by alexipharmics and febrifuges; becauſe all the things under thoſe denominations, whoſe operations we have any notice

tice of, exert themſelves that way, by more or leſs encreaſing a diaphoreſis; which is a ſenſible diſcharge by the ſkin, and ſhews itſelf like a dew upon it.

All thoſe medicines which anſwer this intention, muſt do it either by their ſubtilty; whereby they divide and attenuate the humours to ſuch a degree, that they become fine enough to eſcape through ſuch ſmall paſſages as thoſe of the cutaneous glands, or elſe by their contracting and ſqueezing the ſolids, which force out of the extremities what lay before in readineſs for expulſion. Of the former ſorts are many ſimples; which, for their other more manifeſt qualities, we have placed under other heads; and chiefly among the cephalics: for all aromatic, warm, and ſubtile bodies have a natural tendency this way: becauſe they cannot but divide and attenuate the fluids; which makes them fitter to go off by the ſmaller paſſages. What ſimples we have collected under this ſection, are moſtly determined to the ſame intention, by a like texture and diſpoſition of parts; but then they are generally ſuch as are ſeldom met with in compoſition or preſcription for any other purpoſe. And without tranſgreſſing the rules laid down for determining things of this kind, it may be conjectured, that there is this difference between theſe and the common aromatics, that the latter act as ſoon as ever they come into the ſtomach, and by the volatility of their parts divide and thin the juices in the *primæ viæ*, but go off, in a great meaſure, by ſome of the larger diſcharges; whereas the former ſeem not to have any thing in their compoſition ſo active as to render them ſenſible, until they have paſſed the laſt comminution or digeſtion in the circulating blood; and that there they obtain ſuch a reſolution, as ſuits them not only for the cutaneous ſecretion, but alſo to break, and as it were fuſe the blood itſelf, thereby cauſing its thinner and ſerous parts to flow through the pores in great plenty. And this will not, perhaps, appear ſo ſtrange, when we conſider a manifeſt difference in our food, not unlike what we here aſſign to medicine. For ſome parts of our aliment are ſooner than others broke and digeſted in the ſtomach and firſt offices; and ſuch always furniſh the greateſt ſupply to the larger emunctories, and go off moſtly by urine; whereas others, which have ſubtilty enough not only to paſs the lacteals, and get into the blood, but are too ſolid to undergo the laſt comminution, except by a long circulation, beſtow more matter both for nouriſhment and the finer ſecretions. Thoſe ſubſtances, or bodies, therefore, which obtain this appellation of Diaphoretic, are ſuch as are capable of being divided into very ſmall and fine parts; which do not ſenſibly operate until they are brought into the minuteſt veſſels, where their ſmallneſs and activity fit them both to paſs themſelves, and beſides make way for many other particles to go off with them.

But the other caſe of a diaphoreſis, or raiſing a ſweat, is moſt extenſive and efficacious; and that is by ſqueezing and contracting the fibres, and ſo forcing through what is in readineſs to paſs; of which matter there often is a great deal in the capillaries, or juſt at the ſurface, that ſometimes almoſt ſtag-

nates for want of ſuch ſhocks. All acids do this, and whatſoever vellicates and contracts the fibres powerfully. Thus you ſhall ſee people preſently ſweat upon eating vinegar, or lemon-juice. Upon the ſame account does fear, or any ſudden paſſion, produce the like effect; as likewiſe all kinds of exerciſe. But theſe are not ſo directly our buſineſs to account for; nor likewiſe how ſweating moſt commonly terminates fevers, and throws off poiſons, or contagious infections; by which they come to be termed alexipharmics, and febrifuges; becauſe this would take up more room than we have here to ſpare; as requiring the whole theory of fevers to be treated of, in order to arrive at a perfect knowlege of it.

Folia, Herbs.

ANTHORÆ, Helmet-flower; called by ſome writers *Antithora*; who will alſo have it to be the zedoary of the Arabians, particularly of Avicen and Serapion. The *Aconitum Salutiferum*, or wholeſome Wolf-bane of C. Bauhine, is what the officinal preſcriptions intend, whereſoever this is ordered. *Aconitum Anthora*. Linn. It grows on the mountains in Helvetia and in Savoy. The root is chiefly in uſe; which is of a warm, bitteriſh taſte, and reckoned cardiac and alexipharmic, much of the ſame nature as the contrayerva root; on which account by ſome it s called the German Contrayerva. Some commend, and others oppoſe the uſe of this herb: but as it hath never yet obtained generally in practice, experiments are wanting to aſcertain its virtues.

CALAMINTHÆ, Calamint. That deſcribed *Flore magno vulgaris* by John Bauhine, ought to be the officinal ſort. *Melliſſa Calamintha*. Linn. But the ſcarcity of that brings to market in its ſtead the — *Sylveſtris odore Pulegii ſeu Nepetæ* of C. Bauhine. *Melliſſa Nepeta*. Linn. The firſt of theſe flowers in June and July; as a medicine it differs but little from Spear-mint; its odour indeed is leſs agreeable, whence it is prefered in hyſteric caſes.

CARLINÆ, Carline-thiſtle, is the *Chamæleon albus* of Dioſcorides, — and *Acaulos magno flore.* of C. B. *Carlina acaulis*. Linn. It grows in the valleys of Germany and Italy; and flowers in June. Its root is moſt in eſteem; and recommended for its warm alexipharmic qualities, in reſiſting infection, and expelling malignities. But the preſent practice takes little or no notice of it.

DORONICI, Leopards-bane. Mathiolus will have this to be the *Aconitum Pardalianches* of *Theophraſtus*; but the modern botaniſts diſſent from him in that particular. *Doronicum Plantagineum*. Linn. This grows in many places in Germany, and is ſaid to be alexipharmic, alſo a ſpecific for reſolving coagulated blood, but it operates ſo violently, that it is rarely uſed. A pugil of the leaves or roots are a doſe.

DRACUNCULI, and,

DRACONTII, Dragons. The *Dracunculus Polyphylus* of C. Bauhine is that referred to here, and ſeems to be a ſpecies of the *Arum*; being entitled in Herman's Catalogue, *Arum Polyphyllum, Dracunculus & Serpentaria dictum, caule maculato, majus & elatius. Arum Dracunculus*. Linn. It is reckoned alexi-

alexipharmic, and a reſiſter of poiſons; on which account it hath a place in the plague-water.

Galegæ, called alſo *Ruta Capraria*, Goat's Rue. *Galega officinalis.* Linn. This has a great name with ſome authors, and paſſes for a powerful alexipharmic, ſudorific, and a reſiſter of poiſonous and peſtilential contagions; but its ſenſible qualities diſcover no foundation for any virtues of this kind; and the taſte is merely leguminous; and in Italy, it is ſaid, to be uſed as food.

Meliſſæ, Baum; diſtinguiſhed—*Vulgaris odore Citri*, by J. Bauhine. *Meliſſa racemis axillaribus verticillatis: pedicellis ſimplicibus.* Linn. It flowers in July. This herb is very well known in our gardens. It is of a fine cordial flavour; but ſo weak, that in moſt medicinal forms it is loſt; and it is hard even to dry it with its natural ſcent. The diſtilled water made from it therefore is beſt drawn when the plant is green; which, by the way, holds good in very few other plants: but with all the care imaginable it will ſoon fade, unleſs ſprinkled with a little ſpirit before it is diſtilled. The way of gaining this water in its full perfection, is by cohobating it ſeveral times upon freſh parcels of the plant; for thus it may be made extremely rich, and of conſiderable medicinal virtues. The plant is a good cordial, and makes an agreeable ingredient in many alexipharmic waters. Any other form it is not fit for.

Scordii, Water Germander. *Teucrium foliis oblongis ſeſſilibus dentato ſerratis, floribus geminis axillaribus pedunculatis, caule diffuſo.* Linn. It grows in watery grounds; and flowers in June and July. It is ſomewhat of a garlic ſmell, mixed with an aromatic. It is juſtly eſteemed a good alexipharmic, and makes an excellent ingredient in all compoſitions of that intention; as well as in that grand medicine of the ſhops, which has its name from it, *Diaſcordium.* This plant keeps its ſmell, if well dried, though reduced into a fine powder; and therefore may very conveniently be preſcribed in boles, as well as infuſion; which makes it ſtrange that it is not oftener met with in extemporaneous practice, in the room of ſome things not by much ſo efficacious, or ſo eaſily to be procured.

Ulmariæ, Meadow-ſweet. *Spiræa Ulmaria.* Linn. It flowers in June. We have this amongſt the beſt alexipharmics, in ſome writers, and it is called *Regina Prati*, Queen of the Meadow, and by Caſp. Bauhine, *Barba capri, floribus compactis.* It has a very agreeable ſcent; but it does not by any great volatility of ſmell, or pungency in taſte, ſeem to diſcover in it ſuch properties, in ſo large a degree as authors mention.

Flores, Flowers.

Calendulæ, Marygold. *Calendula officinalis.* Linn. Theſe blow almoſt all the ſummer. They are well known in the kitchen as well as the ſhops. Amongſt phyſical writers they paſs for alexipharmics, though in a much inferior degree to ſaffron, which it is compared to. Many alſo ſpeak of them as hyſterics; and we meet with them often in Riverius's practice for that purpoſe. The leaves of the plant are the moſt active part.

Croci, Saffron. *Crocus ſpatha univolvi radicali corollæ tubo longiſſimo.*

giſſimo var. Linn. Theſe blow in September, and are of a nice culture, and a valuable commodity, growing in ſome parts of England, particularly in Eſſex and Cambridgeſhire; which are the beſt of any in the world we have yet met with. The German writers mention, that for the beſt, which grows in the circle of Auſtria; but by their doſe it muſt fall ſhort of our's; for a ſcruple was their ordinary quantity; whereas five or ſix grains of Engliſh ſaffron, that is good, has very ſenſible effects. Foreign authors alſo ſpeak much of this narcotic quality; and pretend, that an immoderate doſe of two or three drams will bring on a particular kind of delirium (or mirthful madneſs) and occaſion death. Etmuller gives a ſtory of a perſon, who trading in this commodity, for the ſake of ſaving ſome duty, concealed a bag of ſaffron ſo long under his clothes, that its ſteam had ſuch an effect upon him as to kill him. It is certainly one of the greateſt cordials of any ſimple the whole *Materia Medica* ſupplies; and as effectually promotes a diaphoreſis; which makes it hardly ever omitted in extemporaneous preſcriptions, for any ſpecies of fevers. It wonderfully aſſiſts the eruption of the meaſles and ſmall-pox; and at the ſame time that it puts the conſtitution upon a force to throw off ſomewhat diſagreeable, it enables it to ſuſtain ſuch an exertion. It is alſo given in almoſt all diſorders of the lungs; and for its great efficacy in promoting expectoration, and relieving the breath, it is called by ſome *Anima Pulmonum*, the ſoul of the lungs. There are many forms which it is made into into the ſhops; but it is much better given in ſubſtance; and is very conveniently powdered, and made into boles and electaries. The dearneſs of this commodity make ſome draw out its tincture for a ſyrup; or to uſe by itſelf, and afterwards dry and powder the remainder for uſe. That which has not been ſo ſerved, is almoſt of a red colour when powdered: and upon but juſt touching it with any moiſture, it will ſtain extremely yellow. The colour which it gives in tincture, though deep and fine at firſt, will fade with keeping; and the ſooner, as the menſtruum is the more acid; for this reaſon, that which is ordered with treacle-water, and ſeems beſt fitted to anſwer the intention of an alexipharmic, is hardly ever made. It is generally done with canary, and ſuch wines as are moſt remote from acidity; but that is only for the ſake of the beauty of the medicine. This flower parts with a great deal in infuſion that will riſe in the ſtill; and therefore what is ſold for ſpirit of ſaffron, if well made, is an admirable cordial: and in the ſtrict ſenſe of the term, perhaps a greater than medicine any otherwiſe ſupplies. This way likewiſe there is nothing of the ſimple loſt; becauſe the reſiduum may conveniently be evaporated into an extract; in which will be retained the moſt deterſive parts; and will make it a good medicine in the jaundice, cachexies, and all diſorders ariſing from obſtructions and foul viſcera. There are many who extol this in hyſterical affections; and are of opinion, that it cleanſes the womb, promotes the menſtrual diſcharges, and aſſiſts in delivery. Some preſcribe it to be worn with camphire, in a bag at the pit of the ſtomach

for

for melancholy; and others affirm, that, if ſo uſed, it will cure agues.

Semina, Seeds of,

SESELIOS, Hart-wort. *Seſeli Montanum*. Linn. Botaniſts deſcribe ſeveral kinds of this plant; but the officinal ſort is the ſame as the *Siler Montanum*; and called likewiſe by C. Bauhine, *Liguſticum*. The ſeeds have a great name with ſome ancient botaniſts and Diſpenſatory writers; and are mentioned almoſt in every intention: but they are grown into neglect in the preſent practice, and enter few ſhop-compoſitions except the *Theriaca Andromachi*.

VICIÆ, Tares. Theſe are too well known to want deſcription; and they are of no uſe in medicine but amongſt nurſes, who boil them in ſome drinks, to bring out the meaſles and ſmall-pox.

Gummi, Gums.

CAMPHORA, Camphor. This is a pellucid gum, or reſin, which does not flow from the *Laurus Camphora*. Linn. but is obtained out of its wood, by a particular way of ſublimation; *vid.* Jac. Breynius in Exotic. Cent. 1. It is brought into Europe chiefly from China, and the iſland Borneo in the Eaſt Indies. It is totally volatile, and exhales without any loſs of its parts; ſo ſuffers no loſs by long keeping. It is the moſt efficacious diaphoretic known in medicine; its great ſubtility diffuſing it through the very ſubſtance of the parts, as ſoon almoſt as the warmth of the ſtomach ſets it in motion. In all fevers, therefore, when a diaphoreſis is to be encouraged, nothing will ſooner raiſe one; but its great heat requires plentiful diluting with ſmall liquors. Its ſmell indeed is ſo penetrating and particular, that it is not to be diſguiſed in any form. In reducing it to powder, the mortar muſt be firſt rubbed with a little oil, or ſpirit; elſe it will not divide. It very readily diſſolves in rectified ſpirit; but it will again part from it, and appear like a curd, if that be lowered with any aqueous mixture. It unites freely with water, by the intervention of gum, and but ſparingly by other intermedia that render oils miſcible with watery liquors. This has been in great eſteem with practical authors of the beſt note heretofore, in all kinds of fevers, malignities, and epidemical contagions; and we ſhall hardly meet with any compoſitions for thoſe intentions in Sennertus Riverius, or Etmuller, without this as a principal ingredient. How it comes to be ſo little in the preſent practice, is ſomewhat ſtrange; for it is as ſafe as efficacious. But to thoſe who appear moſt acquainted with this drug, there is one quality which ſeems but little known; and that is, that in deliria, where opiates fail of procuring ſleep, and oftentimes aggravate the ſymptoms, this will frequently ſucceed, eſpecially if joined with nitre; and as it helps forward a breathing through the pores by its warmth, it does alſo contribute to the ſame good end, by relaxing the tenſity of the fibres with reſt. It has been much debated, whether this be really hot, or cold; its ſenſe upon the palate, at firſt taking, perſuading the former; and its uſefulneſs, in allaying inflammations, encouraging the latter opinion. If by warmth is underſtood ſuch a ſubtility of parts, as diſpoſes them to briſk motion, and to agitate what is about them,

this has as good a title to be ſo as any thing which is not actual fire. And for its allaying inflammations, that may be done by the ſubtilty of its parts, dividing and diſcuſſing ſo far the obſtructed humours, that they either perſpire, or are taken up again into circulation by the refluent blood; for ſpirit of wine, and many things allowed by all to be hot, will do this by the ſame means. Its doſe is from one to ten grains.

Guaiaci, of Guaiacum. This gum, or rather reſin, is much of the ſame virtue as the wood whence it is drawn, but more efficacious. It is reckoned much to promote inſenſible perſpiration; and upon that account is good in ſuch cutaneous caſes as proceed from obſtructions of the perſpirable matter in the miliary glands. It is very warm and deterſive; and therefore good in all ulcerations and gleets, both internal and external. In gonorrhœas it is by ſome almoſt deemed a ſpecific. In the gout likewiſe it does frequently good ſervice; not only by deterging and cleanſing the joints and mucilaginous glands from tartarous matter; but alſo warming and ſtrengthening the nerves, it enables them to move with great vigor, and ſhakes off and prevents the lodgment of ſuch particles upon them.

Cortex Eleutheria *ſeu Caſcarilla.* It is the bark of a tree known in Jamaica by the name of Muſk-wood, and Alligator-wood. All the parts of the tree, eſpecially the bark, ſmells ſtrong of muſk, and may be uſed inſtead thereof for many purpoſes. The Negroes uſe the powdered bark as an emetic. This bark is in curled pieces, about an inch in width, it pretty much reſembles in appearance the Peruvian bark, but it is of a paler brown colour on the inſide, leſs compact, and more friable; its taſte is bitter, and has a conſiderable ſhare of aromatic pungency, and heat. It eaſily takes fire, and whilſt burning it emits a fragrant odour: this peculiar property diſtinguiſhes the elutheria from all other known barks.

It is hotter than the Peruvian bark. When properly applied, it is of ſervice in intermitting, and alſo ſlow fevers, which proceed from a fault in the ſtomach, or a weakneſs of digeſtion. In ſeveral inſtances where the uſual ſudorifics &c. failed, the aſſiſtance of this bark ſecured ſucceſs: during the uſe of it, the patient generally ſweated without loſs of ſtrength; or where it did not ſweat, three or four ſtools were produced by it each day. In flatulent colics, dyſenteries, &c. for promoting expectoration it hath been uſed with ſucceſs.

Cortex Peruvianus. Jeſuits Bark, as it is called, from its being brought into Europe from the Weſt Indies, by ſome miſſionaries of that order. It is the bark of the *Cinchona panicula brachiatas vel arbor febrifuga Peruviana.* Linn. The power which this medicine has, of curing (almoſt generally, agues and intermitting fevers) is too well known, to leave room for doubt. But in ſymptomatic agues, hectic, and purulent fevers, cacochemic habits, and where the hypochondres are ſwelled and diſtended, this medicine is improper, and for the moſt part prejudicial. Its manifeſt aſtringency forbids its uſe in obſtructions of the abdominal viſcera, or ſuppreſſion of any critical evacuation; until the ob-

obſtruction is firſt removed, or the evacuation had its due courſe.

In acute, inflammatory, or malignant fevers, the bark does not ſeem to have any good effect. Nevertheleſs, in the decline of long nervous fevers, or after a remiſſion, when, from bad habit, old age, fatigue, or the like, the patient is extremely weak, and the pulſe low, the cortex proves a medicine of excellent ſervice; provided that there is no extravaſation, that the veſſels remain entire, and the pus is not already formed.

Peruvian bark has likewiſe been found eminently ſerviceable in gangrenes and mortifications, proceeding either from an internal or external cauſe. In all the caſes of this kind, where it proved ſucceſsful, it occaſioned a kind ſuppuration, which degenerated when the uſe of the medicine was diſcontinued, and again turned kindly upon reſuming it. Some have been hence induced to exibit the cortex in variolous caſes, where either the puſtules did not rightly ſuppurate, or the petechiæ ſhewed a diſpoſition to a gangrene; and here likewiſe it anſwered the expectation: the empty veſicles filled with matter, the watery ſanies changed into thick white pus, the petechiæ became gradually of a pale colour, and at length diſappeared, and the pock began to turn ſooner than was expected. See the Edinburgh Medical Eſſays.

The bark has been applied likewiſe, and not without ſucceſs, to the cure of periodical head-achs, hyſteric and hypochondriac fits, and other diſorders, which have regular intermiſſions. By its aſtringency and aromatic quality it ſtrengthens the whole nervous ſyſtem, and proves uſeful in weakneſſes of the ſtomach, and ſundry chronical diſorders, proceeding from too great a laxity of the fibres. In obſtinate uterine fluxes, and old gleets, bark joined with chalybeates has notable effects.

The virtues of Peruvian bark reſide chiefly in a reſinous ſubſtance, and hence are extracted in perfection by rectified ſpirit. Aqueous liquors gain conſiderable from it, without coction, by which the reſin is melted out; and mingled with the water; which, whilſt hot, appears tranſparent, but in cooling grows turbid, and depoſits great part of the reſin to the bottom. Water elevates in diſtillation the aromatic part of the bark; pure ſpirit brings over nothing. Hence an aqueous extract proves not only leſs in quantity, but likewiſe inferior in quality to one made with rectified ſpirit. Proof ſpirit extracts the virtues of this drug in tolerable perfection, in the cold; heat enables it to take up more than it can retain when cold. Spirit of ſal ammoniac, prepared with fixed alcaline ſalts, gains very little from the cortex, either with or without heat; the ſpirit prepared with quicklime, and the dulcified ſpirit, in a few hours become ſtrongly impregnated with its ſmell; and the bark, when given in the form of a bolus, ſhould be mixed up with a mucilage, and not with ſyrup, for that makes it hang about the mouth. Aromatics do not conceal the taſte of it, the extract of liquorice does it very effectually—the doſe is from half a drachm to two drachms, or more.

The modern practice, previous to the uſe of this medicine, uſually is to give an emetic at the beginning of a paroxyſm: in ſome caſes a cathartic, and in plethoric habits

venæſection, are premiſed: theſe render the bark not only more ſafe, but likewiſe more certain and ſpeedy in its operation: where theſe evacuations are neglected, or not ſufficiently plentiful, the diſeaſe, if not of a long ſtanding, ſcarce yields to the cortex; or if it appears at length ſubdued, yet the patient does not recover his ſtrength, and ſoon ſuffers a relapſe. Where the fever is of the bilious kind, and accompanied with great heat, a little nitre ſhould be joined: and in all caſes, moderate exerciſe generally promotes its effect.

Radices, Roots:

Contrayervæ, Counter-poiſon. This is an exotic root, which botanic writers ſeem not well to agree about: Bauhine, with ſome others, making it a kind of cypreſs; and calling it *Cyperus longa*. Some alſo call it *Drakena*; and others make it a ſpecies of the *Granadilla*. It is the *Doreſtenia Peruviana acaulis, foliis pinnatifido-palmatis ſerratis, floribus quadrangulis, ſcapis radicatis, radice dentariæ*. Linn. It has a quick aromatic ſmell, is of a reddiſh colour, rough or wrinkled on its ſurface, and has many ſmall fibres ſhooting from it. The fibrous parts of the root have but little taſte or ſmell; the tuberous part therefore is to be alone choſen. It is much more come into extemporaneous practice of late, than it ſeems to have been heretofore; though not given above a ſcruple at moſt in a doſe; whereas ſome ancient practical authors ſpeak of a dram as a moderate one. It is very powerful in forwarding the cuticular diſcharges; and is therefore of great ſervice in fevers, by promoting and keeping up a convenient diaphoreſis. There is a good compoſition in the ſhops, which takes its name from it, called *pulvis contrayerva compoſitus*, and is very juſtly preferred to the Gaſcoin's powder. It is likewiſe ſecond to nothing in bringing forward the ſmall-pox and meaſles, where expulſion is neceſſary; and in all kinds of fevers, that can be relieved by increaſing the diſcharges through the cutaneous pores.

Imperatoriæ, Maſter-wort, called alſo amongſt many other names, *Aſtrantia*. The *Imperatoria* of Caſpar Bauhine, is the officinal maſter-wort. *Imperatoria Oſtruthium*. Linn. Theſe are not unlike the angelica roots in flavour or virtue. They are agreeably penetrating, and allowed by all to be good alexipharmics. They are alſo deterſive, and good in the jaundice, cachexies, and dropſies; becauſe they promote the ſecretions by urine as well as by the ſkin. Theſe are not ſo often met with in extemporaneous preſcription, as they deſerve. In the *Aq. Ep.* or plague-water, they are an excellent ingredient; if they are diſpenſed in it in due quantity, and freſh, it gives a very agreeable predominant taſte to the compoſition.

Meu, Spignel, generally called *Meum Athamanticum*, diſtinguiſhed by C. B.—*foliis Anethi. Meum Athamanta vel Athamanta foliolis capillaribus, ſeminibus glabris ſtriatis*. Linn. It grows in meadows and paſture grounds, but is not often met with. It flowers in June. This has an aromatic pungency in its ſcent; but is alſo ſomewhat fetid. Some aſcribe to it virtues which give it a place in hyſterical preſcriptions. It is given to promote the menſtrual diſcharges, and remove

remove the diſorders of thoſe parts, which proceed from obſtruction.

NARDI, Spikenard. We ſhall here take notice of two ſorts, the Celtic and the Indian. The former grows in many parts of Europe; and Mr. Ray ſays, as it agrees in kind with the valerian, ſo it has the ſame virtues. It is the *Valeriana Celtica* of Linn. The latter comes to us from the Eaſt Indies, Alexandria, &c. called by Breynerus, *Gramen Cyperoides aromaticum Indicum*; and is much more valuable than the other. But the plant is unknown to botaniſts. It is eſteemed as an alexipharmic; being warm and ſpicy, and helpful to promote ſweating. Upon this account it is an ingredient in the capital and other Diſpenſatory compoſitions of the ſame intention. It is likewiſe reckoned a good ſtomachic, a ſtrengthener of the fibres, and a diſpeller of wind and crude flatulencies.

PETASITIDES, Butter-Bur, diſtinguiſhed by C.—*Major & vulgaris*, and by J. B.—*vulgaris*,—*rubens rotundiori folio. Tuſſilago Petaſites Thyrſo ovato floſculis omnibus hermaphroditis*. Linn. It grows in low grounds, and flowers in March. This is not greatly unlike the maſter-wort root, in pungency and flavour. It has alſo the virtue aſcribed to it as an alexipharmic, upon which account it is in many of the Diſpenſatory compoſitions of that intention. It is likewiſe reckoned detergent, and good in all obſtructions of the viſcera, and the diſtempers thence ariſing.

PYRETHRI, Pellitory of Spain, diſtinguiſhed—*flore Bellidis*, by C. B. *Anthemis caulibus ſimplicibus unifloris decumbentibus foliis pinnato multifidis, radice longo ſervida, flore bellidis*. Linn. This is an acrid root, brought to us chiefly from ſome parts of Italy; but it is mighty ſubject to decay; ſo that we meet with it in the ſhops frequently rotten and worm eaten. It is hot and very diſcutient, which makes it forward a diaphoreſis; and it wonderfully attenuates and draws out of the fibres and glands, viſcid and phlegmatic humours. For which reaſon it is not only uſed as an alexipharmic, but as a phlegmagogue, and a purger of watery humours. It is a good medicine in all cachexies, and diſtempered habits from too much cold and moiſture; and frequently of good ſervice in palſies, and numbneſs of the limbs. It is much uſed for the tooth ach, to be held in the mouth; and its great heat and pungency, when ſo uſed, occaſion abundance of rheum to flow out of the ſalival glands; which in many caſes gives relief to other pains of the head beſides the tooth-ach. It makes an excellent gargle by boiling in water for paralytic tongues.

SCORZONERÆ, Viper-graſs, called *Viperaria Hiſpanica* by Gerhard, *Tragopogon Hiſpanicus* by J. B. *Scorzonera Hiſpanica*. Linn. The preſent practice acknowledges it only for an alexipharmic; although it is not often preſcribed. It ſeems beſt ſuited to decoction; but it is not very palatable. In that form ſome commend it for bringing out the meaſles and ſmall-pox.

SERPENTARIÆ, Snake-weed. This is plentifully brought us from Virginia; and thence takes its name. It is called *Colubrina* and *Ariſtolochia Virginiana*. *Ariſtolochia Virginiana foliis cordato oblongis planis, caulibus infernis ſuperne flexuoſis teretibus, floribus recurvis ſolitariis*,

tariis, fructu parvo pentangulari. Linn. There are three roots under this name in the ſhops, whoſe diſtinctions amongſt botaniſts ſhew them to be of the *Ariſtolochia* kind. But all theſe are by cuſtom ſunk into the common appellation of Snake-root. It is very hot and pungent, both in ſmell and taſte. The preſent extemporaneous practice juſtifies it to be a powerful alexipharmic; and hardly ever omits it in moſt kinds of fevers, eſpecially the worſt and more malignant ſort. Its heat is ſo conſiderable, that where it is plentifully preſcribed, it requires to be well diluted with ſmall liquors; and ſo managed it ſeldom fails to raiſe a diaphoreſis. Its warmth alſo occaſions it to be uſed frequently in nervous and paralytic caſes, which proceed from too much rheum and humidity. It is an ingredient in the *Aq. Ep.* or plague-water, and its name ſeems to have brought it in eſteem amongſt many people; and to have introduced it into the cloſet cordials and drams; as conceived to be a great reſiſter and preſervative againſt infections, and what they call catching diſtempers.

Succisæ, Devil's-Bit, diſtinguiſhed, *vulgaris flore purpureo*, by Parkinſon, and—*Glabra* by C. B. *Scabioſo Succiſa.* Linn. It grows in meadows and paſture grounds; and is a ſpecies of the ſcabious: it is ranked by many amongſt the alexipharmics; but is ſeldom preſcribed in common practice.

Valerianæ, Valerian. Of this there are ſeveral kinds; the *Major hortenſis*, which is the *Phu Oluſatri-folio* of Dioſcorides, the —*Major odoratâ radice* of J. Bauhine, commonly called *Phu* in the ſhops; the—*Minor paluſtris* of Caſpar, the *Minor pratenſis ſeu aquatica* of John Bauhine; and the—*Sylveſtris Major foliis anguſtioribus*; the latter of which is intended in moſt preſcriptions. *Valeriana floribus triandris, foliis omnibus pinnatis.* Linn. There are two ſpecies of this wild Valerian; the one has its root divided into many white and thick fibres, growing more downwards, and ſpreading leſs than the other; of no conſiderable odour when firſt taken out of the ground; but ſmelling very ſtrong when dry. This grows in woods and drier places than the other; which is larger, higher, and more ſpread in its roots; with bigger and ſmoother leaves; and of a deeper ſhining green. The latter grows in watery places near ditches. They both flower in May, and are uſed for each other. It is warm and aromatic, but ſomewhat of a fetid ſcent. Its efficacy, as a ſudorific, is ſupported by the teſtimony both of the ancient and preſent practice. It has been reckoned by ſome deterſive; ſo much as to make it diuretic; and good in all obſtructions of the viſcera. It is mightily extolled likewiſe by ſome for ſtrengthening the optic nerves, and reſtoring decayed ſight. It ſometimes does wonders in hyſterical affections; eſpecially where ſimples of the fetid kind are good; and the ſpirits are too impetuous in their motions, ſo as to occaſion convulſions. I have known it alſo (aſſiſted with camphor, and ſome other things of the like nature, which are very powerful in breaking through the minuteſt obſtructions) to cure obſtinate agues. It is likewiſe very efficacious in all nervous caſes, and particularly the epilepſy. This virtue in it ſeems

firſt to have been diſcovered by Fabius Columna; who, p. 220 of his Phytabaſanos, commends it for that purpoſe given in powder. Riverius celebrates it alſo upon the like account; which makes it a wonder that Etmuller ſays ſo little of it; who is very diligent in ſearching after ſpecific qualities, and prolix enough in their commendation: for he takes no notice of it but as an alexipharmic, and a ſtrengthener of the ſight. Monſieur Marchant, in the Memoirs of the French Academy of Sciences for the year 1706, has confirmed this virtue by many inſtances within his own knowledge. And what appears very remarkable is, that in the two obſervations he enlarges moſt upon, the patients voided great quantities of worms. His cuſtom was always to purge before he adminiſtered it. The *radix Phu* in the *Theriaca Andromachi*, is the root of the garden Valerian.

Of Animals.

Coccinilla, Cochineal. This comes from New Spain, and moſtly uſed in the dying trade; though it is alſo frequently preſcribed in medicine; but there a little of it goes a great way. It is an inſect, which breeds upon the leaves of the American prickly pear-tree, where it lays its eggs, and hatches them there, until the increaſing bulk breaks through its confinement in the leaf, and lets out the young brood. Their wings and legs ſeem to be broken, and ſitted or picked from them; nothing but the trunk of the inſect being brought to market. Leuwenhoeck has pretended with glaſſes to diſcover many parts in them peculiar only to an animal; and has been ſo very particular as to have deſcribed their ovaria. They who deſire to be informed more concerning theſe inſects, may turn to Philoſ. Tranſact. N° 176, and 193. The uſe of theſe in medicine, is as an alexipharmic; they raiſe ſweat, and are alſo accounted cordial. They make the *Pulvis Purpureus*, in Bates's Diſpenſatory, a good medicine; it is much preferable to the Gaſcoign's powder in children's little feveriſh diſorders; as alſo in the ſmall-pox and meaſles. It agreeably tinges the white drink, now known in almoſt all families, as well as the ſhops. Its doſe is from two to ſix or eight grains.

Scinci, Skinks. This is an aquatic animal, though termed *Corcodilus terreſtris*, by Dioſcorides. It is a kind of amphibious lizard, reſembling a crocodile: but ſo ſmall, that the largeſt are ſcarce above five inches long. They are found in Egypt upon the river Nile; and are covered with a fine ſilver ſcale from the extremity of the tail to the end of the ſnout. They have four feet, but exceeding ſhort and feeble; ſo that they rather crawl than walk; they are alſo found in plenty in the Carribbee iſlands. They ought to be choſe large, plump, heavy, dry, entire, and if poſſible untouched by the worm. It hath an alexipharmic quality aſcribed to it, on which account it is in the mithridate; and a tendency to excite venery, for which it was brought into the diaſatyrion, a compoſition now rejected by the college: but theſe different virtues are aſcribed to its different parts; for the diaſatyrion takes in the belly and back, with regard to the reins and ſpermatic veſſels; whereas the mithridate receives the belly only. Dioſcorides,

rides, Galen, Pliny, and many other ancients, were as particular about the different parts for different purpoſes; but Hoffman hath taken pains to ſhew it a needleſs labour; and the preſent pharmacy gives no reputation to ſuch conceits.

Bezoar Orientalis, Oriental Bezoar.

Bezoar Occidentalis, Occidental Bezoar. Theſe are both animal ſubſtances; but Dr. Slare endeavoured to prove them factitious. Their value is chiefly determined by the colour they give to the Gaſcoign's powder; which makes the oriental by much the moſt preferable and deareſt; and of that, ſuch ſtones are preferred as are ſmootheſt, ſmall, and ſtrike a deep green upon white paper that has been rubbed over firſt with chalk; which is a ſure way of trying them. It is wonderful of what value theſe have always been reckoned; ſince it ſeems to be without any good ground. If they are factitious according to Dr. Slare, the art muſt be in very few hands; or the materials very ſcarce, to keep them up ſo dear. But before him moſt were of opinion that they were morbid concretions in an animal, in the Indies, like a deer or a goat. Schroder ſays they are alexipharmic, and promoters of ſweat; that they are good in epilepſies, palpitations of the heart, jaundice, dyſenteries, ſtone, and obſtructions of the menſes; as alſo that they cure melancholy, and forward delivery: and in theſe important intentions he aſſigns the doſe from three grains to twelve. But we have no inſtances from experience to ſupport any ſuch practice. They have neither ſmell nor taſte; and upon taking into the ſtomach no ſenſation, nor produce the leaſt perceivable effect; which is ground enough to ſuſpect them good for nothing; although our phyſicians preſcribe them in much larger doſes than what Schroder mentions; and others have ventured half a drachm or a drachm at a time. The ſhops uſe it only in the *Pulvis è Chelis compoſitus*, commonly called Gaſcoign's powder; which though it be a dear medicine ſeems to be of no virtue as an alexipharmic; yet as it has often been joined in preſcription with ſome alexipharmics of efficacy, it has the credit, amongſt the ignorant, of doing what it never had any ſhare in.

Of Minerals.

Lapis Ætites, Eagle-Stone. This foſſil is not eaſily arranged under any claſs. It is a tunicated maſs, hollow, and containeth a looſe ſtone; about the ſize of an almond ſhell. This has occaſioned ſome very odd conceits; it being for this reaſon termed by ſome, *Lapis veluti prægnans, alio in utero ſonante*, that is, a ſtone pregnant with another in its womb. And upon this chimerical foundation it ſeems to have aſcribed to it the power of influencing the fœtus in women. The eſpouſers of this deluſion ſay, that if it be wore about the arm it prevents abortion; and about the thigh, that it helps delivery: but in the latter caſe it is very gravely adviſed not to be worn too long, leſt it draw out the womb itſelf. Even Galen and Pliny, with many others, have much given into theſe ſuperſti-

tions:

tions: and Wormius pretends to give inſtances of its drawing down the womb. Valeriola likewiſe atteſts the ſame in his obſervations; but a true knowledge of anatomy will not allow of any aſſent to ſuch reports.

SECT. VII.

Of Emetics.

THAT part of the *Materia Medica* which comes under this head, although it is not ſo extenſive as ſome of the preceding diviſions; yet it is of that efficacy, as to require the utmoſt ſkill and caution in the management. For a vomit cannot be given without doing either good or harm: it is not therefore to be indifferently regarded as the operation of ſome alteratives, which are frequently preſcribed only to keep the patient eaſy under ſome expectation, until a phyſician more clearly ſees what nature indicates to be done.

Vomits and purges are ſo much alike in their operations, that one cannot be well apprehended without the other; thus much therefore is common to them both, that any medicine which ſo far vellicates the membranes and coats of the ſtomach and bowels, as to draw them into convulſive twitches, or much accelerate their natural motions, will be emetic or cathartic, and ſometimes both. But the action of vomiting is more properly a convulſive motion in the ſtomach than any which can happen in the bowels; unleſs their periſtaltic undulations are perverted, as it happens in the *paſſio iliaca*. Whatſoever therefore comes into the ſtomach, which ſo irritates its fibres, as to make them contract or draw up with force, will throw its contents upwards; the vent being much larger that way than through the pylorus; which would ſend them down by ſtool. The difference therefore between an emetic and a cathartic, lies only in this, that the latter conſiſts of ſuch particles as paſs the ſtomach without any violent vellications of the fibres; and the former of ſuch as have that effect almoſt as ſoon as they come there; ſo that a vomit ſeems ſtronger than a cathartic: and this is the reaſon why a cathartic in an increaſed doſe will prove emetic.

Some are of opinion, that the ſubſtance itſelf, which procured a vomit, is thrown up again in the firſt or ſecond ejection; and that the following ſolicitations are cauſed by the acrimony of the juices; which the firſt motions pumped as it were, and occaſioned to drain into the ſtomach. It is of no great importance whether it be thus or not; but it is certain that the action of vomiting gives the ſtrongeſt ſhake to all the muſcles and ſolids of the body, that any motion is capable of; and therefore in all medicinal intentions it may be conſidered as an exerciſe. And the laſt reachings do generally diſcover a drain of humours derived into the ſtomach

from

from ſome conſiderable diſtance; their colour ſhewing them to come from the liver, or parts more remote. But ſervice is not ſo much to be expected from what theſe medicines diſcharge upwards, as from what their violent emotions and concuſſions fit for ſeparation, and force through other outlets; and even that by the ſkin is prodigiouſly increaſed by theſe means, as is manifeſt from the profuſe ſweats which a perſon naturally falls into afterwards, upon the leaſt encouragement thereto.

Tinctures, extracts, and reſins, are always obſerved to operate rougher this way than more ſimple preparations; and the reaſon ſeems to be, that ſuch management of an ingredient divides its parts too much, and makes them too intimately come into contact with the fibres; whence they are not ſo ſoon ſhook off by their convulſive twitches, or throws, as more groſs parts might be. Upon this account, therefore, moſt of the ſimples which come under this head, are beſt ordered in their natural forms; and the elaborate preparations of the chemical pharmacy eſpecially, produce no vomit ſo good as we find amongſt nature's own productions: and this opinion the preſent practice fully ſupports; for all the antimonial and mercurial emetics are almoſt quite laid aſide, unleſs in very obſtinate caſes; and ſome ſimple generally is now preſcribed, only in powder, as the ipecacuanha. The emetic tartar likewiſe, which uſed to be ſo much in vogue, is at preſent to be found only in ſuch hands as are ſtrangers to milder and ſafer methods.

Folia, Leaves of,

ERIGERI, Groundſel; called alſo *Senecio*, and diſtinguiſhed by C. B.—*Minor vulgaris. Senecio vulgaris corollis nudis, foliis pinnato ſinuatis amplexi caulibus, floribus ſparſis.* Linn. This grows moſtly upon old walls, and amongſt rubbiſh; and is much known and uſed by the common people for a vomit. They infuſe or boil it in whey or poſſet-drink: and then ſtrain the liquor. It is a good and ſafe vomit; but it is not uſed in the ſhops, nor, as I ever met with, preſcribed in extemporaneous practice. This plant externally applied, abates inflammations in the breaſts; and diſſolves ſcirrhous tumours.

Flores, Flowers.

PERSICARUM, Peach-bloſſoms. The bloſſoms of the *Amygdalus Perſica*. Linn. Theſe are uſed only in a ſyrup, which is directed in the former College Diſpenſatory. It is a very palatable and gentle medicine for children; provoking them to puke without any manifeſt ſickneſs. It alſo moſt commonly gives a ſtool or two.

Semina, Seeds of,

CARTHAMI, Baſtard-Saffron, called alſo by many *Cnicus*. *Carthamus Tinctorius*. Linn. It is produced by culture. Theſe are ſaid to purge watery and viſcid humours, and deterge the mucus which frequently adheres to the inner coats of the ſtomach; but they are very little uſed in compoſition, and hardly ever occaſionally preſcribed.

Radices, Roots of,

SCILLÆ, Sea-Onions, or Squills; diſtinguiſhed—*Vulgaris radice rubrâ* by C. B. *Scilla Maritima, vel Scilla nudi flore bracteis refractis,*

refractis, Linn. They are uſed only in infuſion, generally with vinegar, which they render emetic. It is ſometimes boiled into the conſiſtence of a ſyrup with honey, and called *Oxymel Scilliticum* in the ſhops; which retains the ſame properties. They wonderfully deterge and ſcour off viſcid adheſions in the bowels, and gently irritate the ſtomach to ejection. They are alſo, as all of the onion kind are, very diuretic; and therefore in great eſteem with ſome in dropſies; for if their infuſion be mixed with cinnamon-water, they will ſeldom vomit, but work downwards and very forcibly by urine. In aſthmas, and all obſtructions and infarctions of the lungs, which are to be removed by deterſives and expectoration, there is ſcarce any thing more effectual. Given along with nitre, in hydropical ſwellings, and in the nephritis, great relief follows; the proportion of nitre may be two parts to one of the ſquills, dried and powdered, and the doſe of the compoſition from gr. x. to ʒ ß, which uſually paſſes off by urine.

Ipecacuanhæ, Ipecacuanha, or Braſilian Root. The French, ſince their knowledge of it, ſeem to have been much more diligent in learning its virtues than ourſelves; Monſieur Homberg, a chemiſt, and Monſieur Boulduc, an apothecary, have both made analytical inquiries into its texture. It will be worth the reader's while to be informed what the latter ſays of it, in the Memoirs of the Royal Academy of Sciences for 1700. He takes it for granted, that all allow it to be a divine remedy in diarrhœas and dyſenteries; and that it is at the ſame time emetic, cathartic, and aſtringent. He leaves to botaniſts the deſcription of the plant, of which it is the root; and contents himſelf to obſerve, that there are two ſorts of it, the one grey, the other brown, inclining to black on the outſide. The brown is more violent in its operations; though the other is more certain, as he learned from his own experience, as well as the report of others. But the gentleneſs of the grey has made it of more general uſe. He adds, that of late we have another ſort brought over, which is white, and unlike the others, and which is given to pregnant women and infants, by reaſon of its mildneſs. He confined himſelf for that time to the examination only of the grey, referring the reſt to ſome other opportunity. And this he does both by diſtillation with a retort, and by extraction with ſuch different diſſolvents as are proper and convenient. By diſtillation he drew off a phlegm, an acid ſpirit, and a little oil; and from the black maſs that was left at the bottom of the retort, he was able to get but a very little fixed ſalt by a violent fire. It was not found worth while to take farther notice of this analyſis; believing the other way by extraction to afford more light into the nature of this root. The extraction was begun with very well rectified ſpirit of wine; by which was drawn off its reſinous part; ten drachms from eight ounces of the root. The remainder thus deprived of its reſinous parts, and well dried, weighed ſix ounces. From this he again drew, with diſtilled rain-water, two ounces of an extract as ſolid as the former; which contained nothing beſides the ſaline particles, accompanied with ſome terreſtrial ones; which were

were inſeparable from the others. This laſt was but of a lax conſiſtence; becauſe all the reſinous parts were ſeparated by the preceding operation. The remainder, or *caput mortuum*, thus deprived both of its reſinous and ſaline parts, weighed but four ounces. Monſieur Boulduc believes this double extraction to be uſeful; viz. one by the ſpirit of wine, the other by the water: being perſuaded that the virtue of the root did not reſide alone in the reſin, but likewiſe in the ſaline parts; on which the ſpirt of wine did not act; and whereof the water is the only proper diſſolvent. It hence appears hat the root contains much more ſaline parts than reſinous, independent of the terreſtrial ones.

In another diſſertation publiſhed the ſame year, Monſieur Boulduc gives his obſervations on the brown ipecacuanha. By diſtillation he remarks, that it yielded leſs oil than the grey; and that the laſt portion of ſpirit which comes away with its oil upon the greateſt violence of fire, although conſiderably acid, appeared to him to have more volatile parts than the ſame portion of ſpirit in the former. He ſays, that by trial with ſalt of tartar, the particles of the brown eſcaped with the greater briſkneſs, and ſtruck the ſenſe of ſmelling more powerfully. Hence he concluded before-hand, that as the brown contains leſs oily parts than the grey, ſo it contains fewer reſinous; and in the ſecond place that this laſt portion of ſpirit ſeems to contain more volatile parts; which is the reaſon that it is more violent in its effects. This obſervation may countenance the opinion of ſuch as believe the purgative virtues of medicines to be exalted by means of a certain volatile ſalt; and that they are more or leſs volatile, in proportion to the quantity of volatile ſalt contained in them. By extraction, both by ſpirit of wine and by water, that of the brown weighed leſs than the grey. The proportions are theſe; from eight ounces of the grey, he had, by ſpirit of wine, ten drachms of a reſinous extract; but from the ſame quantity of the brown, only ſix drachms. From the remainder, thus freed of its reſinous parts, by an aqueous menſtruum, he drew from the grey two ounces of a ſaline extract; but from the brown only between five and ſix drachms. The remainder of the grey, after it had been thus deprived of its reſinous parts by the ſpirit of wine, and of its ſaline ones by the water, weighed four ounces; but that of the brown weighed near ſix ounces; which ſhews that the active principles abound more in the grey than in the brown; which is farther confirmed by the following way of extraction. In the former he began with the ſpirit of wine, and then uſed water; but here he extracted firſt with water, and afterwards with ſpirit of wine; and obſerved that eight ounces of the brown yielded, by a watery menſtruum, one ounce three drachms of an extract very ſolid and compact: and the remainder, well dried, yielded, by means of ſpirit of wine, but twenty-four grains of a reſinous extract; whereas the like quantity of grey afforded, by an aqueous menſtruum, three ounces and a half of extract; and its remainder, by ſpirit of wine, thirty-ſix grains of a reſinous extract. Whence Monſieur Boulduc thinks it eaſy to conclude, that the brown contains leſs of reſinous parts, and more

more of terreſtrial ones than the grey. It is, however, certain, that the brown is more efficacious, which ſeems a ſort of paradox: the reaſon of which is conjectured to be, that active virtues are not to be eſteemed according to the meaſure or weight of their bodies. Thoſe of leſs bulk have often more force and energy: *vis maxima in minima Mole*, is a maxim which holds good in many inſtances. It has been obſerved, that the ſpirits drawn laſt from the brown were more picquant and ſtruck the ſenſes more briſkly than thoſe of the grey; why then may they not have the ſame activity in our bodies, to irritate the interior parts, and agitate the humours more violently? The extracts of the brown are indeed leſs in quantity; but their virtues may be more concentrated, and by conſequence more active.

In the memoirs for 1701, this ſame inquirer diſcourſes farther on the ipecacuanha; and ſays he has found means to deprive this root of its emetic quality. The difference that is between this and other violent purgers, he ſays, encouraged him in this ſearch. The other violent cathartics, as ſcammony and colocynth, however prepared and corrected, leave too often fatal marks of their action; but ipecacuanha, tho' it appears very briſk in its operations, leaves generally behind it an aſtriction of the parts it had before opened and fatigued. He made a reſinous extract with ſpirit of wine, and then drew out the ſaline part with rain water, and found, by experience, that its violence as in moſt other purgers, was owing to its reſin. For the effects of the reſin were more violent than of the root itſelf; leaving little or no aſtriction afterward; but the ſaline extract was diuretic, purged gently, without any or little nauſeouſneſs; and, in ſhort had the ſpecific quality of the root, that is to cure dyſenteries.

Thus far we thought proper to follow our French guide; whoſe experiments give a good inſight into the contexture and virtues of this root. But the common practice here makes any preparations of it little needed; it being moſt eſteemed and preſcribed in ſubſtance. Its doſe is from two to ten grains. It was firſt introduced as an excellent remedy in dyſenteries, and other inveterate fluxes; and time hath well eſtabliſhed its reputation in theſe caſes: when putreſcency or a faulty air accompanies a dyſentery, opiates and diaphoretics are joined with ipecacuanha. The virtues of this medicine in dyſenteries depends on its promoting perſpiration; after puking with it two or three times, if the patient is covered warm, a copious ſweat comes on. And after the removal of the dyſentery by this means, it muſt be continued ſome time, to prevent a relapſe; in which caſes the doſes muſt be ſo ſmall as not to affect the ſenſible excretions. In general, when an emetic is indicated the ipecacuanha is to be preferred.

Minerals.

Borax, Borace, is the *Santerna* of Pliny; and we have of it two kinds, native and factitious. The native is only the Chryſocolla or Tincal, calcined diſſolved, and cryſtallized. But the manner of doing it is extremely difficult; and kept as a great ſecret in few hands;

who make a profit thereof. There are alſo two kinds of the factitious, one made of nitre and urine, and the other, with an addition of more things, which may be ſeen in Schroder, but it is now neglected. Its uſe in medicine is but little. Taken alone in powder, it provokes to vomit; but it is ſeldom uſed for that purpoſe. Its chief uſe is in a ſolution with water, to diſſolve aphthous cruſts in the mouth and fauces, whether of children or adults, with or without fever.

SECT. VIII.

Of Cathartics.

SOmewhat may be underſtood concerning the operations of cathartics, from what has been already ſaid about emetics: the vellication or irritation of the fibres and membranes being the ſame in both. But as the difference of the parts in which their ſcenes of action are, makes a great deal of difference in the conſequences of their operation, on many accounts; therefore it may be farther neceſſary to know what a ſtimulus will do, in the inteſtines particularly.

The periſtaltic, or vermicular, motions of the guts, is ſuch as continually propels forwards their contents, from the pylorus down to the rectum. Now every irritation either quickens that motion in its natural order; or occaſions ſome little inverſion of it. In both, what but ſlightly adheres to the coats, or inner membranes, will be looſened and ſhook off, and carried forward with their contents; and they will alſo be more agitated, and thus rendered more fluid. By this only it is manifeſt, how a cathartic haſtens and increaſes the diſcharges by ſtool. But the ſame manner of operation alſo carries its effects much farther, in proportion to the force of the ſtimulus. For where it is great, all the appendices of the bowels, and even all the viſcera in the abdomen, will, by a conſent of parts, that is, a communication of nerves, be pulled or twitched; ſo as to affect their reſpective juices in the ſame manner as the inteſtines themſelves affect their contents. The conſequences of which muſt be, that a great deal will be drained back into the inteſtines, and make a part of what they diſcharge. And when we conſider the vaſt number of glands in the inteſtines, with the outlets of thoſe viſcera opening there into, and particularly of the pancreas and liver, it will be no wonder if vaſt quantities, eſpecially in full conſtitutions, may be carried off by one ſmart purge.

Farther, another way of promoting the diſcharges by ſtool from fuſion, or rendering the humours more fluid, is to mix ſuch particles with them as prevent their running into viſcid coheſions; and by degrees divide and break them when in contact; whence they are rendered fitter to run off by the moſt convenient outlets. This is done

done by ſubſtances which have parts rigid, groſs, and full of aſperities; and theſe are many kinds of ſalts and tartarous medicines. For by experiments eaſy to be tried, thoſe bodies being mixed with any thing tenacious and adheſive, will deſtroy ſuch properties. Thus, let any one mix a few grains of ſalt of tartar with the *Extractum Rudii*, which of itſelf is ſo tenacious as to draw out into any figure; and it will immediately run into almoſt a dry powder; and crumble ſo as not to be capable of being made into pills. To the quantity of this ſalt alſo in the Mathew's pill, as it is commonly called, is owing, that the maſs is ſo difficultly made up into pills. Likewiſe all tenacious and mucilaginous bodies of much thinner conſiſtence, will, by the like means, be rendered much leſs adheſive, and more diſpoſed to fluidity. Cathartics of this ſort are generally too groſs to paſs the lacteals; and therefore their influence extends no farther than the *Primæ Viæ*; that is, the ſtomach and bowels. After this manner cream of tartar, with its cryſtals, which differ not much from the former manna, and all the milder purgers, operate; that is, by ſeparating, and keeping from contact and coheſion, the ſeveral contents of thoſe parts, which render them ſo fluid as to run of ſooner, and in larger quantities by ſtool, than otherwiſe they would do.

Claſs 1. *Of the Eccoprotic, or Milder Purgers.*

Folia, Leaves of,

Senæ, Sena. *Caſſia Alexandrina, foliis trijugis quadrijugiſve acutis, floribus luteis.* Linn. The beſt comes from Alexandria, and is the ſharpeſt-leaved of any of the ſorts, and ſmells briſk, if it be not old. The brightneſs of its colour, and quickneſs of its flavour, are indications of its goodneſs; for when it has loſt its ſcent and grows duſky, it is good for little. It is one of the moſt common purgers in the ſhops, and in extemporaneous preſcription. Although it is here placed amongſt the milder ſorts, yet in ſome circumſtances, and eſpecially in an increaſed doſe, it will work ſmartly enough. Its doſe in powder is from half a ſcruple to half a drachm; but it is ſeldom given in that manner by itſelf; although it is in ſeveral of the College compoſitions of ſpecies; and one has the name from it of *Pulvis Senæ compoſitus*. In common preſcription it is generally ordered in infuſion, from one dram to half an ounce. Its common correctors are liquorice, ſome of the carminative ſeeds or ſalt of tartar: the latter gives a much higher colour to the infuſion, and ſeems a very agreeable ingredient as a corrector; for all lixivious ſalts divide the reſinous parts of a cathartic, whence they are not ſo apt to adhere to the coats of the bowels, which often makes their vellications too ſenſible; and they alſo aſſiſt in attenuating thoſe viſcidities, which a cathartic is intended to carry off, and therefore make them paſs away more eaſily; but perhaps the beſt correctors are, to allow more water in the infuſion, to the ſame proportion of the ſena; or to give the infuſion mixed with

ſome oily emulſion. This drug is apt at firſt taking to nauſeate the ſtomach; and therefore in its infuſion, or to the ſtrained liquor, if a little cinnamon, or a drachm or two of its diſtilled water be added, it paſſes through with leſs ſickneſs, and will afterwards operate as well. This is exactly conformable to the ſentiments of Ludovicus; who ſays, the purgative quality of this herb reſides in its mucilaginous or gummy juice, which the more it is divided, makes it gripe the leſs in its operation; and therefore he orders its infuſion in water, or ſmall wine, with half a dram of ſalt of tartar to a doſe; and ſome cinnamon or ginger. But the doſe he determines by the quantity of the menſtruum, upon a conjecture that it cannot be ſated under a certain degree; ſo that if the quantity of ſena exceeds the proportion which will do that, it makes it never the ſtronger; the menſtruum being capable of receiving no more. There are ſcarce any forms of cathartics in which this is not an ingredient; and it is generally the principal in purgative diet-drinks and medicated ales.

Fungus Agarici, Agaric. This is a fungus or muſhroom, growing on the larch-tree, which produces the Venice turpentine. That is accounted beſt which is light, ſpongy, and white; though the beſt rather makes people ſick than purges them; for it is extremely nauſeous to the ſtomach; and without the help of other purgers is not ſtrong enough to work of itſelf. There are many correctors mentioned by ſome authors for this cathartic, generally of the aromatic kind; but much the beſt way is to throw it quite out of the ſhops; which the preſent practice has almoſt done.

Flores, Flowers of,

Rosarum Damascenarum, Damaſk Roſes. *Roſa Damaſcena.* Linn. They blow in May and June; and are much uſed as a purge. They work gently, ſo as to be ſafe to infants in a proper doſe; but it may be increaſed ſo as to make it very ruffling and ſtrong. From half a drachm to two drachms of the leaves well dried, is the uſual quantity in infuſion; and of the ſyrup made of them in the ſhops, from two drachms to two ounces. In making this laſt, the infuſion of them, when dry, is much better than the expreſſed juice; for in the remainder, though preſſed ever ſo hard, there is a great deal of the purgative quality left behind, which infuſion would draw out. The diſtilled water, therefore, which is made from them, and is a good cordial, as was before taken notice, Sect I. Claſs 1. ſhould be made by the hot ſtill; and the ſtrained liquor of what remains will have all the purgative quality; which may be conveniently made into a ſyrup.

Violarum, Violets. *Viola acaulis foliis cordatis, ſtolonibus reptantibus.* Linn. The ſyrup made of them is the only preparation in the ſhops; but it is not by much ſo often preſcribed as formerly; although, amongſt the nurſes, it ſtill remains in its wonted eſteem, for a ſafe and gentle purger of young children. Its doſe is from a quarter of an ounce to one ounce. It is never given to grown perſons; becauſe no doſe is ſufficient to make it a purge to them. Some have got the art of levigating the teſta-

ceous

ceous powders for the *Pulvis è Chelis compoſitus*, with the expreſſed liquor which is made for the ſyrup; for that changes them green, very much reſembling the bezoar colour, ſo as to ſave out a great deal, if not all, of that coſtly ingredient.

Fructus, Fruits.

Cassiæ Fistularis, of Caſſia, or the Pudding-Pipe Tree. *Caſſia fol. quinque jugis ovatis acuminatis glabris petiolis aglandulatis.* Linn. This is a kind of pod or cane, which grows upon a large tree in both the Eaſt and Weſt Indies, not greatly unlike our walnut. The beſt is that from the Eaſt Indies. The part uſed in medicine is the pulp which grows within-ſide, and is black, and extremely ſweet; which makes ſome call it Wild-Honey. That is beſt which is bright, black, and heavy, and does not rattle when ſhaken; becauſe when the pulp decays with too much drying, the ſeeds, which lie in certain interſtices, have room enough to ſtrike againſt the ſide, and ſo be heard upon ſhaking. This pulp is a gentle purge, not much ſtronger than ſyrup of violets; and therefore is more uſed to procure a convenient laxneſs in ſome coſtive habits, than as a purge to diſcharge any over-load of humours. This pulp or extract, is kept in the ſhops by itſelf, chiefly for glyſters; but it is ſeldom boiled up high enough to make it keep long without fermentation and ſouring. Valliſnieri ſays, that its purgative virtue is remarkably promoted by manna; that a mixture of four drams of caſſia and two of manna, purges as much as twelve drams of caſſia, or thirty-two of manna alone.

Myrobalani, Myrobalans. Theſe are a kind of dry foreign plums. They were not known to the Greek phyſicians; but are much in the Arabian pharmacy. Sennertus often uſed them, and frequently in diarrhœas and dyſenteries, for ſome aſtringency which attended their purgative quality. They are in ſome officinal compoſitions; but not regarded in common preſcription. The medicinal catalogues take notice of ſeveral kinds of theſe; but the beſt of them are not worth any regard.

Pruna, Prunes. *Prunis Damaſcena, vel Pruna majora dulcia et parva atro cæruleo.* Linn. They are gently laxative and cooling; and are an ingredient in the lenitive electary.

Tamarindi, Tamarinds. *Tamarindus Indica.* Linn. This is the fruit of an Indian tree of the palm kind, and not greatly unlike the Engliſh aſh in manner of growth. It is called *Siliqua Arabica* by C. B. The fruit is by ſome writers called Indian Dates, and by others Indian Acacia. They now come to us from both the Indies, and are either blackiſh or red. The former are uſually preferred. The ſailors are apt to enlarge their bulk with too much ſugar; for a little does not hurt them. They are acid, pleaſant, and cooling; and gently relax the bowels. For this reaſon they are in the lenitive electary; and alſo preſcribed in burning fevers to moiſten and cool the mouth, by ſucking and gradually ſwallowing them.

Aloes, Id. It is the inſpiſſated juice of a ferulaceous plant. The extreme bitterneſs of this drug has occaſioned ſome writers to call it Fell Nature. There are two principal kinds of this taken notice of:

the—*Vulgaris* of C. B. which is the *Sempervivum marinum* of Gerhard and Parkinſon; the—*Guineenſis Caballina vulgari ſimilis, ſed tota maculata*, of Commeline; and the—*Succotrina anguſtifolia ſpinoſa, flore purpureo*, of Breynius, and of Linnæus. The ſecond kind is called Hepatic, from its liver-colour, and Caballine, from its ſtrength, and cuſtomary uſage for horſes; and the third ſort hath its name from the place it chiefly comes from. The Succotrine is the pureſt of the three: it is of a gloſſy ſurface, clear, and in ſome degree pellucid; in the lump, of a yellowiſh red colour, with a purple caſt; when powdered it is of a bright golden colour. The hepatic is not ſo clear and bright as the Succotrine; it is alſo of a darker colour, more compact texture, and for the moſt part drier; its ſmell is much ſtronger, and more diſagreeable; the taſte is intenſely bitter and nauſeous, with little or nothing of the fine aromatic flavour of the Succotrine. The Caballine is of a ſtrong rank ſmell, though in other reſpects it is much the ſame as the Hepatic. Many are of opinion, that they all differ only in degree of fineneſs and purity; but the obſtinate ſmell of the Caballine ſort, which cannot by any ablutions be deſtroyed, makes ſome think them ſpecifically different. The Hepatic comes from Barbadoes, in great ſhells like gourds, from which place it likewiſe ſometimes takes its name; and the Succotrine is brought in ſkins; being of a ſhining golden hue, and of no ill ſmell: and this ſort is always intended for inward uſe; being mild and ſafe: the other is ſo nauſeous and offenſive to the ſtomach, that it is uſed for little elſe but cattle, and is a mighty purge for horſes in England. They are all compoſed of two ſorts of ſubſtances; the one reſinous, which is diſſolved, and taken up by a ſpirituous menſtruum; and the other mucilaginous or gummy, which joins with water, and menſtruums of that kind. The hepatic aloes contain more reſin and leſs gum than the Succotrine. Experience ſhows that the purgative virtue reſides chiefly in the gummy part, and that the pure reſin has little or no purgative quality. Hence the diſſolvent is to be leſs or more ſpirituous, as the intention is for briſker or milder purgation. Its bitterneſs renders it ſo nauſeous, that it is not much uſed in liquid forms; but generally made into pills, where half a drachm is a mean doſe. Salt of tartar is the beſt corrector; and Etmuller inſinuates, that ſo much may be mixed with it, as will quite deſtroy its purgative quality. There are hardly any of the officinal purging pills without this in their compoſition. There is certainly a dexterity in bringing it to be little more than an alterative; and *Tinctura Sacra*, which is an infuſion of the *Species Hieræ Picræ*, of which this is the chief ingredient, as it is ordered uſually in the ſhops, with many will not operate until a long time after taking: and I have known inſtances, where it has been ſo managed, as not to work ſenſibly till after a third or fourth doſe. It appears that many ancient phyſicians had the ſkill to uſe it thus; and in caſes where the veſſels are ſtuffed, and as it were almoſt glued up with viſcidities, if this be ſo ordered as not to go off by the firſt diſcharges, but gradually to mix with the blood, it cannot but very powerfully break and

deterge

deterge the humours in the ſmalleſt veſſels, ſo as to fit them for ſome evacuation. And this is the reaſon, that frequently after repeated doſes, when it once begins to operate, it continues to do ſo long together; for having in its many circulations at laſt ſo much fuſed the juices, they flow through the inteſtinal glands in great quantities, and run off by ſtool. But in theſe caſes great caution muſt be had, that the evacuation, when it once begins, does not continue long enough to make a waſte of the neceſſary fluids; which the ſtrength of the patient is the ſureſt rule to know by. It is a good cathartic, in watery, cold, corpulent conſtitutions; as it heats and attenuates very much; but it is bad for thin and hectical perſons. It is very efficacious in promoting the menſtrual diſcharges; and is very proper to be interpoſed in ſteel courſes. It is alſo good to deſtroy worms, and ſcour away thoſe viſcid humours apt to breed them in the bowels of children. The hepatic aloes is ſo penetrating in its ſcent, as to purge and kill worms, applied only to the belly in a plaſter. It is of great account amongſt ſurgeons in the tincture of myrrh, for external intentions. In ſhort, there is not any one drug of more univerſal uſe in medicine than this; or of greater efficacy for many important ends.

Manna. This is a drug in great uſe now; but does not appear to have been very long ſo, by the ſilence of ancient authors about it. It is the juice of certain trees of the aſh kind. *Fraxinus Calabrienſis folio rotundiore.* Linn. (growing in Italy and Sicily) either naturally concreted on the plants, or exſiccated and purified by art. There are ſeveral ſorts of manna in the ſhops. The larger pieces, called flake manna, are uſually preferred; though the ſmaller grains are equally as good, provided they are white, or of a pale yellow colour, very light, of a ſweet not unpleaſant taſte, and free from any viſible impurities. Some people injudiciouſly prefer the fat honey-like manna to the foregoing: this has either been expoſed to a moiſt air, or damaged by ſea, or other water. It is as ſweet as ſugar, and, like it, diſſolves in any warm liquor. It is given to children, from two drachms to an ounce; and to grown perſons, from one ounce to two, or upwards. It is reckoned only to deterge the *Primæ Viæ*, and carry its influences no farther than the ſtomach and bowels. It is therefore not to be depended on in any caſes of obſtinacy. That is now accounted the beſt, which comes from Calabria in Italy.

Radices, Roots of,

Hermodactyli, Hermodactyls. Caſp. Bauhine calls this *Colchium radice ſiccatâ albâ*, which is the meadow-ſaffron; but many diſpute whether it be of this kind, or not; ſome taking it to be a ſpecies of the *Dens Caninus*, others of the *Iris tuberoſa*, amongſt whom is Mathiolus; and others of the *Cyclamen*: however, this ſtands ſo much in the eſteem of ſome writers, as to be dignified with the name of *Anima Articulorum*, the Soul of the Joints; becauſe they believed it to be very efficacious in ſcouring the mucilaginous glands, and preſerving them from the lodgment of ſuch gritty matter, as occaſions the gout and arthritic complaints. This is of that kind of cathartics, which exert not themſelves

ſelves but in the ſmalleſt paſſages; and therefore are ſlow in operation; although of great conſequence in their effects.

Mechoacannæ, White Jalap. This is brought chiefly from a province in New Spain, called *Mechoacan*. Some indeed call it Indian Rhubarb, but improperly. Monardus will have it a ſpecies of exotic bryony; and C. Bauhine calls it *Bryonia Mechoacanna alba*; and Ray, *Convolvulus Americanus*. This is reckoned, as the former, a very efficacious purge, but of ſlow operation; the ſeat of its action being chiefly in the extreme parts; and therefore accounted good in all arthritic pains; for which purpoſe is ſtands in great commendation amongſt the ancients; although it is almoſt rejected in modern practice.

Rhabarbari, Rhubarb. *Rheum folium palmatis accuminatis.* Linn. This is a ſpecies of the *Lapathum*, and comes to us of two ſorts. The firſt is imported from Turky and Ruſſia, in roundiſh pieces, freed from the bark, with a hole through the middle of each; they are externally of a yellow colour, and on cutting appear variegated with lively reddiſh ſtreaks. The other, which is leſs eſteemed, comes immediately from the Eaſt Indies, in longiſh pieces, harder, heavier, and more compact than the foregoing. The firſt ſort, unleſs kept very dry, is apt to grow mouldy and worm eaten; the ſecond is leſs ſubject to theſe inconveniencies. Some of the more induſtrious artiſts are ſaid to fill up the worm-holes with certain mixtures, and to colour the outſide of the damaged pieces with powder of the finer ſort of rhubarb, and ſometimes with cheaper materials: this is often ſo nicely done, as effectually to impoſe upon the buyer, unleſs he very carefully examines each piece. The marks of good rhubarb are, that it be firm and ſolid, but not flinty; that it be eaſily pulverable, and appear, when powdered, of a fine bright yellow colour; that, upon being chewed, it impart to the ſpittle a ſaffron tinge, without proving ſlimy or mucilaginous in the mouth. Its taſte is ſubacrid, bitteriſh, and ſomewhat aſtringent; the ſmell, lightly aromatic.

Rhubarb is a mild cathartic, which operates without violence or irritation, and may be exhibited with ſafety even to pregnant women and children. Beſides its purgative quality, it is celebrated for an aſtringent one, by which it ſtrengthens the tone of the ſtomach and inteſtines, and proves uſeful in diarrhœæ, and diſorders proceeding from a laxity of the fibres. Rhubarb in ſubſtance operates more powerfully as a cathartic than any of the preparations of it. Watery tinctures purge more than the ſpirituous ones; whilſt the latter contain in greater perfection the aromatic, aſtringent, and corroborating virtues of the rhubarb. The doſe, when intended as a purgative, is from a ſcruple to a drachm or more. Paracelſus pretended to a tincture from it, which had not its purgative quality, but only operated by urine, and purged away gravel and fabulous concretions. It is good againſt worms in children; and is the beſt purge that can be given them, to clear away thoſe crudities in the bowels, which are apt to breed worms. It alſo gives a firmneſs to the fibres, which from the ſlipperineſs of children's diet are generally too lax; ſo that

its

its repetition to them can hardly be too frequent. This is of great uſe in extemporaneous preſcription; and is alſo in many officinal compoſitions; although none of them are ſo good as the root powdered and given in ſtubſtance.

TURPETHI, Turbith. It is not agreeed of what this is properly the root: ſome will have it of the *Thlaſpia*, which Schroder is poſitive in; and Cluſius, of the Scammony. We find it however deſcribed by C. Bauhine—*repens foliis Althææ*; and by Linnæus *Convolvulus Turpethum Album.* It is much of the nature of hermodactyls and Mechoacan; but more efficacious. It yields good ſtore of reſinous particles to a ſpirituous menſtruum, which affect not much the larger paſſages; but are very active and briſk in the ſmaller veſſels, and glandulous contorſions; which this root wonderfully clears of all viſcid adheſions. The ancients had a notion, that where agaric failed, turbith took effect; and when that was not ſufficient, coloquintida was the fartheſt they could proceed with ſuch kind of inſtruments. The preſent practice almoſt neglects it. The doſe is from half a dram to a dram in powder; and from a dram to half an ounce in infuſion.

Claſs 2. *Of the Draſtic or Rougher Purgers.*

Folia, Herbs or Leaves of,

CHAMÆDAPHNES, Spurge Laurel, is the *Laureola* of Gerhard and Parkinſon; it grows in woods and hedges, and flowers in February. It is very hot, and vehemently purges bilious and watery humours. Another ſpecies of the *Laureola* is called *Chamælea*, or *Mezereon*, the Spurge Olive, and accounted of the female kind, as the preceding is the male. It is the *Daphne floribus ſeſſilibus ternis caulinis, foliis lanceolatis deciduis.* Linn. Spurge Olive, or Mezereon with purple flowers. This is cultivated in gardens, and hath the ſame virtues as the former. The *Thymelæa*, Spurge Flax, is alſo of the ſame claſs, and to be met with in the phyſic gardens. The berries of this laſt have the ſame virtues. The leaves, berries, and bark, both of the ſtalks and of the root, have an extremely acrid, hot taſte, which laſts for a long time, burning the mouth and fauces. Taken internally, they operate with great violence by ſtool, and ſometimes by vomit, ſo as ſcarce to be ſafely taken, unleſs by ſome ſuitable management their virulence is abated. In rheumatic and venereal pains, a decoction of an ounce of the freſh bark of the root in twelve pints of water to eight, and taken to half a pint four times a day.

LINI CATHARTICI, Linn. Purging Flax, entitled—*Sylveſtre*, by ſome; and—*Pratenſe floſculis exiguis*, by C. Bauhine. This is owned in medicine only by the common people. It is a rough harſh purge, and powerfully deterges and evacuates viſcid and watery humours, from the moſt remote lodgments. This makes them fond of it in rheumatiſms; but it is only fit for very robuſt conſtitutions. It is uſually infuſed or boiled in ale, or wine; what they call a ſmall handful, in a ſufficient quantity of liquor, being the uſual doſe.

Semina,

Semina, Seeds of,

CATAPUTIÆ. There are two ſorts of this: the *Cataputia major*, which is the *Racinus Americanus* of Piſo, and by ſome called *Palma Chriſti*; *Ricinus Communis*. Linn. and the *Minor*, or *Lachyris*, which is a ſpecies of tithymal, or ſpurge: both theſe agree in a violent purgative quality. The laſt of theſe is by ſome (though falſely, ſays C. Bauhine) called Granadilla. From the ſeeds of the *Ricinus Communis* of Linnæus, is produced the purging oil called Caſtor Oil; which ſee. The plant is native in Sicily; and is very ornamental in our green-houſes. Hippocrates uſed the ſeeds of this plant inſtead of the *Grana Cnidia*.

Fructus, Fruit of,

COLOCYNTHIDIS, Bitter-apple: diſtinguiſhed *Fructu rotundo minor*, by C. Bauhine. *Cucumis Colocynthis major, foliis multifidis, pomis globoſis glabris*. Linn. This has been a drug of mighty account in medicine for many ages. Its roughneſs and violence of operation has always tortured the ſeveral hands it has paſt through, to determine in what part of its compoſition this quality reſided; that they might the better know how to correct and mitigate it. According to ſome, it ſeems to reſide in certain reſinous particles, which ſooneſt join with a ſpirituous menſtruum, and therefore make ſuch infuſion too violent; for which reaſon they direct more aqueous diſſolvents, and ſuch as are capable of uniting with ſalt of tartar, which would ſeparate the reſin, and make its efficacy upon the fibres more moderate. Schroder and Ludovicus ſpeak much of this management, and commend the extract made by evaporations of the liquor, with ſalt of tartar for its corrector. They direct it from three to eight grains. Others conjecture its catharic property to be more in its ſlimy and mucilaginous parts, which are beſt drawn out and diſſolved by plain water; but moſt aſſign it to a penetrating volatile ſalt. And this latter ſeems to have been the opinion of the ancients, particularly of the Arabians; for which reaſon, in the *Trochiſci Alhandalæ* (for Handala, or Alhandala, was the name by which this drug was known to them) it ſtands corrected with gummy and mucilaginous bodies; as they are moſt proper to blunt the violence of thoſe *ſpiculæ*, and prevent a too great irritation of the membranes. Van Helmont ſpeaks of this as a thing which might eaſily be diveſted of its purgative quality, and reduced into an extraordinary alterative in ſome chronical caſes; but this is a ſecret not yet found out.

In the Memoirs of the French Academy for 1701, the above mentioned Monſieur Boulduc has given his obſervations and experiments on this drug; which are worth our notice. He tells us, that it is the fruit of a plant of the nature of the wild gourd, and is very purgative; inſomuch that its operation is ſometimes attended with excoriations of the membranes and blood. Whence many have conjectured, that *Coloquintida*, by its volatile ſalts, would render the blood more fluid; but our author did not find this true by his own experience; for he put a good quantity of it in powder to new-drawn blood, which did not prevent it from running into its uſual coagulations. The little ſuc-

ceſs

ceſs of the means hitherto attempted to correct this remedy, has not hindered Monſieur Boulduc from trying others. He fermented four ounces of its pulp with ſix pounds of good muſt of wine, for ten or twelve days together; then he diſtilled this mixture in *Balneo Vaporis*, by degrees. The firſt portion, of eight ounces, was very clear, moderately ſpirituous, and exceſſively bitter; the other portions gradually decreaſed in their qualities; and when the liquor came altogether inſipid, he put an end to the diſtillation, and evaporated the remainder into an extract; which was of a ſufficiently ſolid conſiſtence, and weighed two ounces and a half.

With theſe, experiments were made upon the ſick with all neceſſary precaution. An ounce of what came away firſt in the diſtillation, cauſed great nauſeas and ſevere colics, without effect; which were obliged to be appeaſed by other remedies; though two ounces of the ſame, upon another trial, had its effect, but with gripings. Of the extract made after diſtillation, he gave ten grains, which operated without violence, or irritation; which he attributed to the eſſential ſalts of the wine, whoſe acids had ſuppreſſed, and as it were fixed the volatile ſalt of the *Coloquintida*.

Next, inſtead of muſt, Monſieur Boulduc made uſe of water; and put in digeſtion for fifteen days, ſixteen ounces of the pulp, with two quarts of boiling water; after which he diſtilled the whole. The liquors which came away, had nothing in them penetrating and volatile; had no taſte, and if taken inwardly, had no effect. But the extract made of what remained after diſtillation, he found to be very efficacious. It was a gentle purger, and of ſufficient force, given in but a little quantity. Perhaps, ſays he, as the ſubſtance of the *Coloquintida* is extremely ſpungy, its mucilaginous parts which are in great number, are the moſt offenſive; and a long digeſtion in a large quantity of water, may ſo attenuate, ſubtilize, and diſſolve them, that an extract made in this manner may be a good preparation: and he believes the following experiments confirm this opinion. He drew from the *Coloquintida* all the tinctures poſſible with water; and by filtration ſeparated the clear from the mucilaginous: of each of theſe he made a ſolid extract, of which the former was a more efficacious, though a more gentle purger than the latter. The laſt trial he made, was with ſpirit of wine; from eight ounces was obtained but half an ounce of reſinous extract; whereas he had from the ſame weight, by the means of water, near three ounces of a ſaline one; reckoning both its clear and mucilaginous parts. Whence he concludes, that the colocynth contains much more ſalt than oil or ſulphur; and that it is probable the ſalts, particularly the more groſs, enveloped in the mucilaginous parts, are the occaſion of its violent operation.

I ſhall leave the reader to make the beſt application of this account to his own practice he can; and only obſerve, that the common way of making the Euſtachian extract, that is *Extractum Rudii*, contradicts Monſieur Boulduc's firſt experiment of the ſpirits coming over exceſſively bitter and purgative: for the liquor in which the ingredients of this compoſition, (the chief being colocynth) are infuſed,

fuſed, when it is drawn off by diſtillation (which moſt do only for good huſbandry, as it may ſerve for the ſame uſe again) has neither colour, taſte, or purgative quality, any more than common ſpirit of wine. So that Monſieur Boulduc ſeems to have made a miſtake in the experiment, by letting ſome ſmall quantity of the infuſion inadvertently paſs over into the receiver; which, in the leaſt quantity, would give an extreme bitterneſs to the whole that came over by vapour.

This drug is yet much in the officinal compoſitions, but hardly ever met with in extemporaneous preſcription; its nauſeous taſte not making it tolerable in any form but pills; where it can be covered. It is ſo ſmart a purger, as not to be ſafe but to athletic conſtitutions, and ſuch full habits, where the fibres are ſufficiently guarded, by a *ſaburra humorum*, from its vehement vellications. It is by all eſteemed very efficacious againſt worms; but its roughneſs of operation makes it hardly ſafe to give to children, who moſtly want it upon that account, unleſs in glyſters. The only method of abating its virulence, without diminiſhing its purgative virtue, is to enlarge its volume, by triturating it with ſugar, teſtaceous ſubſtances, or the like, which without making any alteration in the colocynth itſelf, prevent its reſinous particles from cohering, and ſticking upon the membranes of the inteſtines ſo as to irritate, inflame, or corrode them.

Rhamni Baccæ, *ſeu Spinæ Cervinæ*, Buckthorn Berries. *Rhamnus ſpinis terminalibus, floribus quadrifidis dioicis, foliis ovatis, caule erecto.* Linn. They may be diſtinguiſhed from other common berries, (1.) By the tree they grow upon, which is a hedge-tree, or buſh, with its branches full of long ſtiff thorns; (2.) By the leaves, which are of a yellowiſh green, about the ſize of thoſe of the ſloe-tree, but more elegantly ſerrated about the edges; (3.) By the flowers, which grow ſeveral together; being ſmall, four-leaved, and yellow; (4.) By the berries themſelves; which are a little larger than elder-berries, round and black; yielding a bitter purple juice, daſhed with green; and holding three or four cornered ſeeds; the tree grows in woods and hedges; flowers in June; and the berries are ripe towards the end of September. Thoſe who ſell the juice to apothecaries, are apt to mix it with water. The ſyrup which is made by many private families, as well as in the ſhops, is the only preparation of them now in uſe. It is a ſtrong purger; and effectual in diſcharging watery and flatulent humours; and is therefore in eſteem in dropſies and rheumatiſms. We are told that one of the German emperors made it his conſtant medicine in the gout, and with good ſucceſs. It is frequently given by the poorer ſort to purge their children; but it is too rough for ſuch tender conſtitutions. They give it from two drachms to an ounce; and to grown perſons two ounces. It is frequently in extemporaneous preſcriptions ordered in cathartic draughts and glyſters, with other purgative ingredients, to quicken their operations.

Gummi, Gums:

Gambogiæ, Gamboge; *Cambogia Gutta*. Linn. called alſo *Gutta*

ta Gamba, comes from the *Carcapuli* of Parkinſon, and the Bauhines; which grows in Malabar. This gum hath been longer known in painting than in medicine, for its yellow colour. The violence of its operation, both by vomit and ſtool, has occaſioned abundance of ſearch for ſome proper corrector; but none has yet been found better than the lixivious ſalts, and particularly ſalt of tartar. Monſieur Boulduc, who has been induſtrious this way, and communicated his experiments to the Academy of Sciences upon many of the moſt efficacious medicinal ſimples, in the Memoirs for 1701, has a diſſertation upon Gamboge. He ſays that it ought to be reckoned amongſt the reſinous juices, ſince it is inflammable and will flow in the fire, and be almoſt entirely diſſolved in ſpirit of wine; but, on the contrary, that in aqueous menſtruums it ſpreads itſelf into a milky ſubſtance like ſcammony, and afterwards precipitates. It ſeems at firſt to be inſipid upon the tongue, but ſoon after becomes ſenſible in the throat by its acrimony, and an inſupportable drought It is a powerful hydragogue and emetic; but ought to be uſed with caution, and not until it has been corrected. Monſieur Boulduc ſays, he endeavoured to get flowers from this reſinous juice, like thoſe from benjamin, but without ſucceſs. He made trial on it with ſpirit of wine, a ley of alkalious ſalts, and water: the ſpirit of wine diſſolved all, except about a ſixth part: the remainder, which the ſpirit would not touch, was eaſily diſſolved by a ſolution of ſalt of tartar. This, ſays he, may be eſteemed the ſaline part of Gamboge; and though it had no purgative virtue, it was very diuretic. The reſin, which was made by the ſpirit of wine, purged more violently, and with greater irritation, than the Gamboge itſelf.

This gum was entirely diſſolved by an equal quantity of ſalt of tartar, and a ſufficient one of boiling water; excepting ſome few terreſtrial parts. The liquor filtered and evaporated by a gentle fire, gave a ſort of grey ſalt, which eaſily flowed in the air, if not kept cloſe ſtopt in a phial. This ſaline extract purged with leſs irritation, and in a ſmaller doſe than the gum; but cauſed a great acrimony and heat in the throat; inſomuch that it was intolerable; and ought therefore to be enveloped in ſome other convenient ſubſtance when it is given.

This gentleman obſerved before, that water would not diſſolve it; but only made it flow into a milky ſubſtance of a yellow colour, which ſoon precipitated, and left the water clear above it. This reſiduum dried, differed in nothing from the gum; only it was more pure. By caſting diſtilled vinegar on this milky ſubſtance, it became clear; oil of vitriol, on the contrary, made it again turbid; and ſpirit of wine gave it a golden colour. There are many ways, this author obſerves, of correcting it; but he thinks that by alkalious ſalts is the beſt. However, he gives one of his own, which as it is different from any other hitherto uſed, he has alſo continually practiſed it with ſucceſs. The manner is by tying the gum in a rag, and putting it into a hot loaf, as it comes out of the oven, where it muſt remain for twenty-four hours: afterwards it is to be powdered; and this muſt be repeated four

four or five times. By this management, he ſays, he always found it freed from its great violence, as well purgative as emetic. He farther obſerved, the crum of the loaves thus uſed, to have both a purgative and emetic quality.

From this account it is not very difficult to determine the qualities of this drug, wherein its efficacy conſiſts, and the moſt advantageous means of managing it in preſcription; though it does not clearly appear what way of reaſoning directed the author to the loaf of bread; becauſe it has no relation to the means made uſe of in other trials; nor is it eaſily to be accounted for, how ſuch a method made it of a milder operation. It is a powerful hydragogue, and therefore good in dropſies, and diſorders tending thereunto. But its roughneſs requires the utmoſt caution and ſkill in its exhibition. It is a fit purge only for grown perſons, and thoſe of a ſtrong conſtitution; and to ſuch a ſcruple is an outſide doſe. With all the care poſſible to prevent it, it will frequently vomit before it paſſes downward. The moſt convenient form to give it in is a bole or pills; for no menſtruum will equally draw out all its qualities by diſſolution. It will not well powder without ſome portion of a lixivious ſalt, or fine ſugar; and ſuch are its beſt correctors, by dividing its reſinous parts, and preventing their adheſion to the membranes in too forcible a manner. In ſeveral intentions which are moſt conveniently anſwered by the urinary diſcharges, that particular management of Monſieur Boulduc's, which diveſted it of its purgative parts, and left only the ſaline, which were very diuretic, may be worth putting in practice.

Elaterii. This is an inſpiſſated juice, or extract, made of the wild cucumber, called *cucumis aſininus*. It is the moſt violent in operation of any of the hydragogues; and therefore is ſeldom preſcribed, but where the caſe is ſtubborn and deſperate; and then only from two to four or five grains.

Scammonii, Scammony. This is the inſpiſſated juice of a root called by many *Scammonium*, of the convolvulus kind. *Convolvulus Syriacus, ſeu Scamonia ſyriaca, foliis ſagitatis poſtice truncatis, pedunculis teretibus ſubtrifloris floribus pallid luteis.* Linn. That which we have now in the ſhops, muſt be different from the ſcammony of the ancients; becauſe they gave it in much larger doſes, their's being frequently a whole drachm; whereas our's cannot be truſted in the moſt robuſt, beyond a third of that quantity. This drug is greatly eſteemed in medicine; and enters almoſt all the officinal purges, whoſe forms are ſuitable for its reception; becauſe it is not convenient in any that are more liquid than an electary. That is reckoned beſt which is light and grey; the heavy and black is not much eſteemed. It is ſo adhefive that it will not powder, unleſs the mortar be ſometimes rubbed with a little oil: and in the powdering, care ſhould be taken, that it does not get up the noſe; for it will purge the head ſo violently, as oftentimes to occaſion a great deal of miſchief. Loaf-ſugar, and any alkalious ſalts, are alſo very convenient to rub it into powder with; for they divide its parts, and make it operate more gently; as they do all other reſi-

nous

nous purges. It wonderfully deterges the paſſages and glands of mucous and viſcid humours; and therefore is a good ingredient in all compoſitions intended againſt thoſe diſtempers; which have ſuch humours for their cauſe. It is reckoned a good deſtroyer of worms; but great care is to be taken how it be given to children; although ſome empirics put off ſugar-plums and lozenges for ſuch intentions, where this is the only purgative ingredient; as its quantity in a doſe is but ſmall. But ſuch things, although they chance to work off well with ſome ſtrong children, yet they often do a great deal of miſchief, and occaſion convulſions, by their inſupportable vellications of the tender membranes and fibres.

Cortex, Bark of,

ALNUS NIGRÆ, the Black Alder, called alſo *Frangula*; the *Arbor fœtida*, or ſtinking tree; and the *Alnus nigra baccifera*, the black-berry bearing alder of C. B. *Betula alnus nigra*. Linn. The inner bark to the quantity of a dram is a very ſtrong cathartic, and uſed therefore to be given in dropſies, and where a great load of humours is to be purged away. The ancients accuſtomed themſelves to correct it with cinnamon, ginger, and the carminative ſeeds; but it is now very little in uſe.

Radices, Roots of,

ELLEBORI NIGRI, Black Hellebore, called alſo *Veratrum nigrum*. *Helleborus ſcapo ſub-biſloro ſubnudo, foliis pedatis*. Linn. This has been a medicinal drug of the greateſt eſteem among the ancients, in the moſt obſtinate chronical caſes; but grows neglected now, either through our unacquaintance with its virtues, or the ſort which comes to us not having the efficacy of that which they made uſe of. The latter may be our unhappineſs; for botanic and Diſpenſatory writers differ much in determining which is the true officinal hellebore. Mathiolus tells us, that is the right which flowers like a roſe; others, that it has a ſky-coloured flower; and Bauhine takes it to be the *Helleborus niger, tenui folio, Buphthalmi flore*. And by the ſtrength and manner of the operation of that they ſpeak of, our's ſeem to be of the ſame ſpecies, but much weaker in efficacy. What comes to us now, will not operate much by ſtool; but is a powerful alterative, and wonderfully affects the juices in the moſt remote receſſes. For this reaſon it greatly promotes all the thinner ſecretions; and particularly that by ſweat, eſpecially if joined with any convenient volatiles. This root is almoſt infallible in obſtructions of the menſes; and where ſteel is not only ineffectual, but improper; as in plethoric habits: for in ſuch, ſteel will ſometimes raiſe hyſteric commotions, convulſions, and a ſort of uterine fury: whereas this ſo thins the blood, as to diſpoſe it for that diſcharge, without making it more impetuous. So that though ſteel and hellebore both promote the menſes, yet they do it different ways; one by increaſing the blood's velocity, and giving it a greater momentum in the uterine arteries; and the other by dividing it, and rendering it more fluid. In all nervous caſes the moſt ancient practice confirms its efficacy; but eſpecially in the mania or diſtraction. In this laſt intention it has been ſo famous as to make it even proverbial, to ſend ſuch a one to Anticyra,

whom

whom they would inſinuate to be mad; becauſe that country produced the greateſt quantities of this drug.

Monſieur Boulduc, to whoſe induſtry in experiments of this kind we have been much beholden already, gives us ſome which he made upon this root alſo, in the Memoirs of the Academy of Sciences for the year 1701. The extract which he procured with ſpirit of wine, was very little in quantity; becauſe this root contains few reſinous parts: and I am, ſays he, the more confirmed in this, ſince from what remained I was able to get a great quantity of an extract with water.

He alſo made an extract of the root with water, wherewith was drawn all that could be extracted; for from the reſidue there was nothing to be got by means of ſpirit of wine. Whence it ſeems reaſonable to conclude, that the ſaline parts are able ſo to diſſolve its few reſinous ones, that both may be drawn out by water, without the aid of ſpirit of wine. He farther remarked, that the firſt extract, which was purely reſinous, and made with ſpirit of wine, purged little, and with irritation; that the extract made of the remainder with water, purged not at all, but was very diuretic; and that, on the other hand, the extract made firſt with water, and without ſpirit of wine, purged well and gently. And this, he ſays, he has obſerved of moſt purgatives; whence he thinks that the extract made by ſpirit of wine alone, ought to be ſuſpected; ſince being deprived of its proper ſalts, which when joined to the ferment of the ſtomach, open, divide, and attenuate the reſin; it happens that its thick and reſinous parts do adhere to the fibres of the ſtomach, and cauſe gripings, and, by remaining undiſſolved ſome time, excite a teneſmus. And this is confirmed by experience; for the moſt able practical phyſicians are wont to correct the reſin with ſalt of tartar. He confeſſes that to be a good method in theſe caſes; but ſuppoſes, one may do without it, by leaving to thoſe reſinous extracts the proper ſalts which nature has endued them with. Whence he affirms, that the way of making the extract with water, is preferable to the common way of doing it by a ſulphureous menſtruum; ſince thereby the ſubſtance is freed from its terreſtrial parts without depriving it of any of its natural principles. He takes notice that the hellebore which is brought from Switzerland, is preferable to that which comes by the way of England. This latter, whether it is ſpoiled by keeping, or loſes its virtue by tranſportation, he found to have little or no effect.

So that by this author's account, as well as the reaſons above given, there is ground to ſuſpect very much, that our hellebore falls greatly ſhort of the goodneſs of that uſed by the ancients; ſince we find there is ſo great a difference between it, and what ſo near neighbours as the French have in uſe among them at this time. Of our's I have frequently given fifteen or twenty grains in powder, as an alterative and a ſudorific; and in tincture, where the root has been one part and the menſtruum three, it may be given to ſixty or one hundred drops to a doſe. I have found its virtues beſt drawn by rubbing a little ſalt of tartar with

with it in a groſs powder, and letting it lie until the air runs it; for that ſo penetrates into the very ſubſtance of the root, that its parts immediately join with the menſtruum, as ſoon almoſt as put into it. Small wine I have imagined the beſt, as moſt likely to take up all its parts of any medicinal efficacy. The tincture is the beſt preparation.

JALAPII, Jalap. This is the root of a plant not unlike our bryony, and is therefore by ſome called *Bryonia Peruviana*; for it is brought to us chiefly from Peru and New Spain. The Mechoacan and this are both reckoned ſpecies of the Convolvulus; and therefore as this is ſometimes called *Mechoacanna nigra*, ſo that goes as often by the name of *Jalapium album*. That which breaks blackeſt, moſt brittle, ſound, and ſhining withinſide, is beſt; by reaſon the reſinous parts, which give it thoſe properties, are ſuppoſed to contain its medicinal virtues. Some take great pains to extract its reſin, which is to be done with any ſpirituous menſtruum; but afterwards correctors are wanted for it. The moſt common one is ſalt of tartar, or loaf ſugar; for its being rubbed much with the latter, makes it operate milder; for the ſame reaſons as the ſalt of tartar does. But if correcting it conſiſts in ſeparating its parts, what occaſion was there for the pains of drawing them from the root, and joining them in the form of a reſin? And therefore that operation ſeems to have been very needleſs. Monſieur Boulduc has likewiſe upon this drug made ſome experiments very uſeful to inform us in its true virtues: which we ſhall therefore abridge from the Memoirs of the Royal Academy of Sciences in France, for 1701.

He ſays it is one of the beſt cathartics we have. He has found it ſo by experience, and wonders that it is ſo little uſed at preſent: for as it is ſo gentle, that it ſtands in need of no corrector; on the other hand it wants nothing to promote its operation; which can be hardly ſaid of any other purgative ſimple. Yet he obſerves, that there are many methods given to correct it, which rather ſpoil than meliorate it. Some have obſerved, to its diſadvantage, that it binds the body too much after its operation is over; but this he thinks of no force, becauſe that effect is common to other purges, eſpecially the hydragogues. His experiments were made by extraction with ſpirit of wine and common water. Twelve ounces of the root yielded, with ſpirit of wine, two ounces of a reſinous extract well dried; the remainder being likewiſe well dried, weighed nine ounces and ſix drachms. Out of this remainder, by water, he got four ounces of a very ſolid and pure extract. He took twelve ounces more of the ſame root, and digeſted it in common water, with a gentle fire; then by evaporation he got an extract well conditioned, which weighed ſix ounces and half; the thick and mucilaginous parts, which he ſeparated by filtration, being well dried, weighed an ounce and half; and the reſidue weighed but four ounces and half.

Hence he obſerved, that the extract made by water, if given from four-and-twenty grains to thirty-ſix, purged gently; but was very diuretic; as he had experienced in many hydropical caſes: that

the reſidue, which yet contained a little of what was reſinous, purged reaſonably, but with gripings; that the remainder, deprived of its ſaline and reſinous parts, purged very little, but was extremely diuretic. Whence he takes the liberty to conclude, that extracts to purge to the purpoſe, and without irritation, ought to contain both the ſaline and reſinous parts. For the former only paſs by urine, and the other always, if taken alone, occaſion diſorders; but both joined together, their effects are laudable: for the ſaline opening the reſinous parts, and diſſolving and accelerating their diſtribution, do thereby hinder them from adhering to, and inflaming the parts they paſs through.

According to the opinion and experience of this perſon, both concerning this and other drugs of the like nature, the more pains is taken in their preparation, the worſe they are; becauſe nature ſeems to have furniſhed them with the beſt correctors in their production. The jalap root itſelf therefore ſimply powdered, is the beſt way of taking it; and may be mixed into a draught or a bole. It may be given to adult perſons from half a drachm to one drachm; and to children ſome make the mean rule, to give ſo many grains as they are years old; but that is ſomewhat in too ſmall a quantity, eſpecially when they are advanced above ten years.

Thapsiæ, Deadly-Carrot, *Carotæ folio*, C. B. *Thapſia garganica*, Linn. It grows in ſome gardens; and the juice of its root is a violent purger; but the preſent practice makes no uſe of it.

SECT. IX.

Of Sternutatories.

This is a way of application in medicine ſeldom made uſe of, but to looſen and drain away ſuch humours by the noſe, as are not eaſily to be come at by other means. A very little part therefore of the *Materia Medica* falls under this diviſion; although many volatiles and aromatics are uſed for this intention; which by reaſon of other more important properties are ranked under other heads: what we have ſubjoined here, being hardly made uſe of in medicine for any other purpoſe.

How a medicine occaſions ſneezing, is not at all difficult to underſtand, to one who has conſidered well the manner by which emetics draw the ſtomach, and its appendices, into that motion which is obſerved in vomiting. The fibres and membranes within-ſide the noſtrils are extremely ſenſible; whatſoever therefore ſtimulates them, makes them contract, and thereby twitches thoſe parts they have any communication with; which, by degrees, brings on that general convulſive ſhake, that throws off the irritating matter. Every one's own experience demonſtrates,

monſtrates, and beſt explains to himſelf how this is produced; and likewiſe manifeſts the great influences which may be communicated over the whole body, by the communication of fibres from an almoſt unheeded ſenſation upon the leaſt part.

The ſalutary effects of this forcible concuſſion of the whole body, are very conſiderable. There are many glands about the head, deſtined for the ſeparation of very viſcid and mucous ſubſtances; by which means many ſinuſes or cavities, of ſervice in the œconomy, are frequently ſtuffed ſo with ſuch matter, as not to give that room to ſome of the veſſels, as it is their office to do; whereby the circulating fluid in ſome part makes them too turgid: which upon many accounts will occaſion uneaſy ſenſations, pains, giddineſs, and other diſtempers, frequently experienced in the head. By a particular conformation the noſe receives and diſcharges many ſuch ſuperfluous viſcidities. Therefore a ſtimulus, from what we call ſternutatories, or commonly ſnuff, will provoke thoſe parts to increaſe thoſe diſcharges; whereby a troubleſome load is drawn off, and the head rendered briſk and lightſome.

But, beſides the benefit which the head immediately receives from ſuch a diſcharge, the whole conſtitution is likewiſe ſo ſenſibly affected, that in many caſes it is of uſe as an exerciſe. There is no motion whatſoever, even not that of vomiting, which ſo ſuddenly and forcibly ſhakes the whole nervous ſyſtem; ſo that in all obſtructions of the finer paſſages, and particularly of the nervous fluid, whatſoever produces ſneezing muſt be of great advantage. And common experience in practice confirms this in many inſtances of paralytic, apoplectic, and lethargic caſes; where this motion rouſes and enlivens, as it were, the ſpirits; and, by ſhaking the moſt remote fibres, aſſiſts their proper juices in circulation, which before ſeemed to ſtagnate, or not to irritate the fibres enough to maintain their natural elaſticity. And of ſuch great efficacy is this convulſion, that it is ſometimes procured on purpoſe to aſſiſt the expulſion of the fœtus; and with good ſucceſs.

How far the cuſtom of taking ſnuff, as it now prevails, is ſerviceable or detrimental, is not directly to our purpoſe to determine; but thus far it may not be amiſs to inform thoſe who comply ſo much with it as a faſhion, that they put it out of their power to receive any benefit from it as a medicine, whenſoever there may be occaſion for ſuch helps; for continually ſtimulating thoſe parts with hot pungent ſnuffs, makes them by degrees grow as it were callous, and much leſs ſenſible; which all ſnuff-takers experience, being not provoked to ſneezing, if they take ever ſo much; when one pinch of the ſame would immediately operate upon a ſtranger to it. There is another inconvenience alſo from this practice; and that is ſpoiling their appetite: for moſt of the common ſnuffs are tobacco, of one kind or other; whereof ſome will paſs down the throat into the ſtomach, eſpecially in thoſe who take much; which deſtroys the natural appetite, as many confeſs they find by experience, although they cannot be prevailed with to leave it off. For ſuch who imagine the continual taking of ſnuff

to be neceſſary, or beneficial, to them, many things in liquid forms would much more properly anſwer their intention; ſuch as *Sal volatile oleoſum*, diluted with ſomething proper, where it is too ſtrong by itſelf. But it is to be feared no ſalutary regard can obtain ſuch a reformation, unleſs that idol faſhion, would vouchſafe its ſanction.

Flores, Herbs or Leaves of,

Primulæ Veris, Linn. Primroſe, called *Verbaſculum Sylvarum majus, ſingulari flore*, by C. B. This flowers very early in the ſpring. The juice is expreſſed; and, after it is fined *per ſubſidentiam*, made uſe of to provoke ſneezing, in ſuch caſes, as the drain which that procures, is imagined to do ſervice.

Asari, Aſarabaca. *Aſarum foliis reniformibus obtuſis binis*, Linn. This is become a mighty ſnuff of late. The leaves are common in the phyſic markets; and to dry and reduce them to powder, is all that is required in making them into ſnuff. Some empirics, or traders in phyſical matters, have put off a ſnuff by the name of Royal at a good round price, which is little elſe but this, decorated with ſome leaf-gold. This has anciently been much in uſe, as an emetic and a cathartic, in doſes from a ſcruple to a dram. Rolandus frequently preſcribes the root as a diuretic: as does alſo Fernelius, in whoſe works we meet with an electary, in which that is the chief ingredient. Its operation is very briſk, and therefore commended in conſtitutions that are moiſt and cold, and ſubject to generate viſcidities, and what obſtructs and fouls the viſcera, and retards the contractile force of the fibres; but in none of theſe caſes does the preſent practice acknowledge it. The ſpirituous tincture poſſeſſes the emetic and cathartic qualities; but the extract operates only as a mild emetic. The watery infuſion is ſaid to be only cathartic and not emetic. As a ſternutatory, it frequently does good ſervice; for it powerfully drains mucous humours out of the head. It is not ſo pungent as to be immediately felt upon taking, like the tobacco-ſnuffs; but after ſome time it makes the noſe run very much, and not unfrequently blood itſelf; if its uſe be long continued. The uſual way is to take near a ſcruple going to bed, for three or four nights together; and by the next morning its operation will be very ſenſible; though it occaſions little or no ſneezing, unleſs by the acrimony of the humours which drain off, and irritate the fibres in their paſſage. The roots are nearly twice the ſtrength of the leaves.

Euphorbii, Euphorbium. This is a gummy reſin, exſuding from a large oriental ſhrub. *Euphorbia officinarum*. Linn. It is brought to us immediately from Barbary. It is ſo extremely hot and penetrating, as to prove even cauſtic; wherefore, although it is mentioned as a purge, in many authors, againſt ſerous and viſcous humours, and its doſe aſſigned from half a ſcruple to a whole one, yet it is now never given inwardly, becauſe its violence tears off the neceſſary mucus, or covering of the ſtomach and bowels, and occaſions dyſenteries. As a ſternutatory, it is to be uſed very cautiouſly, and never to be taken alone, but mixed in a ſmall quantity with ſome other powders proper to ſoften the fibres, and

and guard them againſt the intolerable heat of the Euphorbium. In pounding it there may be much danger; becauſe, without great care, ſo much will fly up the noſtrils, as to do miſchief.

Ellebori Albi, White Hellebore, called alſo *Veratrum album. Veratrum racemo ſupra decompoſito, corollis erectis.* Linn. It grows on ſome mountains in Germany. The ancients gave this inwardly as a purger of phlegm and viſcid humours; but its violent operation has expelled it now from internal uſe: and it remains at preſent in medicine little otherwiſe than an errhine. And even thus, its irritations are ſo great, as to make it not prudent to venture it alone; and therefore it is joined with other things which abate its vehemence. It is alſo prepared in ſome lotions for cutaneous foulneſſes; and is oftentimes ſucceſsful in deterging thoſe little ulcerations which blotch and deform the ſkin, and are ſometimes infectious, or what the common people call catching. In ſome maniacal caſes a ſcruple hath been given for one doſe, with great advantage.

Nicotianæ, Tobacco, called alſo *Petum* and *Tabacum*; by Gerhard, *Hyoſcyamus Peruvianus*; by Piſo, *Petum*; diſtinguiſhed by C. Bauhine—*Major latifolia. Nicotiana Tabacum, vel Nicotiana Virginiana, foliis lanceolatis ovatis ſeſſilibus decurrentibus floribus acutis rubris.* Linn. If it be infuſed, and the liquor drank, it produces ſickneſs, vomiting, and afterwards doſing ſtupidity. And therefore, although it has been uſed as an emetic amongſt ſome ignorant people, yet common prudence has hitherto kept it out of general practice. How its conſtant uſe comes to make it ſo familiar to perſons, as not to have any of thoſe ſtrange effects upon them as it has at firſt, is not properly our buſineſs to explain here; although the fact is in every one's knowledge. What we place it for here is as a ſternutatory; ſince it is the baſis of all the ſnuffs now in uſe.

SECT. X.

Of Narcotics.

UNDER this head we include all that part of the *Materia Medica* which any way produces ſleep; whether called Narcotics, Hypnotics, or Opiates. But although many of this tribe ſtand with ſome authors in the rank of poiſons; yet we ſhall not here enter into the controverſy, whether ſuch things can be medicinal, or whether a medicine can poiſon: becauſe it is certain there is truth on both ſides of the debate. Theſe are inſtruments whoſe agency lies very remote from the reach of our ſenſes; as wonderful effects are often produced almoſt from unheeded cauſes.

Folia, Herbs of,

Cicutæ, Hemlock. *Conium maculatum ſeminibus ſtriati*. Linn. This plant grows much like parſley; and it is ſo difficult to diſtingu ſh them

them when young, that in all probability they have ſometimes been gathered and ſold together. For there have been many inſtances of perſons, and ſometimes whole families, being ſuddenly taken ill, ſo as to occaſion ſuſpicion of poiſon, when they had reaſon to ſuſpect it in the parſley. The fool's parſley, and the ſcandix, with rough ſeeds, are the moſt likely to be miſtaken for this poiſonous plant; but the hemlock is well diſtinguiſhed by its large and ſpotted ſtalk, by the dark and ſhining green colour of its bottom leaves, and particularly by their diſagreeable ſmell when bruiſed. It has ſo much the repute of being poiſonous, that it is never taken inwardly unleſs by ſuch accidental miſtakes as above mentioned; but I never heard of an inſtance where it has proved deadly, though many are ſo caught with it. It firſt affects perſons with a giddineſs of the head, and dimneſs of ſight; and afterwards operates violently by vomit and ſtool. Fat broths and oily ſoftening liquors are good in ſuch accidents, to defend the ſtomach and bowels againſt its vellications. After its fury is over, which laſts not long, is ſometimes leaves a dizzineſs or heavineſs to ſleep; and goes off without any farther miſchief. The *Oenanthe*, which Wepfer deſcribes under the name of *Cicuta Aquatica*, Dr. Mead thinks the poiſon which was uſed ſo much of old, eſpecially at Athens, for killing malefactors; but the common hemlock, he ſays, is not by much ſo malignant. Etmuller mentions a perſon who took the root inwardly, to the quantity of a drachm; which cured him of a ſchirrous liver and ſpleen; and recommends us for farther knowledge of its properties, to Kircher, Simon Pauli, and Amatus Lucitanus. But we have but an indifferent warrant for ſuch practice; and as anciently as Dioſcorides, it ſtands rejected from all inward uſe, for its poiſonous qualities. Dr. Storck ſays, that the freſh root afforded an acrid juice, of which one drop ſo inflamed and ſwelled his tongue, as immediately to render it painful, rigid, and difficult to uſe in ſpeaking. Yet it is certain that the roots of our ſpotted hemlock may be chewed and ſwallowed in conſiderable quantities, without producing any ſenſible effect; and that in any ſeaſon of the year. However the leaves and ſtalks are by many in eſteem externally, for the ſpleen and hypocondriac inflammations. The juice is boiled up with gums, and ſuch convenient ingredients, as are neceſſary for the form of an emplaſter. Our college had one which bears its name, and was pretty much preſcribed in the above mentioned caſe; as likewiſe to diſcuſs hard, flatulent, or cold tumours in other parts. See Extr. Cicutæ.

MANDRAGORÆ, Mandrake; diſtinguiſhed—*Fructu rotundo*, by C. Bauhine. This is of a ſtrong narcotic quality, and is mentioned in ſome ancient writers as convenient to be given before an amputation, to deaden the ſenſe of pain by ſtupifying the patient; but modern practice owns it not for any ſuch uſe. The mandragora of the ancients was the *Atropa Mandragora* of Linn. It is reckoned cooling, in external applications, and therefore commended in inflammations of the eyes, or an eryſipelas; upon which foot it ſtands in the *Unguentum Populneum*.

NICO-

Nicotianæ, Tobacco. See the preceding claſs. Common experience manifeſts, upon the firſt uſe of this its narcotic properties; and although it be only ſmoaked, according to uſual cuſtom, or chewed, as ſome take it, or adminiſtered in ſnuff, it has always the ſame effect: but upon long practice, like many other things of this kind, it grows leſs perceivable in ſuch qualities; and with ſome ſeems to have no influence at all. Its inward uſe is no way practiſed, but amongſt ſome poor people, for cheapneſs ſake, as a vomit; unleſs in thoſe unnatural ways which invention has found out, of ſmoaking, chewing, or taking it in ſnuff. In whatſoever form it is taken, it is certainly prejudicial to people that have weak nerves.

Solani, Nightſhade. Of this there are various kinds deſcribed by botaniſts; the chief of which are the *Solanum Lignoſum* the ſame as *Dulcamara*, or *Amara Dulcis*, Bitter-ſweet; and the—*Pomiferum fructu rotundo ſtriato molli*, of Caſp. Bauhine; or *Mala aureo odore fœtido quibuſdam Licoperſicon*, of J. Bauhine; Love apples. But the—*Vulgare* of Parkinſon is the only officinal kind. *Atropa Belladona, vel Atropa caule herbaceo, foliis ovatis integris.* Linn. Dwarf, or Deadly Nightſhade; or, as preferable, the *Solanum caule inermi fruteſcente flexuoſo, foliis ſuperioribus haſtatis, racemis cymoſis.* Linn. Garden Nightſhade; which is reckoned very cooling; inſomuch as not to be ſafe in inward uſe; being deadly in its conſequences. Some authors commend its external application to the temples, againſt the headach, and in inflammations of the eyes; and to the feet, in burning fevers. An ingenious ſurgeon lately publiſhed a pamphlet on the virtues of this plant. An infuſion of one grain and an half of the leaf either of the *Solanum hortenſe*, or *Lethale*, purged, vomited, and ſweat, to an immoderate degree, and was found ſo beneficial in old ulcers, and cancers, as to be thought a cure for them. The infuſion was preſently given to more than fourſcore patients at once in different hoſpitals; ſeveral were relieved, few or none cured, but all of them were troubled, during the courſe of the medicine (which they repeated every day or every other day) with vertigoes, blindneſs, deafneſs, ſtupors, &c. though none of them died; yet ſo many ſymptoms of the worſt kind appeared, that it was univerſally agreed to return the *Solanum* to the claſs of poiſons from whence it had been taken—I believe there never was an inſtance before of any ſimple being examined with ſo much candor, and upon ſo many ſubjects at once.

Strammonei, Thorn apple, is the *Solanum fœtidum pomo ſpinoſo oblongo*, of C. B. *Datura pericarpiis ſpinoſis erectis ovatis, foliis ovatis glabris.* Linn. It grows in gardens, and flowers in June; but medicine at preſent is a ſtranger to it.

Flores, Flowers of,

Papaveris Erratici, Wild Poppies, is the ῥοιὰς of Dioſcorides, Theophraſtus, and Pliny; and the *Rhœas* of Gerhard; and the *Erraticum rubrum campeſtre* of J. B. the Corn Roſe. *Papaver foliis pinnatifidis inciſis hiſpidis, caule piloſo multifloro, floribus coccineis, capſulis glabris globoſis, ſeminibus purpuraſcentibus.* Linn. The flowers

blow in June, and have a fetid faint ſcent; but make a ſyrup pleaſant enough, which is much uſed in the ſhops. They are gently anodyne and narcotic; ſo that they are given ſafely to young children: two drachms to half an ounce of the ſyrup is a doſe very moderately inclining to ſleep; and alſo promoting a diaphoreſis. There is an infuſion made of them in a low ſpirit, in ſome ſhops; which being dulcified and warmed with a few proper aromatics, makes a very toothſome dram; and is much uſed by ſome with good ſucceſs, under the title of *Aqua Papaveris rubra*, (and *Aqua Crapulæ*, or ſurfeit water) in colic pains and flatulencies at the ſtomach. And theſe are the principal ingredients in many of thoſe waters which are ſold in the ſhops, by the name of colic waters; and anſwer their end in giving preſent eaſe, by their ſoporific properties. This quality does not reſtrain ſomewhat which is detergent in their compoſition; for they help expectoration, and are good in many diſtempers of the breaſt. The ſimple ſyrup which is commonly made with them, has a beautiful red colour; and is not only a good ſweetner of alexipharmic juleps, but makes them pleaſant both to the eye and palate.

Paralyseos, Cowſlips, are the *Primula veris major* of Gerhard. *Primula elatior, vel Primula foliis dentatis rugoſis, ſcapo multiflore, floribus faſtigiatis luteis odoratis.* Linn. The flowers are commonly enough known, and reckoned of the ſame virtues as the former: but in a leſs degree. They are very little in uſe. The ſyrup is well enough to ſweeten juleps for children; but is not ſo effectual in any reſpect, as to deſerve an aſſignment of its doſe; there being no fear of error in quantity. The water is good for nothing; and the conſerve for little elſe than to give a convenient conſiſtence and bulk to electaries or boles, amongſt ingredients of more efficacy.

Fructus, Fruits:

Nux Vomica, Id. This is the fruit of the *Solanum arboreſcens Indicum*, according to Breynerus. *Strychnos Nux Vomica.* Linn. The wood of which is the *Lignum Colubrinum.* Its principal uſe is to do miſchief with, by killing dogs or cats. It has all the operations of a violent poiſon. The *Semina Hyoſcyami, Cocculæ Indicæ*, and *Staphidis agriæ*, are all ſo much of the ſame nature, that we have forbore to give them diſtinct places. They are commended for deſtroying ſuch vermin as are apt to breed in uncleanly people. Riverius preſcribes the *Cocculæ* in a cataplaſm againſt the gout. Some poachers have learned a trick of making theſe up into a paſte, to intoxicate fiſh with; ſo that they may be taken out of the water with one's hand. And this appears to have been an old practice; as we find them, for this reaſon, in ſome authors, diſtinguiſhed by the name of *Baccæ Piſcatoriæ.*

Capita Papaveris Albi, White Poppy Heads. The plant is the *Papaver ſomniferum album, vel Papaver calycibus capſuliſque glabris foliis amplexi caulibus inciſis.* Linn. Theſe are cultivated in gardens; and contain a great deal of a juice, which may be extracted into an opium; being of the ſame virtues, but not ſo ſtrong as the Turkiſh opium; whence it requires to be given in a double doſe.

doſe. See the next article but one, viz. *Meconium*. Of theſe the *Syrupus de Meconio* is now made.

Capita Papaveris Nigri, Black Poppy Heads. Theſe grow not as the former; but wild amongſt the corn; and are reckoned ſtronger. Theſe were formerly an ingredient in the *Syrupus de Meconio*. They are ſo narcotic, that their ſcent will even affect perſons with drowſineſs. Of this I once knew an odd inſtance: a whole family inſenſibly fell into ſuch an inclination to ſleep and heavineſs, as for two or three days to be ſcarce able to keep awake; until at length imagining the cauſe to be from a great many green poppies which were hung almoſt in all the rooms to dry, the poppies were removed, and the lethargy wore off.

Succi, Juices:

Meconium, Id. This is the extract of our Engliſh poppies, and has all the virtues of the foreign opium, but in ſomewhat a lower degree.

Opium. This drug is the concreted juice of the heads of the white poppy, and is generally imported hither from Turkey. It has been, till lately, conſidered in general as a ſoporific and ſudorific only; and its uſe moſtly confined to the removal of deliriums, nervous coughs, and ſome other particular purpoſes: but the experience of modern practice has ſo extended its application, as to give a ſufficient light into the true nature of it. The quality of opium, to which its medicinal effects are owing, is the diminiſhing the ſenſibility and tenderneſs of the nerves, in ſuch manner, that ſpaſms, and the convulſive cramps that are excited by inflammation, or the action of any irritating bodies, are thereby greatly mitigated, and in general removed; and the ſymptomatic miſchiefs attending many diſorders thence prevented or leſſened. This power, therefore, renders it of extreme good ſervice in the following diſorders, the evil conſequences whereof are the reſult of the irritating acrimony of depraved humours: firſt, in the *cholera morbus*; where the whole of the danger ariſes from the violent convulſions cauſed by the intolerable ſtimulus of exceſſively acrid bile, poured out of the *ductus colcdochus communis* into the inteſtines, in an incredible quantity; in this caſe opium will give a reprieve from the fatal conſequences of the ſpaſms, till a diſcharge of the morbid matter is procured by the aid of cathartics, when it would be impracticable by any other means to give the leaſt relief. It is in like manner highly efficacious in diarrhœas and dyſenteries, which owe their origin to a parallel cauſe: as alſo in the convulſions of children, produced by an aceſcent acrimony of the humours in the *via prima*. It is, when judiciouſly uſed, of great importance in ſeveral caſes of eruptive and other fevers where a ſpaſmodic ſtate ariſes from nervous irritations; particularly in reſpect of children, whoſe greater ſenſibility ſubjects them to frequent convulſive ſymptoms; eſpecially in the ſmall-pox, where, by a proper uſe of this medicine, the fatal ſpaſms, which attend their coming out may be frequently evaded. It is likewiſe of high efficacy in many female caſes: relieving the convulſive diſorders of the uterus, and checking thoſe exceſſive diſcharges of the

the catamenia, and profuſe hæmorrhages conſequent to delivery, which are cauſed by them. Beſides theſe, there are many occaſions, not reducible to general rules, where, on the ſame principle, this quality of opium may remove ſymptoms which would be otherwiſe fatal or dangerous, and on which all the other qualities of medicine could have no influence: whence it may therefore be juſtly ranked amongſt thoſe few medicines, of whoſe obvious effects the recovery of the patient from violent and dangerous diſeaſes is the evident reſult.

The doſe is various, viz. from a quarter of a grain to two grains or more, and to be repeated as required.

It is partially diſſolved in water, and in rectified ſpirit of wine; proof ſpirit, wine, and vinegar, diſſolve it all, leaving only the impurities behind.

SECT. XI.

Of Anti-inflammatory Simples.

THESE are as little regarded in medicine as any claſs of ſimples; being of ſlight efficacy, and uſed for no important intention; and ſeldom preſcribed any otherwiſe than as palliatives, or to mitigate the uneaſy ſenſation of ſome particular ſymptoms, more than to cure the diſeaſe whence they ariſe.

All of this rank may be conſidered under the two following diviſions: the firſt are ſuch as immediately produce a preſent ſenſe of cold. Theſe are chiefly fruits and acid juices; and are moſt commonly ordered to cool the mouth and ſtomach, and allay that extreme thirſt, which an inflammatory fever is apt to occaſion. What comes under this intention, ſeldom has any farther effect, than giving a grateful ſenſation to thoſe parts (which were before uneaſy with heat and drought), unleſs they are taken down in large quantities; and then they may, from a ſudden chilneſs, make ſuch an alteration in the pulſation of the fibres, as will ſhock the whole conſtitution. And this is in effect ſo much in the experience of every body from ſuch things one time or another, that it needs no large explications; only theſe two conſequences are moſt likely to happen; viz. ſuch convulſive contractions of the veſſels may either obſtruct their contents, and thence cauſe ſtitches and inflammations; or may ſo ſuddenly retard the circulating juices, as will diſpoſe them to undue coheſions and conſiſtencies.

The other kind of coolers are ſuch, as by their viſcidity are diſpoſed to communicate the ſame quality to the animal fluids, with which they are mixed. Theſe can be preſcribed in no ſalutary intention, unleſs to check the inordinate celerity of the blood, which ariſes from a debauch with ſpirituous liquors: or to give a thicker conſiſtence to that of hectic conſtitutions; whereby it may be reſtrained

ſtrained from flowing too faſt. But in both caſes there is a great deal of hazard from the ſame means; becauſe the diminution of the blood's velocity cannot ſo exactly be reſtrained, but it may be carried too far, and prove too great: whereupon ſuch ſubſtances, for want of due motion from circulation, will fall into one which is fermentative; and ſo by allaying one heat raiſe another of much worſe conſequence. Thro' this error, coolers, in the hands of injudicious perſons, frequently change ſimple inflammatory fevers, which would perhaps ſoon go off by a critical diaphoreſis, into putrid and malignant ones, which often terminate in death.

Folia, Herbs or Leaves of,

Acetosæ, Sorrel; called alſo Oxalis. *Rumex floribus dioicis, foliis oblongis ſagittatis.* Linn. It grows in meadows and paſture-grounds, as well as by culture in gardens, and flowers in May. It is well known in our common ſallads; and is little otherwiſe uſed. It is acid and grateful to the ſtomach, quenches thirſt, promotes urine, and reſiſts putrefaction. A decoction of the leaves in whey affords an agreeable drink, in fevers and inflammatory diſorders.

Agni Casti, *Agnus Caſtus*, the Chaſte-Tree; called alſo Vitex, and diſtinguiſhed—*Foliis anguſtioribus, canabis modo depoſitis*, by C. B. and *Agnus folio non ſerato*, by J. B. *Vitex Agnus Caſtus.* Linn. This has got a name for a cooler, and particularly of the genital parts, ſo as to have been preſcribed to allay thoſe inordinate motions and deſires, which ariſe from ſeminal turgeſcency: for which intention many authors have compoſitions, wherein this is a principal ingredient; and from whence they take their names. But they are not now in any eſteem.

Alsines, called alſo Morsus Gallinæ, Chickweed, or Hen-Bit. There are many ſorts of it deſcribed by botanic writers; but the *Alſine Media*, the middle kind, of C. B. and of Linn. is the chickweed of the ſhops. It grows in gardens, and in almoſt all manured grounds. It comes out in the winter, and flowers until midſummer. It is applied to hot, painful, and inflammatory ſwellings, with good ſucceſs.

Anchusæ, Alkanet. *Anchuſa tomentoſa, foliis lanceolatis obtuſis, ſtaminibus corrolla brevioribus.* Linn. Its principal uſe is to tinge oil, and unctuous matters of a red colour; as it does very beautifully, by warm infuſion. Hence ſome tinge the Lucatellus's balſam with it. The ſmall roots are the beſt.

Cichorei, Succory, is diſtinguiſhed by botaniſts into a garden and a wild ſort; but they differ not. It is the *Cichorium Intibus.* Linn. This plant has generally paſſed for a cooler; but Schroder, and after him Mr. Ray, from its bitterneſs, pronounce it rather on the contrary ſide, and will have it to be a good detergent; and upon that foot, of ſervice in all obſtructions of the viſcera, and particularly of the liver; which makes it, in their account, an excellent hepatic.

Cusoutæ, Dodder. It is the *Cuſcuta Europæa* of Linn. This grows out of, or ſo cloſely adheres to ſome plants (from whence it is reckoned to have its nouriſhment) that ſome have diſgraced it with the names of *Herba inferni*, and *Diaboli*

Diaboli inteſtina, i. e. Hell-weed, and Devil's-guts. Some queſtion, whether it be properly a plant, or rather an excreſcence of another. It is ſomewhat aperitive; and therefore reckoned amongſt hepatics, and other deterſives. Hoffman obſerves all plants of the like manner and production to be of the ſame virtues. It is now hardly ever met with in any kind of compoſition, either officinal or extemporaneous; although taken notice of by moſt Diſpenſatory writers.

Endiviæ, Endive. This flowers in July and Auguſt. It is very much like the ſuccory; it is the *Cichorium Endivia*. Linn. and preſcribed for all the ſame intentions; but reckoned rather more cooling.

Lujulæ, Wood-ſorrel. This is alſo called *Acetocella*; which ſee. *Oxalis acetoſella ſcapo unifloro, foliis ternatis obcordatis, radiæ dentata*. Linn. It grows in woods and ſhady places; and flowers in April and the beginning of May. It is reckoned much of the nature of common ſorrel; but it is not quite ſo ſharp. Its conſerve is uſed in electaries, and to mix ſpecies into the form and conſiſtence of boles.

Lens Palustris, Duck-meat; called alſo *Lens Aquatica*. *Lemna Minor*. Linn. It grows upon ponds and ſtagnant waters; and by ſome it is recommended to cool inflammations; but the preſent practice takes no notice of it.

Populi, Poplar. *Populus Nigra*. Linn. The leaves of this tree are uſed for the ointment in the ſhops, which borrows its name of Populneum from it: they are accounted cooling in that compoſition, but they are of no other uſe.

Portulacæ, Purſlain. *Portulaca Oleracea*. Linn. This flowers in June. It is very little uſed except in ſallads; though formerly it ſtood recommended for a great aſſuager of choleric heat. It is alſo accounted good in the ſcurvy, and all cutaneous eruptions.

Lactucæ, Lettuce. *Lactuca Sativa*. Linn. This is alſo much more uſed in ſallads than in medicines; and is found ſufficiently in the gardens. It is reckoned pretty much of the nature of ſuccory, but more cooling; whereby it inclines to ſleep; upon which account it procures eaſe in pains; both taken inwardly, and externally applied.

Salicis, Willow. There are ſeveral kinds of this; but none of them have any credit in the preſent Pharmacy. The *Salix Caprea*, Linn. or Common Sallow, is uſed by way of decoction, to relieve from the heartburn. And the *Salix Alba*. Linn. or Common white Willow, affords a bark which is ſaid to vie with the Peruvian bark in the cure of intermitting fevers. See Philoſ. Tranſ. Vol. liii. p. 195.

Sedi, Houſe-leek. *Sempervivum ſectorum foliis ciliatis propaginibus patentibus*. Linn. This ſtands commended, by ſome writers, as a convenient cooler in fevers; but the preſent practice knows it not in any ſuch intention. It is uſed in the Populneum; and in ſome other outward applications for burns and inflammations.

Sonchi Lævis, Smooth Sow-thiſtle. *Sonchus oleraceus pedunculis tomentoſis calycibus glabris*. Linn. There is alſo a *Sonchus Aſper*, the Prickly Sow-thiſtle: but neither of them are of any uſe in medicine; and therefore deſerve no farther deſcription or notice.

Spinachiæ, Spinach. *Spinacia Oleracea*. Linn. This is well enough

enough known in food; but has nothing to do in medicine, except in counterfeiting the colours of ſome things of value. As particularly giving to Gaſcoign's powder the ſame colour as is given by bezoar.

Taraxi, Dandelion. *Leontodon calyce ſquamis inferne reflexis, foliis runcinatis denticulatis lævibus.* Linn. This is much like the endive and ſuccory; though ſomewhat more cooling. It flowers in April and May. It abſterges, opens, and is a good hepatic. It operates chiefly by urine. A decoction of the whole plant is frequently uſed.

Umbilici Muralis, Wall Navel-wort. *Cotylidon Hiſpanica.* Linn. This is not known of late in medicine, except in the Populneum; and is the true and only ſort which ought to be in that compoſition; the other, *Umbilicus Veneris*, being of a contrary quality: although, as the ingredients for that ointment are generally diſperſed in the markets and phyſic gardens, the rough ſort is put for both, that being in moſt plenty, and few being curious enough to diſtinguiſh one from the other.

Semina Cannabis, Hempſeed. *Cannabis Sativa.* Linn. This is very rarely met with in uſe. By expreſſion it yields much oil, which in the form of emulſion is uſeful in coughs, heat of urine, &c.

Fructus, Fruit of,

Agreſtæ, unripe Wild Grapes, The juice of theſe is the *Omphacinum* of the ancients; as their *Oleum Omphacinum* was the expreſſed oil from unripe olives. They uſed to expoſe the grapes to the ſun ſome days, and then preſs out their juice into large vats; and in the time of Dioſcorides they uſed to let it ſtand open in them, expoſed to the ſun, till moſt of the humidity was exhaled, and the remainder inſpiſſated into a rob; a form much uſed among the ancients. This is reekoned a cooler; but hath little or no place in our preſent Pharmacy.

Aurantiorum, Oranges. N. B. The ſmall dry ſort, of which peas are made, are the *Aurantium Curaſſavenſe, ſive aurantia enaſcentia immatura.*

Limonum, Lemon.

Citri, Citrons. Theſe are well enough known to all people. They are the *Citrus Citrus-aurantium*, and *Citrus-limon* of Linn. They very much agree in their medicinal virtues; only the lemons are ſomewhat the ſharpeſt and moſt efficacious. Their juices are wonderfully grateful to the ſtomach; and very proper to allay drought in fevers, and any diſorders attended with that ſymptom. They are very good to take nauſeas from the ſtomach; and ſtop vomiting which proceed from a redundance of choler. The lemon-juice wonderfully aſtringes and hardens the fibres in the ſtomach; which makes it greatly aſſiſting in digeſtion: and there is hardly any one thing, which better enables it to retain its food without regurgitation, after hearty eating.

Cucumerum, Cucumbers. *Cucumi ſativus.* Theſe are ſufficiently known in food, both raw and in pickle. They are very cooling and viſcid; and therefore apt to diſpoſe the blood to putrid fermentations; inſomuch, that it is to be feared theſe have no ſmall ſhare in occaſioning thoſe ugly fevers which appear at the latter end of

of the year, and are often of a malignant kind. They do well therefore, who dreſs them with a good quantity of vinegar and pepper; for as the former helps to keep up the due tenſity aud contraction of the ſolids; the other preſerves the proper fluidity of the juices, aud prevents them from running into morbid coheſions. They are likewiſe pretty well ſecured againſt the above mentioned miſchiefs by pickling, with the like ingredients. They are of little or uo uſe in any officinal compoſitions, or occaſional preſcriptions; only as their ſeeds are ſometimes in emulſions, and ſtand the firſt amongſt the four greater cold ſeeds.

Cucurbitæ, Gourd. *Cucurbita Aſpera.* Linn. This fruit ſeems to be of the ſame ſpecies of the former: and grows in the ſame manner, but larger. It is of no uſe in medicine, unleſs for the ſeeds, which are alſo of the four greater cold ones.

Grossulariæ, Gooſe-berries. *Ribes Groſſularia.* Linn. Theſe are by all known to be a grateful cooling fruit, and very wholeſome, if eat in moderation. There is a great deal of difference between what they are when green, at which time they are uſed for baking, &c. and when ripe enough to eat as they come from the tree; the former are much more acid, cooling and aſtringent; and the latter more inclining to viſcidity, and likely to produce diſorders, which the common people call ſurfeits.

Mali Armeniacæ, Apricot. *Prunus Armeniaca.* Linn. This is a fine fruit, and if not too ripe, or too mellow, as it is uſually called, agreeably aſtringes and ſtrengthens the ſtomach.

Mali Persicæ, Peaches. *Amygdalus-Perſica.* Linn. This is much of the ſame nature as the former, but hardly ſo reſtringent. Of the ſame kind is alſo the nectarine, a fruit now much known in our gardens.

Malorum Hortensium *omnium*, *Pyrus-malus.* Linn. all Orchard Apples. Theſe generally agree in the common property of cooling and aſſuaging thirſt; tho' they ſomewhat differ in degree, as they are more or leſs acid or auſtere. Thoſe are moſt wholeſome which moſt abound with this laſt property, becauſe that maintains the due tenſity of the fibres; and prevents their corrupting with the animal juices. Theſe make a very good part of our food in the ſummer time, when the heat evaporates ſo much of the animal moiſture, as would be inſupportable to the conſtitution, were it not frequently refreſhed with the grateful ſenſations which ſuch coolers produce.

Mali Sylvestris, Crabs. *Pyrus-malus Sylveſtris.* Linn. Theſe are ſo extremely ſour, and reſtringent upon the palate, as not to be eaten raw; they are therefore uſed only for their expreſſed juice, which ſerves in ſome countries inſtead of vinegar, and is much of the ſame virtue. It is ſold by the name of verjuice; and makes, in many caſes, a very good gargariſm.

Melones, Melons. *Cucumus-melo.* Linn. Theſe differ not much from the cucumber, either in property or manner of production; only as they are a larger fruit, and ſomewhat more delicate. The ſeeds alſo are another of the four greater cold ſeeds.

Mori, Mulberries. *Morus fructu*

tæ Nigro. Linn. Theſe afford a great auſtere juice, and are uſed pretty much in the ſhops for the ſyrup which is made of them, and bears their name. It both cools and aſtringes the ſtomach; and is often an ingredient in gargariſms, for its deterſive roughneſs. If the fruit hangs until it is too mellow, it grows more ſlimy, and is not ſo good.

Olivæ, Olives. *Olea Sativa.* Linn. Theſe are not the produce of our own country; but come to us in pickle, chiefly in ſalt water. They are very oily and ſmooth; and are therefore not ſo good for the ſtomach; being apt to pall and relax it too much, as moſt things of the like properties generally do. It is from the ſame fruit we have the oil of olives, ſo much in uſe: the virtues of which we ſhall conſider in the thirteenth Section.

Ribesiæ, Currants. *Ribes Hortenſe.* Linn. Theſe are of many ſorts; but the red and white only are in uſe: unleſs for ſome very ſingular purpoſes. For the black, and chiefly the leaves upon firſt coming out, are uſed by ſome to flavour Engliſh ſpirits, and counterfeit French brandy. The red and white are very agreeably acid, and accounted as wholeſome fruit as any we have of our own growth. They greatly aſſuage drought, cool and fortify the ſtomach, and help digeſtion. No harm can be received from them unleſs eat in too great quantities.

SECT. XII.

Of Simples uſed in Topics, or external Applications.

IN this diviſion, the reader will meet with ſeveral of the ſimples, which have been placed under the foregoing heads for ſome internal intentions; but the great ſhare they have in external applications, may juſtify the repetition. The materials which neceſſarily come into this rank, are ſo few, without ſuch as, for more important efficacies, have been already taken notice of in ſome other, that we have made the number of ſubdiviſions, expreſſive of the intentions of what they contain, as ſmall as poſſible.

Claſs 1. *Of Repellents.*

To underſtand rightly the operation of ſuch ſimples as will occur under this head, it may be neceſſary to obſerve, that by repelling is meant thoſe means which prevent ſuch an afflux of a fluid to any particular part, as would raiſe it into a tumour: but to know how this may be effected, it will be convenient to attend to the ſeveral cauſes which can produce a ſwelling, or force out of the veſſels any of their fluid contents by ſome unnatural diſcharge.

All tumours have neceſſarily one of theſe in their cauſe; either an increaſe in the velocity or quantity of the fluids; or a weakneſs

neſs in ſome particular part; and ſometimes both concur. An increaſe in the velocity of the fluids makes them more forcibly puſh againſt and diſtend all the parts in their circuit: if therefore any part be unequally preſſed, or relaxed by external injuries, that will be more elevated than any other; and for want of equal reſiſtance with the reſt of the body, will, at length, receive ſuch a quantity of fluid, as will raiſe it into a tumour; eſpecially if any of its veſſels be obſtructed: becauſe the protruſion of freſh matter *à tergo* will continue to add thereto, until the part is upon the utmoſt ſtretch, and can hold no more. In this caſe all thoſe means are ſaid to be repellent, which check the growth of the tumour; and aſſiſt the refluent blood in taking up the obſtructed matter, and waſhing it again into the common ſtream. This intention is chiefly favoured by evacuation and revulſion; for whatſoever leſſens the quantity of the fluid, will diminiſh the force upon the tumefied part: but it concerns us moſt here to know, how external application to the part itſelf helps in this affair.

Now a medicine comes to be a repellent in this caſe, by conſiſting of ſuch ſubtile parts, as may tranſmit ſome of them thro' the pores, and help to render the obſtructed matter more fluid; ſo that it becomes the more eaſy to be looſened and fall again into the circulating current. But in this caſe there is a hazard of ſuch things likewiſe putting the obſtructed humour into a ferment; whereby it ſooner turns into pus, and then they come under the denomiuation of Suppuratives or Ripeners. What therefore, in the moſt ſtrict ſenſe, is to be reputed a repeller, is that which aſtringes and ſtrengthens the part, ſo as to make it reſiſt ſuch lodgments. Theſe are ſuch, whoſe virtues reſide in their coldneſs, and drying properties. But there are ſo very few inſtances wherein bandage is not better than ſuch application, that very little comes to be uſed for that purpoſe. In hæmorrhages and ouzings out of ſerum, ſo as to deform the ſkin, ſimples of this nature moſtly take place, which anſwer their ends by aſtringing the fibres; whence thoſe apertures are ſo cloſed as not afterwards to admit through them any ſuch fluid.

Some things alſo anſwer this end only by ſtimulating the fibres of the tumefied part; ſo as to give them ſudden and forcible twitches, whereby the obſtruction is ſometimes looſened and ſhook, as it were, away into the influent current. Such a ſort of motion will be occaſioned by the ſudden application of any thing extremely cold, as common water: but the practice is ſeldom ſafe; becauſe, if the firſt efforts, which the fibres are put upon by thoſe means, do not ſucceed in breaking away the incloſed matter, they will be ſtrained, and not able afterwards to repeat their natural vibrations; the conſequence of which is weakening the part, which will render the tumour more obſtinate. There are many other means and accidental circumſtances, which contribute to favour or retard this intention: but theſe hints may be ſufficient; eſpecially for a part which cannot be allowed any great length in this work.

Albumen Ovi, White of an Egg. This is of a glutinous binding

binding quality; and therefore is often mixed with bole, and other things of the like nature, to defend any ſtrained part from diſtenſion and elevation into a tumour; and to reſtore it to its due tone and elaſticity; as likewiſe under convenient bandage and compreſſure, to prevent the luxation of bones after reduction. It is uſed alſo in ſome mixtures for conſolidating freſh wounds, and preventing too great an effuſion of blood.

Lapis Calaminaris, Calamine. This has been already mentioned under Claſs 3. Section 2. as an abſorbent. Externally it s uſed in collyria againſt inflammations of the eyes; and in cerates to cool, and, in ſome meaſure, deterge foul ulcers.

Cerussa, White Lead. This is a preparation of lead, whoſe virtues we ſhall conſider amongſt the preparations of that metal, at the latter end of this part; as alſo in the following.

Lithargyrus Auri, Litharge of Gold. It generally is called thus for its colour ſake; though it ariſes in the purification of ſilver; and therefore ought more properly to be named Litharge of Silver. It is much uſed in emplaſters; and boiled with oil diſſolves in it, and gives it a proper conſiſtence; as in the diachylon. It is reckoned to be cooling; and to give a tenſity to the parts upon which it is applied; and therefore it is accounted a repellent; although it is alſo in ſome compoſitions of other intentions.

Minium, Red-Lead. This is lead calcined, as we ſhall ſhow under the preparations of lead, and we ſhall alſo give its virtues there.

Lapis Tutiæ, Tutty. A calx or ſublimate of zinc, produced in the furnaces where zinc is fuſed with other metals, or copper made into braſs, by calamine, the ore of zinc: it is found adhering to certain cylindrical bodies placed in the upper part of the furnace for that purpoſe; from theſe it receives its tubulated figure. It is moderately hard and ponderous, of a browniſh colour, and full of ſmall protuberances on the outſide, ſmooth and yellowiſh within; ſome pieces have a bluiſh caſt, from minute globules of zinc being thrown up by the heat in its metallic form. Tutty is celebrated as an opthalmic, and frequently employed as ſuch in unguents and collyria.

Pompholyx This is a metallic powder, of a white colour, and lighter than tutty; for as that, in the making of braſs, adheres to the ſides of the furnace, this mounts up to the top. Its virtues are the ſame with thoſe of tutty.

Sedum, Houſe-Leek. This has been mentioned in inward uſe. We took notice of it in Sect. 11. but it is very little uſed that way; nor even in external applications, only amongſt the common people, who have got a way of managing it into an ointment with cream, for burns and inflammations.

Telia Aranearum, Cobweb. Every one knows what this is, and how produced. It appears not in medicinal preſcriptions; but as accident, for want of other helps, has taught its uſe to common people for ſtopping blood in a freſh wound. And this it ſeems to do by its extraordinary fineneſs; which makes it adhere to, and ſtop up the mouths of the veſſels, ſo as to prevent the effuſion of their contents.

Claſs 2. *Of Suppuratives and Digeſtives.*

This intention is frequently of mighty importance in chirurgery; but there are very few who well weigh the conſequences of the operation in thoſe medicines which are preſcribed to anſwer it; nor the accidents to which they are liable. For a ripener or drawer is what, by the activity and warmth of its parts, is able to penetrate the pores, and mix with and rarify any obſtructed matter; ſo that it may be rendered fit for diſcharge upon laying open the part, by a cauſtic or inciſion. Now in many inſtances, as the matter by this means rarifies and grows more fluid, the refluent blood is apt to waſh it back into the common maſs; which ſometimes is of that nature as to do a great deal of miſchief; or by making it take up more room upon its rarefaction, occaſions it more to diſtend the parts in which it is contained; whereon a ſenſe of pain is excited, and thereby a greater concourſe of fluid, and conſequently a needleſs increaſe of the tumour. So that medicines under this denomination require to be in the hands only of ſuch, who are ſo well acquainted with the mechaniſm of the animal œconomy, as to be able to apply them to the beſt advantage; and know how to avoid the hazards which may ariſe from their abuſe.

Adeps Anseris, Fat of a gooſe.
Canis, of a dog.
Hominis, of a man.
Viperæ, of a viper.
Ursi, of a bear.

Theſe are all to be met with in this intention; becauſe they are reckoned to be of a penetrating nature; and therefore ſuited to diſſolve and rarify the incloſed humours; and bring them, as it is called, to maturity. A great variety of fats were introduced into medicine by the Arabians. There are ſome ſpecific virtues aſcribed to thoſe fats in particular caſes; but they have not been ſupported by reaſon or experience. And they ſeem not poſſeſſed of any properties different from other ſubſtances of like kind, unleſs what may ariſe out of their different conſiſtencies, and degrees of volatility. They have all one common emollient quality; they relax the part to which they are applied, and prevent perſpiration: theſe effects, with the conſeqences of them, may be expected in a greater or leſs degree, from fats of every kind. The fat of the viper ſeems to have the moſt right to claim ſomething extraordinary upon this account. Dr. Mead, in his eſſay upon this animal, having inquired into the many ways of curing the viperine poiſon, which is inflicted by a bite; he tells us, that the viper-catchers have a remedy far beyond them all; and in which they place ſo great confidence, as to be no more afraid of a bite, than of a common puncture; immediately curing themſelves with this fat, which they value in ſuch caſes as a ſpecific; as he diſcovered upon the ſtricteſt inquiry. But to be convinced himſelf farther of the truth, in ſo important a point, the doctor enraged a viper, and cauſed it to bite a young dog by the noſe; both

the

the teeth were ſtruck deep in; he howled bitterly, the part began to ſwell; but upon application of ſome of the axungia, which was ready at hand, he was very well the next day.

But becauſe ſome gentlemen, who ſaw this experiment, were apt to impute the cure rather to the dog's ſpittle (he licking the wound) than to the virtue of the fat, he was cauſed to be bit again in the tongue; upon which, forbearing the uſe of this remedy, he died within four or five hours. The ſame trial was made another time with like ſucceſs; which the doctor aſcribed to the clammy and viſcid parts of the fat; though withal it was more penetrating and active than other oily ſubſtances. For by this property he ſuppoſes it to involve, and as it were ſheathe the volatile ſalts of the venom, ſo as to prevent their ſhooting into thoſe *ſpiculæ*, which were obſerved to be the inſtruments of thoſe deadly miſchiefs following the bite.

The London College hath retained only three fats, of different conſiſtencies, for different mixtures, viz. viper's fat, hog's lard, and mutton ſuet; theſe certainly will anſwer all the intentions that ſubſtances of this kind are employed for.

Furfur, Bran. This is uſed likewiſe in cataplaſms.

If bran is ſcalded with boiling water, and hath a ſmall quantity of hog's lard added to it, it might ſave the waſte of bread, in cataplaſms; and alſo the expence which the poor can ill ſpare.

Flos Cerevisiæ, Yeaſt. By the common uſe this is put to in raiſing other bodies into fermentation, as well as from the manner of its production, may eaſily be conceived how it comes by the denomination of a drawer. For, by the ſubtilty of thoſe ſpirituous parts with which it abounds, it cannot but tranſmit a great many of them into the part to which it is applied; and there, by rarifying the incloſed humours, diſpoſe them to what is called maturation.

Halec, a Herring. This fiſh, as it is in pickle, is often preſcribed in a cataplaſm to the feet in fevers; becauſe it is reckoned to draw the humours downward, and thereby relieve the head. But ſuch a property ſeems more likely to ariſe from the ſalt which is uſed in the pickle, than from the virtues of the fiſh; for the heat of that part will put the ſaline particles into motion, which by vellicating the fibres, that are very ſenſible in the ſoles of the feet, occaſion a greater derivation of fluid that way; and thereby make a revulſion from other parts.

Hirudo, a Leech. The uſe of this is commonly enough known. They are convenient ſometimes to draw blood from a particular part, as the temple, hæmorrhoidal veins, and where the lancet cannot be well uſed: as likewiſe from young children; whoſe veins ſeem too ſmall to admit of puncture by an inſtrument with ſafety. It is the general opinion, that theſe are good to draw away the humours from any particular part, eſpecially if it be much pained; and under this notion they are applied to the gums for the tooth-ach. But in ſome habits of body, and peculiar diſpoſition of humours, they occaſion ſuch a derivation to the part ſucked, as to raiſe great ſwellings, and

ſometimes an eryſipelas. They ought not therefore to be uſed inadvertently, and without proper advice.

Melilotus, Melilot. This was mentioned before, Sect. 4. Claſs 3. but its uſe being chiefly external, we judged it proper to take notice of it again here, upon that account. It is the principal ingredient in the plaſter which has its name from it in the ſhops. It conſiſts of warm ſubtile parts; as is manifeſt by the very ſcent of the plant; and upon that foot comes under the head of ripeners. It is moſtly employed in dreſſing bliſters until they ceaſe running, and ſkin over: for its warmth ſtill promotes the diſcharge, and prevents mortification; which in ſome conſtitutions they are very liable to; eſpecially if dreſſed with things that are cooling; which the heat of the part frequently provokes perſons very injudiciouſly to venture upon.

Nicotiana, Tobacco. Although this has been mentioned before, both as a ſternutatory, Sect. 9. and as a narcotic, Sect. 10. yet it deſerves alſo to be conſidered particularly as a topic; being of more real uſe that way than any other in medicinal intentions. It is ſo hot and penetrating, as to yield to none of this rank as a drawer or ripener; eſpecially when we conſider that, at the ſame time it gives this diſpoſition to the incloſed humours, it alſo quiets and ſooths the parts with its narcotic qualities; whereby the irritation is prevented, which many of this tribe too much occaſion. Upon this account it is frequently of great ſervice where there are ſharp pains, attended with a tumour; and particularly in thoſe of the rheumatiſm and gout. The leaf bound upon the part, is the beſt way of applying it; eſpecially if it be rubbed over firſt with a little oil.

Oleum, Oil. Hereby is meant only the common oil of olives. Some oleous and fat ſubſtances prove ripeners: as thoſe firſt mentioned under this head, by their having ſomething in them ſubtile and penetrating: but this lays claim to the ſame title upon a different account; proving ſo only by relaxiug the tumified part; and thereby giving more room for the encloſed humours to expand and rarefy; upon which they ſooner come to maturation. And for this very reaſon it is judiciouſly practiſed, to mix with all cataplaſms, of this intention, ſome oleous materials; becauſe by ſuch means the part is kept ſupple and lax, and more vent given for the humours either to tranſpire, or turn into matter, fit for an artificial diſcharge, by a cauſtic or inciſion.

Pix Burgundica, Burgundy Pitch.

Pix Navalis, Common Pitch.

Resina, Roſin. Eſſential oils, indurated by age or acids, are called reſins; alſo, when the indurated maſs, or when turpentine, or other natural balſams, have by heat or time loſt their eſſential oils, the groſs matter left behind, is thus named. Theſe prove ripeners or drawers, after a manner peculiar to all hard adheſive bodies: which is by ſticking ſo cloſe to the part affected, that they ſtop the tranſpiration of the common perſpirable matter through the ſcarf-ſkin, or cuticula. The conſequence of which is, that ſuch comminuted matter returns with ſome

ſome degree of force, and at laſt, by a tendency to move the ſame way, occaſions ſuch frequent encounters and occurſions, as will by degrees attenuate and diſlodge the obſtructed humours; whereby they either ſuppurate into matter, or are propelled through the true ſkin; and for want of room, by means of the plaſter, to get farther, they elevate the cuticula from it into a bliſter; and lie collected between both, in the form of a thick ſerum or jelly. And this is the reaſon why ſuch ſubſtances, applied to any part undiſtempered, will often raiſe bliſters; as it is frequently practiſed to make revulſions, in ſome pains of the head, defluxions, and ſore inflamed eyes. Theſe are more or leſs in the compoſition of moſt officinal plaſters; becauſe they give a due conſiſtence, and are a kind of cement to other ingredients: as is alſo the bees-wax; which ſeems indeed to be of this claſs upon a double account; both as it ſends ſomewhat into the included juices, in the ſame manner as many things already explained under this head; and alſo by its ſticking, though not ſo ſtrongly as the ingredients under theſe articles.

Roſins diſſolve in ſpirit of wine, in oil, both expreſſed and eſſential, and may be united with water, by the intervention of gum, or ſuch other intermedia as render fluid oils miſcible with water.

Sevum Cervinum, Deer's Suet.
Bovinum, Ox's.
Ovinum, Sheep's. Theſe ſtand in the catalogue of medicinal ſimples, much upon the ſame account; and can hardly be diſtinguiſhed in their efficacy, in any intention, from what were aſſigned before to oil, No. 556. only theſe ſeem ſomewhat more to approach to the bees-wax; and therefore may not quite ſo much, or ſoon, relax as oil; and they may have ſome ſmall ſhare of ſubtilty, or what is volatile (as indeed moſt animal fats have) whereby they enter into the pores, and aſſiſt alſo that way, in bringing the deſtined humours to maturity. The common axungia, or lard, is likewiſe for the ſame reaſon more a ripener than any vegetable expreſſed oil; although it does alſo, as oil, aſſiſt by relaxing the fibres, and giving the part larger dimenſions. This holds good in all animal oils, or fats, that they are more penetrating than ſuch as are expreſſed from vegetable ſubſtances; becauſe by reaſon of a ſtronger digeſtion they are in themſelves more ſubtile; and have alſo wrapt up in them ſome portion of a volatile animal ſalt; which makes them more effectual in this intention.

Thus, Frankincenſe. The produce of the tree that yields the *Terebinthina Vulgaris*. This comes to us of different conſiſtencies and colours; ſome being hard and more brittle, and others ſo ſoft as to run; that is, too fluid to keep in any form upon a plane; as being almoſt like a thick turpentine. The former ſort ſome diſtinguiſh to be a male frankincenſe; and take it to be the officinal *Olibanum*, deſcribed Sect. 2. Claſs 1. And the latter, *thus fœmineum*, or female frankincenſe. But both ſorts fall in with this intention, by having ſomewhat conſiderably penetrating and warm in them; whereby the included humours are agitated, divided, and diſlodged, ſo as to forward their maturation, or ablution into the reſluent current. This drug alſo is very adheſive, and ſticks cloſe

to the ſkin, either by itſelf, or in the compoſition of emplaſters; ſo that on that account alſo it forwards the ſame end.

Claſs 3. *Of Detergents.*

The operation of all topics of this denomination, may be underſtood by what has been ſaid in explication of the third Claſs of the fourth Section, concerning Vulneraries, page 114, and the following of Detergents, page 121. The reader is therefore deſired to turn back thither, for what concerns this claſs.

ÆRUGO ÆRIS, Verdigris. This is a ſolution of copper, the manner of which will be taught under the article of copper, amongſt the preparations of ſimples, at the latter end of this part; as alſo its uſe in medicine.

GUMMI ELEMI. This gum is the produce of the *Hymenæa Courbaril*, Linn. This claims a place under this claſs, upon the merit of the *Linimentum Arcæi*; or *Unguentum e Gummi Elemi*, in which it is a principal ingredient; and is in great account in chirurgical practice, for a digeſter: but it is little met with elſewhere.

OS SEPIÆ, Scuttle-fiſh Bone. This is white and ſpongy, and ſeems almoſt to be calcined by the ſun. It is rough and abſterſive, and uſed chiefly as a dentifrice; for it wonderfully cleanſes the gums, and whitens the teeth. Some commend it in inward uſes; but it is now never met with in preſcriptions of that kind.

VITELLUM OVI, Yolk of an Egg. This is frequently mixed with the turpentines, upon account of its glutinous incarnative qualities. For in ſome intentions the turpentines deterge too much, and draw off the nutritious matter as well as what is morbid. This therefore moderates, in ſome meaſure, the violence of their action.

TEREBINTHINÆ & BALSAMA OMNIA, All Turpentines and Balſams. Theſe all come under this head; and are more or leſs deterſive, as they more or leſs abound with warm, aromatic, and ſubtile particles. Some of them are too cleanſing; and therefore the yolk of an egg, as was taken notice of under the preceding article, is mixed with them, to check their activity; medicines of this tribe ſometimes incarn too faſt, and fill up the ulcer with a fungus, or what is commonly called proud fleſh; which brings on a neceſſity for the ſubſequent claſs. Beſides what has been already ſaid under the different kinds of turpentines above, which was chiefly extracted from authors who wrote ſome time ago, it may be acceptable to acquaint the reader, that our New England traders have found out ways to imitate, or come up very near to the fineſt turpentines and balſams of the Eaſt, from trees of their own growth; inſomuch that not many have ſkill enough to diſtinguiſh them; though the true Balm of Gilead, the Chio, and Straſburg Turpentines, are yet ſingular in their chief characteriſtics, particularly their delicacy of flavour. The counterfeits which ſome make here, are knowable in a little time keeping, by a ſeparation of them into thinner parts, almoſt

almoſt like an oil, and thicker like a coagulum. All the turpentine of late vended for the Venice ſort, hath been thus manufactured from the common turpentine; but that from Straſburg will not eaſily admit of ſuch adulteration, without being diſcovered at firſt ſight; its greeniſh colour, and peculiar fragrancy, being almoſt inimitable.

Claſs 4. *Of Cauſtics.*

Theſe are ſuch things as by their violent activity, and heat thence occaſioned, deſtroy the texture of the part itſelf to which they are applied; and eat it away, as we commonly expreſs it, or burn it into an eſchar. Ripeners and detergers have ſomething ſoft and ſmooth in their compoſitions, which guards them againſt wounding the fibres themſelves: but in thoſe we call cauſtics, the acrid parts are altogether unguarded by any thing of that kind; and by their extreme minuteneſs, aſperity, and quantity of motion, like thoſe of fire itſelf, tear aſunder all obſtacles, deſtroy the texture of the very ſolids themſelves, and change what they are applied to, into a ſubſtance like burnt fleſh; which in a little time, with detergent dreſſings, falls quite off, and leaves a vacuity in the ſubſtance of the part. Theſe are of uſe generally in abſceſſes and impoſthumations, to eat through to the ſuppurated matter, and give it vent; and alſo to make iſſues in parts where cutting is difficult or inconvenient. We have ranked ſome things under this head which do not come up to ſo great a degree of efficacy as to make an eſchar; but becauſe they are able to raiſe the fleſh into bliſters, and make conſiderable changes by the ſame manner of operation, in a more remiſs degree, we thought it moſt proper to give them a place here.

Calx Viva, Quick-lime. The water in which it is ſlaked, as the uſual term is, partakes ſo much of its hot drying nature, as to be wonderfully good in waſhing and cleanſing ſome ſloughly foul ulcers, as alſo tetterous eruptions; its alkaline ſalts, made ſo by calcination, greatly deſtroying thoſe acidities which ouze out and deform the ſkin. It is alſo uſed in internal preſcription, as a drier or an abſorbent, on account of the ſame qualities. The ingredients therefore for diet-drinks of the woods, are frequently boiled in it. It is accounted one of the beſt remedies in a diabetes; for reaſons which the reader may find in Dr. Keil's book of animal ſecretion, too long to be inſerted here; it is likewiſe of great ſervice in fluxes, eſpecially from an acid cauſe. The lime-water made with calcined oyſter-ſhells is a powerful diſſolvent of the human calculus, if drank from one to three pints a-day, and continued a length of time.

Cantharides, Spaniſh Flies. They raiſe bliſters by their pungency and activity; for ſtimulating the cutaneous fibres, they occaſion a greater derivation of fluids to that part: which paſſing the ſkin, and not being able to penetrate the cuticle, they divide them, and elevate the latter up into a bliſter, as has been already hinted, page 152. The ſubtilty of this is manifeſt from their entering

into the blood in ſuch quantities, when only externally applied, as are ſufficiently felt beyond the kidneys, and often occaſions ſtranguries, and great heat of urine. Cantharides taken internally, often occaſion a diſcharge of blood by urine, with exquiſite pain: if the doſe is conſiderable, they ſeem to inflame and exulcerate the whole inteſtinal canal; the ſtools become mucous and purulent; the breath fetid and cadaverous; intenſe pains are felt in the lower belly; the patient faints, grows giddy, raving mad, and dies. All theſe terrible conſequences have ſometimes happened from a few grains: Herman relates, that he has known a quarter of a grain inflame the kidneys, and occaſion bloody urine with violent pain. There are, nevertheleſs, caſes in which this ſtimulating fly, given in larger doſes, proves not only ſafe, but of ſingular efficacy for the cure of diſeaſes that yield little to medicines of a milder claſs. In cold phlegmatic ſluggiſh habits, where the viſcera are overloaded, and the kidneys and ureters obſtructed with thick viſcid mucous matter, cantharides have excellent effects; here the abounding mucus defends the ſolids from the acrimony of the fly, till it is itſelf expelled; when the medicine ought to be immediately diſcontinued. Groenvelt employed cantharides with great ſucceſs in dropſies, obſtinate ſuppreſſions of urine, and ulcerations of the bladder; giving very conſiderable doſes made into boluſes with camphor: and interpoſing large draughts of emulſions, milk, and the like: by this means, the exceſſive irritation which they would otherwiſe have occaſioned, was in a great meaſure prevented. Cantharides are ſometimes managed ſo as to open iſſues, but it is a painful and uncertain way. By the ſame management iſſues may be provoked to make the greater diſcharges; the leaſt particle being put at the bottom of the pea: or touching the pea with an unguent, that has ſome of them in its compoſition.

Cataputia, Spurge. The juice of this plant, which looks white like milk, will, applied to the ſkin, corrode it into an eſchar; but it is ſeldom uſed in any medicinal forms. The common people uſe the ordinary tithimal, or ſpurge, to eat off warts; which it will do by frequent application, if the cruſt, which hardens upon them, be pared off between whiles.

Lepidium, Dittander; called alſo *Piperitis*; and diſtinguiſhed *Latifolium* by Linnæus. It grows on the banks of rivers; and Dioſcorides affirms, that it is good externally applied in iſchiadic pains; but the preſent Pharmacy knows nothing of it.

Euphorbium. We mentioned this amongſt the ſternutatories, Sect. 9. but its wonderful ſubtilty and heat ſometimes give it a place in external compoſitions, which are intended for powerful ſtimuli, and to make a derivation of ſerous humours to the parts where it is applied. Upon this foot it is an ingredient in the *Emplaſtrum Cephalicum*, of the former College Diſpenſatories; which is laid upon the head to draw out ſerous humours, and make a revulſion from thoſe glands which ſuffer by the continual drain of rheum, in common defluxions and catarrhs. The ſame compound is alſo preſcribed to be applied to the feet in fevers, for the like property.

Gos-

Gossipium, Cotton. This in no reſpect has a claim to this claſs for any medicinal virtue; but it is ſometimes ordered to be burnt upon the parts afflicted with the gout; in which caſes its operation is to be accounted for in the ſame manner as that of fire or quick-lime; it having no efficacy but from its burning. Of the effects of uſtion you will find a good account, at page 143, of Van Horne's *Microtechne*.

Moxa. This is a ſort of down from the Chineſe mugwort; it is put to the ſame uſe as the former, and operating by the ſame means only. The notice Sir William Temple has taken of this in one of his eſſays, gave it credit enough to be talked of for ſome time; but I cannot find that any ſucceſs from trial made with it has yet encouraged it to be brought into practice. See *Artemiſia*.

Siliqua Hirsuta, Cow-itch. This ſtands in ſome catalogues of medicinal ſimples; but ſeems good for nothing; and is of no uſe but to gratify wanton people in playing tricks with it. It is brought to us from the Eaſt Indies; and is a down, or hairy ſubſtance, growing on the outſide of the pod of the *Phaſeolus Zurratenſis ſiliquâ hirſutâ*. It is ſo pointed, as like a nettle to ſting the fleſh, but not with ſo painful a ſenſation; this cauſing only an itching; which continues ſo long, and at laſt will grow ſo troubleſome, as to excite much pain in rubbing to allay it; ſo that it frequently occaſions a flux of humours to the parts.

Tithymalus, Sun-ſpurge. *Euphorbia umbella quinquefida; trifida; dichotoma, involucellis obovatis, fol. cuneiformibus ſerratis.* Linn. Its acrimony is not inferior to that of any of the ſpurges, hence it is often applied to warts, (whence it is called Wartwort) for the purpoſe of deſtroying them. Its milky juice only is applied to the wart.

Sapo, Soap. What we mean here, is the black ſoap, which has ſo much of the pot-aſh lixivium in it, that it is extremely penetrating; and this makes it much ordered in cataplaſms, to be applied to the ſoles of the feet in fevers. It is ſo very ſearching alſo, as to reach even the ſeat of the gout in the joints; and cauſe ſometimes the exudation of a great deal of ſerous matter. But the ſeverity of its operation in ſuch caſes, render it hardly to be bore; and therefore ſome have procured ſkill to allay it with a convenient mixture of opium, and ſuch unguents as the *Populneum*; but this is not for unſkilful perſons to meddle with.

Spongia, Sponge. We have rather ſubjoined this to the claſs of cauſtics, than made it a part of them. Its uſe in chirurgery thus far agreeing with the former, that they are all deſigned to drain, or make diſcharge of ſome humours. This is uſed for ſuch purpoſes as a tent, to dilate the orifices of fiſtulas, or of any abſceſſes which are too narrow to make a proper evacuation. And this it does by being put in dry; becauſe filling with the moiſture of the part, it ſwells, and gradually thruſts wider the place it was put into.

SECT.

SECT. XIII.

Simples omitted, or not reducible under the former Heads.

ALCEA, Vervain Mallow. *Malva Alcea.* Linn. Of the ſeveral kinds of this, that referred to by our officinal preſcriptions, is the *Vulgaris Major*, the greater Vervain Mallow of C. B. Its virtues are inferior though ſimilar to thoſe of the common mallow.

AMOMUM, *Amomum.* It is very much in doubt what was the true amomum of the ancients; ſome will have it to be the Paleſtine roſe, and Cluſius deſcribes many plants under this name, which by no means agree with thoſe deſcribed under the ſame name by Dioſcorides. The ſhops ſhew two kinds of ſeed, having the ſame title; one of which is larger, blackiſh, and round, like pepper, or cubebs, with a biting taſte, and ſeems to have been the ſiſon, or ſinon, of the ancients; the other is ſmall and paler: but they are both very little uſed; and moſt ſubſtitute acorus, or ſweet flag-roots in their room. The London College allows of the ſeeds, either of the true ammomum, or the baſtard ſtone-parſley.

AMORIS POMUM, Love-apple. *Solanum-lycoperſicum Galeni.* Linn. This is diſtinguiſhed by J. Bauhine, *Malum aureum odore fœtido*, the ſtinking golden apple; and is the ſame as others call *Lycoperſicon*, the wolf's peach. But it is now ſo little, if at all uſed in medicine, that it deſerves no farther notice.

AMYLUM, Starch, is a commonly known thing, made from wheat-flour: it is uſed in ſome few officinal preſcriptions; particularly in glyſters. In moſt inſtances, if ſtarch-jelly, with agreeable additions, was ſubſtituted for calves-feet jelly, the patient would be a conſiderable gainer by it.

ANTIMONIUM, Antimony, is a ſemi-metal, or rather the ore of a metal; for it conſiſts of common ſulphur, and a reguline part which is the proper metal. This mineral is of no uſe in medicine in its crude ſtate; but being prepared, by the ſeparation of the ſulphur from the metalline part, it affords remedies of great power and efficacy: by different treatment, it yields ſtrong emetics, and cathartics: and one preparation which has the name of diaphoretic; but that it has any certain quality of cauſing ſweat is very dubious. There are other preparations of antimony likewiſe in the hands of particular perſons, to which the ſame property is attributed; but they have given little reaſon hitherto, from any clear experience, to place any great confidence in their pretenſions. As the operations of antimonial medicines are greatly varied by ſlight differences in the preparation, and are thence very uncertain, and in many caſes violent, the uſe of them in regular practice has prevailed but little hitherto; though it appears, from inſtances in the practice of an eminent

nent empiric, that many things are to be performed by a daring uſe of it, that cannot be effected by any of the means received in the authorized practice.

Arbor Vitæ, the Tree of Life. This, according to C. Bauhine, is the Thuya of Theophraſtus, *Thuja*, Linn. but is little known in modern Pharmacy.

Areca, Linn. the Indian Nut; diſtinguiſhed by C. Bauhine, *Palmæ cujus fructus ſeſſilis Faufel dicitur*; the palm tree, whoſe ſquat fruit is called Faufel. But it is altogether neglected by the preſent Pharmacy.

Argentum, Silver. There is little to be ſaid of this metal, conſidered as a part of the *Materia Medica*, ſince only one inſtance of its uſe occurs in the modern Pharmacy, viz. the lunar cauſtic.

Aurum, Gold. This metal is of no uſe in the preſent Pharmacy, nor of any preparations, to which great virtues have been attributed by pretenders of chemical ſecrets, nor are there any remaining in the modern Diſpenſatories.

Agaricus *pedis equini facie*, *Tourn*, Female Agaric, or Agaric of the Oak, called from its being very eaſily inflamable, touch wood or ſpunk. It is the *Boletus acaulis pulvinatus lævis, poris tenuiſſimis*. Linn. This fungus is frequently met with, on different kinds of trees in England; and has been ſometimes brought into the ſhops mixed with the true agaric of the larch: from this it is eaſily diſtinguiſhable by its greater weight, duſky colour, and mucilaginous taſte, void of bitterneſs. The medullary part of this fungus, beat ſoft, and applied externally, has been of late greatly celebrated as a ſtyptic, and ſaid to reſtrain not only venal but arterial hæmorrhages, without the uſe of ligature.

Bamia Moschata, Muſkmallow, or Moſch-ſeed, is a ſpecies of the alcea, or vervain-mallow. It is called *Bamia Egyptica Moſchata*, by Parkinſon;—*Egyptiaca villoſa*, by C. B. *Hibiſcus Abelmoſchus*. Linn. The Egyptians were ſaid to uſe it to ſtrengthen the brain, and as a great cordial. Moſt botaniſts agree, that the Bang, with which the Indians intoxicate themſelves, and play ſtrange tricks under its influence, is a ſpecies alſo of the alcea; being called *Alcea Indica Cannabino folio*, by Dr. Paul Herman, who lived a great while in India. But Dr. Tancred Robinſon will have it a genuine ſpecies of the Cannabis, or hemp: however, none of theſe diſtinctions enter into our Pharmacy.

Bismuthum, Biſmuth. This is of no uſe in the preſent Pharmacy, except in two preparations; the flowers, and magiſtery; which are uſed abroad, particularly in Spain, as coſmetics.

Butyrum, Butter. This is ſeldom met with in medicinal preſcriptions. Every one knows the uſe of it in food. By the texture and nature of its ſubſtance, it tends to relax the ſolids; and ſupplies the juices with particles light and adheſive. Upon the firſt account, it may be good in dry and coſtive conſtitutions; but muſt be hurtful in lax, moiſt, and corpulent ones. By the levity and tenacity of its parts, it is alſo very apt to ſtop in the glands and capillaries; whereby it fouls the viſcera, but particularly the ſmall glands of the ſkin: hence it is apt to produce blotches, and all cutaneous

taneous deformities. And this opinion is much confirmed by the experience of all whoſe buſineſs has made them converſant with young children; they having much of this in their diet; whereby they have been obſerved to grow weakly, corpulent, big-bellied, and very ſubject to breaking out, and to breed lice, and ſuch like uncleanlineſſes; but upon reſtraining them from it, without any other viſible means, they have out-grown all thoſe inconveniences. Oil of olives is much of the ſame nature as butter; and is uſed in countries which abound with it for the ſame purpoſe.

Caseus, Cheeſe. This is ſomewhat of the ſame nature as the former; conſiſting of light, tough, viſcid parts; which, for the ſame reaſon as given before, will occaſion obſtructions with their conſequences: but in this reſpect cheeſe is not ſo liable to thoſe inconveniences as the other; becauſe of the ſubtile acid which it has from the rennet, and gives it a warm biting taſte, and makes it more eaſy of digeſtion and comminution. However, therefore, the palate may be prejudiced, yet without doubt that is the wholſomeſt which is the ſtrongeſt, as we uſually ſay of the rennet. Though indeed all the ſorts tend to viſcidities; and are therefore bad in all caſes which ariſe from ſuch a ſtate of blood: but particularly in diſorders of the breaſt, as pleuriſies and aſthmas.

Carpobalsamum. This is the fruit of the tree that yields the balm of Gilead. *Balſamum Syriacum rutæfolio*, C. B. It is about the ſize of a pea, of a whitiſh colour, incloſed in a dark brown wrinkled bark. This fruit, when in perfection, has a pleaſant warm glowing taſte, and a fragrant ſmell, reſembling that of the opobalſamum itſelf. It is very rarely found in the ſhops; and ſuch as we now and then do meet with, has almoſt entirely loſt its ſmell and taſte. It is of no other uſe in this country than as an ingredient in the mithridate and theriaca, in both which the college ſubſtitute cubebs in its room.

Cera Flava, Yellow Bees-wax. This is a ſolid concrete obtained from the honey-combs after the honey is got out, by heating and preſſing them betwixt iron plates. The beſt ſort is of a lively yellow colour, and an agreeable ſmell, ſomewhat like that of honey: when new, it is toughiſh, yet eaſy to break; by age it becomes harder and more brittle, loſes its fine colour, and in great meaſure its ſmell.

Cera Alba, White-wax is prepared from the yellow, by reducing it into thin flakes, and expoſing it for a length of time to the air; when ſufficiently bleached, it is melted, and caſt into cakes. The beſt ſort is of a clear and almoſt tranſparent whiteneſs, a light agreeable ſmell like that of the yellow wax, but much weaker.

The chief medical uſe of wax is in cerates, plaſters, unguents, &c.

Cineres Russici; Ruſſia Pot-aſh. Pot-aſh is an impure alcaline ſalt, produced from vegetable matters by burning. The ſtrongeſt is brought from Ruſſia, in dark coloured very hard maſſes, which nevertheleſs ſoon deliquiate in the air. This ſort is prepared by burning wood with a cloſe ſmothering heat, and making the aſhes, with a ley drawn from the coarſer part of them, into a paſte, which

is

is afterwards ſtratified with ſome of the more inflammable kinds of wood, and burnt a ſecond time: by this means the ſalt melts, and concretes with the earthy matter of the aſhes, into hard cakes. A purer and whiter ſalt is brought to us from Germany, under the name of pearl-aſhes: this is extracted from wood-aſhes, by means of water, and afterwards reduced into a dry form by evaporation. Theſe ſalts ſhould never be employed for medicinal purpoſes, without due purification: this may be effected by ſolution in cold water, filtration, and exſiccation.

Cuprum. The preparations of copper are violently emetic, and therefore very rarely exhibited internally. Some have ventured upon a ſolution of a grain or two of the metal in vegetable acids, and obſerve, that it acts almoſt as ſoon as received into the ſtomach, ſo as to be of good uſe for occaſioning poiſonous ſubſtances that have been ſwallowed. to be immediately thrown up again. Phyſicians in general ſeem to be agreed, that it has really a virulent quality: and too many examples are met with of fatal conſequences enſuing upon eating food that had been dreſſed in copper veſſels not well cleaned from the ruſt they had contracted by lying in the air. Great care ought to be had, that acid liquors, or even water, deſigned for internal uſe, be not ſuffered to ſtand long in veſſels made of copper; otherwiſe they will diſſolve ſo much of the metal as will give them diſagreeable qualities.

Cerevisia, Ale. Under this article is intended all that belongs to potable malt liquors: and theſe may be conſidered under the following diviſions; 1. Hopped and unhopped drinks. 2. Small or ſtrong. 3. Pale or brown. And, 4. New and old.

1. The difference made by hops is beſt diſcovered from the nature of the hops themſelves. Theſe are known to be a ſubtile, active, grateful bitter. By this means the viſcid parts of the malt are more divided and ſpiritualized, if we may uſe that term: and therefore not only more eaſy of digeſtion and ſecretion in the body; but alſo while in the liquor, prevent it from running into ſuch coheſions, as would make it ropy, vapid, and ſour. But for want of this in unhopped drinks, that clammy ſweetneſs which they retain after working, ſoon turns them acid and unfit for uſe; which is ſooner or later, in proportion to the ſtrength they receive from the malt, and the comminution it has undergone by fermentation. It is much in the opinion of ſome, that ale is more diuretic than beer; that is, unhopped liquor more than that which has hops in it. In ſome particular conſtitutions it may ſo happen; becauſe ale is more ſmooth, ſoftening, and relaxing; and therefore where urine is to be promoted by enlarging the paſſage, that is moſt likely to do it: and this is moſtly the caſe of thin dry conſtitutions. But where the promotion of urine is to be made by attenuating and breaking the juices, and rendering them more fluid, it is certainly beſt anſwered by thoſe drinks which are well hopped. As to the controverſy whether hops tend to breed the ſtone, it is too long to enter into here; and ſeems to have little foundation on the affirmative ſide: but thus far we may venture

ture to ſay, where one inſtance can be produced, of any probability for ſuch an effect from this cauſe, there may many more be brought, which can admit of no doubt, where conſtitutions have been ſpoiled by ale on the contrary extreme. For that manifeſtly fouls the glands, ſtuffs the veſſels with ſlime and viſcidity, makes the body unwieldy and corpulent, and paves the way for cachexies, the jaundice, aſthmas, and at laſt incurable dropſies. The urinary paſſages, which likewiſe it is imagined to clear, it will, by degrees fill with ſlough, and matter of as bad conſequence as gravel.

2. The ſtrength of theſe liquors, makes them of different efficacies, as to any medicinal regards. The ſtronger they are, the more viſcid parts they carry into the blood: and although the ſpirituous parts make theſe imperceptible at firſt, yet when they are evaporated or gone off, which will be in a few hours, the other will be ſenſibly enough felt by pains in the head, nauſeouſneſs at the ſtomach, and laſſitude, or liſtleſneſs to motion. This, thoſe are much the beſt judges of, who have experienced the extremes of drinking theſe liquors, and wines: for a debauch of wine they find much ſooner wear off: and they are more lively and briſk afterwards, than upon over-tippling of malt-liquors; whoſe viſcid remains will be long before they can be ſhook away. Theſe liquors therefore are much the more wholeſome for being ſmall: that is of ſuch a ſtrength as to carry ſome ſmall degree of warmth into the ſtomach; but not ſo as to prevent their being proper diluters of our neceſſary food. People of robuſt conſtitutions, who labour very hard, may diſpenſe with reaſonable quantities of the ſtrongeſt; eſpecially as their food is frequently poor and ſlender enough, the deficiencies of which this ſupplies; and their continual exerciſe and ſtrength of body, digeſts and breaks the viſcidities of the drink into convenient nouriſhment: although in perſons of another habit and way of living, they would only produce obſtructions and ill humours.

3. Malt drinks are diſtinguiſhed into pale or brown, from the malt they are brewed with. That which is ſlendereſt dried, makes it leſs tinge the liquor in brewing; and therefore is called pale; whereas that which is higher dried, or roaſted, as it were, in compariſon of the other, makes it of a high colour; and a mixture of both, of an amber; which name likewiſe ſeveral of thoſe liquors bear. The pale malt has certainly moſt of the grain in it; and is therefore moſt nouriſhing; but alſo, for that very reaſon, it requires a ſtrong conſtitution, ſufficient to digeſt it. Thoſe who drink much of it are generally ſleek and fat in the bloom of their age; but if they are not ſuddenly cut off by fevers, as they generally are, they fall very early into a diſtempered old age; and hardly ſupport the burden of life, with a retinue of diſeaſes. The brown makes a drink much leſs viſcid, and fitter to paſs the ſeveral ſtrainers of the body; but what is very ſtrong of it may be uſed in exceſs enough to bring on the inconveniencies of the former; though a ſingle debauch with it much more eaſily wears off. How far it may be an uſeful hint to thoſe that find their accounts

counts only in the profits of brewing, I cannot be a judge: but for the health of the conſumer, I can venture to aſſure him, that the pale malt brewed with hard waters, ſuch as thoſe of ſprings and wells, is the beſt: becauſe the mineral particles, with which they are impregnated, will help to prevent the coheſions of thoſe drawn from the grain; and enable them to paſs the proper ſecretions the better: as the viſcid particles of the grain will likewiſe defend them from doing the miſchief, which otherwiſe they might occaſion. But ſofter waters, as river and rain waters, ſeem moſt ſuited to draw out the ſubſtance of high dried malts; which retain many igneous particles in their contexture; and are therefore beſt loſt in a ſmooth vehicle.

4. The age of theſe liquors is the laſt thing we are to conſider, by which they become more or leſs wholeſome. And this ſeems to do ſomewhat the ſame as hops: for thoſe liquors which are longeſt kept, are certainly leaſt viſcid; age, by degrees, breaking the viſcid parts, and rendering them ſmaller, makes them fitter for ſecretion. But this is always to be determined by their ſtrength; becauſe, in proportion to that, they will ſooner or later come to their full perfection, and likewiſe to their decay. But when ale or beer is kept until its particles are broke and comminuted, as far as they are capable, then it is always the beſt; but beyond that it will continually be upon the decay, until the finer ſpirits quite make their eſcape, and the remainder becomes vapid and ſour. By what therefore has been already ſaid, it will appear that the older drinks are the more wholeſome; provided they be kept up to this ſtandard, but not beyond it.

There is ſo much of uſe might be ſaid upon this head (becauſe theſe liquors have the greateſt ſhare in our way of living) that it would exceed the bounds we have ſet ourſelves: we ſhall therefore only make this farther obſervation, that thoſe whoſe fortunes permit them to intermix wine with their common drink, are not ſo ſubject to coughs, with other diſtempers of the breaſt, and dropſies; yet they are more afflicted with gravel, and arthritic pains: ſo that although the French may be merry (as what is not the ſubject of mirth to them?) with the Engliſh coughing at church; yet we can return it, that the Engliſh do not ſo often cry out under the torments of the ſtone and gout; unleſs it be the inactive drinkers of their wines.

We have not here given wine a diſtinct article; becauſe it is a foreign liquor; and this work is profeſſedly calculated for our own country: however, as it is ſo much in our common drink, amongſt the higher order of people eſpecially, it may not be amiſs to obſerve, that the ſtronger wines ſeem much the more agreeable to Engliſh conſtitutions; but where they are too ſtrong when neat, they may be diluted with water. Theſe, by their ſpirituouſneſs, wonderfully conduce to the digeſtion of the groſs food of our country; eſpecially the great quantities of fleſh we eat; and are the more neceſſary, by reaſon we eat but little herbs. But the thinner wines, though they are moſt grateful to the ſtomach, and leſs

diſ-

diſorder the head; yet they carry ſomething with them into the blood, which they leave behind in the mucilaginous glands of the joints; where it occaſions thoſe racking pains of the gout, and ſometimes, by degrees, takes away the uſe of the limbs, ſo far as to reduce perſons to the ſtate of cripples.

Ferrum, Iron. This metal holds a capital place in the *Materia Medica*, and has been prepared in more forms than perhaps any ſimple whatever. But though prepared by ſuch various means, its medicinal qualities are the ſame in all different preparations of it, except in reſpect of the degree of their force. It has a ſtyptic, aſtringent power, by which it acts as a corroborative, eſpecially in the inteſtines; and by removing relaxations, and giving a due tenſion to the ſolids, it reforms the vitiated craſis of the blood, and removes the glandular obſtructions. It is, on account of theſe effects, given as an emenagogue and antichloretic, and is eſteemed the moſt powerful of any whatever. It is alſo ſometimes given in hyſteric and other cachectic caſes, and very frequently in proſtrations of the appetite, and weakneſs of the digeſtive faculty; particularly in thoſe occaſioned by hard drinking. It is ſometimes joined to the bark in the cure of agues and intermittent fevers, and has been ſaid to be ſo neceſſary thereto in ſome conſtitutions of the air, that the bark has been abſolutely incapable of effecting a cure without it. It is ſometimes given in the jaundice; but very improperly; for though it acts as a deobſtruent, and may poſſibly excite greater efforts in the liver to diſcharge the ſtagnant bile; yet its aſtringent effects, which are more immediately exerted in the *via prima*, and conſequently on the mouth of the *ductus coledochus*, may contribute greatly to lock up the concreted bile, and conſequently, inſtead of removing, aſſiſts the cauſe of the diſeaſe: and indeed it is the leſs adviſeable to give ſteel in theſe caſes, as mercury has the ſame deobſtruent power, without this aſtringent quality ſo repugnant to the intention.

Elatine; *linaria ſegetum nummulariæ folio non villoſo Tourn.* Fluellin or Female Speedwell. *Antirrhinum foliis haſtatis alternis, caulibus procumbentibus.* Linn. the leaves. This is a low creeping plant, growing wild in corn-fields. The leaves have a very bitter, roughiſh taſte. They were formerly accounted excellent vulneraries, and of great uſe for cleanſing and healing old ulcers, and ſpreading cancerous ſores; ſome have recommended them internally in leprous and ſchrophulous diſorders; as alſo in hydropic caſes. It gives name to one of the officinal honeys; but the plant itſelf is never uſed in the preſent practice, and this preparation of it is in no great eſteem.

Mel, Honey. Monſ. Lemery the younger has a diſſertation of honey, in the Memoirs of the Academy for 1706. He ſays, that the ſpring-honey is the beſt; becauſe the bees are then in their vigour. He eſteems that which is made in Languedoc and Dauphiny; but that of Corbiere, three leagues diſtant from Narbonne, is preferable to all; and they therefore call it Honey of Narbonne. The excellency of this is thought owing

owing to the abundance of roſemary that is to be met with thereabouts; but when he was in thoſe parts, notwithſtanding all the roſemary was deſtroyed by the ſeverity of the preceding winter, yet he obſerved the honey to be as good as ever was known. In our country, Hampſhire honey has the greateſt name; but I cannot ſay, whether for its greater excellency, or the quantity which that country affords. That which is whiteſt and hardeſt is moſt preferred; but the browner and ſmoother ſort is beſt in medicine; becauſe it is not ſo apt to candy, which deforms and ſpoils it: beſides, Lemery the Elder, in his chemiſtry ſays it is more ſpirituous, which very well agrees with its keeping more fluid. And that certainly muſt moſt abound with ſaline parts, which ſhoots ſooneſt into what is commonly called Candy. Schroder's authority alſo juſtifies the choice of Monſ. Lemery; for he prefers the *Mel flavum*; and next to that the *Mel album*. Some naturaliſts and phyſical writers ſpeak of honey being found in many places where there are no bees: and it is by them, therefore, called *Ros*, and *Cibus Cæleſtis*. Pliny, Book 21. Ch. 14. mentions a mountain in Crete, where there was found great plenty of honey; but where never were ſeen any bees. And Galen affirms, Lib. 11. *de ſimp. Medic. Facult.* that he fouud honey perfectly formed upon divers trees and plants. His words are to this purpoſe: I remember I have ſometimes in the ſummer obſerved honey upon the leaves of trees and plants: inſomuch that the hinds have with joy cried out, Jupiter rains honey!

The medicinal virtues of this are many and great; inſomuch that there is no author, from the moſt ancient times, but makes mention of them; it is very penetrating and deterging; and is therefore good in all obſtructions, eſpecially from viſcid and tough humours. In infarctions and ſtuffing of the breaſt, it is of great efficacy; and wonderfully promotes expectoration. In ſhort there is no diſorder from phlegm, or any thing which is the produce of a cold conſtitution, which it is not of ſervice in. But in thin and hot habits it is not good. It was anciently uſed as ſugar is now; and great pity it is, that it is not at preſent more uſed. It does great ſervice to ſuch as are troubled in a morning with thick tough phlegm; with which they cannot be eaſy, until it is hawked up; though it gives a great deal of difficulty and ſtraining to do it. For this purpoſe it is very conveniently eat over-night upon a toaſt; or diſſolved in any warm liquor. This has been much uſed in chirurgery to cleanſe foul ulcers; either by immediate application, or waſhing them in liquors in which it had been diſſolved.

Fuligo Ligni, Wood Soot. This concrete is of a ſhining black colour, a diſagreeable ſmell, and an acrid bitter nauſeous taſte. Its chief uſe is in hyſteric caſes, in which it is ſometimes exhibited in conjunction with the fetid gums: it gives name to a tincture of this kind in the ſhops. Its virtues are extracted both by watery and ſpirituous liquors, each of which, if the ſoot is of a good kind, diſſolve about one ſixth of it. Soot differs greatly in quality according to the wood it was produced from; the more reſinous the wood, the

more the ſoot abounds with oily matter.

Lignum Tinctile Campechense; [L. E.] *lignum Braſilio ſimile, cæruleo tingens* [. B. Campeachy or Logwood; *Hæmatoxylon Campechianum.* Linn. a wood brought from Campeachy in the bay of Honduras. This is uſually met with in large logs, very compact and hard, of a red colour, and an aſtringent ſweet taſte. It has been for a long time uſed by the dyers; but not till very lately as a medicine; a decoction of it, and the extract, are in uſe in our hoſpitals, and ſaid to have proved very ſerviceable in diarrhœas.

Ova, Eggs. The medicinal uſes of theſe have been already taken notice of under the preceding Section in Claſs 1. and Claſs 3. Here therefore we have to do with them only as a part of our food; in which reſpect all know them to be of good nouriſhment, and warm; but ſubject not to paſs well through the ſtomach with ſome people; which may ariſe from their ſoftening and relaxing the membranes; and alſo their tenacity and difficulty of comminution; eſpecially if they are made hard in the dreſſing. The beſt way of remedying this inconvenience is with vinegar, or pepper, or both, as the uſual cuſtom is; becauſe ſuch things aſtringe the coats of the ſtomach, and make them perform their attritions more forcibly, whereby digeſtion is ſooner performed.

Palma Oleosa, the Palm Oil Tree. *Palma Spinoſa major et minor.* Sio. Cat. This is a kind of Palm-tree, growing upon the coaſts of Guinea; and bearing a flat fruit that by expreſſion affords the palm oil, which, when freſh, is of a beautiful orange-colour, of a pleaſant ſweet ſcent, little taſte, and of the conſiſtence of butter. The natives uſe it inſtead of butter; but we apply it only externally, as a ſtrengthener and emollient, and in all kinds of weakneſs of the limbs; in pains, cramps, bruiſes, ſtrains, and ſwellings, &c. See Cacao.

Panis, Bread. Moſt of what concerns this article may be found under Sect. 4. Claſs 2. concerning barley, and all kinds of bread corn. Only here we ſhall juſt obſerve, that the bread which is moſt baked, is eaſieſt of digeſtion, becauſe what the heat does in baking, forwards that comminution of the more viſcid parts, which is to be finiſhed in the ſtomach. The ſalt and yeaſt, or what is added to it as leaven, to give it a gentle ferment, very much aſſiſts to the ſame end; the lighter therefore it is the better. The coarſe bread which the country people feed on, makes a good change of diet with ſome citizens, who live upon meats too nouriſhing; and, for want of ſufficient exerciſe, grow corpulent; becauſe it is deterſive, and will gently purge them at firſt.

Saccharum, Sugar. *Saccharum officinarum.* Linn. The plant which produces this is called *Arundo Saccharifera*, or *Calamus ſaccharinus*, the Sugar-Reed or Cane. Its medicinal effects vary ſomething, according to its different degrees of fineneſs; the browneſt is moſt ſweet, becauſe there is moſt of an oily nature in its compoſition: which makes it more adhere to, and abide longer upon the palate. It is alſo moſt opening, and therefore beſt to uſe in purgative ſyrups, as alſo in glyſters. The finer has more of a

binding quality; but the fineſt of all has a deterſive one; and is therefore uſeful where phlegm abounds; for it cuts and attenuates viſcid humours, and promotes expectoration. The common ſugars have ſo much in them that is groſs and viſcid, that if much uſed they foul the glands; particularly thoſe of the ſkin; and occaſion many ſcorbutic ſymptoms. Many authors too have a notion of their being hurtful to hyſterical and hypochondriacal people; becauſe of their fermentative nature: and for the ſame reaſon alſo forbid them in fevers. The Arabians firſt brought them ſo much into medicine; and contrived a great many ſyrups, which were to have their conſiſtence from them. Sugar-candy is ſugar cryſtallized. The cryſtals are prepared by boiling down ſolutions of ſugar to a certain pitch, and then removing them into a hot room, with ſticks ſet acroſs the veſſel for the ſugar to ſhoot upon: theſe cryſtals prove of a white or brown colour, according as the ſugar was pure or impure.

Salop, Is an oblong and ſomewhat tranſparent root, of a yellowiſh white colour; of little ſmell, and a ſlimy taſte. It is brought from Turkey: and is a ſpecies of the Orchis. It is made into the conſiſtence of thin jelly, and drank as ſuch; it is a reſtorative and ſtrengthener.

Sal Ammoniacum, Sal ammoniac. This ſalt is brought from Alexandria, where it is made by ſubliming the ſoot of the ovens in which camels dung is employed for fuel. It is compoſed of a volatile alkali and the acid of common ſalt (the camels having had this ſalt given them with their food.) The beſt is almoſt tranſparent, colourleſs, and free from any viſible impurities. Pure ſal ammoniac is perfectly neutral, attenuates viſcid humours, promotes a diaphoreſis, or the urinary diſcharge, according to the circumſtances in the conſtition, or as the patient is managed during the operation. Externally it is antiſeptic, and is often employed to advantage in gargariſms, for inflammations of the tonſils, and for diſſolving thick viſcid mucus.

Sal Marinus, Common, or Sea-ſalt. This ſalt is of little uſe in medicine in its unprepared ſtate; though, doubtleſs, in default of other neutral ſalts, it might be uſed with ſucceſs, having both the purgative and diſſolvent power, common to the reſt; but its quality of exciting intolerable thirſt, when taken freely, gives the others a right to preference. It is compoſed of an acid ſpirit, and a natural fixt alkaline ſalt, which is moſt probably the Natron of the ancients.

The firſt of theſe elements, ſeparated from it, and called ſpirit of ſalt, is employed in many important preparations, and the latter makes the baſis of the valuable *Sal mirabile*, or *Glauberi*.

Sal Catharticus Amarus, the bitter purging ſalt; extracted from the bitter liquor remaining after the cryſtalization of common ſalt from ſea water. It was firſt prepared as a cheap ſubſtitute to the ſalt of Epſom, and other purging mineral waters, from which it does not conſiderably differ, either in ſenſible qualities, or medical effects. We uſually meet with it in minute cryſtals, of a ſnowy appearance: diſſolved in water, cryſtallized afreſh, it concretes, if properly managed, into

larger ones, of a rectangulae priſmatic figure, reſembling thoſe of the artificial cathartic ſalt of Glauber, to which they are ſometimes ſubſtituted in the ſhops.

The ſal catharticus is a mild and gentle purgative, operating with ſufficient efficacy, and in general with eaſe and ſafety, rarely occaſioning any gripes, ſickneſs, or the other inconveniences which purgatives of the reſinous kind do.

Serum, Whey. This is accounted a good cooler and ſweetener of the blood. By taking away the curd from the milk, the moſt viſcid and grumous part is gone; and the whey, which remains, is thereby left thinner and finer to paſs the ſeveral ſtrainers of the body: and for this reaſon, where it does not too much chill the ſtomach, it is very good to drink in large quantities, to rinſe the viſcera and particularly the kidneys, by which it is very apt to paſs off. The cuſtom of infuſing fumitory in it, to drink for many mornings together faſting, is of long ſtanding; and is greatly approved of by many ancient phyſicians. Where it is not too nauſeous (for the fumitory is very bitter) it cannot but be an extraordinary good medicine for moderately deterging, and ſtrengthening the inwards.

Spigelia Anthelmis. Linn. Braſilian Worm-Graſs It is alſo called *Anthelmenthia.* It is native in South America, and is cultivated in moſt parts of Jamaica, &c. it riſes to 7, 10, or ſometimes 13 inches in height; the main ſtem ſends out from two to ſix lateral and oppoſite branches, as it riſes, which, like the parent ſtalk, are furniſhed with four oval pointed and almoſt equal leaves, diſpoſed in the form of a croſs at the top; from the centre of theſe it throws out one, two, or more ſpikes, which bear all their flowers and ſeed veſſels on one ſide of them, and are commonly from one half to two or three inches in length.

This medicine is principally noticed for its efficacy in deſtroying worms. It procures ſleep, almoſt as certainly and in an equal degree with opium; but the eyes ſeem diſtended, and appear bright and ſparkling, as they generally do before the eruption of the ſmall-pox, or the meaſles: this effect is perceived after the ſleeping fit is over. In a ſhort time after the firſt doſe, the pulſe becomes regular and begins to riſe, the fever abates, the ſymptoms in general vaniſh, and the worms are diſcharged by the uſe of the ſubſequent purgatives, if not before. A repetition of the doſe is rarely required more than once. Its effects on the eyes of children is ſometimes conſiderable, which requires ſome caution in adminiſtering it; though it is very rare that any remarkable inconvenience follows its uſe.

Of the whole plant, two moderate handfuls are boiled in a pint and half of water to a pint, half of which is given at bed-time, to a robuſt man, and the ſame quantity repeated every twenty-four hours, to a third time: or four ounces of the decoction may be given to a full grown perſon, and two ounces every ſix hours after; and leſs to the weaker and younger in proportion. If its anodyne effects do not diſappear in ſix hours, wait their departute before the next doſe is given; after forty-eight hours the double doſe may be given, &c. as before, as long as required.

Spiritus Vini, Brandy. What is ſtrictly a ſpirit of wine, is only a vegetable highly exalted by volatile ſalts; as was before hinted in the firſt part, concerning principles; but here we mean that which is in common uſe in potable liquors; which is the former, with a large ſhare of phlegm: for what comes up to that ſtandard which the diſtillers call proof, contains near ſeven parts of phlegm to nine of ſpirit. Upon the exacteſt trial I have known made, thirty-two ounces of brandy of common proof, will raiſe over nineteen ounces, or very near, of ſpirit, which would all burn away, but no more; the reſt being mere phlegm. The medicinal effects of this may be found in the explanation of the firſt Claſs of the firſt Section of this Part.

Stannum, Tin. This metal powdered is an excellent *anthelminthic*. Vide Med. Eſſays

Tartarum, Tartar. This is what is found ſticking to wine-caſks, like a hard ſtone; and is either white or red, according to the colour of the wine from whence it comes. The white is preferable, as containing leſs droſs or earthy parts. The beſt comes from Germany; and is the tartar of the Rheniſh wines. It is not uſed but after preparation. We ſhall mention its virtues in their proper place.

Vinum, Wine. So far as is neceſſary to take notice of this may be already found under Cerevisia, in this Section.

Among the great variety of wines, five of them only are uſed in the ſhops, viz.

1. *Vin. Alb. Hiſpan.* Mountain Wine.

2. *Vin Alb. Gallicum*, French White Wine.

3. *Vin. Canarinum*, Canary, or Sack.

4. *Vin. Rhenanum*, Rheniſh.

5. *Vin. Rubrum*, Red Port.

Theſe are uſed as menſtrua and vehicles of other medicines.

Vitriolum, Vitriol, is a ſalt compoſed of that ſpecies of acid which thence takes its name, and ſome metal, according to the kind of which three ſpecies of vitriol are formed: they are diſtinguiſhed by the names of *Vitriolum cæruleum ſeu Romanum*, blue or Roman vitriol, or celeſtial ſtone: *Vitriolum viride*, green vitriol, or copperas; and *Vitriolum album*, white copperas: the ſpecies called formerly *Hungaricum* is not now diſtinguiſhed it being diſputed whether it was the green or blue.

The Roman vitriol conſiſts of the proper acid and copper; it is uſed externally as a cauſtic; and being powdered is almoſt an univerſal cure for the tooth-ach, if thus applied; dip the end of a little tent or roll of cotton wool in the powder, and thruſt the ſame into the tooth, and ſuffer it to continue there for ſix or eight minutes, or longer, if the caſe be obſtinate; but take the greateſt care that none of it be ſo diffuſed in the mouth as to touch any of the other teeth, and that all the ſaliva, whoſe ſecretion will be plentifully excited, be ſpit out and not ſwallowed: for this ſalt has a moſt violent emetic quality, when taken in the leaſt quantity. It is of little uſe in any preparations, except in ſome proceſſes for making the *ens Veneris*; where, from the ſuppoſed authority of Mr. Boyle, it is uſed; but of this ſee more particularly

cularly in the note on that preparation.

The green vitriol, or copperas, is compoſed of the acid and iron: it is ſeldom uſed crude under that name; but it is in every reſpect, excepting purity, the ſame with what is called *Sal Martis*, and prepared by proceſſes proper to Pharmacy. As it affords, when analyſed, the acid which bears its name, and a calx of iron, it is of courſe employed in many proceſſes where ſuch ingredients are wanted, as likewiſe for the production of theſe two important ſubſtances of which it is compoſed, the acid, commonly called oil of vitriol, and the colcothar, or calx of iron.

White vitriol conſiſts of the acid and zinc; it is little uſed in medicine under its own name, but having ſuffered a needleſs purification, it is called *Gilla vitrioli*, and by the College of London now *Sal vitrioli*. Its uſe is chiefly in collyriums; but it has been ſometimes given as a vomit, where extreme violent ones have been required.

Scincus, the Skink, a kind of ſmall lizard, brought dry from Egypt. It ſtands recommended as a great reſtorative; whatever virtues it may have as uſed freſh by the Egyptians, it has none as it comes to us, and ſerves to uſeleſsly increaſe the articles of the mithridate.

Zibethum, Civet. This is an unctuous ſubſtance of the conſiſtence of honey, taken out of a peculiar bag both of the male and female civet-cat. It is a high perfume, and uſually mixed with muſk and ambergriſe. It is ſometimes uſed alone to the ears againſt deafneſs; a little of it being lodged on a bit of cotton. It is alſo reckoned anodyne; and ſometimes mixed with unguents, &c. of that intention.

SECT. XIV.

Of Waters.

WATER is ſo uſeful and neceſſary a part of all that we are concerned in, with regard either to diet or medicine, that we cannot be too inquiſitive into its nature and difference; nor too ſolicitous and nice in our choice of it. It is the main diluter of our food; and is the better for that purpoſe, the freer it is from the mixture of any foreign particles. By this element, or diviſion of matter, we underſtand nothing but a ſimple unmixed fluid; and water, as ſuch, is not manageable, by Pharmacy, to alter it for the better. But as it is not to be met with unmixed with ſome heterogeneous particles, we ſhall be better inſtructed how to uſe and chuſe it for the purpoſes of life, by inquiring how it is altered and affected by the mixture it receives of ſuch foreign matters, in the

ſeveral

ſeveral conditions we meet with it.

In this ſearch we find the beſt helps from ſome ſhort hints (and ſuch only we have room for) of Dr. Mead in his Eſſay on Poiſons.

Water is of ſo conſtant a ſervice, not only for our drinks, but alſo in preparing our fleſh and bread, that it may juſtly be ſaid to be the vehicle of all our nouriſhment: ſo that whenever this happens to put on other properties than are neceſſary to fit it for this purpoſe, it is no wonder if in its paſſage through the body theſe make ſuitable impreſſions there.

For this reaſon, the choice of water for drink, amongſt the ancients, was made by weight; the lighteſt being preferred, as moſt free from all heterogeneous bodies.

A great neglect, in this reſpect, the doctor charges upon the inhabitants of this city; and that is, in chuſing ſtagnating impure well-water for the brewing of beer, and making other drinks. Such a fluid indeed has a greater force and aptneſs to extract the matter out of the malt, than is to be had in the more innocent and ſoft liquor of rivers: but for this very reaſon it ought not, unleſs upon mere neceſſity, to be made uſe of; this quality being owing to the mineral particles and aluminous ſalts with which it is impregnated.

A late author, Dr. J. H. in a book called *Scelara Aquarum*, or A Supplement to Mr. Graunt on the Bills of Mortality, by ſearching into the firſt accounts of the diſtemper we call the Scurvy, deſcribed by Pliny and Strabo, under the promiſcuous names of Stomocace and Scelotyrbe; and examining the authentic hiſtories of it in later years, made by the moſt obſerving phyſicians in thoſe countries where it was unhappily revived, as Olaus Magnus, Balduinus, Ronſeus, J. Wierius, Solomon Albertus, &c. finds that the origin of it was in all times and places charged upon the uſe of unwholſome ſtagnating warers. Then by comparing together the clayey ſtrata of the earth about the cities of London, Paris, and Amſterdam, he ſhews, that where the water is worſt, there this malady is moſt rife. So that he has put it out of all doubt, that moſt of the perplexed and complicated ſymptoms, which are ranged under this one general name, if they do not entirely owe their birth to the malignity of this element, do however acknowledge it to be their main and principal cauſe.

And indeed Hippocrates himſelf, as he has very plainly decyphered this diſeaſe by the title of σπλῆνες μεγάλοι, or great milts, ſo he does very particularly in another treatiſe take notice, that drinking of ſtagnating well-waters muſt neceſſarily induce an ill diſpoſition both of the milt and belly. Sanctorius teaches us, in his *Medicina Statica*, Sect. 2. Aphor. 2. that heavy water converts the matter of tranſpiration into an ichor: which being retained, induces a cachexy.

What miſchiefs will enſue hereupon, every one ſees; not only pains in the limbs, livid ſpots in the ſurface of the body, ulcers, &c. from the acrimony of the undiſcharged moiſture; but many alſo of thoſe perplexing ſymptoms, which go by the name of hyſterical and hypochondriacal, may take their riſe from the ſame

ſource: for the before cited *Sanctorius* has remarked, in Sect. 3. Aphor. 13. that the *flatus* or wind, ſo inſeparable from thoſe caſes, is no other than the fluid of perſpiration crude and unfiniſhed. If the inconveniences are oftentimes not felt, at leaſt not till towards a declining age, in ſtrong and active habits of body; yet I am from very good experience aſſured, that they deſerve conſideration in weaker conſtitutions and a ſedentary life; eſpecially of the more tender ſex: a worthy perſon, who had formerly an afflicted life, from the violent returns of colic pains, till ſhe was, with happy ſucceſs, adviſed by the noble Van Helmont not to drink, as ſhe then did, beer brewed with well-water; and her health is even now ſo far owing to this management, that an error in it is unavoidably followed with the wonted complaints.

For theſe reaſons Pliny tells us, that thoſe waters are condemned, in the firſt place, which, when boiled, do encruſt the ſides of the veſſels: and that our well-waters do this, no body who looks into the tea-kettles of our gentlewomen can be ignorant. And indeed in ancient times, when phyſic was more a ſcience, which is now more a trade; as that part of it which relates to diet was more carefully ſtudied than it is now-a-days; ſo this point particularly, of which we are treating, was of ſo great moment, that Hippocrates, who wrote the beſt book on the ſubject that ever was publiſhed, has in a great meaſure accounted not only for the diſeaſe, but even for the temper and diſpoſition of the people of ſeveral countries, from this difference of the waters with which nature has ſupplied them.

Aqua Fontana, Spring-water. By the courſe of this we are liable to a mixture, in one ſort or other, of all the metalline or mineral particles which lie concealed in the earth. For the waters of all ſprings (that is all waters which are circulated or ſtrained through the earth, and which we call ſprings, when they break out upon the ſurface) waſh off and carry along with them ſome particles of the ſoil they travel thro'; ſo that they become ſalubrious or miſchievous, according to the nature of the mineral matter, which they have taken up, and joined with, in their courſe. So far as this anſwers any medicinal purpoſes, and makes the water in any reſpect purgative, will come under inquiry in the article of Acidulæ. Here, therefore, we have only occaſion to be ſatisfied what are beſt for the common occaſions of life, as they muſt neceſſarily make a part of our diet; and theſe are the lighteſt, as the preceding reaſonings demonſtrate, and ſuch as are freeſt from mineral mixtures.

That ſpring-waters are thus loaded in their current, cannot be doubted by thoſe who have ever experienced the taſte and efficacy of our ordinary medicinal ſprings; and though our own country furniſhes us not with any ſuch inſtances, unqueſtionable authority informs us of ſome ſprings which bring along with them poiſonous and deadly companions: which muſt be corroſive corpuſcles mixed with their water, that cannot fail (when forſaken, in the canals of the body, by their vehicle) to

do the ſame miſchief as they would if taken by themſelves undiluted; only with this difference, that they may, in this form, be carried ſometimes farther into the animal frame, and ſo diſcover their malignity in ſome of the inmoſt receſſes. Thus the *Fons Ruber* in Ethiopia, mentioned by Pliny, about which abundance of native minium or cinnabar was found, ſhewing its ill effects chiefly on the brain: which gave occaſion for Ovid to ſay of it,

—Si quis faucibus hauſit,
Aut furit, aut patitur mirum gravitate ſoporem.

But there is no need of enlarging farther on this head; ſince any mineral poiſon may impart its deadly quality to perfluent ſtreams: and accordingly there are inſtances of arſenical, mercurial, and other fountains, of which the hiſtories may be ſeen in the collections of *Baccius de Thermis*, Lib. 6. and a very remarkable one in the Philoſophical Tranſactions, N° 8.

We are taught many curious ways of trying what are the principal mixtures in theſe waters; which muſt be of great uſe to ſuch as travel in unfrequented countries; and where neceſſity often forces them to unexperienced ſprings: but that would be too long for as here; we ſhall therefore only drop this general rule, that thoſe waters are beſt for uſe which are lighteſt: and this may be determined with the utmoſt exactneſs, by weighing other convenient bodies in them; which we are taught by the common hydroſtatical ſcales, now any where to be had in the ſhops. The common experiment of trying them with ſoap is alſo uſeful; for the more remote they are from lathering with that, the more unfit they are for uſe. Thoſe ſprings which ariſe from a chalky earth, are generally accounted beſt; which may be either for their not giving to the perfluent waters any thing unwholeſome; or their abſorbing many mineral particles from them in their percolation.

There may circumſtances happen, where ſpring-waters ſhall be found of good ſervice drank alone. In ſome ſtomachs relaxed from intemperance, theſe drank in a morning, not only help to waſh off a great deal of ſlimy filth, the remains of a debauch, but alſo to aſtringe the fibres, and draw up the membranes to a due tenſity. And the more loaded ſuch waters are with ſome mineral particles, eſpecially of the alluminous or nitrous kind, the more abſterſive and more reſtringing will they be, and the better anſwer thoſe intentions.

——Fluvialis, River water. This likewiſe has its various qualities from the different ſoils it travels through, though not ſo much as that of ſprings. River water may be reckoned a compoſition of ſpring and rain waters together: near the head therefore of any conſiderable ſpring, that may partake much of the ore or mineral, which the ſpring waſhes along with it; but at a greater diſtance it may be affected and charged with its proper ſoil. For in its progreſs the mineral particles will fall, or be entangled and loſt in the ouzy and clayey mixtures they paſs through. As the ſpring waters take up, in their meanders, many heavy mineral particles; ſo theſe either waſh up from ouzey bottoms, or have

have ſo much filth drained into them eſpecially near large towns, that they abound with a foreign matter of a very different nature; and which ſometimes will ferment, as is manifeſt in that of the Thames; though ſome travellers affirm no other waters do the ſame. Of this kind therefore thoſe which come into uſe with ſuch mixtures, may be more or leſs convenient in particular caſes and conſtitutions, according to the nature of what they have got ſo mixed. But, in general, theſe waters are much ſofter than ſuch as travel under-ground; and therefore are fitter for uſe where hard waters are condemned.

PLUVIALIS, rain-water. This is reckoned the moſt ſimple of all: and to come neareſt a homogeneous fluid; and therefore, as a diluter, it is to be preferred. Quercetan, and many others, lay ſtreſs upon the circumſtances of theſe falling, whether ſuddenly or more ſlow, and from what quarter of the heavens the clouds bring them: but this ſeems to be as little to the purpoſe, as under the former articles what parts ſprings or rivers run from, as to the diviſions of the globe, and their poſition to the ſun. Some are of opinion, that rain-water brings ſomewhat of a nitrous volatile ſalt along with it; and think, by that means, it gives fertility to the earth: but if it does ſo, they muſt be too fine to injure any of the ſecretory ſtrainers, by obſtructing them; and too active or ſuſceptible of motion to draw into contact, and form hurtful concretions; and indeed, in many inſtances, ſuch a mixture might be of ſervice. Therefore whatſoever rain-water brings along with it, it is notwithſtanding certainly the moſt ſimple and elementary of any; and the propereſt diluter or vehicle that we can be ſupplied with.

——PUTEALIS, Well-water. This is ſubject to all the inconveniencies of ſpring-water; with this additional miſchief, that ſtagnating ſo long in the well, it may there take up, from the bed it lies upon, ſuch particles, farther than what is brought along with it thither, as to render it ſtill more unwholeſome: whereas that which breaks out in ſprings, is preſerved higher than ſuch heavy matter is uſually lodged. Of all waters, therefore, whatſoever, well-waters are the moſt to be diſtruſted; and of thoſe, ſuch chiefly as come out of the deepeſt wells.

——PALUSTRIS, Pond-water. This may include all ſtagnant waters, which are generally from rain only; for here we do not ſuppoſe any ſprings concerned. To this therefore no more can be ſaid, than that where it is upon a clean bottom, it comes ſo near to rain water, as not to be diſtinguiſhed from it: but generally even the motions of the wind, or ſome other cauſes, as the treading of cattle, ſo diſturb theſe, as to force up with them ſuch filth, as there corrupts and ferments; which makes ſuch waters the moſt uncleanly and diſagreeable of any.

——NIVEALIS, Snow-water. This undoubtedly brings a conſiderable portion of nitre along with it: ſo as to make it deterſive and diuretic. But it comes ſo little either into our diet or medicine, that we need not be very ſolicitous about it. As for what waſhes into the rivers, and accidentally comes

comes to us that way, after the fall of great ſnows, it is loſt ſo much, that it can hardly be imagined to communicate any efficacy to the ſhare we have of it.

——MARINA, Sea-water. The ſaltneſs of this is ſufficiently known; and how upon that account it is both diſagreeable and unwholeſome in our food: and therefore never experienced but in extremities.

ACIDULÆ, Medicinal Waters. Though theſe waters have long gone by this name, it is but very lately that it was known wherein their acid conſiſted. Dr. Prieſtley was one of the firſt who diſcovered and demonſtrated that the gas (as it is called by Helmont, and the fixed air, by others,) is the acid of theſe productions. See Dr. Prieſtley's Directions for impregnating Water with Fixed Air, &c. We ſhall conſider theſe waters under theſe two diviſions only, of Purging and Chalybeate.

AQUÆ PURGANTES, Purging-waters. There is no county ſcarce in England, but diſcovers ſome of theſe ſprings. Thoſe about London are chiefly Epſom, Dulwich, Acton, North-Hall, and Kilburn; though there are many others, and perhaps as good, but of inferior note. They all agree in this, that they abound with a ſalt of a neutral nature; which they take up and waſh along with them in their paſſages. This is not only manifeſt to the taſte; but upon evaporation they leave it in conſiderable quantities behind. It is not of moment enough to diſtinguiſh the ſeveral kinds of theſe ſalts, which ſome perſons of great leiſure have done. By this ſaline mixture, theſe waters greatly deterge the ſtomach and bowels, and carry along with them, by ſtool, a great deal which it may be beneficial to have well diſcharged. They do often therefore good ſervice where the *Primæ Viæ* want cleanſing; and this is to be done with a few repetitions: but if perſons go no longer (as it is too cuſtomary, ſome thinking the more they purge, the farther they are from being ſick) the ſalts will too much get into the blood; which by their groſſneſs will gradually be collected in quantity enough in the capillaries and glands, to obſtruct them, and occaſion fevers *peſſimi moris*. For all thoſe fevers which come after long purging, eſpecially after the waters, are of the worſt kind, and often fatal. Some ſoften theſe waters by boiling up milk enough with them to make a kind of whey, which is agreeable to ſome tender perſons, who might be too much chilled with the water raw. Theſe ſometimes do great ſervice in ſuch colics as invert the periſtaltic motion of the inteſtines; and, as people commonly expreſs it, twiſt the guts; where the patient can walk about, or be kept conveniently in an erect poſture; for their weight preſſing downwards, and their moiſture ſoftening and relaxing the fibres, concur to promote their paſſages quite through; wherein conſiſts the cure in ſuch caſes. But it is here ſuppoſed that they are boiled with ſome milk; a quart of water with half a pint is the uſual quantity: for that much contributes to its relaxing quality.

Dr. Grew, who was a moſt worthy phyſician, and an induſtrious experimenter himſelf, made trial how much ſalt theſe waters would

would leave upon evaporation: and found that a gallon left about two drachms, or near, according to my beſt remembrance, for I have not his writings by me. He likewiſe found the ſalt thus procured anſwered the virtues of the water in its cathartic qualities. Of this an account was given before the Royal Society, in a Latin Diſſertation, or Lecture. But the avaricious craft of a certain furnace-philoſopher could not let this uſeful diſcovery in natural knowledge reſt under the improvement and proper uſe of perſons of integrity; but he pretended to make a great quantity for ſale; and, to recommend his ſalt, tranſlated the Doctor's Lecture upon it into Engliſh, in order to give away in his ſhops as a quack-bill. The doctor not ſuſpecting ſo vile a fraud, interrupted him not in that; but was forced to tranſlate his own Latin, to reſcue it from the blunders of the chemiſt. And thus went off ſomewhat for the true ſalt of the purging waters; until competitors in ſuch fraudulent practices forced the price to be lowered; ſo that what was firſt ſold at one ſhilling an ounce, and could not honeſtly be made under, is now come to be ſold for not much above thirty ſhillings per hundred weight, which does not much exceed three pence per pound. This ſalt is prepared from that bitter liquor called bittern, which runs from common ſalt in the making, and is in every reſpect as good and uſeful as the true Epſom ſalt.

This ſalt is of ſervice in cathartic infuſions; for a drachm in an infuſion of ſena, rhubarb, and ſuch like things, helps to extract the purgative virtue the better, and aſſiſt their operation.

Of the waters above named the ſtrength is much the ſame; if there be any difference, thoſe of Dulwich ſeem to be the quickeſt in operation. They are all of them beſt at the well-head, tho' they are uſed in town ſome days after they are taken up; for by ſtanding they let fall ſome mineral particles, which ſeem neceſſary in their operation.

AQUÆ FERRUGINEÆ, Steel-waters. Theſe are likewiſe in many parts of England. Thoſe of moſt note are of Tunbridge, Scarborough, Hampſtead, and Iſlington. The ſmall difference of ore, or mineral mixtures, are not here alſo worth our while to take up room about: it ſufficeth, that it is out of all doubt that the quality, to which they owe their uſe in medicine, is received from iron; for of this their taſte, and what they let fall from ſtanding, as well as the ruſt they fur the borders of their ſprings with, beſides the known experiment of galls, put it out of all diſpute. In conſidering therefore the medicinal efficacy of theſe waters, we are to regard them as an iron diſſolved in an aqueous menſtruum. And becauſe that mineral, with the many preparations made of it, will preſently come in our way to examine in this light, we ſhall ſay the leſs of theſe here; only obſerving what is neceſſary of a chalybeate medicine in this form.

There is perhaps not any one alterative of greater efficacy than thoſe from this mineral; and yet with how little care or due conſideration do many run into a courſe of the waters impregnated with them? for they are not of the number of ſuch things which may be uſed in wantonneſs or diverſion.

ſion. It may be depended on, whoſoever meddles with theſe, is much the better or worſe for them afterwards. Whoſoever takes iron in medicine, if it paſſes the firſt digeſtions, and mixes with the blood, will find it to warm him, and make his veins full and turbid. In plethoric habits, therefore, theſe waters are to be forbid: and how many fevers are obſerved after drinking them (which are manifeſt from that extreme,) as alſo vertigoes, epilepſies, and apoplexies? For raiſing the blood too high, crouds the veſſels, and makes thoſe in the brain preſs upon the conveyances of the nervous fluid; whereby they put the whole ſyſtem into diſorder, and occaſion the foregoing miſchief. In moſt young perſons proper evacuations ought to be made while they are drinking; and eſpecially if, as with many, they render them more coſtive.

To ſuch as by long illneſs, or any other cauſe have their blood rendered thin, poor, cold, and watery, theſe waters will give wonderful aſſiſtance. In a chloroſis, which is commonly called the green-ſickneſs, and in all obſtructions of the viſcera, eſpecially of the kidneys and uterus, they do great ſervice. In a relaxed tone of the ſtomach likewiſe, from crapulas, or any other cauſe, they greatly aſtringe the fibres, and bring them to a due tenſity; although at firſt their roughneſs occaſions them to be thrown up again by vomit.

BALNEA, Baths.

Of theſe we have two kinds; the hot and cold.

BALNEA CALIDA, or THERMÆ, Hot-baths. The chief we have of this kind in our country, is that famous one near Wells in Somerſetſhire; another there is of inferior note at Buxton. We ſhall leave it to naturaliſts and philoſophers to account for the production of theſe waters; and content ourſelves with obſerving, that they greatly abound with a volatile ſulphureous acid; which appears beyond all doubt, from its turning ſilver or copper blackiſh. And ſome who have been ſo curious as to boil it in oil, affirm it to have made a good balſam of ſulphur.

From the principal mineral ingredients then, with which this water is impregnated, we may pronounce it a ſoft healing ſubaſtringent balſamic. We add ſubaſtringent, becauſe we never meet with ſulphur, even in the ſublimed flowers, which had not ſome portion of ſalt in its compoſition; which when boiled in oil, as in making the *Balſamum Sulphuris*, ſhoots like needles, or the branches of *Sal Ammoniac*: ſo that it is very improbable theſe waters ſhould take up any ſulphur in their ſubterraneous current, without alſo bringing ſome of that ſaline part along with them; which it is never found without above ground; and eſpecially when we conſider, how much more it is in the nature of water to attract and join with ſuch particles, than thoſe which are purely ſulphureous.

From theſe premiſes, we are very naturally directed to the caſes wherein theſe waters, and bathing in them, muſt be of ſervice. And firſt of all, in langours, debility, and any waſte of the conſtitution, that is not out of a poſſibility of repair, they are like a fomentation, which both ſupplies and ſtrengthens

ſtrengthens the parts all over the body at once; and by gentle ſhaking and undulating the fibres, helps forward thoſe animal motions, which are ready to be at a ſtand. In old pains and aches, which have been the remains of nervous diſtempers, and where ſome particular part continues contracted, or has any humours fixed upon it, which it cannot diſlodge; theſe waters pumped upon ſuch parts, hot from the ſpring, do more towards a cure than all the compoſitions of Pharmacy. General bathing in theſe ſprings cannot but wonderfully open that almoſt infinite number of ſecretory orifices upon the ſurface of the ſkin, and clear the cutaneous ducts of matter which is apt to ſtick in them: by the aperture of which ſpiracula, the fluids of the whole body have more room to flow, and proper vents given them to reek out a great deal, which it is of ſervice to the œconomy to get rid of. Thus are rheumatiſms of many kinds, arthritic pains, contracted and paralytic limbs, with all the deplorable attendance of aches and lameneſs, cured by what is more a pleaſure and enjoyment than a medicine.

Theſe ſulphur fountains, likewiſe, inwardly uſed, to amazement warm and ſtrengthen a decayed ſtomach; eſpecially if relaxed and almoſt worn out with luxury and debauch. The moſt grievous nauſeas and vomitings, from theſe caſes, have been removed by them. For they both ſoften again with proper moiſture the fibres which have been rendered incapable to vibrate by the uſe of hot burning ſpirituous liquors; and, at the ſame time, draw them into a greater tenſity; as a cord, which relaxes with over-drying, fills up and ſtraitens upon the contact and attraction of a convenient moiſture. The ſmall ſhare of a fine ſalt, which likewiſe attends, and is as it were wrapt up in the particles of ſulphur, cannot but contribute ſomewhat in reſtoring the tone of ſuch decayed parts. But beſides the benefit theſe particularly do to the ſtomach, they alſo carry along with them, into the moſt remote receſſes, a balſamic of nature's own preparation; whereby ſuch decays, as we have been ſpeaking of, in the ſtomach, or in any of the viſcera, from abſceſſes, ulcerations, or any the like cauſes, are with great ſucceſs relieved. And particularly, if they be of the kidneys or urinary paſſages; becauſe they waſh thro' them in greater plenty, than where they come only by the ordinary courſe of circulation. Indeed the excellencies of theſe ſprings deſerve a volume to do them juſtice; but we have room here only for ſhort hints. Such as deſire more, may conſult Guidott Pierce's Bath Memoirs; and Oliver on Bath Waters.

Balnea Frigida, Cold-Baths. Theſe have been long baniſhed out of medicine; and hardly heard of during the uſurpation of monkiſh philoſophy and enthuſiaſtic chemiſtry. The ancients had them in the greateſt eſteem; and by good luck ſome improvements of reaſoning in phyſic, from geometry and mechanics, have brought them into tolerable good countenance again: and the preſent age can furniſh us with abundance of noble cures performed by cold-bathing, which were long, in vain, attempted by the moſt efficacious medicines. What a de-

lightful

ſightful ſight it is to a perſon of humanity and tenderneſs towards his fellow-creatures to ſee the number of crutches, and other artificial aids of a cripple, hang up, as certificates of the benefit ſo many poor wretches have had from the bathing only in cold water, in the apartments where theſe ſprings are maintained!

This branch of the means of cure comes under demonſtration, both as to the manner and quantity of its efficacy, as much as any thing in the whole compaſs of phyſic. The gravitation of fluids, the preſſure of the atmoſphere, and its differences, and that of water with its different weights upon any given ſurface, come into calculation with as much eaſe and plainneſs, as any thing that can be ſtated in common arithmetic. And the alterations which the animal fluids are ſubjected to, under ſuch different weights, is as eaſy to apprehend. For the theory of this affair, the reader may ſtudy Dr. Mead, *de Imperio Solis ac Lunæ*; Wainwright of the Non-naturals; and a late edition of Sanctorius's *Medicina Statica*, with explanations.

There are hardly any chronic diſeaſes but the cold-bath may be made uſe of to advantage, if the conſtitution has not ſomewhat particular that forbids its uſe; which are chiefly corpulency and unſound viſcera. In very fat perſons, the fibres are ſo ſtuffed round, and as it were bolſtered up, that they have not room to vibrate and contract with the ſudden ſqueeze of the bath; inſtead therefore of enforcing their ſprings, and ſhaking off any unneceſſary incumbrances, they will only be ſtrained to no purpoſe, and conſequently weakened; for whereſoever an effort is made to remove any thing by an elaſtic body, if the firſt exertion fails, every impetus afterwards languiſhes, and the ſpring is ſpoiled. And in unſound viſcera, or where any part is much weaker than the reſt, ſuch an additional force, as the ſudden contraction the bath gives to the ſolids, which preſs the fluids on that part, very much to its damage; which may occaſion either the burſting of the veſſels, or promote the diſcharge of ſome ill humours upon that part which otherwiſe might drain off elſewhere.

But where nothing of this nature forbids the uſe of the cold bath, whatſoever is to be effected by bracing the ſolids, invigorating the vibrations, and accelerating the blood's motion, is with certainty to be had from thence. In diſeaſes, therefore, from a ſizy blood, and a lentor in the animal juices, if the elaſticity of the veſſels is not worn out with age or debauches, relief will be had from the cold-bath; as rheumatiſms of the moſt obſtinate kind, hypochondriacal affections, and debility, from too tender, indulgent, and inactive ways of life. In all inconveniences, likewiſe, proceeding from a bad tranſpiration, or when humours are thrown upon the ſurface, which cannot get through, but ulcerate, blotch, and deform the ſkin, this remedy will be of ſervice. For, upon immerſion, the whole nervous ſyſtem is ſo ſhook, that the very capillaries feel the influence, and the minuteſt paſſages are forced open by an increaſed velocity of the circulating fluids; whereby the ſkin will

will be cleared, and, inſtead of entertaining groſs acrimonious humours, tranſmit only the imperceptible matter of perſpiration. But in a work deſigned to improve and recommend medicine, it may not be well perhaps to launch out too far in commendation of cold water; we ſhall therefore refer, for more information upon this head, to the learned letters of Sir John Floyer upon the Cold Bath; and what in latter editions is annexed thereto by Dr. Baynard.

CHAP.

CHAP. II.

Diſtribution of Medicinal Simples, according to their ſenſible Qualities.

SECT.

I. ACIDS.
II. INSIPID EARTHY *Subſtances, capable of* ABSORBING ACIDS.
III. INDISSOLUBLE EARTHS.
IV. GLUTINOUS *vegetable and animal Subſtances.*
V. UNCTUOUS *vegetable and animal Subſtances.*
VI. ASTRINGENTS.
VII. SWEETS.
VIII. ACRIDS.
IX. AROMATICS.
X. BITTERS.
XI. *Subſtances of* COMPOUND QUALITIES.
XII. *Simples not reducible under the foregoing Heads.*

SECT. I.

ACIDS.

Claſs 1. *Mineral:* the acids of vitriol, nitre, and common ſalt.

Claſs 2. *Vegetable:* { *native*; as ſorrel, juice of lemons, barberries, and other fruits. *produced by fermentation*; as vinegar and tartar.

THE firſt of theſe claſſes, viz. the mineral acids, are diſtinguiſhed by the names of the concretes from which they were at firſt extracted; the vitriolic from vitriol, the nitrous from nitre,

and the marine from common ſea-ſalt.

All theſe acids are highly corroſive, unleſs largely diluted with water, or united with ſuch ſubſtances as ſuppreſs their acidity. Mixed haſtily with vinous ſpirit, they raiſe a violent ebullition and heat, accompanied with a copious diſcharge of noxious fumes; a part of the acid unites intimately with the vinous ſpirit into a new compound, void of acidity, called dulcified ſpirit. The marine acid is much leſs diſpoſed to the union with ſpirit of wine, than either that of vitriol or nitre: nevertheleſs, many of the compound ſalts reſulting from the combination of earthy and metallic bodies with this acid, are ſoluble in that ſpirit, while thoſe with the other acids are not. All theſe acids effervеſce with alkaline ſalts, both fixt and volatile, and form with them neutral ſalts.

The nitrous and marine acids are obtained in the form of a thin fluid, the acid part being blended with a large proportion of water, without which it would be diffuſed into an incoercible vapour: the vitriolic acid ſtands in need of ſo much leſs water for its condenſation as to aſſume commonly an oily conſiſtence (whence it hath been called oil of vitriol) and in ſome circumſtances even a ſolid one.

The vitriolic acid, in its concentrated liquid ſtate, is much more ponderous than either the nitrous or the marine; it emits no viſible vapours in the heat of the atmoſphere, but imbibes moiſture therefrom; the nitrous and the marine emit copious corroſive fume, the nitrous yellowiſh red, and the marine white ones. The corks uſed to ſtop the bottles which are uſed to contain theſe acids, are corroded, and tinged by the vitriolic of a black colour, by the nitrous of a yellow, and by the marine of a white.

Alkaline ſalts, and the ſoluble earths and metals, abſorb from theſe acid liquors only the pure acid part: ſo that the water may be evaporated by heat, and the compound ſalt left in a dry form.

The vitriolic acid, diluted with water, eaſily diſſolves zinc and iron; in its concentrated ſtate, it requires a boiling heat to enable it to corrode moſt of the other metals. The nitrous acid is the common menſtruum of all metallic ſubſtances except gold and the metallic part of antimony; of which two, the proper ſolvent is a mixture of the nitrous and marine acids, called aqua regia. The marine acid diſſolves zinc, iron, and copper; it requires much art to make it diſſolve any other metal. The vegetable acids diſſolve zinc, iron, copper, lead, tin, and part of the metal of antimony.

The medical effects of acids, duly diluted and exhibited in proper doſes, are, to cool, quench thirſt, and allay inordinate motions of the blood. By theſe qualities, in hot bilious temperaments and inflammatory diſorders, they frequently reſtrain immoderate hæmorrhages, and promote the natural ſecretions; in ſome kinds of fevers they excite a copious diaphoreſis, where the warm medicines called alexipharmic, tend rather to prevent this ſalutary diſcharge.

Vegetable acids, particularly the native juices of certain plants and fruits, have ſome degree of a ſaponaceous quality; by means of which they attenuate or diſſolve viſcid

viſcid phlegm, and deterge the veſſels; and thus prove ſerviceable in ſundry chronical diſorders. Inveterate ſcurvies have ſometimes yielded to their continued uſe, eſpecially when given in conjunction with medicines of the acrid or pungent kind: experience has ſhewn that the acrid antiſcorbutics have much better effects when thus managed, than when exhibited by themſelves; hence in the *ſucci ſcorbutici* of our Diſpenſatory, Sevile orange juice is uſefully joined to that of the *cochlearia* and *nauſturtium*.

The mineral acids inſtantly coagulate blood: the vegetable dilute it, even when inſpiſſated or thickened by heat; in which ſtate, watery liquors will not mingle with it. Hence in ſome fevers, where water runs off by the kidneys almoſt as pale and inſipid as it was drank, vegetable acids ſoon render the urine of the due colour and quality. The mineral acids (the ſpirit of nitre in particular) combined with vinous ſpirits, have the ſame effect.

Acids of every kind are prejudicial in cold, pale, phlegmatic habits, where the veſſels are lax, the circulation languid, bile deficient, and the power of digeſtion weak. In theſe caſes, an acid is often generated in the ſtomach, from milk and moſt vegetable foods, which, whilſt it continues in the firſt paſſages, occaſions uneaſineſs about the ſtomach, flatulencies, ſometimes griping pains of the bowels, vomiting, or the *cholera morbus*.

SECT. II.

Earths.

The different kinds of earths are,

I. Earths, capable of abſorbing acids. II. Earths not ſoluble in acids.

1. THE earths ſoluble in the nitrous, marine, and vegetable acids, but not at all, or very ſparingly, in the vitriolic acid, are, 1. The mineral calcareous earth, which is diſtinguiſhed by its being convertible, in a ſtrong fire, into a calx which is called quick-lime, of this kind are, fine ſoft chalk; the coarſer lime-ſtones; the harder marbles; the tranſparent ſpars; the earthy matter concealed in waters, which incruſtates the ſides of the caverns, &c. 2. The animal calcareous earth, which, like the above, burns into quick-lime. Of this kind are oyſter ſhells, and indeed all the marine ſhells; the quick-lime produced from them varying only in the degrees of its ſtrength. 3. The earths of bones and horns, diſtinguiſhed from the above by not burning into quick-lime. Theſe earths diſſolve more difficultly in acids, than any of the foregoing.

The earths ſoluble in all acids are, the *magneſia alba*, and the aluminous earth.

The virtues of the inſipid earths, viz. oyſter-ſhells, crabs-claws, crabs-eyes, corals, pearls, chalk, all the marles, lime-ſtones, marbles, ſpars, bezoars, &c. are to abſorb or de-

ſtroy acidities in the firſt paſſages, and conſequently to remove ſuch diſorders as proceed from that cauſe. The cordial alexipharmic, antifebrile, and other like virtues attributed to theſe medicines, appear to have little foundation; or at beſt, are only ſecondary ones. When united with the acid, they form a neutral ſaline compound, poſſeſſing ſome degree of an aperient and detergent quality, tho' too inconſiderable to be in general regarded.

The abſorbent earths were ſtrangers to medicine till the time of Helmont; and their uſe does not ſeem to have been eſtabliſhed before the laſt century; when ſome practitioners, from an opinion that moſt kinds of diſeaſes proceeded from a preternatural acid, introduced a great variety of antacid bodies, both of the earthy and ſaline kind; and very liberally exhibited them on almoſt every occaſion.

It is certain that in children, and adults of a weak conſtitution, and whoſe food is chiefly of the vegetable aceſcent kind, ſundry diſorders are occaſioned by acidities; theſe readily diſcover themſelves by ſour eructations, the pale colour of the face, and in children by the ſour ſmell and green colour of the alvine fæces, which are ſometimes ſo manifeſtly acid as to raiſe a ſtrong effervеſcence with alcaline ſalts. In theſe caſes, and theſe only, the uſe of abſorbent earths is indicated.

If there are really no acid juices in the ventricle, theſe earths are apt to concrete with the mucous matter uſually lodged there, into hard undiſſoluble maſſes; which have ſometimes been thrown up by vomit (*V. Zwelf. Animadv.* in *Ph. Aug. p.* 66. *Miſcell. N. C. dec.* 2. *Ann.* 6. *Obſ.* 24. *Act. N. C.* vol. ii. *Obſ.* 139.) or found in the ſtomach upon diſſection (*V. Hoffm. de benign. remed. abuſu.*) Hence indigeſtion, loſs of appetite, nauſeæ, vomiting, obſtructions of the bowels, and other diſorders. Sometimes the ſtomach and inteſtines have been found lined with a cruſt, as it were, of theſe earthy bodies, (*V. Albert. Diſſ. de Atrophia*, Sect. 10.) which muſt not only have prevented the ſeparation of the gaſtric liquor, but likewiſe cloſed the orifices of the lacteal veſſels, ſo as to obſtruct the paſſage of the chyle into the maſs of blood.

Some ſuppoſe the earthy powders capable (without the concurrence of any acid) of paſſing the lacteals along with the chyle; and allege, in ſupport of this opinion, that when triturated with water, they are in part taken up, and carried with it through a filter of paper; the filtrated liquor leaving, upon evaporation, a portion of whitiſh earthy matter. This experiment, (allowing the conſequences drawn from it to be juſt) is itſelf erroneous: the reſiduum proceeds from the earth naturally contained in the water, not from that employed in the experiment; for if pure diſtilled water be made uſe of, it will leave no reſiduum though long triturated, or digeſted with the earth.

All theſe bodies, particularly thoſe of the animal kind, contain, beſides their purely alcaline earth, a portion of glutinous matter. An inſtance of this we have in crabs eyes, which, if macerated in the weaker acids, or the ſtronger, ſufficiently diluted with water, the earthy part will be diſſolved, and the

the animal glue remain in form of a ſoft tranſparent mucilage. The glutinous ſubſtance increaſes their tendency to concrete in the ſtomach; and hence thoſe which contain leaſt thereof ſhould be preferred to the others. The mineral earths contain the leaſt of this kind of matter, and ſome of them are very eaſy of ſolution; chalk for inſtance; which may therefore be given more liberally, and with greater ſafety than the animal abſorbents. Theſe ſubſtances diveſted of their conglutinating matter by means of fire, are reduced into acrimonious calces or limes, and thus become medicines of a different claſs.

The teeth, bones, hoofs, and horns of animals, conſiſt of the ſame principles with the animal abſorbents above mentioned, but combined in different proportions: The quantity of gelatinous matter it ſo large as to defend the earthy part from the action of weak acids; whilſt the earth, in its turn, protects the gluten from being diſſolved by watery liquors. Hence theſe bodies in their crude ſtate, though recommended as poſſeſſing ſingular virtues, are not found to have any virtue at all.

Experiments have been made for determinating the degree of ſolubility, or comparative ſtrength of theſe earths; the principal of which may be ſeen in page 6, reduced into the form of tables. Theſe experiments do not ſufficiently aſcertain the point intended by them: in the firſt ſett the quantity of acid is too vague and undetermined: in the ſecond, we are not told whether the acid was perfectly ſaturated; and in both, the acids made uſe of were ſo very different from any that can be ſuppoſed ever to exiſt in the human body, that little can be concluded from them with regard to the medical effects of theſe abſorbents. Trial ſhould have been made with the mild vegetable acids, as the juices of certain fruits, ſour fermented liquors; or rather with ſour milk. Nevertheleſs theſe tables, though not ſo perfect as could be wiſhed, have their real uſe in the hands of ſuch as can make proper allowances.

SECT. III.

Earths not diſſoluble in Acids, or other Liquors.

THE earths of this kind are, 1. Argillaceous earths, which become hard by burning in the fire. Such are the purer clays, boles, and ochres. 2. Cryſtalline earth, which is naturally hard, ſo as to ſtrike ſparks with ſteel: becoming friable in a ſtrong fire. Such are flints, cryſtals, and moſt of the precious ſtones, &c. 3. Gypſeous earths, which are reducible by a gentle heat into a ſoft powder, which unites with water into a maſs, ſomewhat viſcous and tenacious while moiſt, but quickly drying and becoming hard. Such are the tranſparent ſelanitæ, Engliſh talc, and plaſter of Paris ſtones. 4. Talky earth: which is ſcarcely alterable by fire.

Theſe kinds of ſubſtances were introduced into medicine, and many fabulous virtues attributed to them, by the ſuperſtition of the earlier ages. Some of them are ſtill preſerved in foreign pharmacopœias, but at length very juſtly expunged from our's, notwithſtanding what ſome late writers of repute ſpeak of their medical virtue. Theſe indiſſoluble hard bodies are not capable of producing any other effect, than by their rigid angular particles (which, tho' levigated with the utmoſt care, the microſcope ſtill diſcovers in them), to offend or wound the inteſtines. In levigation, they wear off ſo much from the hardeſt marble inſtruments, as will equal or exceed their own weight: from this circumſtance we may account for their having ſometimes appeared to act as abſorbents. Some of theſe ſtones, expoſed to a vehement fire, become in ſome meaſure friable; but nevertheleſs remain indiſſoluble. Moſt of the coloured ones by this treatment loſe their colour; and in this ſtate, prove nearly of the ſame quality with common cryſtal; ſuch are the ſapphire, emerald, amethyſt, and cornelian. Others melt into a blackiſh vitreous matter, from which a portion of iron is obtainable by proper fluxes; as the hyacinth and granate. Geoffroy concludes from hence, that theſe ſtones really poſſeſs ſome medical virtues, depending upon their metallic part; but the quantity of metallic matter ſufficient to give them a conſiderable tinct, is almoſt infinitely ſmall, and ſo incloſed in a ſtony matter not at all ſoluble by any of the known menſtrua, as ſcarce to admit of any poſſibility of its acting in the human body.

SECT. IV.

Glutinous, vegetable, and animal Subſtances.

Claſs I. *Vegetable.*

Pure gums:
Tragacanth,
Senica,
The gums of cherry, plum, and other European trees.

Vegetables abounding with mucilage:
Orchis roots,
Althæa root,
Quince ſeeds, &c.

GUMS and mucilage are glutinous vegetable productions, of no particular taſte or ſmell, ſoluble in water, but not in vinous ſpirits, acids, or in oils. They differ from one another only in degree of tenacity: the more tenacious are called gums; thoſe which are leſs ſo, mucilages. The firſt naturally exude from certain trees and ſhrubs; the latter are extracted by art. Almoſt all vegetable ſubſtances contain ſome portion of theſe, which after the reſinous part has been extracted by ſpirit, may be ſeparated from the remaining

remaining matter by means of water.

The general virtues of theſe kinds of ſubſtances are, to thicken the fluids, and defend the ſolids from them, when grown ſharp or corroſive. Hence their uſe in a thin acrimonious ſtate of the juices, and where the natural mucus of the inteſtines is abraded.

By a little quantity of water, gum is ſoftened into a viſcous adheſive maſs, called mucilage, and is then eaſily miſcible, both with fats and the fluid oils, and with reſins, which by this means become ſoluble in watery liquors along with the gum. As oily and reſinous ſubſtances are thus united to water, by the means of gum, ſo gums may in like manner be united to ſpirit of wine by the intervention of reſins and eſſential oils; though the ſpirit does not take up near ſo much of the gum, as water does of the oil and reſin. Alkaline ſalts prevent the ſolution of gum, and the mixture of gum with oil, &c. but acids have not ſuch an effect.

Claſs 2. *Animal.*

Moſt animal ſubſtances (the fat excepted) contain a viſcous matter, in many reſpects ſimilar to the foregoing, and capable of being extracted by ſtrong coction in water.

Animal glues and jellies have the general qualities of the vegetable gums and mucilages; with this difference, that the former are more nutrimental, and apt to run into a putrid ſtate. Conſidered as the ſubjects of chemiſtry, the difference betwixt them is very great: thoſe of the animal kind are changed by fire into a volatile alcaline ſalt, and a fœtid oil; the vegetable into an acid liquor, and a very minute portion of oily matter, conſiderably leſs fœtid than the former. The gelatinous principle of animals, like the gum of vegetables, diſſolves in water, but not in ſpirit or in oils; like gums alſo it renders oils and fats miſcible with water into a milky liquor.

SECT. V.

Soft unctuous Subſtances.

Claſs 1. *Inſipid vegetable Oils; and Subſtances abounding with them, as Almonds, and the Kernels of moſt Fruits; Linſeed, and the medullary part of ſundry other Seeds.*

Claſs 2. *Animal Fats; as Spermaceti.*

UNCTUOUS vegetables unite with water by trituration, into a milky liquor, and give out their oil upon expreſſion.—Theſe kinds of oil, and animal fats, diſſolve in alcaline menſtrua, which change

change their quality, and reduce them into a ſoap, diſſoluble in water, but more perfectly in vinous ſpirits: from this compound the oil may, by a ſkilful addition of acids, be recovered in a purer ſtate than before, and rendered ſoluble, like eſſential oils, in ſpirit of wine. Animal oils and fats, like the groſs oils of vegetables, are eaſily united with water by the intervention of gum or mucilage.

The medical virtues of theſe ſubſtances are, to obtund acrimonious humours, and to ſoften and relax thy ſolids: hence their uſe internally, in tickling coughs, heat of urine, pains and inflammations; and externally in tenſion and rigidity of particular parts. The milky ſolutions, commonly called emulſions, though much leſs emollient than the oils themſelves, or animal fats, have this advantage, that they may be given in acute or inflammatory diſtempers, without danger of the ill conſequences which the others might ſometimes produce: fats and oils, kept in a degree of heat no greater than that of the human body, ſoon become rancid and acrimonious; whilſt emulſions tend rather to grow ſour.

SECT. VI.

Aſtringents.

Galls,
Tormentil root,
Biſtort root,
Balauſtines,
Terra Japonica,
Acacia, &c.

ASTRINGENT ſubſtances are diſtinguiſhed by a rough auſtere taſte, and changing ſolutions of iron, eſpecially thoſe made in the vitriolic acid, of a dark purple or black colour.

Aſtringents yield their virtues by infuſion both to water and vinous ſpirits, generally in greateſt perfection to the former. Oils extract nothing from them. Nor do they give over any of their virtue in diſtillation: nevertheleſs their aſtringency is conſiderably abated by evaporating decoctions of them to the conſiſtence of an extract; and totally deſtroyed by long keeping.

The medical effects of theſe kinds of ſubſtances are, to conſtringe the fibres, and incraſſate or lightly thicken the juices. Their more experienced uſe is in diſorders proceeding from a debility, or flaccid ſtate, of the ſolids; in hæmorrhages, from a thinneſs of the blood, laxity, or rupture of the veſſels; in preternatural diſcharges of other kinds, after the offending matter has been duly corrected or evacuated; and externally, in ſolutions of continuity. In ſome caſes they produce the effects of aperients; the veſſels, conſtringed and ſtrengthened by them, being enabled to protrude the circulating juices with greater force.

A good deal of caution is requiſite in the exhibition of theſe medicines, eſpecially thoſe of the more powerful kind. In plethoric habits, inveterate obſtructions, criti-

cal evacuations, and in all kinds of fluxes in general before the morbific matter has been expelled, or where there is any ſtricture or ſpaſmodic contraction of the veſſels, aſtringents prove eminently hurtful. Where critical dyſenteries or diarrhœas are reſtrained by ſtyptics, the acrimonious matter, now confined in the inteſtines, corrodes or inflames them; and ſometimes occaſions a gangrene of the parts.

SECT. VII.

Sweets.

Sugar,
Honey,
Raiſins,
Liquorice, &c.

THE vegetable ſweets are a very numerous tribe; almoſt every plant that has been examined, diſcovering in ſome of its parts a ſaccharine juice. The bottoms of flowers, and moſt kinds of ſeeds and grain when they begin to vegetate, are remarkably ſweet.

Vegetable ſweets are extracted both by water and vinous ſpirits; moſt readily by the firſt, but in greateſt perfection by the latter. Nothing of their taſte ariſes in diſtillation with either of theſe liquors: nevertheleſs, by long boiling with water they become ſomewhat leſs agreeable; but are not much injured by being treated in the ſame manner with rectified ſpirit.

The purer ſweets, as ſugar, promote the union of diſtilled oils with watery liquors, and prevent the ſeparation of the butyraceous part from milk: from this quality, they are ſuppoſed to unite the unctuous part of the food with the animal juices. Hence ſome have concluded, that they increaſe fat: others, that they have a contrary effect, by preventing the ſeparation of the unctuous matter which forms the fat, from the blood: and others, that they render the juices thicker and more ſluggiſh, retard the circulation and cuticular excretion, and thus bring on a variety of diſorders. But ſweets have not been found to produce any of theſe effects, in any remarkable degree: common experience ſhews, that their moderate, and even liberal, uſe is at leaſt innocent; that they reconcile, not only to the palate, but the ſtomach alſo, ſubſtances of themſelves diſguſtful to both; and thus render ſalutary what would otherwiſe be injurious to the body.

The unctuous and mucilaginous ſweets, as the impure ſugars, liquorice, &c. have a conſiderable degree of emollient and lubricating virtue.—Thoſe accompanied with a manifeſt acid, as in the juices of moſt ſweet fruits, are remarkably relaxing; and if taken immoderately, occaſion diarrhœa and dyſenteries, which ſometimes have proved fatal.

SECT.

SECT. VIII.

Acrids.

ACRIDS are ſubſtances of a penetrating pungency, without any peculiar flavour. Applied to the ſkin, they inflame or exulcerate it: chewed, they occaſion a copious diſcharge of the ſaliva: and ſnuffed up the noſe, provoke ſneezing.

Theſe ſubſtances, conſidered as the ſubjects of Pharmacy, may be divided into three claſſes,

yielding their acrimony
1. In diſtillation with water: as horſe-radiſh, muſtard, ſcurvy-graſs, &c.
2. By infuſion only: as the greater celandine pyrethum, &c.
3. Neither to infuſion, or diſtillation: as arum and dracunculus.

The general effects of acrid medicines are, to ſtimulate the veſſels, and diſſolve tenacious juices. In cold leucophlegmatic habits, ſtagnations of the fluids, and where the contractile power of the ſolids is weak, they prove powerful expectorants, deobſtruents, diuretics, and emmenagogues; and if the patient is kept warm, ſudorifics. In hot bilious conſtitutions, plethoric habits, inflammatory diſtempers, where there is already a degree of irritation, where the juices are too thin and acrimonious, or the viſcera unſound; theſe ſtimulating medicines prove highly prejudicial, and never fail to aggravate the diſeaſe.

Certain acrid ſubſtances have been lately recommended in dry convulſive aſthmas: of the efficacy of the ſquill in particular, for the cure of this diſorder, ſeveral inſtances are related in the *Commercium Literarium* of Norimberg, for the year 1737 and 1739. It ſeems probable, that not the aſthma itſelf, but a particular effect of it was removed by this medicine. In all aſthmas, the free circulation of the blood through the pulmonary veſſels, is impeded; and hence, during every paroxyſm, the lungs are in a kind of œdematous ſtate. If this œdema, becoming habitual, remains after the fit is over, it is either perpetually occaſioning freſh ones, or gives riſe to a dropſy of the breaſt. Acrid medicines, by removing the œdema, remove what was originally an effect of the aſthmas and in time a cauſe of its aggravation.

SECT. IX.

Aromatics.

AROmatics are ſubſtances of a warm pungent taſte, accompanied with a ſtrong odour; as cloves, cardamom ſeeds, cinnamon, nutmegs, &c. Their peculiar qualities reſide in a volatile oil, uſually called eſſential, and a groſſer reſinous ſubſtance capable of being extracted by ſpirit of wine. The oil poſſeſſes the odour of the ſubject, and often its pungency and taſte. The reſin contains the whole of this latter, but has the former in a leſs degree.

The eſſential oils and reſins of vegetables, at firſt intimately mingled with the aqueous and mucilaginous juices, ſeparate by degrees, and are collected in little membranous veſicles. Theſe are readily diſcovered by the microſcope, in the rind of oranges and lemons, in juniper berries, nutmegs, the roots of elecampane, maſter-wort, ſpignel, angelica, fennel, Florence orris, and others; and by the naked eye, in the flowers of St John's-wort, and the leaves of the orange-tree. In the bark of the pine, fir, larch, and ſome other trees, theſe veſicles are extremely numerous and turgid with oil, inſomuch as (in the warmer climates) frequently to burſt, and diſcharge their contents in notable quantity.

Theſe oils conſiſt of a ſubtile and of a groſſer part. The unctuous liquors which ſpontaneouſly exude from different trees and ſhrubs, and the purer oils extracted from aromatic plants by art, indurate in a warm air into a ſolid reſin, with remarkable loſs of their fragrance. Diſtilled with pure ſpirit, the more ſubtile part ariſes, impregnating the liquid with the pungency and odour of the oil; the groſſer matter, whoſe quantity is much the largeſt, remaining behind. This reſiduum, by repeating the operation with freſh ſpirit, becomes at length inſipid and inodorous. The ſeparation may alſo be effected, though with more difficulty, by a like procedure with water. Water, even by agitation, imbibes ſome of the more fragrant matter, leaving the oil weaker and leſs fragrant than before.

The quantity of this ſubtile matter varies in different oils; as does likewiſe that of the compound contained in different ſubjects. In general, the leſs oil any aromatic vegetable affords, the oil proves proportionably the ſtronger, and the more, the weaker. From cinnamon, for inſtance, we obtain an oil very ſmall in quantity, but extremely pungent; whilſt cloves, a ſpice much more pungent than the other, yields a much larger quantity of oil, which proves in taſte remarkably milder.——The greater pungency, as Neuman obſerves, of the oil of cloves uſually met with, is adventitious. The oil genuinely diſtilled from this ſpice, is very mild. A tincture made in rectified ſpirit, is extremely acrid, and probably is the ſubſtance employed, for giving this quality to the oil.

The

The virtues of all aromatic vegetables are extracted by vinous ſpirits; very imperfectly by watery liquors. In diſtillation, they ariſe with water more perfectly than with ſpirit; ſome give over exceeding little to pure ſpirit; hence the ſpirituous extract poſſeſſes their taſte and flavour in an eminent degree, whilſt the watery ones have nothing of either.

Aromatics, conſidered as medicines, warm the ſtomach, and by degrees the whole habit, raiſe the pulſe, and quicken the circulation: hence, in cold languid caſes, they increaſe ſtrength, and promote the natural ſecretions.

SECT. X.

Bitters.

Gentian root,
Hops,
Leſſer Centaury,
Carduus, &c.

BITTERS yield their virtue both to watery and ſpirituous menſtrua; ſome more perfectly to one, and others to the other. None of the ſubſtances of this claſs give over any thing conſiderable of their taſte in diſtillation, either to water or to ſpirit; their bitterneſs remaining entire, and frequently improved in the extracts. Such as are accompanied with flavour, as wormwood, may by this proceſs be reduced into ſimple flavourleſs bitters.

Theſe ſubſtances participate of the virtues of aſtringents and aromatics. Their general effects are, to conſtringe the fibres of the ſtomach and inteſtines, to warm the habit, attenuate the fluids, ſupply the deficiency of bile, and promote the natural evacuations, particularly of ſweat and urine. In weakneſs of the ſtomach, loſs of appetite, indigeſtion, and the like diſorders, proceeding from a laxity of the ſolids, or cold ſluggiſh indiſpoſition of the juices, theſe kinds of medicines do good ſervice. Where the fibres are already too tenſe and rigid, where there is any immoderate heat or inflammation, bitters very ſenſibly increaſe the diſtemper; and if their uſe is continued, communicate it to the kidneys: hence the urine becomes high coloured, ſmall in quantity, and at length ſuppreſſed; a dropſy ſoon ſucceeding: if the kidneys were before ſo lax as to remain now uninjured, yet the other viſcera become gradually more and more rigid, and a tabes is at length brought on.

Bitter ſubſtances deſtroy inſects, and prevent putrefaction. Hence they are recommended as anthelmintic; and externally as antiſeptics.

SECT.

SECT. XI.

Subſtances in which two, three, or more of the foregoing qualities are conjoined:

As { Aromatic and bitter / Aromatic and aſtringent / Aromatic, bitter, and aſtringent } in { lemon peel. / cinnamon. / Peruvian bark.

THE ſeveral taſtes (and medical virtues depending thereon) of the bodies which come under this head, are extracted by the ſame means as from thoſe in which they are leſs compounded. Thus the aromatic part of lemon peel ariſes in diſtillation with water, whilſt the bitter remains behind in the extract; the aromatic part of bark is diſſipated by long coction in water, the bitter remaining in the extract entire, and the aſtringency (as a ſimple aſtringent would be by the ſame treatment) conſiderably impaired.

SECT. XII.

Subſtances not reducible under the foregoing heads.

Claſs 1. *Metallic and mineral bodies.*
Claſs 2. *Neutral ſalts, as nitre, common ſalt, &c.*
Claſs 3. *Opium, hemlock, &c.*

For an account of the bodies of theſe three claſſes, we refer to the ſeveral articles themſelves in the ſecond book.

Claſs 4. *Acrid and bitter ſubſtances, which generally act as emetic or cathartic.*

Hellebore,
Jalap,
Ipecacuanha, &c.

Colocynth,
Scammony,
Gamboge, &c.

Theſe ſubſtances conſiſt of a reſinous part, in which the purgative or emetic quality reſide; and a gummy-ſaline one, which acts chiefly as a diuretic. The firſt is extracted or diſſolved by vinous ſpirits; the latter by water. Nothing ariſes in diſtillation from either.

The acrid reſins, exhibited by themſelves, tenaciouſly adhere to the coats of the inteſtines, by their ſtimulating power irritate and inflame them, and thus produce ſundry

dry violent diſorders. Hoffman relates, that he has ſometimes obſerved convulſions, and a paralyſis of both ſides from their uſe.

Theſe inconveniences may be prevented, by previouſly triturating them with ſubſtances capable of dividing their tenacious texture, and preventing their adheſion. By this means, they become mild and ſafe, operate without diſturbance, and at the ſame time more effectually anſwer the purpoſes intended by them.

Some have endeavoured to correct the ill quality of the reſinous purgatives, by the addition of acids and aromatic oils. Acids weaken their power, but have no other effect than what a diminution of the doſe would equally anſwer. The pungent eſſential oils may ſerve to warm the ſtomach, make the medicine ſit eaſier, and thus prevent the nauſea, which ſometimes happens; but as ſoon as the reſin begins to exert itſelf in the inteſtines, theſe oils, inſtead of correcting, increaſe its virulence; being themſelves apt to occaſion the inconveniences which they are here intended to prevent, an irritation and inflammation of the bowels. Alcaline ſalts or ſoaps have a better effect; as they diſpoſe the reſin to ſolution, and promote its operation.

The medicines of this claſs ſeem to act by liquefying the juices, and ſtimulating the coats of the ſtomach and inteſtines. If the irritation is ſtrong and ſudden, their action is quick and upwards: if ſlower, downwards. Cathartics given in a liquid form, or in very ſenſible habits, often prove emetic; and emetics where mucus abounds, cathartic. They operate more violently in robuſt conſtitutions, than in thoſe of a contrary temperament; the veſſels being in the former more tenſe and rigid, and conſequently leſs capable of bearing an equal degree of irritation.

The action of theſe medicines is extended beyond the *primæ viæ*: this appears evident from the increaſe of the pulſe, which always accompanies their operation; and from the common obſervation of children being purged by the milk, if the nurſe has taken a cathartic. Some of them, particularly hellebore, are ſaid to purge, if only applied externally in iſſues. Purgatives, even of the more powerful kind, exhibited in ſuitable ſmall doſes, in conjunction with the milder aperients, may be introduced into the habit, ſo as to prove notable deobſtruents, diuretics, and diaphoretics, without acting ſenſibly by ſtool.

PART

PART II.

Practice of PHARMACY.

IN FIVE BOOKS.

BOOK I. *Preparations of Simples.*
II. *Saline Preparations.*
III. *Metalline Preparations.*
IV. *Officinal Compoſitions.*
V. *Extemporaneous Forms.*

BOOK I.

Of the Preparations of Simples.

HAVING given in the firſt part, all that is neceſſary to be known of the general nature and medicinal virtues of Simples, with the ſeveral methods of operation by which they may be fitted for medicine; I ſhall now proceed to ſuch particular preparations of each of them as are previouſly neceſſary, either to their adminiſtration ſingly, or to their admiſſion into officinal or extemporaneous compoſitions.

Of Spirits.

By Spirits here are meant, firſt of all ſuch as become ſo in vegetation, and are the production of nature; and then, ſuch as are made ſo by fermentation and art. Of the former kind there is none, ſtrictly ſpeaking, but in vegetables;

ables; and amongſt thoſe, only in ſuch as are diſcoverable by the ſcent, and quickneſs of their odour.

Of this kind are all ſcented vegetables, whether ſweet or fetid: which ſhould be diſtilled green or dry; as the texture of the vegetable ſubſtance is fitted to loſe or retain thoſe volatile parts, which is beſt known by experience; for thoſe plants, whoſe volatile parts are ſo looſe in their combinations, that they fly off in drying, ought to be committed to the ſtill as ſoon as gathered; as Lilies of the Valley, Baum, and thoſe of a tender ſcent; whereas thoſe which preſerve their volatility, as Marjoram, Roſemary, and the ſtronger aromatics, may be truſted when dry; if they have not been kept too long. Theſe are all beſt raiſed in the Alembic with a Crane-head, the higher the better: and if a handful or two of pot-aſhes are thrown in, they will both help to load and keep down the groſſer phlegm, and ſeparate and volatilize the finer parts. But ſome vegetables of a curious flavour will not admit of this addition, without undergoing a conſiderable change of their ſcent and taſte; as particularly Cinnamon, &c. As by the common way of running what comes off into an open receiver, many of the finer parts fly off, and are loſt; by the contrivance of a bladder and funnel, it may be conveyed into a bottle, as cloſe as into a receiver with a retort. Take a ſtrong bottle, of any convenient bigneſs, into which put a funnel; tie to the worm a bladder, in the ſame manner as it is fitted to a glyſter-pipe; cut open what covers the aperture of the worm, and draw the bladder back over the funnel; ſo that it may be cloſe tied about the neck of the bottle. By this means not a particle can be loſt: but the fire muſt be more moderate than in open diſtillation; otherwiſe it will force up the ſtill-head, or burſt the bladder or bottle. It is worth the while of thoſe that are curious, to manage all their diſtillations of odoriferous plants this way, as the waters will be much the better for it.

The ſpirits of vegetable ſubſtances, eſpecially of herbs, made by fermentation, cannot be depended upon to have much of the virtue of the plants in them: for in fermentation of an odoriferous plant, the ſpirit, which nature has made, flies away in that inteſtine motion; ſo that what is afterwards produced, has no advantage beyond thoſe made from inodorous ſubſtances by the ſame artifice. Thoſe writers therefore exceedingly err, who teach to ferment any plant whatſoever, in order to draw out any medicinal virtues; becauſe the ſpirit is made by the very action of fermentation, as has been before demonſtrated. So that it ſignifies not ſo much what ſubſtances ſuch a ſpirit is drawn from, as what properties reſide in a ſpirit made by ſuch contrivance.

In this limitation of the term, we have no ſpirits from either animals or minerals; all under this denomination, obtained from them, being either not properly ſo, or procured by ſuch artificial helps, as will come to be explained under their reſpective preparations.

All that has been here advanced is very eaſily applied to waters: we ſhall therefore only ſubjoin,

join, that all the waters exhaled from inodorous plants, are not worth diſtillation; becauſe they cannot raiſe any thing beſides phlegm; if, therefore, a perſon has ſuch an opinion of thoſe herbs which were termed cold, as Plantain, Scabious, and the like, as not to be eaſy without them; he had better take them in his ſallads and broths, than diſtil them. This farther may be worth remarking, that all thoſe plants which are deemed cold, are beſt when they ſhoot up rank and large; but of the hot, they are ſtrongeſt when leaſt ſucculent, and when the leaves ſhoot ſmall.

Of Eſſential Oils.

Eſſential oils are obtained only from thoſe vegetables, or parts thereof, that are conſiderably odorous. They are the direct principle, in which the odour, and oftentimes the warmth, pungency, and other active powers of the ſubject reſide; whence their name of eſſences or eſſential oils.

Take any quantity of Gum, Berry, Seed, Herb, or Wood, proper to be bruiſed or powdered; let them be put into a copper ſtill; and to them add eight or ten times their weight of common water: lute the head of the ſtill, and to its refrigeratory or worm; raiſe a fire under it to make it boil; and in a little time the water and oil will run into the receiver, called the ſpout-receiver. When all the oil is apprehended to be come off, hold a ſpoon under the noſe of the worm; and if any more comes with the water into the ſpoon, continue the fire longer: if no oil appears in the ſpoon, let out the fire; and ſeparate the water from the oil. Few of theſe oils are worth diſtillation, except in great quantities; that is to ſay, ſeveral ſtills full. And then when the oil is drawn from the firſt quantity, the ſame water muſt be ſaved to be poured back into the ſtill; by which means alſo, if it be often repeated, ſuch a water will be ſo impregnated with the ingredient, as to be worth keeping under the title of the Simple Water of ſuch an herb, ſeed, &c.

Exactly the ſame method will draw the eſſential oil from any ſubſtance whatſoever that contains it, and thoſe of ſome woods, as cinnamon, ſaſſafras, cloves, and the like, becauſe they are heavier than water, will fall to the bottom; but are as eaſily ſeparated by decanting the water by gentle inclination. As that of aniſeeds, with ſome few others, will coagulate towards the letter end of the diſtillation, the water in the worm-tub ſhould ceaſe to be renewed; that it may grow warm, and diſſolve away all that has condenſed in its paſſage. The moſt valuable of this claſs are grievouſly ſophiſticated by the chemiſts and wholeſale dealers, either with expreſſed oils, or ſuch diſtilled ones as are cheaper, and approach neareſt to their flavours. Theſe cheats are diſcoverable either by ſpecific weight, as in the oils of cinnamon, cloves, and the like, (no other anſwering exactly to the ſame ſtandard;) or by evaporation of a little in a ſpoon; for if there be any mixture of an expreſſed oil, it will all remain, and the other exhale; as the oils of aniſe, caraway, &c. and laſtly by dilution; ſo that the flavour is but juſt retained: which will much ſooner diſcover a foreign

ſcent, than when collected in its full ſtrength.

Eſſential oils unite with rectified ſpirit of wine, and compoſe with it one homogene tranſparent fluid. Water alſo, though it does not diſſolve their whole ſubſtance, may be made to imbibe ſome portion of their more ſubtile matter, ſo as to become conſiderably impregnated with their flavour. By the admixture of ſugar, gum, the yolk or white of egg, or alkaline ſalts, they are made totally diſſoluble in water. Volatile alkalies improve the odour of eſſential oils; but fixed alkalies impair it.

Of fixed Salts.

Take any plant, burn it on a clean hearth, and rake the aſhes as long as any fire appears amongſt them; put theſe aſhes into an unglazed pan; which ſet in a calcining furnace: make a fire about it, till the pan is red-hot; where keep it continually ſtirring the aſhes, till they loſe all their blackneſs. Then put them into a clean pan, and pour hot water to them; when that water is ſufficiently impregnated with ſalt, filter it, and evaporate to dryneſs; and do thus until the aſhes are left inſipid.

We meet in the chemical ſhops with theſe fixed ſalts of a great many plants; and the common preſcriptions take ſome notice of the different kinds: but the practitioner, who thinks there is any real difference between them, correſponding to the plants they are obtained from, may reſt ſatisfied that thoſe dexterous and wonderful conſcientious artificers, the chemiſts, can furniſh him with a lixivial ſalt of any plant he can call for, made from the *Cineres Clavellatti*, or pot-aſhes. It would, however, be well enough, did we lie open but in this particular to ſuch impoſitions; for let the plant be what it will before it is reduced to aſhes, the fire brings it to that texture and make of parts, into which it reduces any other; ſo that a ſalt made from the lixivium of any vegetable aſhes whatſoever, will be always the ſame.

Of Poteſtates, or Powers.

There is a form of preparation, which Salmon chiefly introduced for the ſake of his brother Empirics, and thoſe who were for cutting the ſhorteſt way to profit, called *Poteſtas*, or power. This is an incorporation of the eſſential oil of any vegetable with ſpirit, by the intermediation of *Sal Armoniac*: and this was chiefly deſigned for the extemporaneous making of waters; for with a ſmall quantity of ſuch medicines, and common water, there was always in readineſs whatſoever of that kind could be called for. The *Elæoſaccharа* likewiſe have been contrived for the ſame purpoſes. Theſe are a mixture of an eſſential oil with ſugar; which will diſſolve in a ſtrong ſpirit; and ſo make, on a ſudden, without the help and expence of a ſtill, either cinnamon, orange, or any other water that is required. So that by theſe artifices, all the ſimple and compound waters of a ſhop may be encloſed in a ſmall cupboard: an admirable contrivance for chamber-practice! but very injurious and detrimental to the patient: for there is no way of mixture imaginable, that can

ſa-

ſo well incorporate the volatile oily part of the plant with its phlegm, as diſtillation does. So that the waters made this way will not only be more unfit for preſent uſe; but alſo be much ſooner ſlimy, vapid, and ſour. They who think it worth their while to fall into this way, may make the *Poteſtates* of any thing in the ſame manner as is directed in the preparations of amber.

The Purification of Aloes, and all ſubſtances of the like kind.

If the aloes has any mixture of ſtraws, ſticks, or gritty matter, very gently diſſolve it in water, enough to paſs it conveniently thro' a flannel cloth when warm; and afterwards evaporate to a due conſiſtence.

Some for this purpoſe uſe ſpirit of wine, and others ſpirit of tartar, under the notion of better correcting the aloes; but that diſſolvent is better for the apothecary which leaves the drug in its moſt natural qualities, after refinement from filth, for the phyſician to correct, in preſcription, as he pleaſes.

Gums and reſins of all ſorts are to be cleared from any foreign mixtures by the like means; care being taken to let the diſſolvent be as near as poſſible to the nature of the thing to be ſtrained; and that the evaporation afterwards be not too haſty; for fear of carrying off any volatile parts of the drug, which is very apt to happen in aromatic ſubſtances eſpecially. There are many gums to be conveniently ſtrained by the help of water, which will not mix with them; but upon cooling ſeparate, and form into a clean maſs ready for uſe, as Galbanum, Tacamahacca, and the like.

* E. D. *Aloes præparata, ſeu lota.* Prepared Aloes.

The ſame as the preceding. The beſt aloes, appearing clear and pure, require no preparation.

Eſſentia Ambrægriſeæ. Eſſence or Tincture of Ambergriſe.

Take of ambergriſe two drachms, the ſame quantity of ſugar candy, muſk half a drachm, and civet two grains: beat them together, and put the mixture into a phial. pour upon it of tartarized ſpirit of wine four ounces; ſtop the phial cloſe, and ſet it in a ſlow ſand digeſtion, for four or five days; and then decant the clear for uſe. If it be of conſiſtence enough to congeal, or not run, when cold, put more ſpirit of wine upon the remainder for another digeſtion; and afterwards mix the liquors, and they will continue fluid.

Newman ſays, that the ambergriſe diſſolves readily and totally, if broke in pieces and put into twelve times its quantity of the ſpirit, and made to boil; before which the ſpirit hath but little effect: and if the ſpirit is impregnated with a little of any eſſential oil, it diſſolves the ambergriſe more readily, and in leſs heat than that of boiling.

---

* N. B. The Proceſſes marked L. or L. D. are taken from the laſt Edition of the London Diſpenſatory, and thoſe marked E. or E. D. from the Edinburgh Diſpenſatory.

This certainly makes the beſt of perfumes; and is in a very convenient form, either for any officinal uſe, to mix immediately with any medicine, or for extemporaneous preſcription: the leaſt touch of it leaves its ſcent upon any thing for a prodigious time. The ſugar is only added the better to ſeparate the adheſive parts of the ambergriſe, and the other ingredients; and make them more eaſily join with the ſpirits. In conſtitutions where ſuch ſweets are not offenſive to the head, (as in ſome, eſpecially hyſterical perſons, they are,) there is nothing can be a more immediate cordial.

Tinctura Benzoini.
Tincture of Benjamin.

Powder 4 ounces of ſelect Benjamin; put it into a matraſs, and add to it rectified ſpirit of wine one pound; fit the matraſs for a circulatory; lute the joint; and ſet it in warm ſand for three or four days, now and then ſhaking it about; and in that time there will be made a fine tincture, which decant and keep for uſe.

This is good in aſthmas, and other diſtempers of the lungs; given from 20 to 60 or 70 drops, in any convenient vehicle. But it is moſt uſed externally to ſmooth the ſkin, and take ſpots out of the face: 1 drachm of it put into 4 ounces of clean water, turns it white, and is called virgin's-milk. To this tincture may be added of ſtorax 1 ounce, and balſam of Peru 1 drachm, which will render not only the ſcent more grateful, and make a deeper tinge in the ſpirit, but be alſo better for inward uſe.

Flores Benzoini.
Flowers of Benjamin.

Put into a ſhallow, flat-bottomed, earthen diſh 2 or 3 ounces of Benjamin in groſs powder; ſet on its cover, without luting; and keep it in a moderate heat in ſand, or immediately over a ſmall fire of charcoal: the flowers will preſently begin to riſe into the cover; which once in an hour, or hour and half, muſt be taken off; and wiped out upon a clean ſheet of paper with a feather. There ought to be two covers to one bottom in readineſs; that one may be put on as ſoon as the other is off. When the flowers begin to riſe yellow, take the melted Benjamin out of the pot with a ſpoon; and put in more powdered Benjamin, as at the firſt, and ſo proceed until there are as many flowers as deſired.

In this operation care muſt be taken, that the fire be not too ſtrong, becauſe it would thus throw up ſome oil, and diſcolour the flowers. Theſe are a wonderful pectoral, and particularly excellent in aſthmas; for they greatly attenuate and open the viſcous obſtructions, and cleanſe the bronchia. They are convenient almoſt in any form, and give a very grateful ſcent to any compoſition. Their doſe is from 3 to 10 or 12 grains.

L. D. *Flores Benzoini.*
Flowers of Benjamin.

Put powdered Benjamin into an earthen pot placed in ſand; with a gentle heat the flowers will riſe, and may be caught in a paper cone fitted to the pot.

The

The Benjamin may otherwiſe be put into a retort, and the flowers will riſe, and be collected in the neck.

If the flowers are tinged with yellow, they are to be mixed with tobacco-pipe-clay, and reſublimed.

E. D. *Flores Benzoini.*
Flowers of Benjamin.

Take of Benjamin powdered any quantity, put it into a glazed earthen pot, to the top of which a paper cone muſt be fitted; apply then a gentle heat to ſublime the flowers: repeat this operation till the paper becomes foul with the oil. If the flowers are very foul with the oil, ſolution in warm water and cryſtallization will clear them.

The moſt commodious method of performing this proceſs is by a retort.

Oleum & Spiritus Benzoini.
Oil and Spirit of Benjamin.

Take 1 pound of the black melted Benjamin, which remains after the ſublimation of the flowers; put it into a retort; which place in a ſand furnace; cover it well with ſand; lute on its receiver; and make a gentle fire; then increaſe the heat gradually, and there will come over ſome oil and ſpirit; with ſome diſcoloured flowers: augment the fire more and more, till no fumes appear; and there will riſe a blackiſh oil with an acid ſpirit; and the neck of the retort will be filled with diſcoloured flowers, which may be taken out, and put upon a clean brown paper, to ſuck up the oil.

Theſe flowers, though not ſo beautiful, are as good for uſe as the former; and though both the oil, ſpirit, and flowers, acquire, for the preſent, an empyreumatical ſcent; yet in ſix or eight months that will wear off, and become very fragrant.

After the ſame manner may be made the oil, ſpirit, and flowers, or volatile ſalt of any balſam: as thoſe of Tolu, Peru, and the like. The ſpirit is diuretic, but not very pleaſant, by reaſon of its empyreuma. The oil is accounted a good vulnerary, both in external and internal application. And for inward uſe, put 2 or 3 ounces of it into a cucurbit, capable of holding a gallon of liquor; add to it 5 or 6 pounds of water, and ſet in a ſand furnace, luting on a head and a receiver; keep a gradual fire till the water is ready to boil; and the ſpirituous part of the oil will come over with the water, of a fine amber colour, and a fragrant ſcent; which is an admirable internal medicine, a powerful diuretic, and by ſome reckoned a ſpecific againſt the ſtone and gravel in the kidneys and bladder. Its doſe is from 5 to 15 drops, in a little refined ſugar.

L. D. *Terræorum (a) aliorumque quæ aquâ non diſſolvuntur corporum præparatio.* Preparation of earthy, and other Bodies, not ſoluble in Water.

Let theſe bodies be firſt pounded in a mortar; then ground on a levigating ſtone, a little water being added, to an impalpable powder; afterwards let them be dried on a chalk-ſtone, and laſtly ſet for ſeveral days in a place which is warm, or at leaſt not moiſt. In this manner the following bodies may be prepared. *Erugo*, Verdigriſe; *Antimonium*, Antimony; *Corallium*, Coral; *Creta*, Chalk; *Lapis Bezoar*, Bezoar Stone, in

the levigation of which, ſpirit of wine muſt be uſed inſtead of water; (*b*) *Chelarum cancrorum apices*, Tips of Crabs Claws; *Lapis calaminaris calcinatus*, Calamine Stone calcined, as for making braſs; *Lapis Hæmatites*, Blood Stone; *Margaritæ*, Pearls; *Oculi dicti cancrorum*, Crabs Eyes; *Oſtreorum teſtæ*, Oyſter Shells, being firſt well cleanſed; *Ovorum teſtæ*, Egg Shells, being firſt freed from the membranes by boiling in water; *Succinum*, Amber; *Tutiæ*, Tutty. It is neceſſary in the levigation of Antimony, Calamine Stone, and Tutty, that the ſtricteſt care be taken to make the powder as (*c*) fine as poſſible.

(*a*) The title of this head is very inexplicit and inaccurate, but it is intended to mean the preparation of earthy, and ſuch other bodies as are of a ſimilar texture, in regard to their fitneſs to be powdered.

(*b*) Theſe powders are now moſt generally prepared by mills, which is much more expeditious and effectual than the method here directed.

(*c*) The College have given here a very juſt caution in reſpect to the fineneſs of theſe powders; but they have omitted to mention the only method by which, without extreme trouble, it can be performed. This method is waſhing over; for the manner of which ſee the article Pulverization.

Bolus Armena præparata.
Prepared Bole Armenic.

Let the powder of bole armenic be made fine by waſhing over.

E. D. *Lapis Calaminaris præparatus.*
Prepared Calamine Stone.

Heat Calamine Stone till it is red hot three times, quenching it each time in water; it is then to be pounded, levigated, and waſhed over: in the ſame manner is *Tutia*, Tutty, prepared.

Chelæ cancrorum præparatæ.
Prepared Crabs Claws.

Let the black tips of Crabs Claws be powdered, and then levigated on a marble.

Corallium præparatum.
Prepared Coral.

Coral is prepared as Crabs Claws; and likewiſe,

Cornu cervi calcinatum.
Calcined Hartſhorn.
Margaritæ, Pearls.
Oculi cancrorum, Crabs Eyes.
Succinum, Amber.

E. D. *Teſtæ Oſtreorum præparatæ.*
Prepared Oyſter Shells.

Waſh and perfectly cleanſe the hollow ſhells of oyſters, rejecting the flat ones; then expoſe them for ſome days to the heat of the ſun; afterwards rub them in a marble mortar, till they become a paſte; which muſt be again dried in the ſun; and at laſt ground to an impalpable powder.

L. D. *Axungiæ Porcinæ, ſevique Ovilli curatio.* Preparation of Hogs-Lard and Mutton Fat.

Let them be cut into pieces and melted over a ſlow fire, a little water being added; then let them be ſeparated from the membranous parts by ſtraining.

L. D. *Axungiæ Viperniæ curatio.* Preparation of the Fat of Vipers.

Melt the fat from the inteſtines; then let it be ſtrained by being preſſed gently thro' a linen cloth.

L. D. *Mellis*

L. D. *Melli deſpumatio.*

Purification of Honey.

Melt the honey in balneo, and let the ſcum be taken off as it riſes.

L. D. *Scillæ coctio.*

Preparation of Squills, by baking.

The ſquills being freed from the outſide rind, and the hard part next the root, let each be incloſed in a covering of paſte made of wheat flour, and baked in an oven, till the paſte ſhall have acquired a hard cruſt, and the ſquills are become tender throughout their whole ſubſtance.

L. and E. *Scillæ exſiccatio.*

Preparation of dried Squills.

The exterior rind being peeled off, let the ſquills be cut tranſverſly into thin ſlices, and dried by a very gentle heat. They are duly dried when they become friable, yet retain their acrimony and bitterneſs.

L. D. *Rhabarbari & Nucis Moſchatæ torrefactio.* Preparation of Rhubarb and Nutmegs, by roaſting.

Let them be expoſed to a ſlow fire, till they are of a proper dryneſs for being powdered.

The rhubarb ſhould be firſt cut in ſlices, and the nutmegs groſsly powdered. All the uſe of roaſting is, more eaſily to powder them.

L. and E. *Spongiæ uſtio.*

Preparation of burnt Spunge.

Burn the ſpunge in an earthen veſſel covered from the air, till it becomes black, and will crumble; then powder it in a glaſs or marble mortar. It is uſed in ſcrophulous diſorders and cutaneous foulneſſes, in doſes of a ſcruple 2 or 3 times a day. Its virtues depend on its volatile ſalt combined with its own oil. The beſt method of burning it is firſt to cut it in ſmall pieces, to free it from ſtoney and other foreign matter, then to put it into an earthen veſſel, which being placed in the fire, let the ſpunge be moved about until it is black and friable; then whilſt yet hot, powder it in a glaſs or marble mortar.

L. and E. *Pulparum extractio.*

Extraction of the Pulp of Fruit.

Let the fruits affording pulp, whether ſuch as being uſed ripe are dry, or ſuch as are uſed unripe, be boiled with a little water to ſoften them, then preſs them through a hair ſieve, and afterwards boil them again in an earthen veſſel over a ſlow fire, often ſtirring them to prevent their burning to the veſſel, till they are of a due conſiſtence.

In this manner the pulp of Caſſia may be boiled out of the pods, and afterwards brought to a proper conſiſtence by evaporating the water.

The pulps of fruit that are ripe and moiſt, may be paſſed through the ſieve without any previous boiling.

L. D. *Styracis colatio.*

Purification of Storax.

Boil the ſtorax till it becomes ſoft, then let it be put into a preſs, betwixt iron plates made warm, and there compreſſed, and the purified ſtorax will be ſeparated from the water.

In this purification of ſtorax, great care ſhould be uſed, that it be not ſuffered to burn in the boiling, nor the iron plates made over hot, leſt it acquire any ſcorched ſcent; and that the operation

ſhould be performed as quick as poſſible, after it is duly heated, there being a conſtant and great waſte of the fragrance, whilſt it continues hot: but the beſt purification is a tincture made with rectified ſpirit of wine.

L. D. Purification of *Aſafœtida*, *Galbanum*, and other Gums. (*a*)

Let the gum to be purified be ſliced or bruiſed, and then diſſolve it in boiling water; while it is yet of a boiling heat; let the foulneſs be ſeparated from it by ſtraining it through a linen cloth, uſing preſſure, and afterwards let it be reduced to its former conſiſtence, by evaporation in balneo, or by any other gentle heat.

Gums, ſuch as Galbanum, which readily melt, may be alſo eaſily purified, by putting them in a bladder into hot water, till they are ſufficiently ſoft to be forced by a preſs through a coarſe linen cloth. (*b*)

(*a*) The proper ſpecification of gummous bodies fit to be purified by this method is omitted, viz. their ſolubility in water; for all ſuch as will either abſolutely diſſolve in boiling water, or mix with it, ſo as to form a pulp, may with convenience be freed from impurities by this means.

(*b*) The ſame caution which was before given in the purification of ſtorax, is equally neceſſary in this manner of ſtraining the gums, that great regard be had to due heat, and quickneſs in the operation; for their eſſential oil is continually flying off while they remain hot.

Apes præparatæ.
Prepared Bees.

Put the bees into a convenient veſſel, and dry them by a very ſlow fire.

Bufo præparatus.
Prepared Toads.

Put the toads alive into an earthen pot, and dry them in an oven moderately heated, till they become fit to be powdered.

To avoid ſo cruel an operation, it would be well to ſuffocate them firſt, by holding them over the fumes of burning brimſtone.

Magiſterium Lapidis Caliminaris.
Magiſtery of Calamine.

Take calamine 4 ounces, beat it into fine powder, or levigate it as above; put it into a matraſs, and pour upon it ſpirit of ſalt 1 pound; let them digeſt upon warm ſand forty-eight hours: filter the diſſolution, and precipitate the magiſtery with ſpirit of urine; free it from its ſalt by ſeveral ablutions, and dry it gently for uſe.

It is emetic and cathartic; and given in the like caſes as antimonial emetics. Its doſe is from 3 to 8 grains.

Caliminaris Diaphoreticus.
Diaphoretic Calamine.

Beat 4 ounces of calamine into fine powder; put it into a matraſs; which place in a chimney; and put to it, by three or four ounces at a time, of ſpirit of nitre 1 pound; let it there ſtand covered from dirt, for twenty-four hours, then decant the liquor, which put into a retort; ſet it in a ſand-furnace: and give a gradual heat to the third degree; and ſo keep it till no drops come over it. When all is cold, take the matter out of the retort, and keep it for uſe.

Some ſay it is a good ſudorific; but

but it is little uſed. Its doſe is from 10 grains to half a drachm, 1 ounce of it infuſed in half a pound of ſpirit of wine, makes an admirable collyrium; and does great ſervice, by dropping it into the diſordered eye, three or four times a day. Some likewiſe make a good collyrium, by quenching a lump of calamine of about four ounces, ten or twelve times in one pound of white wine.

Reſina Jalapii, &c. Reſin of Jalap, and the like Subſtances.

Take of the root of jalap, well bruiſed, any quantity, pour on it as much rectified ſpirit of wine, as will cover it to the height of four fingers; and digeſt them in a ſand-heat, till a tincture is extracted. Filter the tincture through paper, then put it into a glaſs cucurbit; add to the remainder a proper quantity of water, and the reſin will precipitate to the bottom, divide it into little cakes, and dry them with a very gentle heat.

Some only put to the tincture common water, which turns it milky, and lets fall the reſin to the bottom; for reſins will not be ſuſpended in any menſtruum lower than ſpirit: many knaviſh chemiſts mix with it common black reſin; two parts of the latter to one of the former; but this may be known by putting it into rectified ſpirit, which will again diſſolve the reſin of jalap, but not touch the other. The virtues are the ſame as thoſe of the root; which ſee in Sect. 8. Claſs 2. but it works rougher; becauſe all ſuch ſubſtances act with greater irritation upon the coats of the ſtomach and inteſtines, ſo as to be the authors of a great deal of pain and uneaſineſs; for which reaſon, this is corrected with ſugar, cream of tartar, or the like: whereby it is ſuppoſed to be brought into the ſame ſtate as nature firſt preſented it to us in the root. For ſome purpoſes indeed where the form is required to be ſmall, as often in adminiſtration to children, this is beſt complied with, and moſt convenient. Its doſe is from 3 grains to 1 ſcruple.

After the ſame manner are made the reſins of guaiacum, ſcammony, turbith, and of all ſimples, which have in their compoſitions any thing of the like kind.

Tinctura Mellis, Tincture of Honey.

Take 1 pound of pure virgin honey; diſpumate it in a clean earthen pan; and put to it 3 ounces of pure ſalt of tartar (or any other fixed ſalt) finely pulverized; ſtir them well together, and an ebullition will ariſe; ſtay till that is over, and take off the ſcum; put the mixture into a cucurbit uncut, and pour upon it one pound and a half of tartarized ſpirit of wine; cloſe the mouth, and ſet it in the heat of digeſtion 48 hours; agitate the matter three or four times a day; and in that time the ſpirit of wine will have charged itſelf with the pureſt part of the honey. Decant it from the fæces into a new cucurbit; lute on a head and receiver, and draw off one half of the ſpirit of wine in a gentle heat. That which remains will be a ſweet thick tincture.

This is ſaid to be an excellent pectoral medicine, and very powerfully to promote expectoration. Its doſe is from 40 drops to 2 drachms, or a tea-ſpoonful, in any warm liquor; eſpecially at going to bed.

Spiritus Mellis, Spirit of Honey.

Mix 1 pound of honey with 3 pounds of clean ſand, and put it into a retort in a ſand-furnace: make a fire of the firſt degree, for two hours: increaſe it to the ſecond for two hours more, and ſo go on to the third; where let it remain, till no more fumes ariſe, nor drops will fall. There will then come over an empyreumatical ſpirit and oil: put them both into a cucurbit; and with a fire of the firſt degree, draw off the inſipid water; and the ſecond will raiſe the ſpirit.

This is a ſpirit only in the ſame ſenſe that other acids are; for this is an acid, and will diſſolve coral or pearl, as diſtilled vinegar. It is affirmed to be good to make the hair grow, and is uſed ſo much for that purpoſe, by rubbing any bald place with it, that it is to be met with almoſt in every ſhop, although it is of no value for any thing elſe.

Aqua Mellis Aromatica.

Sweet Honey Water.

Take of good French brandy 1 gallon; of the beſt virgin-honey and coriander ſeeds, ana 1 pound, cloves 1 ounce and half, nutmegs 1 ounce, Benjamin and Storax, ana 1 ounce, banilloes No. 4. the yellow rind of three large lemons: bruiſe the cloves, nutmegs, coriander ſeed and Benjamin; cut the banilloes into ſmall pieces; put all into a cucurbit, and pour the brandy to them; and after they have digeſted 48 hours, diſtil off the ſpirit into a retort with a gentle heat.

To one gallon of this water add of damaſk roſe-water, and orange-flower-water, ana 1 pound and half, of muſk and ambergris, ana 5 grains. Firſt well grind the muſk and ambergris with ſome of the water, and afterwards put altogether into a large matraſs; ſhake them well, and let them circulate three days and three nights in a gentle heat; then let all cool; filter and keep the water in a phial well ſtopt for uſe.

The perſon whom we take this water from (Mr. George Wilſon), ſays, he often made it for king James II. and that it is an anti-paralytic, ſmooths the ſkin, and gives one of the moſt agreeable ſcents imaginable. Forty or ſixty drops put into a pint of clean water, are ſufficient to waſh the hands and face with; and the ſame proportion to punch, or any cordial-water, gives a moſt pleaſant flavour.

In making the tincture of honey, the veſſel muſt be big enough to hold eight times the quantity; elſe the ebullition will be apt to make it boil over. In the ſpirit of honey, the ſand is to prevent it from boiling over; notwithſtanding which it will ſwell and bubble, ſo that the retort ought not to be above half full. In its rectification, fit a receiver without luting; and as ſoon as the acidity is perceivable, change the receiver; lute it; and draw off the ſpirit in a heat not exceeding the third degree. And if a twelfth or ſixteenth part of ſpirit of nitre dulcified, be added, it will abate its unpleaſant ſcent. In the laſt proceſs the honey more powerfully opens the aromatics; which otherwiſe would afford but very little odour.

Catechu.

Make any quantity of Japan-earth into powder; diſſolve it in ſmall cinnamon-water; pour off the

the diſſolution from the fæces, and dry it gently: when it is dry mix 2 ounces of it with three ounces of ſugar-candy, ſpirit of roſes 15 drops, ambergris half a ſcruple, muſk 15 grains; grind them all together till they are impalpable; and with the mucilage of gum tragacanth make them into little pills, of the bigneſs of pearl-barley.

One of theſe held in the mouth cauſes the breath to ſmell ſweet; and renders all liquors very palatable. Forty or fifty may be ſwallowed in a day for catarrhs, diarrhœas, gonorrhœas, and defluxions of all kinds. They anſwer all the ends of the earth itſelf, deſcribed in Sect. 2. Claſs 3. of Minerals.

Infuſum Corticis Peruviani.
Infuſion of Peruvian Bark.

Take an ounce of Peruvian bark finely powdered, and 12 ounces of water; macerate without heat for 24 hours, now and then ſhaking the veſſel; then pour off the clear liquor, and paſs it through a fine ſtrainer.

Cuſtom has hitherto prevailed in extracting the virtues of Peruvian bark by coction in water; but late experiments prove that this drug gives out more to cold than to boiling water. This infuſion is the beſt preparation of the bark for weak ſtomachs, and may be given with every advantage expected from the decoction in intermitting fevers, &c. where this medicine is required. Doſe 2 or 3 ounces.

L. D. and E. D. *Millepedarum, præparatio.* Preparation of Wood-lice.

The wood-lice being wrapt in a very coarſe thin linen cloth, let them be hung up in a cloſe veſſel over heated ſpirit of wine, that they may be killed, and become fit for powdering.

Vinum Millepedum.
Wine of Wood-lice.

Take 4 ounces, or a quarter of a pint, of Millepedes alive; infuſe them in 2 pounds of white wine, with a drachm of Engliſh ſaffron; ſhake them often, and let them ſtand two or three weeks; then filter the wine for uſe.

The bottle muſt always have vent when ſhook, elſe it will be apt to fly. The wine will have a brackiſh pungent taſte; not much unlike what ſalt of amber gives to any liquor. It is an admirable cleanſer of all the viſcera; and gives place to nothing in the jaundice, or any obſtructions of the kidneys, or urinary paſſages: which makes it a great pity that it is not more in uſe; for there is hardly any chronic diſtemper wherein it will not do ſervice; and even in ſcrophulas and ſtrumous ſwellings, a courſe of it will greatly waſte them, if not quite carry them away: and in defluxions of rheum upon the eyes, it will do wonders; by turning downwards thoſe hot ſalts, by their natural outlets, the kidneys; which had forced their way through the glands about the eyes. It may be given from half an ounce to 2 ounces in a doſe.

E. D. *Vinum Millepedatum.*
Millepedes Wine.

Take 2 ounces of wood-lice alive, bruiſe them, then pour on them a pint of Rheniſh wine: infuſe them a night, and afterwards ſtrain and preſs out the fluid.

Spiritus,

Spiritus, Sal Volatile, & Oleum Millepedum. Spirit, Volatile Salt, and Oil of Wood-lice.

Put any quantity of Millepedes into a long-bodied retort, ſo that it be not above half full: place it in a ſand-furnace; lute on its receiver; and give a moderate heat till the retort is thoroughly hot: then increaſe the fire a little, and thus keep it two or three hours, according to the quantity of wood-lice made uſe of; and ſome liquor will drop into the receiver, and the volatile ſalt will begin to riſe: increaſe the heat yet more; then ceaſe, and take off the receiver, when it is cool; where there will be a ſpirit, an oil, and a ſalt; which muſt be ſeparated and rectified apart; or put all together into a long-necked matraſs, luting on a head and receiver; and ſeparate the ſalt by ſublimation, as that of vipers.

This differs in no reſpect from the volatile ſalt of any other animal ſubſtance, though it has erroneouſly been ſaid to contain the virtue of the Millepedes. The doſe may be from 3 to 16 grains.

Oleum Myrrhæ. Oil of Myrrh.

Half fill a retort with coarſe myrrh, join on a receiver; in a ſand-furnace, give it fire, by degrees, to the greateſt height: when the fumes ceaſe, let out the fire, and in the receiver there will be a fetid oil, and an acid ſpirit.

After the ſame manner are to be obtained the oils of all the like ſubſtances; and they may be rectified, as before directed in the oil of Benjamin; which makes them much pleaſanter for uſe. This is reckoned diaphoretic and diuretic; but is ſeldom preſcribed. Externally it brings bad ulcers to a kind of ſuppuration. Its doſe is from 1 to 24 drops in any proper liquor.

Oleum Myrrhæ per Deliquium. Oil of Myrrh by Reſolution.

Boil eggs till they are hard, ſplit them in the middle, and take out the yolks: fill the cavity with fine myrrh in powder; place them upon little ſticks about an inch and a quarter long, three or four of them being pricked into the egg; ſet them in a clean pan in a cellar, or ſome ſuch moiſt place, and there will drop from them into the pan a liquor, which is called Oil of Myrrh.

This is uſed only externally, to take off blemiſhes and ſpots on the ſkin; and is recommended as excellent for ſuch purpoſes, and particularly for ſore and chopped nipples.

Tinctura Euphorbii. Tincture of Euphorbium.

Put into a phial what quantity you pleaſe of pulverized euphorbium; and pour upon it oil of tartar *per deliquium*, about four fingers high; ſtop the phial, place it in digeſtion upon hot ſand, leave it there for two days, and there will be made a deep yellow or reddiſh tincture; ſtrain it, and keep it in a glaſs bottle.

This is very penetrating, inciſive, attenuating, and powerful in cleanſing old foul ulcers, carious bones, and the callous lips of wounds: it is good alſo to diſſolve ſcrophulous tumours, and very obſtinate indurations of the glands.

Preparations of Opium.

It would be endleſs to give all the

the preparations we meet with of this moſt celebrated drug in Diſpenſatory writers. A very large collection of them may be found in the *Collectanea Chemica Lydenſia.* We ſhall therefore here content ourſelves with theſe only which are now in the ſhops, and preſcribed in regular practice.

L. D. *Opium colatum, vel extractum Thebaicum.* Purified Opium, or the Thebaic Extract.

Take of opium, cut into ſlices, one pound, diſſolve it to the conſiſtence of a pulp in boiling water, great caution being uſed to prevent its burning to the veſſel; while it is yet of a boiling heat, let the foulneſs be ſeparated by forcibly preſſing it through a linen cloth: afterwards let the opium thus ſtrained be reduced to its former conſiſtence in balneo, or by any other gentle heat. Opium thus moiſtened with only a little water, paſſes through the ſtrainer entire; but if diſſolved in a greater quantity, the reſinous part will be ſeparated from the gummous.

L. D. *Tinctura Thebaica.* Thebaic Tincture; commonly called Sydenham's Laudanum.

Take of purified opium two ounces, cinnamon and cloves, each 1 drachm, mountain wine 1 pint; infuſe them a week without heat, and then filter through paper.

This preparation was introduced by Sydenham, and generally bears his name, but is by no means an inſtance of that ſimplicity in practice for which he has been eſteemed; the addition of the ſpices ſeeming to be made on no other principle but the fondneſs for multiplying ingredients. The intention of this, and of all the ſeveral preparations under the name of Laudanum, is to convey opium in a proper vehicle, and under ſuch form, that the required quantity of it may be aſcertained in preſcriptions. That this particular preparation can have no intention, but what depends on the opium alone, is evident from the exceeding ſmall quantity of the ſpices, which is, were they taken in ſpecie, not half a grain to 20 drops; a quantity too minute to flatter even the moſt credulous, who reflect on it with any expectation of the ſlighteſt efficacy. But the mixture of inſignificant quantities of ſpices, or of other irrelative ingredients, with the opium in laudanum, are not only needleſs, but really injurious, ſince they conduce to perplex the preparation, and render the proportion of opium in the compoſition leſs eaſy to be adjuſted: which, though not perhaps attended with all the danger that has been repreſented from an exceſs in the doſe, may, where there happens to prove a deficiency in the ſuppoſed quantity (which, if real, would be but juſt adequate to the intended effect) be the negative cauſe of very hazardous conſequences.

E. D. *Tinctura Meconii.*

Tincture of Meconium.

Take of opium two drams, ſimple Jamaica pepper-water, 20 ounces by weight, rectified ſpirit of wine, the weight of 10 ounces. When the opium is wholly ſoftened with the water, add the ſpirit, then digeſt 8 days, and filter thro' paper.

Dr. Goddard's Compound Extract of Opium.

Take of ſaffron and nutmegs, ſliced

ſliced thin, ana 1 ounce, of caſtor half an ounce: put them into a matraſs with tincture of tartar 12 ounces: ſet all in a gentle heat of ſand, (with the mouth of the matraſs well ſtopt) in digeſtion twenty-four hours, ſhaking it often; then let it cool, and preſs it through a cloth into a clean earthen pan: what ſtays in the bag put into the matraſs again; and add to it rectified ſpirit of wine half a pound: let it ſtand warm for 12 hours, and ſtrain it off to the other: into theſe tinctures put of the extract of opium five ounces, and ſet them over a gentle fire to thicken into an extract.

This has the virtues of the former: but may be ventured upon in a ſomewhat larger doſe, ſo far as to 3 or 4 grains.

Laudanum Liquidum Sydenhamii. Dr. Sydenham's Liquid Laudanum.

Take of ſelect opium 2 ounces, ſaffron 1 ounce, cinnamon and cloves powdered, ana 1 drachm; put them into a matraſs, and pour upon them of good canary wine 1 pound; let the matraſs be fitted for circulation; and ſet them in a good heat of digeſtion for three or four days: then preſs the liquor through a flannel; let it ſettle, and by gentle inclination pour it into a clean phial, and keep it for uſe.

Its doſe and virtues are the ſame with thoſe above.

In this preparation, the canary will bear a ſtronger heat of digeſtion than the ſpirit of wine or tincture of tartar; becauſe there is not ſpirit enough in the wine to extract the reſinous part of the opium without it. If after three or four days digeſtion with the other ingredients, it be preſſed out, let it ſettle, and pour it off by gentle inclination; putting to it an ounce or 6 drachms of the extract of opium, it will be a better medicine.

Guttæ Vitæ. Drops of Life.

Diſſolve 4 ounces of the beſt opium in water (as in the former proceſs), then take of Engliſh ſaffron 1 ounce, of Ruſſia caſtor 1 ounce and a half, cochineal and Virginia ſnake-root, ana half an ounce; nutmegs and zedoary, ana 2 ounces; of camphor 1 ounce. Powder theſe ingredients, and put them into a matraſs; pour upon them tincture of antimony (made with ſalt-petre and *antimonium diaphoreticum)* 1 pound: let them ſtand three or four days in a gentle heat, ſhaking the matraſs often, till a good tincture is produced; which put to one quart of the diſſolution of opium: then let all ſtand in digeſtion 48 hours, and when ſettled, decant for uſe.

This is the medicine which Salmon made ſo much noiſe with. It is an excellent medicine in proper hands; and one of the beſt preparations of this kind; though it is not enough known to be much met with in preſcription. The opium is ſo well guarded with cordial aromatics, that it may be ventured upon in very conſiderable doſes; and there is no fear of nauſeas afterwards at the ſtomach. It promotes ſweat very much; and is wonderfully carminative. A patient may take from 10 to 40, 50, or 60 drops.

Pil. Matthæi. Matthews's Pill.

Take of the extract of opium, black hellebore, liquorice, and the ſoap

ſoap of tartar (deſcribed under the preparations of tartar) ana 4 ounces. Let the hellebore and liquorice be made into a ſubtile powder; beat and mix theſe four ingredients very well; then with 2 or 3 ounces of this maſs, mix an ounce of Engliſh ſaffron cut into ſmall pieces; and beat them well together, till the ſaffron is perfectly incorporated with the maſs, ſo that no part of it be diſcernible from the reſt. Then beat and mix that with the reſt of the maſs as well. If this maſs be too dry, you may mix it with ſome of the oil which comes from the ſoap, which it ſpues out when it ſtands a long time by; or in its ſtead, ſo much rectified oil of turpentine as is ſufficient to make a maſs fit to form into pills. Then put it into a wide-mouthed glaſs, or galley-pot, tied over with a bladder or leather.

There are many ways of making this medicine: Bates puts in white hellebore; but how much ſoever it may be imagined to ſtand corrected here, it is much ſafer left out; and the medicine will be ſtill left efficacious enough to all the intentions it is ordered for. The ſaffron, in this, is not ordered by Bates; but much mends the medicine in many caſes. It is an admirable and ſafe opiate, and promotes the diſcharges both by ſweat and urine; and the ſoap of tartar is ſo aperient, that it makes it ſafe even in aſthmas, when no other preparations of opium dare be ventured upon. It may be given from 3 to 10 grains. When it grows dry with keeping, it muſt be again moiſtened with freſh oil of turpentine: but the oftener it has had thoſe amendments, its doſe may be enlarged; for the turpentine will dry away ſo much, as not to leave enough behind to give ſome augmentation to its bulk.

Pilulæ Starkei. Dr. Starkey's Pills.

Take extract of opium 4 ounces, nutmegs and mineral bezoar, ana 2 ounces; ſaffron and Virginia ſnake-root, ana 1 ounce; beat the nutmegs and ſaffron together into a paſte; ſo that they cannot be diſtinguiſhed from one another. Let alſo the mineral bezoar and ſnake-root be in impalpable powder. Then mix all together with half a pound of the ſoap of tartar, of oil of ſaſſafras half an ounce, and 2 ounces of tincture of antimony: let them be all well incorporated, by beating in a mortar: then keep them in a glaſs, or galley-pot, tied over with a bladder, and leather, for uſe.

This Mr. George Wilſon ſays, he had from Dr. Starkey's own mouth, in the year 1665, a little before his death; who then told him, he gave Matthews the former for a little money: but that this was what he ſucceſsfully made uſe of himſelf. It is both more diaphoretic and more anodyne than the former; and they who have made uſe of it in their practice, affirm it to be the beſt laudanum that they ever met with. And yet this is not the ſort which is kept in the ſhops; and it is not by much in ſo conſtant preſcription as the former. Indeed there are hardly any of the ſhops that prepare this; ſo that a phyſician may write for it in vain; while the other is ſo ready for a ſuccedaneum. This may be given in a good handſome doſe, when reſt is wanting in fevers; and is not ſo hazardous

hazardous in its effects as common opium, or any other of its preparations; the alexipharmics likewiſe, in its compoſition, cauſe it ſooner to raiſe a ſweat; becauſe at the ſame time that they warm and attenuate the fluids for ſecretion, the opium relaxes the fibres, and makes more way for their paſſage through the cutaneous pores.

Laudanum Londinenſe.
London Laudanum.

Take extract of opium made with ſpirit of wine, 1 ounce; extract of ſaffron 1 drachm and half; caſtor 1 drachm; let them be made up into a maſs with tincture of the ſpecies diambræ half an ounce, made with ſpirit of wine: add ambergris and muſk, ana 6 grains; oil of nutmegs 10 drops; and then with a gentle heat evaporate to a due conſiſtence.

This is endued with the virtues of the former preparation. It may be given from 1 to 4 grains, either in a pill, or diſſolved in a draught. Many prefer this to any liquid form; becauſe the doſe cannot ſo exactly be determined by ſo many drops, as by ſo much weight: for drops may contain more or leſs, according to the ſhape of the phial they are dropt out of, and the ſlowneſs of their dropping; beſides the uncertainty of a menſtruum ſuſtaining juſt ſuch a quantity of opium. This medicine is very apt to grow too dry in the ſhops, and alſo mouldy; both which may be prevented by a very ſmall portion of ſalt of tartar in its compoſition, and proportioning the doſe ſo much larger accordingly.

Preparations of Scammony.

There are various ways which authors have contrived to prepare ſcammony, and all with a view to make it a milder and ſafer cathartic. Moſt agree in doing this with acids; to which purpoſe ſome bake, or roaſt it, incloſed in the fruit of a quince, and then it is called *Diagrydium*; others waſh it with the juices of lemons, citrons, and with diſtilled vinegar; but after all it is beſt to give it in the ſtate that nature has given it us.

Scammonium cum Sulphure præparatum. Scammony prepared with Sulphur.

Lay the powder of ſcammony upon thick ſtrong paper; then hold it over coals, upon which ſulphur is to be burnt, until the ſcammony turns white, and melts. Afterwards rub it in a mortar a little greaſed, to a fine powder for uſe.

This is preſcribed from 3 to 8, or ten grains; and has the virtues of the ſcammony itſelf, being little altered by this preparation.

Reſina Scammonii. Reſin of Scammony.

Take any quantity of ſcammony, and diſſolve it in a ſufficient quantity of ſpirit of wine: decant the liquor, and put it to common water, which will occaſion it to turn milky, and let the reſin fall to the bottom; or put it into a retort, and gently draw off the ſpirit, as directed in making the reſin of jalap; from which it differs very little, but is ſomewhat ſtronger and rougher in operation. Its doſe is from 2 to 6 or 7 grains.

Spiritus Cochleariæ.
Spirit of Scurvy-graſs.

Take of ſcurvy-graſs, freſh gathered,

thered, and bruiſed, 10 pounds; rectified ſpirit of wine 5 pints; infuſe them 12 hours, and then diſtil off 5 pints of ſpirit, in balneo.

This ſpirit is ſtrong of ſcurvy-graſs, and uſeful in thoſe caſes in which the herb is proper; the doſe from 20 to 100 drops. The virtues of ſcurvy-graſs reſide in a ſubtile volatile oil, which riſes in diſtillation both with water and pure ſpirit; if the liquors are expoſed to the air, it ſoon exhales from both. In the cloſeſt veſſels, it loſes remarkably of its pungency by long keeping. Horſe-radiſh is often uſed inſtead of ſcurvy-graſs, for making this ſpirit with, and ſo alike are their flavours, that the difference is not eaſily diſtinguiſhed.

Spiritus Cochleariæ Aureus.
Golden Spirit of Scurvy-graſs.

Take of the foregoing ſpirit one pound, and diſſolve in it reſin of jalap, ſcammony, or gamboge, one ounce. If there be any ſediment, decant the tinged ſpirit carefully from it.

This is kept up in high eſteem amongſt the common people, by the great pretenſions of ſeveral venders of it; but it is an indifferent and uſeleſs medicine; unleſs in athletic conſtitutions; and is very unfit to anſwer the expectations its name raiſes. Its doſe is from 20 to 60 drops.

Flores Sulphuris.
Flowers of Sulphur.

Take any quantity of ſulphur groſly powdered; put it into a glaſs body, which place in a ſmall open fire, and cover it with a pot, or another cucurbit turned upſide down; ſo that the neck of the one may enter into the neck of the other. Change the upper cucurbit every half hour, fitting another in its place; add likewiſe new ſulphur. Gather the flowers which ſtick in the cucurbit, and continue to do ſo, until there is as much as deſired.

The great conſumption of this, and the lowneſs of the price it is got down to, make it neceſſary for thoſe who would find a profit in it, to build a furnace with brick, big enough to ſublime an hundred weight of ſulphur at a time; and a few that have put themſelves to ſuch expence, ſerve the reſt of the buſineſs. This proceſs is ſufficient to let us into the nature of theſe flowers as a medicine; and to inform us, that they are the fineſt part of the brimſtone; though with theſe there ariſes a great deal of ſalt, as ſome farther proceſſes will diſcover. Pure ſulphur looſens the belly, and promotes inſenſible perſpiration. That it readily paſſes through the ſkin, is perceived by the ſmell of perſons who have taken it inwardly. In ſome inſtances of coughs, &c. it is found uſeful; particularly where the blood is affected by ſcorbutic humours; in which caſe it affords relief by throwing out a plentiful eruption on the ſkin. In cutaneous diſeaſes it hath long been celebrated; and whether uſed externally or internally its effects are nearly ſimilar: in both caſes the eruptions become frequently more copious after the firſt uſe of it.

L. D. *Flores Sulphuris.*
Flowers of Sulphur.

The ſame as the preceding; but the flowers are directed after the ſublimation to be powdered in a wooden mill, or in a marble mortar, with a wooden peſtle.

L. D. *Flores Sulphuris loti.*

Waſhed Flowers of Sulphur.

Pour water on the flowers till it riſes to the height of three or four fingers above them, and boil them ſome time; then pour off this water, and with renewed quantities of cold water, waſh away the remainder of the firſt, and then dry the flowers for uſe. In ſubliming the flowers of ſulphur the air is not always completely excluded, and ſome of thoſe which ariſe the firſt are apt to take fire, and thus become an acid vapour, which mixing with the flowers which afterwards are ſublimed, communicates to them a degree of acidity, which requires this operation; otherwiſe the flowers are apt to gripe the bowels, and occaſion much uneaſineſs there.

Flores Sulphuris albi.

White Flowers of Sulphur.

Take of ſalt-petre, fixed with charcoal, four ounces, or half a pound; of clean mineral ſulphur twice its quantity; grind and mix them well together; then put them into a retort, and ſet it in a ſand-furnace; fit to it a receiver, but lute it not; make a gentle fire, which gradually increaſe to the third degree, and ſo keep it till all the flowers riſe: which may be known by the upper part of the retort above the ſand being clear.

The uſe of theſe is the ſame as the former; and they may be given from 1 ſcruple to 2 drachms.

L. D. *Sulphur præcipitatum.*

Commonly called *Lac Sulphuris.*

Boil flowers of ſulphur with thrice their weight of quick-lime, till the ſulphur is diſſolved; filter the ſolution through paper; make a precipitation with weak ſpirit of vitriol, which is to be made perfectly inſipid by frequent waſhings.

Hepar Sulphuris.

Liver of Sulphur.

Take of flowers of ſulphur 3 ounces, melt them in an earthen diſh under a chimney; add by degrees an ounce and half of ſalt of tartar, conſtantly ſtirring it till the maſs has acquired a red colour; care being taken that they do not catch fire.

Lac Sulphuris.

Take of liver of ſulphur powdered, any quantity, ſpring-water four times as much; boil them three hours, ſupplying more water, if there be occaſion; then filter the ſolution, while hot, and drop ſpirit of vitriol into it as long as any efferveſcence appears: a powder will be precipitated, which is to be waſhed with water, and afterwards dried for uſe. The method of preparing this article with *Hepar Sulphuris* is the moſt expeditious and leaſt troubleſome, provided that the hepar be well made; but quick-lime gives it a more ſaleable whiteneſs. The medicine would be the ſame, if any other acid was uſed; the vitriolic acid forms with the lime a ſelenitic concrete, which precipitates with the ſulphur, and is not afterwards ſeparable by any ablution; whilſt the neutral ſalt, which the acid forms with the fixt alkali of hepar, may be totally diſſolved, and waſhed off by repeated ablutions in hot water. The combinations of the other acids, as diſtilled vinegar, &c. both with the lime and the alkali, are ſeparated by cold water. Pure lac ſulphuris

ris is not different in quality from pure ſulphur itſelf.

Balſamum Sulphuris cum Oleo Olivarum. Balſam of Sulphur with Oil of Olives.

Take of the flowers of ſulphur 4 ounces, ſallad-oil 1 pound; put them in a pipkin which will contain about three times their quantity; ſet them over a fire, and make the matter to boil gently, when it is quite cool, put it up for uſe.

The balſams of ſulphur are moſt commodiouſly made in a tall glaſs body, with a mouth about an inch or more in diameter; for when the ſulphur and oil begin to act vehemently upon each other, they not only rarify into a large volume, but likewiſe throw out impetuouſly great quantities of an elaſtic vapour, which, if the veſſels are cloſed, will burſt them. In a veſſel of this kind the proceſs will be finiſhed in about 4 or 5 hours; the fire at firſt, and for ſome time being gently, and afterwards gradually increaſed, ſo as to make the oil juſt bubble or boil, in which ſtate it may be continued until all the ſulphur appear to be taken up.

This is commended in coughs, aſthmas, and conſumption, and is uſed externally to heal ulcers; but it is not often made. Its doſe is from 10 to 40 drops.

L. D. *Balſamum Sulphuris ſimplex.* Balſam of Sulphur.

The ſame as the preceding, only the veſſel is directed to be ſlightly covered, inſtead of being ſtirred. In the ſame manner is made a balſam of ſulphur of Barbadoes tar.

Balſamum Sulphuris Terebinthinatum. Balſam of Sulphur with Oil of Turpentine.

Take flowers of ſulphur 4 ounces, oil of turpentine 1 pound; put them into a matraſs looſely ſtopped with another glaſs, ſet it in a ſand-heat, give a ſmall fire for one hour, then increaſe it till the oil boils gently, in which degree keep it three or four hours; then let it cool, and pour off the impregnated oil from that which is not diſſolved.

This is an excellent medicine for all diſeaſes of the breaſt, and likewiſe for ulcerations and obſtructions of the urinary paſſages; but it is nauſeous to take at firſt, becauſe of an empyreuma, which wears off with long keeping. Its doſe is from 6 to 15 or 20 drops, upon fine powdered ſugar, which is the beſt way to take it, becauſe it will not well mix with liquors. After the ſame manner is a balſam made with any other oils, as of aniſeed (which is much uſed in the ſame doſe), or any other the phyſician may direct: but care muſt always be taken leſt it boil over, becauſe it immediately takes fire, and burns ſo fiercely as to endanger the houſe. The veſſel ought therefore to be large enough to be two thirds at leaſt empty, to give it room to riſe without running over.

Balſamum Sulphuris Terebinthinatum. Terebinthinate Balſam of Sulphur.

Take of flowers of ſulphur 2 ounces, oil of turpentine 10 ounces, digeſt them in a ſand heat, till the oil is ſaturated with the ſulphur.

Balſamum Sulphuris cum Oleo Lini. Balſam of Sulphur with Linſeed Oil.

Put 4 pounds of linſeed oil into a glazed earthen body; ſet it in a ſand-heat till it boils gently; then add 1 pound of flowers of ſulphur; ſtir it till it ſwells and ſubſides; then remove it from the fire. Linſeed oil diſſolves the ſulphur more readily than the olive oil. The veſſels in which theſe balſams are boiled in, ſhould be capable of holding three times the quantity of the ingredients, becauſe, when the oil begins to act upon the ſulphur, which is at near boiling, it rarifies ſuddenly and conſiderably; at this time carefully remove it from the fire.

The uſe and doſe of this is the ſame as of the other balſams of ſulphur; but this is the moſt grateful of any of them.

E. D. *Balſamum Sulphuris craſſum.* Thick Balſam of Sulphur.

Take of olive oil 1 pint, flowers of ſulphur two ounces; boil them together over a gentle fire, continually ſtirring them, till they are of the conſiſtence of a balſam.

Balſamum Sulphuris Aniſatum. Balſam of Sulphur with Oil of Aniſeed.

Take 2 ounces of flowers of ſulphur, 6 ounces of turpentine, and four ounces of oil of aniſeed: digeſt as above.

Balſamum Sulphuris Succinatum. Balſam of Sulphur with Oil of Amber, &c.

Theſe are prepared with the ſeveral diſtilled oils in the ſame manner as the balſam with oil of turpentine.

The eſſential oils employed in theſe proceſſes undergo a great alteration from the degree of heat, neceſſary for enabling them to diſſolve the ſulphur; and hence the balſams have not near ſo much of their flavour as might be expected. It ſhould therefore ſeem more eligible to add a proper quantity of the eſſential oil to the ſimple balſam: theſe readily incorporate by a gentle warmth, if the veſſel be now and then ſhaken. Sixteen parts of eſſential oil, and ſix of the *Balſamum Sulphuris ſimplex*, form a balſam more elegant than thoſe made in the foregoing manner: and the balſams of ſulphur have been ſtrongly recommended in coughs, conſumptions, and other diſorders of the breaſts and lungs. But the reputation which they have had in theſe caſes do not appear to have been built upon any fair trial, or experience of their virtues. They are manifeſtly hot, acrimonious, and irritating; and therefore ſhould be uſed with the utmoſt caution. They have frequently been found to injure the appetite, offend the ſtomach and viſcera, parch the body, and occaſion thirſt, and febrile heats. The doſe of the ſimple balſam is from ten to forty drops; thoſe with eſſential oils are not given in above half theſe quantities. Externally, they are employed for cleanſing and healing foul running ulcers; Boerhaave conjectures, that their uſe in theſe caſes gave occaſion to the virtues aſcribed to them when taken internally.

Sanguis Sulphuris. Blood of Sulphur.

Grind of the liver of ſulphur 4 ounces, and of oil of tartar, *per deliq.* 2 ounces, very well in a mortar together; put them into a matraſs,

matraſs, and pour upon them of dulcified ſpirit of nitre 12 ounces. Shake the matraſs, and let them digeſt, cloſe ſtopt, ſeven or eight days: when cool, decant the liquor for uſe.

The doſe of this is from 5 to 20 or 30 drops, mixed with ſyrup, or upon loaf-ſugar powdered, drinking afterwards a draught of canary, or warm ale. It is an admirable pectoral, and is alſo diuretic. But they do not make it in the ſhops, and our phyſicians hardly ever preſcribe it.

Tinctura Sulphuris.
Tincture of Sulphur.

Beat of the liver of ſulphur (while it is warm) 4 ounces, in a warm mortar; put it preſently into a matraſs, add to it ſpirit of wine 1 pound; ſet them in digeſtion for 24 hours, and there will be a very red tincture; which keep in a phial well ſtopt for uſe.

This is good in all the intentions wherein the foregoing balſams are uſed; but is much pleaſanter to take, becauſe it will mix with any liquors: Canary wine is the beſt vehicle to give it in. Its doſe is from 10 to 30 drops.

Tinctura Sulphuris Volatilis.
Volatile Tincture of Sulphur.

Take of flower of ſulphur ſix ounces, ſal ammoniac one pound, quick-lime a pound and a half. Sprinkle ſome water on the lime, and when quenched and fallen into powder, grind it firſt with the ſulphur, and afterwards with the ſal ammoniac, in ſmall quantities at a time; then diſtil the mixture in a retort, with the fire gradually increaſed: the diſtilled liquor ſhould be well kept in a cloſe phial.

The vapour from this tincture ſpreads to a conſiderable diſtance and changes copper and ſilver to a brown or a black colour. If a piece of paper, written upon with a ſaturate ſolution of lead in vegetable acid, or dried, be placed in the middle of a quire of paper, or a pretty thick book, and brought near the unſtopt orifice of the bottle containing this tincture, the vapour will quickly reach it, and change the colourleſs writing to a legible black.

Hoffman ſays that 10 drops of this tincture, with 30 drops of ſpirit of wine, is powerfully ſudorific: and that a liquor compoſed of this and camphor, takes off the pain of the gout, by bathing the feet with it.

L. D. *Oleum vel Spiritus Sulphuris per campanam.* Oil or Spirit of Sulphur by the Bell.

Take any quantity of ſulphur, put it into an earthen diſh, placed upon an inverted crucible; ſet them both upon the bottom of a large earthen veſſel, in a moiſt place, ſecured from the wind, then fire the ſulphur with a red hot iron, and hang over it a glaſs bell, at ſuch a diſtance as to be out of the reach of the flames; the vapour of the ſulphur will condenſe in the bell, and flow down the ſides like water into the veſſel underneath.

This is a powerful acid, and its operation is chiefly diuretic; but it is more commonly preſcribed to give a palatable acidity to ſome internal medicines, than to anſwer any intention by its proper virtues. Its greateſt uſe is in other preparations. Its doſe for palatableneſs is at pleaſure, and as a diuretic, from 3 to 10 drops, in any proper vehicle.

It has been till lately diſputed, whether there is any real difference between the oil of ſulphur and the oil of vitriol; but it is now ſcarcely a doubt with any who are converſant with chemical experiments of a general nature, that the acid is the very ſame ſubſtance, though their being obtained from different bodies may occaſion a variation of the proportion of the heterogeneous matter, which in ſome quantity neceſſarily ariſes with the oil in diſtillation from either ſubject. The doubt of their being ſimilar has aroſe from this reaſon, that what has been ſold under the name of ſpirit of ſulphur has been more diluted than oil of vitriol, and conſequently produced different appearances in the trials of its action on other bodies; as in the inſtance of the oil of ſulphur's not exuding like the other the corks, which ſtop the bottles wherein it is kept, &c. That the acid of ſulphur and vitriol are the ſame, is evident from the two following inſtances. 1ſt. The acid of ſulphur, united with copper, or iron, forms true vitriol of copper, and of iron; 2d. The acid of vitriol combined with inflammable matters, produces ſulphur, not diſtinguiſhable from pure common brimſtone.

But, as nevertheleſs there remain perſons to whom theſe reaſons are not convincing; and who, ſuppoſing a ſuperior medicinal virtue in ſpirit of ſulphur, may be deſirous of preparing it; I recommend in the place of the above given proceſſes, which are extremely tedious, for the want of a greater quantity of ſurface in the condenſing veſſel, and its being ſo ſoon made hot from its contiguity to the burning ſulphur, this following one.

Spiritus Sulphuris per campanam.

Take a large retort, with a tubulated receiver (with the pipe turned uppermoſt) adapted to its neck; in the ſide of this retort, cut a hole, and pour into its bottom an ounce or two of warm water, in the middle of which is placed a ſhallow ſtone cup, containing the ſulphur. The heat of the burning ſulphur is ſoon communicated to the water, ſo as to keep it continually riſing in ſteam; with this aqueous vapour, the fumes of the ſulphur are effectually blended as they aſcend, and detained in conſiderable quantities, in a much leſs proportion of phlegm than when the common methods are purſued; for here the buſineſs of rectification or dephlegmation is carrying on, at the ſame time that the acid is collecting.

By the common method with the bell about two drams of acid is obtained from 16 ounces of ſulphur; by this method, two ounces may be obtained. Stahl relates that 15 ounces of acid may be obtained from 16 ounces of ſulphur, and if ſuch ſtrength as to require being diluted with above an equal quantity of water, to reduce it to the ſtrength of the common ſpirits of ſulphur.

Thoſe who ſupply us with the vitriolic or ſulphurous acid, inſtead of an open bell, or a retort, uſe for burning the ſulphur in very large ſpherical glaſſes, blown of the ſize of a very large hogſhead, or larger, with only one aperture, through which the ſulphur is introduced, and which is afterwards immediately cloſed, till the fumes have ſubſided or incorporated with the vapour of the warm water, placed

placed in the lower part of the veſſel.

Sal Sulphuris. Salt of Sulphur.

Take of *Sal Polycreſtum* (as prepared under the article of Nitre) 4 ounces, powder it in a glaſs mortar, with a peſtle of the ſame; put it into a flat wide-mouthed glaſs, and add to it of the ſpirit of ſulphur 2 ounces; ſtir them well together, and evaporate in a ſand-heat; this will leave a pleaſant acid ſalt, which put up in a phial for uſe.

This is not, ſtrictly ſpeaking, the ſalt of ſulphur, but nitre, fixed by ſulphur, and afterwards impregnated with its ſpirit. It is diuretic, and if given in a large doſe, cathartic, as moſt ſalts are. In the former intention it is given from 10 grains to 1 drachm; in the latter up to 4 drachms, diſſolved in broth, or any proper vehicle, warm.

Aqua Sulphurata.
Sulphurated Water.

Take of water a quart, of ſulphur half a pound: let ſome portion of the ſulphur, ſet on fire in an iron ladle, be ſuſpended over the water in a cloſe veſſel; and let this be repeated as often as the fumes from the laſt ſulphur ſubſide till the whole is burnt away.

Van Helmont called this medicine *Gas Sulphuris.*

The burning ſulphur may very commodiouſly be ſuſpended over the water by putting the water into a glaſs receiver ſo large as to contain it conveniently with the mouth laid ſide-ways, the ladle holding the burning ſulphur being fixed to a wooden plug made to go freely into the neck of the receiver, which ſhould be pretty long; this plug will then keep the ladle up horizontal, that it ſhall not dip into the water; and a cloth ſlightly thrown round the mouth of the receiver will ſufficiently confine the fumes of the burning ſulphur.

The water in this proceſs is impregnated with a ſubtile volatile acid, differing in many reſpects from the ſpirit of ſulphur or volatile acid. This volatile acid hath a pungent ſuffocating ſmell, like that of the fumes of burning brimſtone, but diſcovers to the taſte very little acidity or corroſiveneſs. Expoſed for ſome time to the air, it loſes thoſe properties, and becomes a fixed acid, and corroſive like the common oil of vitriol.

Half an ounce two or three times a day, is recommended in ſpaſmodic aſthmas, to be taken in any convenient vehicle: but this preparation is liable to great uncertainty in point of ſtrength.

Spiritus Sacchari ardens.
A burning Spirit of Sugar.

Take of coarſe ſugar, or melaſſes, any quantity at pleaſure, in proportion to the ſtill; put to it ten or twelve times its weight of water, and let them ſtand a ſufficient time to ferment: as ſoon as the fermentation is over put the liquor into a copper ſtill with its refrigeratory, and give it gradual fire till it begins to drop. Obſerve ſo to manage the fire, that the ſpirit come from the mouth of the worm in a ſmall thread, and ſo continue till it runs inſipid; then let out the fire, and rectify the ſpirit by a ſecond diſtillation, either in a glaſs body or head; or if the quantity be great, in a copper veſſel; obſerving to ſeparate the ſpirit from the phlegm, as in the firſt diſtillation; which may

be farther rectified till it will burn all away, and then it is called alcohol.

This is of the ſame uſe as the ſpirit of wine: and is much preferable to our malt ſpirits, both for ſofnteſs and flavour; and is exceeded by none but that of the grape.

Oleum Camphoræ.

Put into a glaſs retort well coated, 2 ounces of camphor groſly pulveriſed; pour upon it 8 ounces of the ethereal oil of turpentine; place the beak of the retort upwards in digeſtion upon hot ſand; ſtop the ſame, and let it remain there twenty-four hours; and ſhake it now and then till all the camphor is diſſolved in the liquor: then place the retort for diſtillation upon ſand; open it, and adapt thereto a recepient; and lute the joint exactly; afterwards, by a moderate and gradual fire, diſtil the liquor till nothing more comes over: keep this liquor in a bottle well ſtopt, and you will have an oil of camphor, which will appear muddy, of a whitiſh colour, inclining to yellow, of a more fetid odour and taſte than thoſe of turpentine oils. It will weigh ſix ounces, and nothing remain in the retort.

This is very deterſive, penetrating, and reſolutive, both inwardly and externally uſed: and will reach to ulcerations and foulneſſes in the moſt remote and ſtraitened canals, as in the lungs or urinary paſſages. In athritic pains, and thoſe ſettled by old colds, as they are called, it cannot but be very efficacious; taken from 5 to 15 drops in any proper liquor, keeping the patient warm.

Acetum. Vinegar.

Vinegar is produced by ſuffering a ſmall acceſs of air to any vinous or fermented liquor, which is thereby ſo changed, that the inflammable ſpirit diſappears, and an acid is generated. This change is much accelerated by the application of a gentle heat; whence, in liquors not too highly fermented, where the inflammable ſpirit is defective, it frequently happens in warm weather, notwithſtanding the air be carefully excluded and all heat avoided as much as poſſible.

Common vinegar is prepared, by thoſe who make it their proper buſineſs, from malt, rape, melaſſes, or ſuch fermenting vegetables as can be bought at the loweſt price; which is brewed and fermented, but not ſo highly as if deſigned for vinous liquors, or the diſtillation of vinous ſpirits, and then expoſed in caſks, having a ſmall aperture for the admiſſion of the air, to the heat of the ſun; the ſtalks of raiſins or grapes, taken out of ſome quantity before prepared, being added, by which the acetous fermentation is excited, as the vinous one is by yeaſt. A more elegant vinegar is, in leſſer quantities, made from the acetification of various kinds of wines; but it is indifferent, in regard to its medicinal effects, of what matter the vinegar is made.

Wine vinegar is conſiderably more pure than that prepared from malt liquors; the latter however acid and fine, contains a large portion of a viſcous mucilaginous ſubſtance; the ſtronger and more ſpirituous the wine, the better and ſtronger vinegar it yields.

The uſes to which vinegar is applied in medicine are extremely various;

various; it is given in ſcurvies as an alterative; in fevers as an anti-inflammatory, in hæmorrhages as a coagulating ſtyptic. It is ſometimes employed to neutraliſe alkaline ſalts, as in the *Terra foliata Tartari*, and Mindererus's mixture; ſometimes to diſſolve metals, as in the *Sacch. Saturni*, verdigriſe, &c. ſometimes as the menſtruum of an extract, as in the *Acetum Squillatum*; and frequently in plaſters, liniments, and embrocations, where an anti-inflammatory or repellent intention is propoſed. It is prepared likewiſe by diſtillation, and afterwards applied to ſome of the above, and other purpoſes.

Vinegar, as well diſtilled as crude, contains, beſides its acid, a water, a conſiderable quantity of oil, and ſome tartarous ſalt. That the diſtilled vinegar is not free from this oil, is manifeſt from the coal produced in the fuſing the *Terra foliata Tartari*; and the *caput mortuum* left after diſtillation, ſhews evidently how it abounds in the crude. To this oil it is moſt probably owing, that vinegar is a more general ſolvent, both of earths and metals, than any other acid.

There does not appear to be any medicinal quality in vinegar, diſtinct from thoſe of other acids; only it is much gentler, and aſſimulating more with the animal ſubſtances, does not, like the others, force its excretion through the glands of the inteſtines, or the kidneys. In putrid caſes, ſuch as the muriatic ſcurvy or the ſlow miliary fever, where from rancid diet, or the ſuppreſſion of the glandular ſecretions, the blood is colliquated, from the exaltation of the oils, and the retention of the ſalts, vinegar is certainly a very appoſite and efficacious remedy; as likewiſe in ſpontaneous hæmorrhages, ariſing from the ſame cauſes; but ſeveral eminent perſons even of the preſent time, not confining its uſe to this intention, ſeem to have run into moſt extravagant errors concerning it. Firſt, they have ranked it amongſt the alexipharmic claſs, though it is obviouſly the common property of acids to check the motion of the blood and cool the habit. Secondly, they have conſidered it as a reſolvent, by confounding that repellent power, which ariſes from its aſtringency, with the power of reſolving; and even direct it to be given internally in the caſe of glandulous and pituitous tumours, whoſe very cauſes lie in the want of *vis vitæ*, and that lentor and poverty of blood, which are owing to its want of due alkaleſcenſe; and laſtly, in hypochondriac and hyſteric caſes, where the obſtruction and pravity of the bile, and the languid ſtate of the inteſtines, occaſion ſuch an acéſcence in them, as gives riſe to ſome of the moſt troubleſome ſymptoms and conſequences thoſe diſorders produce, which muſt therefore be greatly aggravated by the addition of freſh acid.

The doſe of vinegar may be from half an ounce to three ounces; but a continuance of frequent large doſes ought to be avoided; as it may otherways make a coagulation of the chyle in the lacteals and chyle-ducts; and thence produce an incurable atrophy; of which ſome inſtances have been known, in the caſe of women who have taken large quantities, with a view to a ſlender ſhape.

L. D. *Acetum*

L. D. *Acetum diſtillatum, vel Spiritus Aceti.* Diſtilled Vinegar.

Let vinegar be diſtilled with a gentle heat, as long as it will riſe without any empyreumatic ſmell.

If the ſpirit that firſt comes be removed, a ſtronger will be obtained afterwards.

It is not improper here to give a caution to apothecaries, &c. not to diſtil vinegar in any kind of alembick made of metal, as I have known to be very injudiciouſly done: for a ſolution of the metal will be neceſſarily made in the worm or condenſer; from whence, particularly if it be made of lead, or pewter (in the compoſition of which lead is generally uſed,) there may be great hazard; as the vinegar may be thereby greatly charged with ſugar of lead, whoſe known ill effects internally taken I need not mention.

Wine vinegar ſhould be uſed; the vinegar made of malt liquors, contain much gluten, which detains the acid, ſubjects the vinegar to boil over into the receiver, alſo diſpoſes it to receive an empyreuma from the fire. To prevent the empyreuma, if a retort is uſed, place the ſand a little way up the ſides, and when little more than half the liquor is come down, pour in the remainder a quantity of freſh vinegar, equal to that of the liquor drawn off; this may be repeated three or four times; the vinegar ſupplied at each time, being previouſly made hot.

E. D. *Acetum diſtillatum, ſeu Spiritus Aceti.*

Diſtilled Vinegar, or the Spirit of Vinegar.

In a glaſs veſſel, on a gentle fire, diſtil a gallon of vinegar. The firſt two pints being too watery, muſt be ſet aſide; the next four pints are to be kept as diſtilled vinegar. The reſiduum is the ſtrongeſt acid, but being too much affected by the fire, muſt be kept for other uſes.

Spiritus Aceti. Spirit of Vinegar.

Put diſtilled vinegar upon filings of copper, or to that ſcoria of copper, which the braſiers call ſpill or ſpittle duſt; and make it into a paſte: let it ſtand ſome time without heat, to penetrate the copper; evaporate over a very gentle fire, till the fumes of the vinegar can be ſmelt: then take it preſently away, imbibe again, and evaporate as before; do this ſo often, that an eager ſcent may be perceived at the beginning of the evaporation; which ſhews that the copper is well ſatiated with the diſtilled vinegar; put this ſatiated calx into a retort; place it in a ſand-furnace; fit it to a receiver, and lute well the joint with a wet bladder; give it the firſt degree of fire for two hours; then increaſe it to the ſecond, for two or three hours more; and ſo to the third, for three hours longer; at laſt, give it the fourth degree for two hours more; then let all cool, and in the receiver there will be a ſpirit of vinegar, of which the more phlegmy part may ſtill be ſeparated by rectification.

This is much more penetrating than the former, and will perform any operation with more force, and in much leſs quantity; but it is ſeldom made.

A very commodious way of obtaining a ſtrong ſpirit of vinegar, is by freezing common diſtilled vinegar, to take out the more phlegmy part.

Acetum

Acttum Colchicum. Vinegar of Meadow Saffron.

Take freſh roots of meadow ſaffron, thin ſliced, one ounce, digeſt in a glaſs veſſel, with a gentle heat, in one pint of white wine vinegar for two days, often ſhaking the bottle.

This vinegar is thought to be rather too acrid for internal uſe, and is, therefore, beſt made into an oxymel.

Acetum Roſatum. Vinegar of Roſes.

Take of red roſe buds dried, with the white cut off, as for making the conſerve, 1 pound, and infuſe them in 12 pounds of the beſt white wine vinegar, for 40 or 50 days; then preſs out the roſes, and keep the vinegar for uſe.

This is ſeldom preſcribed, but to embrocate the head and temples in ſome kinds of the head ach; in which it frequently does great ſervice. After the ſame manner is made *Acetum Sambucinum*, *Anthoſatum*, &c. vinegar of elder, roſemary, and the like, by an infuſion of the flowers. The uſes of theſe vinegars are manifeſt, from the virtues of the ingredients already deſcribed.

Acetum Roſaceum.
Vinegar of Roſes.

Take of red roſes dried 1 pound, the ſtrongeſt vinegar 1 gallon, expoſe them to the ſun in a cloſe veſſel 40 days, and then ſtrain off the fluid.

In the ſame manner are prepared,

Acetum Rutaceum
Vinegar of Rue.
Acetum Sambucinum.
Vinegar of Elder.

Acetum Rutaceum. Vinegar of Rue.

Infuſe the leaves of rue and ſcordium, that is, water germander, picked from the thick ſtalks, ana 2 handfuls; juniper berries and angelica roots, ana 2 ounces; zedoary, and Seville orange peel, ana 1 ounce, in eight pounds of the beſt vinegar. Let them digeſt for a month; then preſs the vinegar from the ingredients, and keep it for uſe,

This is not preſcribed, or kept in the ſhops, but is ſo eaſily made by any private family, and is ſo good a medicine to procure ſweat upon any threatnings of a fever, or upon a ſurfeit, that is very well worth any one's making, and keeping in readineſs. It may be given from half a ſpoonful to two or three ſpoonfuls, in any convenient warm liquor. And if the patient is kept warm with clothes, it cannot fail of raiſing a ſweat; and it is the beſt ſuccadaneum to treacle-water.

L. D. *Acetum Scilliticum*
Vinegar with Squills.

Take of dried ſquills 1 pound, vinegar 6 pints; infuſe the ſquills in the vinegar in a ſlow heat; then ſtrain off the fluid, and place it to ſettle; laſtly, to the depurated vinegar add about a twelfth part of proof ſpirit, that it may be the longer preſerved clear.

This is a very powerful ſtimulant aperient, and attenuater of tenacious juices; and hence is frequently uſed with good ſucceſs, in diſorders of the breaſt occaſioned by a load of thick viſcid phlegm, for promoting urine in hydropic caſes, &c. The doſe of this medicine is from a dram to half an ounce: where crudities abound in the

the firſt paſſages, it may be given at firſt in a larger doſe, to evacuate them by vomit. It is moſt conveniently exhibited along with cinnamon, or other agreeable aromatic waters, which prevent the nauſea it would otherwiſe, even in ſmall doſes, be apt to occaſion.

E. D. *Acetum Scilliticum.*
Vinegar with Squills.

Take dried ſquills, cut them into thin ſlices 4 ounces, diſtilled vinegar 2 pints; proof ſpirit of wine two ounces.

Macerate the ſquills with vinegar, eight days, then add the ſpirit, when the fæces have ſubſided, pour off the clear liquor.

According to this direction in the Edinburgh Diſpenſatory, it ſeems moſt convenient to add the ſpirit before the vinegar is decanted; for thus, the purification is accelerated and rendered more perfect; and the liquor prevented from growing mothery a ſecond time, which it is apt to do upon the affuſion of the ſpirit, however carefully it may have been depurated before.

Acetum Theriaeale.
Treacle Vinegar.

Take of Edinburgh treacle one pound, the ſtrongeſt vinegar two quarts, digeſt them in a very gentle heat three days, and then ſtrain off the vinegar; this is greatly celebrated as a ſudorific in acute and contagious diſeaſes.

Acetum Lithargryites.
Litharge Vinegar.

Take of the litharge of gold 4 ounces, the ſtrongeſt vinegar one pint, digeſt them in a ſand-heat four days, frequently ſhaking them, then filter off the fluid.

This preparation, though diſtinguiſhed by a particular name, is in fact only a ſolution of ſugar of lead; and intended only to be uſed externally as a coſmetic.

Diſtillation of Vipers.

Take any number of vipers, open and cleanſe them from all worms and excrements, and the females from their eggs; take out their hearts and livers; dry them in the ſhade, ſeparately from their bodies; and when they are dry, cut the bodies into ſmall pieces, and therewith three quarters fill a coated retort: place it in a fit reverberatory; lute on a receiver, which muſt be large; cover the furnace with its dome, and make a gentle fire for two hours, in which time the greateſt part of the phlegm will come over; then increaſe the fire to the ſecond degree for two hours more, which will raiſe the ſpirit and volatile ſalt: increaſe it ſtill to the third, which will fill the recipient with clouds; keep up that degree till the clouds leſſen in the receiver: increaſe the fire ſtill to the fourth degree; and keep it there till all be come over, and the receiver grows cool; then ceaſe the fire, and there will be come over a phlegm, ſpirit, ſalt, and oil; which muſt be rectified.

Sal Viperarum Volatile.
Volatile Salt of Vipers.

Put all that is found in the receiver, upon the foregoing diſtillation, in a long-bodied uncut cucurbit; if more ſalt adheres to the receiver than the liquid which diſtilled from the vipers, will diſſolve, put in a little water, and rince all the ſalt out into the body: place it in balneo, or a gentle heat

of

of ſand or aſhes; lute on the head with a bladder ſpread with ſtiff ſtarch, and dipt in the white of an egg. There may alſo be a ſmall receiver luted on to the beak of the alembic, and the ſalt will ſublime into the head, or upper part of the body, diſtinct from the phlegm and groſſer part of the oil, which muſt be kept in a clean phial carefully ſtopt.

The volatile ſalts of vipers have been ſuppoſed capable of producing different effects in the body from thoſe of hartſhorn or other animal ſubſtances, but modern practice acknowledges no ſuch different effects; and chemical experiments prove their identity; theſe ſalts may vary, as they are more or leſs purified from the animal oil, but in no other reſpect. For their virtues, ſee *Sal Cornu Cervi*.

Eſſentia Viperarum. Eſſence of Vipers.

Take any number of dried vipers, cut them into ſmall pieces, and put them into a cucurbit; place it conveniently, and pour into it (by little at a time) ſo much ſpirit of nitre as will diſſolve the vipers; (commonly 12 ounces of ſpirit of nitre will diſſolve 4 ounces of vipers.) When all the ſpirit is put upon them, let them ſtand five or ſix hours, and there will be a black ſcum upon the ſurface of the diſſolution, which muſt be taken off with a glaſs ſpoon; or, in defect of that, a clean tobacco pipe. There will alſo be white fæces at the bottom, which muſt be ſeparated from the clear diſſolution. Pour the clear liquor into a retort; and by an ounce or two at a time, put to it thrice its weight of tartarized ſpirit of wine, ſhaking them often; place the retort in a heat of aſhes, and with a gentle fire diſtil off the ſpirit of wine, which will be an excellent dulcified ſpirit of nitre. To the black matter remaining at the bottom of the retort, put the ſame quantity of freſh ſpirit of wine tartarized, and draw it off as the other; put on again the ſame quantity as before, and diſtil it in the ſame manner; and repeat this ſo often with new ſpirit of wine, till it has neither any nitrous ſmell, nor acid taſte; keep that which remains in the retort, to unite with the volatile ſalt, and rectified oil of vipers.

This proceſs, greatly eſteemed by ſome, is too elaborate and tedious for common practice, and therefore ſeldom performed; the common way of keeping them in canary, being as good.

Rectification of the Oil of Vipers.

Put the oil and phlegm, from which the ſalt of vipers was ſublimed, into a cucurbit; let the cucurbit be capable of holding two gallons; pour to them one gallon of clean water; ſet it in a ſand-furnace, fit on a head and receiver; give a gradual fire till the matter within the cucurbit bubbles: continue the fire ſo, till, holding a ſpoon under the beak of the head, there is very little or no oil perceivable upon the water which drops into the ſpoon. Then let all cool, and there will be a water, and the etherial oil of vipers in the receiver.

This water is ſudorific, and has all the virtues of the volatile ſalt; but in a much lower degree. The oil is reckoned a ſpecific in venomous bites, eſpecially of the viper itſelf; and is alſo commended for all

all the ſame inward uſes as the ſalt; from one to five drops in a glaſs of canary.

The union of the volatile Salt, and the etherial Oil of Vipers, into an Eſſence.

To 4 ounces of the diſſolved body of the vipers left in the retort, put 1 ounce of *Tinctura Regalis* (deſcribed amongſt the preparations of antimony) by a drachm at a time: then to 2 ounces of the ſalt, and half an ounce of the ethereal oil, add 1 pound of the ſame *Tinctura regalis*; put them into a matraſs, which make a circulatory; and let them ſtand 10 days in the ſun (or an equivalent heat) ſhaking them every day. When the tincture has imbibed all the ſalt and oil, take it out, and put it to the diſſolution of vipers above mentioned; and when, by a ſtrong agitation, the diſſolution is looſened from the retort, put it all into a matraſs; and let it circulate in a gentle heat 10 days, ſhaking it every day: in this time all the ſeveral ſubſtances will be incorporated into an eſſence; which pour off from the fæces into a clean phial and keep carefully ſtopt for uſe.

This eſſence is endued with all the virtues of the volatile ſalt; and if poſſible, exceeds it. Its doſe is from 20 to 100 drops, in any convenient liquor. The ounce of *Tinctura Regalis*, put to the diſſolved vipers, is to ſatiate that acidity ſtill remaining in them, which otherwiſe might too much fix the ſalt of the vipers, and reduce it to the nature of common *Sal Ammoniac*; which being again mixed with fixed alkalies, may be ſublimed into an animal urinous ſalt, as it was before. The diſſolution likewiſe may be dulcified, by putting to it, by a little at a time, ſo much pure fixed nitre, as will ſatiate its acidity: then let it ſtand in a cold place, and it will ſhoot into a combuſtible ſalt-petre again; and the diſſolution will be thereby freed from the corroſive ſpirit of nitre, which would have changed the volatile ſalt into that which ſome call the ſecret *Sal Ammoniac*.

L. D. *Spiritus, Sal, & Oleum Cornu Cervi.* Spirit, Salt, and Oil of Hartſhorn.

Let pieces of hartſhorn be diſtilled with a fire gradually augmented almoſt to the greateſt degree; ſpirit, ſalt, and oil will ariſe. If, the oil being ſeparated from them, the ſpirit and ſalt be mixed together again, and diſtilled with a very gentle heat, they will both riſe purer; which operation being ſeveral times cautiouſly repeated, the ſalt will acquire a perfect whiteneſs, and the ſpirit become limpid as water, with a grateful ſmell. The ſalt being ſeparated from the ſpirit, and ſublimed, firſt with an equal weight of chalk, and afterwards with a little rectified ſpirit of wine, will be made pure ſooner than by the former method; calcined hartſhorn is moſt frequently made of the horn, after this diſtillation. In the ſame manner, ſpirit, ſalt, and oil, may be obtained from any of the proper parts of all animals.

It ſeems here inſinuated, that an extreme great purity of the ſalt and ſpirit of hartſhorn from the oil is neceſſary; and ſo Dr. P—— has more fully declared, in his notes on this paſſage. But certainly there are limits to that; the intent of this preparation being to obtain a volatile ſalt, combined with ſome of the moſt ethereal oil afforded

affordsd by animal ſubſtances diſtilled; for otherwiſe, if only a pure volatile ſalt was to be procured, the volatile ſalt of *Sal Ammoniac* might be ſubſtituted for this, being in all other reſpects the ſame. If, therefore, the ſalt and ſpirit of hartſhorn differ only from the other in being replete with ethereal animal oil, a proportion of it muſt of courſe be eſſentially neceſſary; and the depriving them of that, is deſtroying the ſpecies of the medicine, and procuring, by a very laborious and expenſive method, one which is already at hand.

L. D. *Cornu Cervi Calcinatio.*
Calcination of Hartſhorn.

Let pieces of hartſhorn be burnt in a potter's furnace, till they are perfectly white: and let them be powdered by the method directed for other earthy bodies.

The calcining in a potter's furnace, is directed not as neceſſary, but expedient; for if they are burnt in any kind of fire till they are white, and fit to be powdered, they will anſwer the end. What is uſed at preſent, is moſtly prepared by perſons who make it their buſineſs to ſaw the horns into pieces, and ſell them to be diſtilled by the chemiſts and apothecaries, of whom they take back the coal after the diſtillation, and calcine it.

Spiritus, Sal, & Oleum Cornu Cervi. Spirit, Salt, and Oil of Hartſhorn.

Take of hartſhorn, cut into pieces, any quantity, fill an earthen or coated glaſs retort with them up to the neck, place it in an open fire; and having fitted on a very capacious receiver, diſtil them with a gradual heat; at firſt phlegm, then ſpirit, and afterwards an oily ſalt of a yellow colour will riſe; and, at laſt a blackiſh red oil, together with more ſalt; a black earthy coal remains at the bottom of the diſtilling veſſel, which being burnt in an open fire, till it becomes white, is then called calcined hartſhorn.

Having poured out of the receiver all the ſeveral ſubſtances which have come over, they may be ſeparated from each other in the following manner: the oil may be ſeparated from the phlegm by filtering; the two laſt will paſs through, while that remains in the filter. The phlegm may be ſeparated from the ſpirit, by diſtilling them in a tall veſſel, with a gentle fire; the ſpirit will come over into the receiver, and the phlegm ſtay at the bottom of the retort, or diſtilling veſſel. The ſpirit may be divided into a volatile ſalt and phlegm, by diſtilling it in a very tall and narrow cucurbit, or body; the ſalt will riſe to the head in a ſolid form, the phlegm remaining at the bottom. The ſalt may be purified from the oil by ſubliming it, from ſix times its quantity of chalk, or calcined bones; for the oil is detained by thoſe ſubſtances, while the ſalt ſublimes to the top of the veſſel.

A ſpirit, ſalt, and oil, may be diſtilled in the ſame manner from all the ſolid parts of animals, and from blood exſiccated by a very gentle heat, as likewiſe from urine, firſt evaporated to the conſiſtence of honey, and putrified, or even from freſh urine, exſiccated and mixed with four times its quantity of ſand, or an equal quantity of any fixt alkaline ſalt. Urine, diſtilled

with

with the addition of quick-lime, yields an exceeding pungent ſpirit.

The ſpirit of hartſhorn met with in the ſhops is extremely precarious in point of ſtrength; the quantity of ſalt contained in it (on which its efficacy depends) varying according as the diſtillation, in rectifying it, is continued for a longer or ſhorter time; it ſhould contain as much ſalt as the phlegm is capable of diſſolving.

Volatile ſalts and ſpirits, in general, are in taſte and ſmell extremely pungent and acrimonious: applied to the ſkin, and prevented from exhaling, they inflame the part, and produce the effect of cauſtics. With regard to their medical virtues, they ſtimulate the nervous ſyſtem, attenuate viſcid humours, promote a diaphoreſis and other natural ſecretions, and abſorb acidities in the *primæ viæ*. They are particularly uſeful in lethargic and apoplectic caſes; in hypochondriacal and hyſterical diſorders, and the languors, headachs, inflations of the ſtomach, flatulent colics, and other ſymptoms which attend them. They are generally found more ſerviceable to aged perſons, and in phlegmatic habits, than in the oppoſite circumſtances. In febrile and inflammatory diſtempers, they are hurtful; thoſe kinds of fevers excepted which are accompanied with a cough, hoarſeneſs, and a redundance of phlegm.

The doſe is from 3 to 12 or 20 grains. But there are great errors committed in the common practice in its preſcription. by putting it either into forms which it will deſtroy, or where it will loſe its volatility before it gets to the patient. In pills it will not lie, no more than any other volatiles; but will rarify them into ten times their proper bulk. Boles alſo it will puff up in like manner, and ſoon make its eſcape; and in powders, wherein it is often ordered, it ſoon becomes no better than a calx, or ſo much powder of lime. There is, therefore, no form to preſerve its virtues in, but by diſſolving it with ſome proper vehicle into draughts; unleſs the apothecary attends with his ſtore-bottle, and waits at the bedſide to diſtribure every doſe as it is to be taken.

L. D. *Spiritus, Sal, & Oleum Fuliginis.*

Spirit, Salt, and Oil of Soot.

Diſtil the ſoot of wood in the ſame manner as hartſhorn; but much more trouble is required to bring the ſpirit and ſalt to purify. The ſalt and ſpirit of ſoot, duly purified do not differ from thoſe of animal ſubſtances.

Oleum Ceræ.

Oil of Wax.

Take any quantity of wax, melt it with twice as much ſand; put the mixture into a retort, and diſtil it in a ſand heat; at firſt an acid ſpirit riſes, and afterwards a thick oil, which adheres to the neck of the retort, unleſs it be warmed by applying a burning coal: this may be rectified into a thin oil, by diſtilling it ſeveral times without mixture in a ſand-heat. Boerhaave recommends this againſt roughneſs and chops in the ſkin, but its diſagreeable ſmell makes it but little uſed. He alſo adviſes in preparing this oil, to cut the wax in pieces, and put it into the retort firſt, ſo as to fill one half of it; when as much ſand may be poured thereon, as will fill the remaining half.

Spiritus

Spiritus Vini tartarizatus.
Tartarized Spirit of Wine.

Take ſalt of tartar two or three times coagulated and diſſolved, one pound: give it a ſtrong fuſion in a crucible for two hours; powder it in a warm mortar; and, whilſt warm, put it into a matraſs, to four pounds of the former rectified ſpirit of wine: ſhake them well together, and place them in a ſand-furnace: lute the junctures of the head and receiver; give fire to ſuch a degree as may make the drops ſucceed each other very quickly; and continue thus till all the ſpirit is come over.

This ſpirit volatilizes and carries over ſome part of the ſalt of tartar along with it; which is demonſtrable by the ſalt ſuſtaining the loſs of at leaſt 1 ounce of its weight. And by this operation, the ſpirit of wine obtains a more agreeable ſcent and taſte than before; and is alſo more ſubtile and penetrating.

Spiritus Cornu Cervi Aromaticus.
Aromatic Spirit of Hartſhorn.

Take the ſpirit, oil, and ſalt of hartſhorn, after the firſt diſtillation, and rectify them: put them when rectified into a clean retort; to each pound put of *Sal volatile oleoſum* 2 ounces, *Spiritus nitri dulcis* 4 ounces; ſhake them well together, and ſet them in a very gentle ſand-heat; lute on a receiver, and continue the fire, not exceeding the ſecond degree, till all be diſtilled; and in the receiver there will be a ſpirit clear of all empyreuma, and of a pleaſant ſcent.

This is reckoned a powerful diuretic and diaphoretic; and to be endued with all the virtues attributed to Goddard's drops. Its doſe is from 50 to 100 drops. If it be once more rectified its ſcent will be yet much more agreeable.

Sal Cornu Cervi Succinatum. Salt of Hartſhorn with Amber.

This is made by ſubliming the genuine ſalt of hartſhorn, with half the quantity of ſalt of amber. The virtues may be eaſily known from thoſe of the ingredients, ſeparate; which this medicine retains.

Spiritus Cornu Cervi Succinatus.
Spirit of Hartſhorn with Amber.

This is made by putting in half as much amber as hartſhorn; and then proceed as in the ſimple diſtillation.

The virtues and doſes here are the ſame as the former plain ſpirit. The oil which comes over is not much uſed or known in preſcription; but it is of great efficacy in arthritic and rheumatic pains, if embrocated upon the part affected; and there is hardly any one thing of greater force in ſuch caſes; eſpecially if it be artfully managed with ſome lixivial ſalts, as in making the ſoap of tartar.

To élixirate, or make eſſential, any Animal Volatile Salts.

Take of any volatile animal ſalt half a pound; put the ſame weight of tartarized ſpirit of wine to it, and it will coagulate, and is that which Helmont calls his *Offa Alba:* put this ſalt into a matraſs; pour upon it pure and ſtrong diſtilled vinegar, by little and little at a time, till the ebullition ceaſes; then ſet it in a gentle heat of ſand, with a head and receiver well luted: there will firſt come over a ſubtile liquor, dropping from the noſe of the

alembic; after that will ſublime into the head a moſt glorious ſalt, white as ſnow, in figure like large flowers of Benjamin; of a quick, pleaſant, penetrating ſcent, and a very agreeable taſte.

In this operation a watchful eye muſt be had, that as ſoon as the cryſtals are perceived to give in the head, the cucurbit muſt be drawn out of the ſand, and the head and receiver taken off; put the ſpirit and ſalt apart into phials well ſtopt. This ſalt will unite with ſalt of tartar; and readily diſſolve in ſpirit of wine. It is extremely penetrating; and a moſt effectual diſſolvent of vegetable and animal ſubſtances; as well as a powerful diuretic and ſudorific; and is therefore good in all chronic diſeaſes. Its doſe is from 10 to 50 or 70 drops, in any convenient vehicle.

BOOK II.

Of Saline Preparations.

SALT of any kind is purified by ſeparating it from its more earthy part, and accidental dirt, by diſſolution, filtration, and chryſtallization. Different ſalts require different quantities of water to keep them diſſolved: and hence, if a mixture of two or more be diſſolved in this fluid, they will begin to ſeparate and chryſtallize at different periods of the evaporation. Upon this foundation ſalts are freed, not only from their impurities, as water is not capable of diſſolving and carrying through the pores of a filter, but likewiſe from admixtures of one another; that which requires the moſt water to diſſolve in, ſhooting firſt into chryſtals. In decrepitating ſalt, put what quantity of common ſalt you pleaſe into a crucible, or any other earthen veſſel, which will endure fire; give it ſuch as will make it crackle, but not melt; continue it in that degree of fire, now and then ſtirring it with an iron hook, till it cracks no more; and this may be done either before or after purification.

E. D. *Spiritus Salis Marini.*
Spirit of Sea-Salt.

Take 2 pounds of decrepitated ſalt, put it into a glaſs retort, pour upon it by degrees 1 pound of oil of vitriol, diluted with an equal quantity of warm water, but become cold again before it be added to the ſalt. Diſtil it in a ſand-heat, gradually increaſing the heat, until the iron pot becomes of a duſky red colour.

L. D. *Spiritus Salis Marini Glauberi.* Glauber's Spirit of Salt.

Take of ſea-ſalt, and ſtrong ſpirit of vitriol, each two pounds; water one pint; proceed as in the foregoing proceſs.

It is a very unſettled point, what quantity of oil of vitriol is the proportion proper to be uſed in this proceſs. The ſpirit of ſalt is

ſo

ſo little uſed, either in medicine or for any other purpoſes, that it is rarely prepared, but for the ſake of its co-produce, the *Sal Glauberi*; and therefore it is in regard to this ſalt, and not the ſpirit, that the proportion of the ingredients merits any conſideration. The difference of the proportion makes no alteration in the nature of the ſalt, but only in the quantity produced; and, as the common ſalt is much the cheaper ingredient, it is moſt profitable that the exceſs ſhould be on that ſide. The exacteſt proportion that can be ſettled, according to the preſent common ſtandard of oil of vitriol, is two parts of the ſalt to one of oil; and if the ſalt is found to ſhoot too ſlowly, a little oil of vitriol added to the chryſtallizing ſolution will be a certain remedy; nor will this in the leaſt injure the medicine.

Sal Mirabile Glauberi.
Glauber's Wonderful Salt.

Take the ſalt left in the retort after the diſtillation of the aforeſaid ſpirit of ſalt, diſſolve it in water, and filter it; evaporate part of the water, and ſet the other in a cold place to chryſtallize. In cold weather it will ſhoot in 48 hours time; and in warm weather in 3 or 4 days.

Its operation is cathartic and diuretic; and anſwers all the intentions of moſt of the purging waters. Its doſe is from half an ounce to an ounce, in a pint or quart of purging ſpring-water.

If the retort performs the operation without cracking, you may put water to the ſalt which is in it; and diſſolve and filter, and ſo ſave the retort. The evaporation is moſt properly performed in a clean iron kettle, or an earthen one.

L. D. *Sal Catharticus Glauberi.*
Glauber's Salt.

The ſame as the preceding, except in the difference of the quantity of oil of vitriol to the ſalt, which ſee above.

E. D. *Sal Catharticum Glauberi.*

Take the ſalt left in the retort after the diſtillation of the ſpirit of ſea-ſalt, (as directed in the E. D.) diſſolved in water, filter through paper, and then reduce it to chryſtals.

It is with great pleaſure that I embrace this opportunity of expoſing a malpractice too well known to thoſe who ſell medicines, and very little to thoſe who preſcribe them, of ſubſtituting in the place, and under the name of Glauber's ſalt, the *Sal Catharticus Amarus*, by a fraudulent preparation, made to reſemble the other. This ſalt was firſt prepared at the ſalt works at Lymington, where the great quantity of bittern, or ſolution of the *Sal Catharticus Amarus*, which remained after the recovery of ſea-ſalt from the ſea water, enabled them to ſell it, converted into chryſtals like Glauber's ſalt, at a very low price. This ſalt was at firſt amongſt the dealers, modeſtly called by the name of the place where it was made; but it has ſince been ſo univerſally ſold for Glauber's ſalt, that it has entirely robbed the true one, invented by him, of his name; which is, in contradiction to it, now called *Sal Mirabilis*. As this counterfeit kind is much more nauſeous, diſagreeable to the ſtomach, apt to produce violent ſickneſs and gripes, and on many other accounts inferior to the true kind, it is extremely fit that all phyſicians and others who are apprized of theſe facts, ſhould, as much

much as poſſible, diſcourage the uſe of it: in order to which, this infallible method of diſtinguiſhing the true from the falſe is furniſhed: let the ſalt ſuſpected be diſſolved, and when the ſolution is become clear and limpid, add to it a ſmall quantity of a ſolution of ſalt of tartar, or any other alkaline ſalt, made clear likewiſe; if no change happens on the commixture, but the mix. ſolutions continue to be as tranſparent and limpid as when ſeparate, it may with certainty be concluded to be the true Glauber's ſalt; but if a milky turbidneſs ſucceeds, which will afterwards ſubſide in the form of a powder, it may thence be known to be the Lymington counterfeit.

Spiritus Salis dulcis.

Take of rectified ſpirits of wine three parts, put it into a large bolt-head, and gradually add thereto of ſpirit of ſalt one part; digeſt them together ſome days in a ſand-heat, and then diſtil them; taking care towards the end of the operation that the retort break not from too much heat.

L. D. *Spiritus Salis Marini Coagulatus.* Coagulated Spirit of Sea-Salt.

Pour a ſolution of any fixed alkaline ſalt, to Glauber's ſpirit of ſea-ſalt, till all ebullition ceaſes; then evaporate the mixture to dryneſs.

It would be difficult to gueſs by what means this compoſition has, without any pretenſions, intruded itſelf into this Pharmacopœia; ſince it produces a ſalt not differing in appearance if chryſtallized, or any known quality, from ſea-ſalt, of which it is a regenerate ſpecies; it may have ſome merit as a ſpeculative experiment, but can have no effect in medical practice, except the deceiving of perſons eaſily captivated with novelty.

Nitrum Purificatum.

Purification of Salt-petre.

Take any quantity of nitre at pleaſure; diſſolve it in warm water; filter, evaporate and chryſtallize, as in other ſalts.

This is an operation not abſolutely neceſſary amongſt us; the refiners of ſalt-petre giving it well purified into our hands. Some eſteem the chryſtalline nitre beſt, and others the lump: but the difference between them is not diſcernible, eſpecially as to any medicinal efficacies; the chryſtals being the top, and the lump the bottom of the pan; in which the nitrous liquor was put to ſhoot.

L. D. *Nitrum Purificatum.*

Purified Nitre.

The ſame as the preceding.

In the ſame manner Sal Ammoniac may be purified.

Sal Prunellæ. Chryſtal Mineral.

Melt any quantity of ſalt-petre, in an earthen pot, or very clean iron kettle; when it is well melted, caſt a little flowers of ſulphur upon it; when that is burnt, put on more; and ſo do till the nitre flows as clear as rock water, without any ſcum: then with a clean iron or braſs ladle take it out of the pot, and put it into a warm braſs pan or mould; when that is coagulated, put it by, and with the ladle take out more; and ſo do till all the melted ſalt is caſt; which keep for uſe.

If it be yet deſired more pure, diſſolve it in clean warm water; filter the diſſolution, and evaporate till

till a thick ſkin appears at the top; then ſet it to chryſtallize. This preparation is built on an erroneous foundation, which ſuppoſed that the nitre was purified by the deflagration with ſulphur; but ſo far from this, that the ſulphur alters a part of the nitre into a ſalt that hath different properties. In this preparation the nitre is partly converted into a vitriolated tartar. It is diuretic and cooling, and often given in fevers; and is very proper where a diſcharge by urine is to be encouraged. It is alſo of good ſervice in ſore throats, and inflammations of the tonſils; being gently melted in the mouth, and ſwallowed, with a little fine ſugar. Its doſe is from 6 grains to a drachm.

E. D. *Sal Prunellæ.*

Take of nitre 2 pounds, flowers of ſulphur 1 ounce; to be treated as the preceding.

E. D. *Sal Polychreſtum.*
Salt of many Virtues.

Mix equal parts of ſulphur and nitre in fine powder, and put them into a red hot crucible, by a ſpoonful at a time: as ſoon as the flame of one ſpoonful is over, put in another; and ſo continue till all the mixture is in. As ſoon as the deflagration is finiſhed, let the ſalt cool; and keep it in a cloſe glaſs veſſel.

To render it very pure, diſſolve it in hot water, filter and cryſtallize it.

If this ſalt be not ſo white as deſired, put it into a crucible, and ſet it in a ſtrong fire for three or four hours longer; continually ſtirring it till it is very white. Then again diſſolve, filter, and coagulate; and there will be a pure *Sal Polychreſtum.* If to 6 ounces of this, there be put 1 ounce of ſublimed *Sal Ammoniac*, and half an ounce of *Sal Mirabile Glauberi*; and it be diſſolved, filtrated, and chryſtallized together, the compoſition will be much more agreable; and better deſerve the name of *Polychreſtum* than the other. The doſe is from half a drachm to half an ounce; and its operation is cathartic and diuretic. This *Sal Polychreſtum* is formed by an union of the vitriolic acid with the vegetable fixt alcali. In this operation both the nitre and the ſulphur are decompounded. The acid of the nitre and the inflammable principle of the ſulphur are diſſipated, and the acid of the ſulphur is united with the alkaline baſis of the nitre.

Nitrum Catharticum. Purging Nitre.

Put 1 pound of nitre into a crucible; ſet it in a wind-furnace, and give it a gradual fire till it melts; then put into it a piece of live charcoal, about a quarter of an inch diameter: when it has done flaming, put in another; and ſo continue to do till the coal cauſeth no flame; then the matter is called *Nitrum Fixatum.* Pour this into a warm mortar; beat it to powder, and diſſolve it in diſtilled vinegar; filter and evaporate it in a wide-mouthed glaſs; diſſolve it again in freſh diſtilled vinegar; filter and coagulate the third time: then diſſolve it in high rectified ſpirit of wine, which afterwards diſtil from it; and there will be a ſalt eaſy of diſſolution, and pleaſant in taſte and operation.

This is cathartic and diuretic, and accounted a good opener of all inward obſtructions. Its doſe is from 2 ſcruples to 4 or 5 drachms.

Some of the foregoing preparations, and particularly that of *Sal Prunellæ*, our chemiſts have got a trick of ſpoiling with alum: as they ſtick at nothing for the increaſe of their own gain, and as their preparations often go through many hands before they are exhibited, they are not ſolicitous about their ſucceſs, if they have but the external ſigns of being genuine, while in their own hands. And thus as alum gives this preparation a commendable whiteneſs, which is valued in the *Sal Prunellæ*; and becauſe it makes the medicine come cheaper, they daſh it, without any remorſe or pain for the poor patient who is to take it.

Spiritus Nitri. Spirit of Nitre.

Take of nitre in fine powder 1 pound, of clean tobacco pipes 4 pounds, or of fuller's earth, dried and beaten to a fine powder, mix them well, and put them into a good earthen or coated glaſs retort: place it in an open furnace; lute on a receiver, and kindle the fire; which keep in the firſt degree till ſome red fumes appear in the recipient; neither augment it till thoſe fumes diſappear; then increaſe to the ſecond, which will raiſe more red fumes; when they begin to decreaſe, raiſe it to the third, and ſo on to the fourth, and utmoſt degree of heat, till no more clouds come over: then let out the fire; and as ſoon as it is cool enough, take off the receiver, and put the ſpirit into a glaſs, with a glaſs or wax ſtopple.

The nitrous acid, whatever kind of body it be combined with, is both diſtinguiſhed and extricated therefrom by means of any inflammable ſubſtance brought to a ſtate of ignition: if the ſubject be mixed with a little powdered charcoal, and made red hot, a deflagration or fulmination enſues, that is, a bright flame with a hiſſing noiſe, and the inflammable matter and the acid being thus conſumed or diſſipated together, there remains only the ſubſtance that was before combined with the acid, and the ſmall quantity of aſhes afforded by the coal.

In the following proceſs, directed by the colleges of London and Edinburgh, the nitrous acid is extricated by means of the vitriolic acid: theſe preſcriptions differ in the proportion of the acid to the nitre, but the ſpirit obtained in either caſe, is in quality the ſame; the difference affects only the reſiduum. When two parts of the nitre are mixed with one of the vitriolic acid, the reſiduum affords a vitriolated tartar.

This ſpirit is too corroſive to be much uſed internally; though ſome order it from ten to fifty drops in any convenient vehicle. Its chief uſe is to diſſolve metals, and fit them for preparations.

Spiritus Nitri cum Oleo Vitrioli. Spirit of Nitre with Oil of Vitriol.

Put one pound of ſalt-petre into a glaſs retort, and pour upon it one pound of oil of vitriol, and of ſpring-water twelve ounces, mix them, but avoid the fumes; then place the retort in a ſand furnace; lute on a receiver, and give a fire of the firſt degree two hours; advance to the ſecond, where keep it two hours longer; and ſo on to the third and fourth, giving two hours to each degree; in which time the operation will be ended. When all is cold, take off the receiver,

ceiver, and put the ſpirit in a phial ſtopped with wax, or a glaſs ſtopple.

This ſpirit anſwers all the ends of the former, and is much better for internal uſe, where it is very diuretic, and a good cleanſer of the viſcera. Its doſe is from ten to fifty drops, in ſome ſoft vehicle; for theſe corroſive ſharp diuretics ought to be given in ſuch things; whereby their points are better guarded from miſchief, and their efficacies alſo rather promoted than hindered. See the explanation of the operation of the diuretics.

This is alſo made with much leſs trouble than the former; for in that, if the nitre is not very pure and dry, and thoroughly ſeparated from common ſalt, which is in all unrefined nitre, it will produce an *Aqua Regia*. And if it be not dry, it cannot be made into ſuch a fine powder as is requiſite to keep it from melting together; by which the emiſſion of its ſpirits would be hindered. And to anſwer the charge of the oil of vitriol, there will be procured at the ſame time the

Sal Enixum Paracelſi.
Paracelſus's Sal Enixum.

This is only the *caput mortuum* of the former ſpirit, which remains in the retort, of a white colour, and pleaſant acid taſte. If it be diſſolved in hot water, and chryſtallized, it will be yet a more elegant medicine, and endued with the ſame virtues as the *Tartarum Vitriolatum*. For which it is commonly ſold in the ſhops.

Its operation is diuretic. The doſe is from one ſcruple to one drachm, in broth or water-gruel.

L. D. *Nitrum Vitriolatum.*
Vitriolated Nitre.

The ſame with the preceding.

L. D. *Spiritus Nitri Glauberi.*
Glauber's Spirit of Nitre.

Take of nitre 3 pounds, ſtrong ſpirit of vitriol 1 pound; let them be mixed gradually under a chimney, with great caution; then let them be diſtilled, firſt with a gentle heat, and afterwards with a ſtronger.

E. D. *Acidum Nitroſum vel Spiritus Nitri Glauberi.* Glauber's Spirit of Nitre.

This is diſtilled from nitre two pounds, and ſtrong ſpirit of vitriol one pound. The nitre put into a retort, gradually pour on it the oil of vitriol. Diſtil in a ſand heat, and gradually increaſe the fire until the iron pot is of a duſky red colour.

E. D. *Acidum Nitroſum Tenue.*
Weak Acid of Nitre.

Take of Glauber's ſpirit of nitre and water equal parts, mix them with care to avoid the offenſive vapours.

L. D. *Spiritus Nitri dulcis.*

Take of rectified ſpirit of wine 2 pints, Glauber's ſpirit of nitre half a pound, mix them by pouring the ſpirit of nitre on the other, and diſtil the mixture with a gentle heat, as long as what comes over will not raiſe any fermentation with lixivial ſalts.

This makes a pleaſant ſcented, as well as pleaſant taſted ſpirit, inſomuch, that ſome have got a trick of mixing it, in ſmall quantities, with ordinary ſpirits, and putting them off for French brandy. It is diuretic, may be given from 20 drops to 100 or 120.

E. D. *Acidum Nitri Vinoſum vulgo Spiritus Nitri Dulcis*

Take of rectified ſpirit of wine 3 pints. Glauber's ſpirit of nitre

one pound. Pour the ſpirit into a large phial placed in a veſſel filled with cold water, and gradually add the acid, carefully ſhaking the mixture whilſt making it; lightly cover the phial, and ſet it for 7 days in a cool place; after which diſtil in the heat of boiling water into a receiver placed in cold water or ſnow, and diſtil to dryneſs.

Aqua Fortis.

Take of nitre and green vitriol uncalcined, each 3 pounds; of the ſame vitriol calcined to redneſs 1 pound and half; mix them thoroughly, and diſtil with a ſtrong fire as long as any red fumes ariſe.

L. D. *Aqua Fortis compoſita.*

Take of *Aqua Fortis* 16 ounces, ſea-ſalt 1 drachm, diſtil them to dryneſs.

This preparation is an imperfect *Aqua Regia*, and ſeems very arbitrarily called compound *Aqua Fortis:* the reaſon of ordering ſuch a compound, is the ſuppoſition of its being the moſt proper for the ſolution of quick-ſilver, in order to the making red precipitate; where we find the uſe of it directed. The re-diſtillation of the ſpirits, after the commixture, ſeems entirely needleſs, as no material alteration can be ſuppoſed to reſult from it.

Aqua Fortis duplex.

Take of green vitriol calcined to whiteneſs, clay dried and powdered, and nitre powdered, each equal parts; having mixed the ingredients thoroughly, put them into an earthen retort, ſo as to fill it two-thirds, and diſtil as in the foregoing proceſſes.

Aqua Fortis purificata.
Purified Aqua Fortis.

Drop into the aqua fortis a drop or two of ſolution of ſilver made in aqua fortis; if it become milky or cloudy, drop in a little more of the ſolution, till a freſh addition occaſions no further change; allowing proper intervals for the white matter to ſettle, that the effect of a new addition may be the better perceived. Then pour the liquor into a glaſs retort, and diſtil in a ſand heat to dryneſs.

The ſilver may be recovered from the white ſettlings, without any conſiderable loſs as follows:

Let the matter be well dried, then mixed with a little pot-aſh, and the mixture made into a paſte with oil. Put this paſte into a crucible, ſurrounding it every where with a little more pot-aſh. Set the crucible in a proper furnace, and gradually raiſe the fire, ſo as to bring the whole into fuſion. When the crucible is grown cold, a lump of fine ſilver will be found in the bottom.

Aqua Regia.

Take of powdered *Sal Armoniac* one ounce, put it into a large cucurbit, and add to it, by degrees, four ounces of ſpirit of nitre, or double *Aqua Fortis*; let them ſtand together in a ſand-heat till the ſalt is entirely diſſolved.

N. B. The ſpirit of nitre is beſt for this purpoſe, if of a middle degree of ſtrength, between ſingle aqua fortis and ſtrong ſpirit of nitre.

Arcanum duplex, ſeu duplicatum.

Take any quantity of the *caput mortuum* of *Aqua Fortis* made with equal parts of nitre and vitriol, and diſſolve it in hot water, by ſtanding ſome hours, and now and then ſtirring the mixture. Let the water be filtered; evaporate to the appearance of the ſkin upon the ſurface,

ſurface, or even almoſt to dryneſs, and leave it to ſhoot.

This is alſo mentioned in ſome authors by the name of *Nitrum vitriolatum*, and *Sal dulcis Holſatiæ*; and is greatly extolled for a diuretic, ſudorific, and, as the humours are diſpoſed, ſometimes for a cathartic too; but we hardly ever meet with it in preſcription. Its doſe is from half a ſcruple to half a drachm.

Nitrum fixatum, Fixed Nitre.

Melt ſixteen ounces of ſaltpetre in a ſtrong and large crucible among burning coals; throw into it a ſpoonful of coals groſly powdered, and there will ariſe a flame and detonation; which being over, throw in as much more, and continue to do ſo, until the matter flames no longer, but remains fixed in the bottom of the crucible; then put it into a warm mortar, and when it is cold powder it, and diſſolve it in a ſufficient quantity of water; filter the diſſolution thro' brown paper, and evaporate all the water in an earthen pan in ſand. There will remain a very white ſalt, which you muſt keep in a phial well ſtopt.

This is of no great medical uſe, but in the following preparation. It differs very little from the ſalt of tartar.

Tinctura Nitri.

Tincture of Nitre.

Take of the above deſcribed fixed nitre one pound, melt it in a crucible, with a ſtrong heat, for three or four hours; then put it into a warm mortar; powder it, and whilſt warm pour upon it two pounds of tartarized ſpirit of wine; ſet the mixture in a matraſs upon warm ſand, gradually increaſing the fire till the ſpirit of wine ſimmers and ſo continue for two or three hours: in which time the fixed nitre will have communicated its tincture to the ſpirit of wine. Decant and put on more, and digeſt as long as it yields any tincture.

This operates both by diaphoreſis and urine, but chiefly the latter way. It is accounted a great purifier of the blood; and a good antiſcorbutic. Its doſe is from 20 drops to 60. It ſcarce differs from the *Tinctura Salis Tartari*.

Pulvis Fulminans.

Take nitre three parts, ſalt of tartar two parts, and ſulphur one part; mix them well in a warm mortar, with the peſtle a little warm, and with all expedition poſſible, that it may not attract the moiſture of the air, which the ſalt of tartar ſoon does.

The operation of this is diaphoretic and diuretic; but it is hardly ever preſcribed, and therefore not made, unleſs to play tricks with; for one drachm of this powder, held over the fire in a ſpoon or ſhovel, will firſt melt, and then go off with an exploſion, not inferior to that of a well-charged muſquet.

Note, That in the rectification of all the acid ſpirits under this article, the phlegm comes over firſt, becauſe it is the lighteſt part of the whole; whereas in vinous ſpirits the phlegm riſes laſt, becauſe it is there the heavieſt.

Alumen. Alum.

This has been mentioned under the claſs of aſtringents. There are no preparations of it in the ſhops, but the *Alumen uſtum*, which is by melting it in a fire-ſhovel, or a crucible, and letting it bubble until it comes to a white ſubſtance.

It

It loſes, by this proceſs, about one ſixth of its weight; and, by the loſs of this quantity of water, becomes proportionably more acrid. It is uſed as an eſcharotic. It gently eats away proud fleſh; but it leaves ſuch a hardneſs upon the part, as makes it little eſteemed in that intention. Many mix a little of it with the ſugar they dulcify their cordial waters with, which fines them down, and throws the milkineſs to the bottom; from which they may be poured by inclination, or racked off with a crane.

L. D. *Alumen uſtum.* Burnt Alum.

Let alum be put into an iron, or earthen veſſel, and calcined as long as any ebullition appears.

Aqua Aluminoſa Magiſtralis.

Take of roch alum, and white mercury ſublimate, ana 2 drachms, boil them in roſe and plantain-water, ana one pound, till half is conſumed; filter the remainder, and keep it for uſe.

This is preſcribed againſt deformities of the ſkin, and often for the itch; but it is an uncertain remedy, and not to be uſed without caution.

L. D. *Aqua Aluminoſa Bateana.* Dr. Bates's Alum-Water.

Take of alum and white vitriol each half an ounce, water one quart, diſſolve the ſalts by boiling them in water; and when the fæces have ſubſided, filter the ſolution through paper. This liquor is uſed for cleanſing ulcers and wounds, and for removing cutaneous eruptions, bathing the parts with it hot; for a collyrium, and as an injection in the gonorrhæa, and fluor albus, when not accompanied with virulence.

Aqua Aluminoſa. Alum-Water.

The ſame as the *Aqua Aluminoſa Magiſtralis*, except that common water is ordered in the place of the roſe or plaintain-water, and intended for the ſame purpoſes.

Sal Ammoniacum. Sal Ammoniac.

This is brought from Alexandria in Egypt, Venice, Antwerp, &c. It is either natural or artificial: the natural, found in very hot countries, where the earth has imbibed the urine of animals; but of this little or none comes to us.

Sal Ammoniacum Sublimatum. Sublimation of Sal Ammoniac.

Put any quantity of *Sal Ammoniac* in groſs powder into a retort, or matraſs, with its head; place it in a ſand-furnace; fit on a receiver, and give a graudual fire to the third degree, in which it muſt be kept till all is ſublimed, which may be perceived by the ſublimate's riſing clear above the ſand. If the head of the ſubliming-veſſel be large and capacious, the ſublimed produce will have the form of flowers; if more confined, a cake, reſembling the common *Sal Ammoniac*, but more pure, will be obtained.

This is diuretic, and is ſaid to operate by ſweat; its doſe is from two grains to one drachm.

L. D. *Sal Volatilis Salis Ammoniaci.* Volatile Salt of Sal Ammoniac.

Take of the pureſt chalk two pounds, *Sal Ammoniac* one pound, ſublime in a retort with a ſtrong fire.

The *Sal Ammoniac* is a neutral ſalt, compoſed of the volatile alkali and marine acid. In this proceſs the acid is abſorbed by the alkaline quality of the chalk; and the volatile

latile alkali is ſet at liberty. The fixed alkali, when ſalt of tartar is uſed, begins to act upon the *Sal Ammoniac*, and extricates a pungent urinous odour, as ſoon as they are mixed. Hence it is better not to mix them until they are put into the diſtilling veſſel; chalk does not begin to act upon the *Sal Ammoniac* till a conſiderable heat is applied, hence they may be well mixed together before they are put into the retort: the ſurface of the mixture ſhould be covered with a little more chalk in powder, to prevent thoſe particles of *Sal Ammoniac* that lie uppermoſt, from ſubliming unchanged. When chalk is uſed it requires more heat than when ſalt of tartar is uſed: yet care muſt be taken that the fire is not too ſtrong, nor too ſuddenly raiſed, leaſt a part of the chalk ſhould be carried up with the volatile ſalt. When all the ſalt is ſublimed, and the receiver becomes cool, it may be taken off, and luted to another retort charged with freſh materials: this proceſs may be repeated, till the recipient appears lined with volatile ſalt to a conſiderable thickneſs; the receiver muſt then be broken, in order to get out the ſalt.

Volatile alkaline ſalts, of which this obtains the principal place in practice, are found uſeful in hypochondriacal and hyſterical caſes, and gives relief in moſt of the ſymptoms attending them, whether faintings, lowneſs of ſpirits, flatulent colics, or head-achs; they alſo remove the heart-burn, and thoſe diſorders of the inteſtines which proceed from the eating fruit, or other aceſcent diet; they alſo are of great efficacy in pleuriſies, quinzies, and other inflammatory fevers, if given more copiouſly than is yet in common practice. The doſe in hypochondriacal caſes, &c. may be from three to ten grains; but in pleuriſies, and thoſe febrile caſes where they are proper, they may be given with advantage in a much greater quantity; and the doſe repeated every four hours. The proper form for adminiſtring volatile ſalts, and indeed all volatile bodies, is in draughts; as in other forms, they will of courſe be continually flying off; and it ſeems to reſult thence, that the ſpirit of *Sal Ammoniac*, which is in reality only a ſolution of the ſalt, ſhould not be preferable to the dry ſalt: but beſides others, there is this very prevalent reaſon againſt ſuch preference of this ſpirit, that in the ſalt this doſe can be aſcertained; and if the compounder of the medicine complies with the preſcription, there can be no error; whereas the ſpirit may vary greatly in ſtrength, and the real proportion of ſalt intended be therefore either exceeded or unſupplied.

The doſe is from ten drops to ſixty, in any vehicle.

L. D. *Spiritus Salis Ammoniaci.*
Spirit of Sal Ammoniac.

Take of any fixt alkaline ſalt one pound and half, *Sal Ammoniac* one pound, water four pints; with a gentle fire diſtil off two pints.

E. D. *Spiritus ſalis Ammoniaci.*
Spirit of Sal Ammoniac.

Take of *Sal Ammoniac*, and ſalt of tartar, each ſixteen ounces; powder them ſeparately, then mix them, and put them into a glaſs retort, and pour to them 24 ounces of water; perform the diſtillation in ſand, and continue it till the ſalt which concretes in the receiver, is diſſolved by the aqueous fluid which comes over after it, or

gradually increaſing the fire, diſtil to dryneſs.

If the receiver be taken off before any fluid ariſes, you will obtain *Alkali Volatile ex Sale Ammoniaco vulgo.*

E. D. *Sal Ammoniacus Volatilis.*
Volatile Salt of Sal Ammoniac.

Take *Sal Ammoniac* one pound, the pureſt and drieſt whiteſt chalk two pounds; mix them well, and ſublime from a retort with a ſtrong fire.

The volatile ſalt, and ſpirit of *Sal Ammoniac*, are the pureſt of all the medicines of this kind. They are ſomewhat more acrimonious than thoſe produced directly from animal ſubſtances; for theſe, it is ſcarce poſſible, by the common methods of purification, to ſeparate entirely from their oil, which gives them ſome degree of a ſapponaceous quality.

Spiritus Salis Ammoniaci cum Calce viva.
Spirit of Sal Ammoniac with Quick-Lime.

Take of *Sal Ammoniac*, in fine powder, one pound, of quick-lime, one pound and a half; put them preſently into a retort, and add four pounds of ſpring-water; ſhake it, to mix the powder and water, and place it in a ſand-furnace; lute well the juncture of the receiver, and with a gentle heat draw off two pints.

The effect of the quick-lime on the *Sal Ammoniac*, is very different from that of chalk or of fixt alkaline ſalt. Immediately on mixture, a very penetrating vapour exhales; and in diſtillation, the whole of the volatile ſalt ariſes in a liquid form. This ſpirit does not effervеſce on mixing it with acids.

When this ſpirit is mixed with the ſpirit of *Sal Ammoniac* prepared with ſalt of tartar or white chalk, alſo with the ſpirit of hartſhorn, it may be detected by adding to a little of the ſuſpected ſpirit, about one fourth its quantity or more of rectified ſpirit of wine; which, if the volatile ſpirit is genuine, will precipitate a part of its volatile ſalt, but occaſions no viſible ſeparation or change in the cauſtic ſpirit, or in thoſe which are ſophiſticated with it.

If a ſolution of crude *Sal Ammoniac* and fixt alkaline ſalt mixed together, is given for the ſpirit of *Sal Ammoniac*, it is detected by adding to a little of it, a ſmall portion of rectified ſpirit of wine, by which a fixt (not volatile) ſaline matter will be precipitated.

The virtues and doſes of this are the ſame as the former; but it is not ſo good for inward uſe, through the heat it has from the lime, but that makes it the quicker in ſcent, and therefore beſt for ſmelling to; and is a better menſtruum for ſundry vegetable ſubſtances, particularly the Peruvian bark. When any alkaline ſalts are mixed with the *Sal Ammoniac*, for theſe preparations, the operator muſt be very nimble, elſe the *Sal Ammoniac* opens and exhales ſo ſuddenly, that there will be a great waſte of it; and if the lime was not to run a little in the air, before mixture, in the laſt proceſs it would be difficult to get it into the veſſel; no concrete ſalt can be obtained from this proceſs.

E. D. *Alkali Volatile Cauſticum, vulgo Spiritus Salis Ammoniaci cum Calce viva.*

Take freſh made quick-lime 16 ounces, water and crude *Sal Ammoniac*,

niac, of each 8 ounces. To the water in an iron or an earthen veſſel, put the lime coarſely powdered; cover the veſſel for 24 hours, whilſt the lime falls into a fine powder; afterwards put it into a glaſs retort, and add to it the *Sal Ammoniac* well powdered; ſpeedily cloſe the mouth of the retort, and mix the matters well by ſhaking them together; laſtly diſtil, on a gentle fire, into a cool receiver, as long as the ſpirit continues to drop. In this diſtillation, the veſſels muſt be ſo luted, that the moſt ſubtil vapours may all be kept in.

Flores Salis Ammoniaci.

Flowers of Sal Ammoniac.

Take of dry *Sal Ammoniac*, in powder, any quantity; put it into an earthen cucurbit, and having fitted on a blind head, ſublime the flowers with a fire gradually increaſed.

Spiritus Salis Ammoniaci dulcis.

Sweet Spirit of Sal Ammoniac.

Take of *Sal Ammoniac*, and ſalt of tartar, ana four ounces; powder them ſeparately, and mix them well in a glaſs or marble mortar; put this mixture into a glaſs body, pour upon it of rectified ſpirit of wine ten ounces, ſtir all together with a wooden ſpatula, and fit to the body a head and receiver: lute well the junctures; place the veſſel in a ſand-furnace, and give it firſt a very little fire to warm the body. The volatile ſalt will riſe, and ſtick to the head and neck of the receiver. Increaſe the fire a little, and continue it until there diſtils nothing more. The whole will be ended in four or five hours. Let the veſſels cool, and unlute them. There will be a little volatile ſalt ſtick to the head, and a ſpirit remain in the receiver. Put quickly both the one and the other into a retort of ſand; and having fitted another retort to it, to ſerve for a receiver, and luted the junctures, diſtil the whole with a ſmall fire. Cohobate it again three times; then keep what has been diſtilled in a bottle well ſtopt. Almoſt all the volatile ſalt will be diſſolved in the ſpirit of wine; and that which remains undiſſolved will receive a perfect diſſolution in the bottle.

This, Lemery recommends as a very good medicine for the lethargy, the palſy, ſcurvy, malignant fevers, and hyſterical maladies: it may be given inſtead of the ſpirit of *Sal Ammoniac*, before deſcribed; and it is pleaſanter to the taſte. It promotes ſweat and inſenſible perſpiration. The doſe is from twelve drops to thirty. It is alſo good, outwardly applied, to paralytic limbs; and for many nervous aches.

L. D. *Spiritus Salis Ammoniaci dulcis.*

Dulcified Spirit of Sal Ammoniac.

Take of any fixt alkaline ſalt, half a pound, *Sal Ammoniac* four ounces, proof ſpirit three pints; the ſpirit may be obtained by diſtillation, with a gentle heat in the proportion of a pint and an half.

E. D. *Spiritus Salis Ammoniaci Vinoſus.*

Vinous Spirit of Sal Ammoniac.

Take of the cauſtic ſpirit of ſal ammoniac four ounces, rectified ſpirit of wine eight ounces, mix.

Spiritus Salis Ammoniaci Succinatus.

Spirit of Sal Ammoniac with Amber.

Either digeſt a pound of ſpirit of

Sal

Sal Ammoniac with an ounce of oil of amber, or in the laſt proceſs, put ſpirit of amber inſtead of ſo much rectified ſpirit of wine.

This is reckoned to be yet more cephalic, and better ſuited to all nervous indiſpoſitions; but it is much more unpleaſant. Its doſe is from ten drops to forty.

Sal Volatile Oleoſum.

It is now called Spiritus volatilis Aromaticus.

This preparation, which Sylvius firſt made common, is mightily now in uſe. It is a moſt noble cephalic, and cordial, either to ſmell to, or take inwardly. Its doſe is from ten drops to an hundred, or upwards, in wine, or any common vehicle. It is much varied, according to the different humours of the maker; ſo that there will be no end of giving all the receipts followed. A *Sal volatile*, thus made with *Marum Syriacum* alone is wonderfully penetrating, grateful, and ſerviceable to the head; and, diluted to a convenient ſtrength, is one of the beſt ſternutatories that can be invented. Medicines of this kind might be prepared extemporaneouſly, by dropping any proper eſſential oil into the dulcified ſpirit of ſal ammoniac, which will readily diſſolve the oil, without the aſſiſtance of diſtillation. e. g. To a pint of dulcified ſpirit of ſal ammoniac add two drams of any proper eſſential oil, or ſo much as the ſpirit will diſſolve, or diſſolve the oil in half a pint of highly rectified ſpirit of wine, then mix the ſolution with half a pint of ſpirit of ſal ammoniac, on which a white coagulum will be formed, but if ſet in a warm place, is ſoon reſolved into a tranſparent liquor, depoſiting a quantity of volatile oily ſalt. By either of theſe methods, a volatile oily ſpirit may be occaſionally made, and at pleaſure adapted to particular purpoſes, by chuſing an eſſential oil ſuited to the intention. The ſpirits thus made are not ſo clear as thoſe made by diſtillation, but they are not inferior in medicinal efficacy. It is eaſy to impregnate this with ſteel, as either with the *Flores Ammoniaci Martiati*, or the *Regulis Martis*, which is the moſt delicate way of giving that mineral to nice conſtitutions, and where it requires a previous communication into the fineſt parts. The ſlower the fire is, the more ſalt cruſts upon the top and neck of the receiver; and therefore if care be taken not to draw it too near, whereby that ſalt is melted down, a great deal may be preſerved, which is vaſtly preferable to all of this kind, not only for fragrancy of ſcent in ſmelling-bottles, but for efficacy internally uſed in all nervous caſes.

L. D. *Spiritus Volatilis Aromaticus.*

Volatile Aromatic Spirit,
or *Sal Volatilis Oleoſus.*

Take eſſence of lemons, and eſſential oil of nutmegs, each two drachms; of eſſential oil of cloves, half a drachm, dulcified ſpirit of *Sal Ammoniac*, 2 pints; diſtil them with a very ſlow fire.

E. D. *Spiritus Volatilis Aromaticus, vulgo Spiritus Volatilis Oleoſus, et Spiritus Salinus Aromaticus.*

Saline Aromatic Spirit.
or *Sal Volatilis Oleoſus.*

Take of the vinous ſpirit of ſal ammoniac 8 ounces, eſſential oil of roſemary a dram and half by weight, eſſential oil of lemon peel one dram

dram by weight, mix ſo as to diſſolve the oils.

L. D. *Spiritus Volatilis Fœtidus.*
Fetid Volatile Spirit.

Take of fixed alkaline ſalt one pound and half, *Sal Ammoniac* one pound, aſſafœtida 4 ounces, proof ſpirit ſix pints; the ſpirit may be obtained by diſtilling with a gentle heat, in the quantity of five pints. This is a moſt excellent antehyſteric medicine, and may be given from thirty drops to eighty.

Take eight ounces of the vinous ſpirit of ſal ammoniac, and half an ounce of aſſafœtida. Digeſt in a cloſe veſſel for 12 hours, then diſtil off eight ounces in a water bath.

E. D. *Spiritus Mindereri.*
Mindererus's Spirit.

Take of the volatile ſalt of *Sal Ammoniac* any quantity, pour on it by degrees (ſtirring the mixture at the ſame time) of ſpirit of vinegar a ſufficient quantity, *i. e.* as much as will excite any effervescence.

The ſalt which this ſpirit contains, is a ſtrong ſudorific, and has, in reality, the febrifuge and deobſtruent qualities of neutral ſalts, in a high degree. The doſe may be as much as contains from ten grains to one ſcruple of the volatile ſalt. As it operates without heat, it is uſually given in febrile and inflammatory diſorders.

It may not be improper to cloſe the preparations under this article with the

Diſtillation and Salt of Urine.

Take of the urine of a ſound young man, newly made, as much as you pleaſe; put it into an iron kettle, and evaporate it to the conſumption of one half, with a gentle heat. Put the remainder into a ſtone bottle; ſtop it well, and ſet it by to ferment about two months. Open the bottle, and if it ſmell quick and ſtrong, put it into a large glaſs retort; lute on a receiver, and ſet on a very gentle fire for an hour; then increaſe it a little, which will raiſe the ſalt and ſpirit; continue that degree till the ſalt begins to diſſolve, then let all cool. Take off the receiver, and put all that is come over into a cucurbit: ſet it in ſand; lute on its head and receiver; give a gentle heat at firſt, and the ſalt, and ſome part of the phlegm, which we call ſpirit, will riſe. Continue the fire till the head is filled with ſalt; which, when it decreaſes, let all cool, and put what is in the receiver into a phial well ſtopt.

The doſe of this is from five to fifty drops. It is reckoned diaphoretic and diuretic.

In the evaporation, obſerve to do it by a gentle heat, leſt ſome of the volatile ſalts, by too great an agitation, ſhould fly before its fermentation. The uſe of the fermentation is to ſeparate the phlegm, which would take up too much room to no purpoſe. If the urine be not ſufficiently fermented, which is known by its weak ſcent, ſtop it again, and let it ſtand longer.

If the ſalt and ſpirit are deſired apart after the rectification, then pour off the ſpirit into a phial, and tie a double paper over the mouth of the receiver; ſet it downward, and let it drain till the ſalt is dry: then ſcrape it off from the ſides with a crooked hoop-ſtick; and put it into a phial well ſtopt. If a greater quantity of ſalt is ſought for, put both it and the ſpirit together into a long body; lute on the head and receiver; and let it

ſtand

ſtand in a digeſting heat of ſand, that the ſalt may gently ſublime.

The ſpirit may be made without fermentation, by evaporating the urine to the conſiſtence of a ſyrup; and giving it a gradual fire to a moderate degree. In this operation the phlegm comes firſt, and then ſome volatile ſalt; afterwards more volatile ſalt will appear in white fumes, and the ſpirit and a little ſtinking oil, which muſt be ſeparated from the ſalt and ſpirit before rectification. After one rectification the volatile ſalt and ſpirit may be ſeparated as in the former: but it is not eſteemed of equal goodneſs with the fermented ſpirit; becauſe all the ſalt of urine is volatilized by the fermentation. In the *caput mortuum*, as ſome call it, there will remain a ſtrong lixivial ſalt. And if the volatilizing, fixed, and lixivial ſalts deſerve that encomium which the moſt celebrated authors give them, the ſalt of fermented urine muſt be the beſt medicine: and indeed there is a perceptible difference between them; the fermented ſpirit and ſalt being more pleaſant and penetrating both in ſmell and taſte, than the unfermented. This ſalt is of the ſame nature with the volatile ſalt of hartſhorn, or any other animal ſubſtance.

Vitriolum purificatum.

Purification of Vitriol.

All the vitriols are made pure by diſſolution, filtration, evaporation, coagulation, or chryſtallization: and their higheſt degree of purity is, when no fæces ſettle in their diſſolution.

L. D. *Vitriolum calcinatum.*

Calcined Vitriol.

Let green vitriol be calcined in an open earthen veſſel in the fire till it be thoroughly dry: then let the veſſel be broken, and the vitriol ſeparated from it, and kept in a well cloſed veſſel, for uſe. Vitriol is ſufficiently calcined when that which is next the ſides and bottom of the veſſel is changed red.

The directions in the London Diſpenſatory for calcined alum and vitriol are very incautiouſly given; for if the vitriol be thus raſhly put into a fire, ſufficient to bring it to redneſs, the far greater part would boil over the veſſel and be loſt: to prevent which, this method ſhould be uſed. Let the vitriol be put into an earthen veſſel till it is three parts full, then place it over a fire, in a heat juſt ſufficient to make it boil; when the ebullition has nearly ceaſed, the ſpace the vitriol before took up will be much contracted: without taking out what it now contains, let the veſſel be ſupplied with a freſh quantity; and continue thus to recruit it, till the ebullition ceaſing, the veſſel ſhall be found full of dry vitriol calcined to whiteneſs. If a higher calcination be required, place the pot and vitriol, now within the fire, ſo that it may be made red hot, and let it remain in that condition, till the vitriol be of a due redneſs.

Vitriol calcined thus to redneſs, is called *Calcanthum Rubefactum*, and is the Calcothar of the preſent Edinburgh Diſpenſatory. If it be calcined till it begins to turn red, it is in that ſtate extremely ſtyptic, and being ſnuffed up the noſe, is very effectual in ſtopping the bleeding thereof, even though the moſt violent.

E. D. *Vitriolum calcinatum.*

Take any quantity of green vitriol, calcine it in an unglazed earthen

earthen veſſel, placed on a moderate fire, until it becomes white and dry.

Oleum and Spiritus Vitrioli.
Oil and Spirit of Vitriol.

Beat the colcothar, or vitriol calcined to redneſs, to powder, and ſift it through a coarſe hair ſieve; then put into thoſe pots called long-necks, five or ſix pounds each, and place them in a reverberatory furnace; lute on the receivers with a lute made of clay, ſand, and cut flax; then make a ſmall fire under the grate with charcoal and ſmall-coal; ſtop the fire-hole of the furnace, and the aſh-hole ſlightly; let the fire ſmother ſo ſix or eight hours, to dry the furnace and junctures of the receivers; then put the fire upon the grate; and keep it in the firſt degree ſix or eight hours; increaſe it to the ſecond for four or five hours, and ſo to the third; which will raiſe white clouds in the receiver; continue it ſo long as the white clouds come over; when they begin to abate, augment it to the fourth degree in its extremity; and continue it till the vitriol emits no more fumes.

Then let all cool, carefully take off the receivers, and put the diſtilled liquor into a retort; which place in the ſand furnace; fit on a receiver without luting: make a gentle fire, which will raiſe a little inſipid phlegm of a ſulphureous ſmell: put that into a phial, and ſtop it. Put on the receiver again; and continue the ſecond degree of fire; and ſo paſs on to the third; which continue till fumes riſe into the receiver, and the oil in the retort be clear and white as rock-water; then let all cool, and put the ſpirit by itſelf, and the oil left in the retort by itſelf alſo.

L.D. *Spiritus Vitrioli tenuis et fortis.*
Weak and ſtrong Spirit of Vitriol.

The ſame as the above, only the name of oil of vitriol is changed to ſtrong ſpirit.

E. D. *Acidum Vitriolicum Tenue, vulgo Spiritus Vitrioli Tenuis.*
Weaker Spirit of Vitriol.

Take of the acid of vitriol by weight one part, water ſeven parts, mix.

The ſpirit of vitriol is the moſt ponderous of all the liquids we are acquainted with, and the moſt powerful of the acids. If any other acid be united with a fixt alcaline ſalt or earth, upon the addition of the vitriolic, ſuch acid will be diſlodged, and ariſe on applying a moderate heat, leaving the vitriolic in poſſeſſion of the alcali; tho' without this addition, it would not yield to the moſt vehement fire. Mixt with water, it inſtantly conceives great heat; exhibited to the air, it imbibes its moiſture, and ſoon acquires a notable increaſe of weight. In medicine, it is employed chiefly as ſubſervient to other preparations: it is likewiſe not unfrequently mixed with juleps and the like (in ſuch quantity as will be ſufficient to give the liquor an agreeable tartneſs) for abating heat, quenching thirſt, and promoting the urinary diſcharge.

E. D. *Calx Zinci, vulgo Flores Zinci.*

Let a quart crucible be covered with a tile, and placed in a furnace with its mouth inclining to that of the furnace. Apply the coals ſo about the bottom of the crucible

that it may be moderately heated; then take away the tile, caſt in about a drachm of zinc, and be careful that none of the fuel falls into it.

Preſently after, look to the bottom of the crucible, and you will ſee the zinc in a flame, and riſing in flocks like wool; ſtir the zinc now and then with an iron ſpatula, that it may be completely ſublimed; then take it from the crucible with a ſpoon, and more zinc being thrown in, repeat the operation at pleaſure.

Gilla, ſeu Sal Vitrioli.
Salt of Vitriol.

Diſſolve any quantity of white vitriol in warm water: filter it, and let it ſtand warm for 24 hours to ſettle: decant it from the ſediment; and evaporate it to a pellicle in an earthen pan; and ſet it two or three days in a cold place to ſhoot into chryſtals.

It works by vomit, and is a gentle puke enough for young children, from three to eight grains; and to grown people from a ſcruple to a drachm. It corrugates the ſtomach into contraction ſo ſoon, that it is fanſied to come all up again upon the firſt ejectment; and therefore ſome give as many doſes of it as they would have the patient vomit; giving each in a porringer or baſon of poſſet-drink, or carduus tea.

L. D. *Sal Vitrioli.*
Salt of Vitriol.

Take of white vitriol one pound, ſtrong ſpirit of vitriol one ounce, water a proper quantity; diſſolve the vitriol in the water by boiling, and filter through paper, and after a due evaporation, ſet the ſolution in a proper place to form chryſtals.

The intention of this proceſs is not to ſeparate the ochery matter of the vitriol, but to prevent its ſeparating and colouring the chryſtals: the addition of the acid keeps it perfectly diſſolved.

E. D. *Vitriolum Album Purificatum.*

Take of white vitriol eight ounces, filings of zinc half an ounce, common water a pint. Digeſt for ſome hours, over a gentle fire, filter through paper, and then place the filtered liquor in a cool place, that chryſtals may be formed.

L. D. *Spiritus Vitrioli dulcis.*
Dulcified Spirit of Vitriol.

Take of ſtrong ſpirit or oil of vitriol one pound, rectified ſpirit of wine one pint; mix them gradually with the utmoſt care, and diſtil them with a ſlow fire, till a black froth begins to riſe; then immediately let the whole be removed from the fire, leſt the froth riſe over into the receiver, and render the whole operation ineffectual.

In this proceſs the greateſt care ſhould be taken in mixing the two ingredients; for which the ſafeſt method is, to add the ſpirit of vitriol to the other by ſlow degrees, and to let the mixture ſtand without farther addition each time, till no ſenſible heat can be perceived after ſhaking it; when the whole is commixed, it ſhould likewiſe be ſuffered to ſtand ſome time before it is diſtilled.

The true dulcified ſpirit ariſes in thin ſubtil vapours, which condenſe upon the ſides of the recipient in ſtreight ſtriæ. It is colourleſs as water, very volatile, inflammable, of an extremely fragrant ſmell, in taſte ſomewhat aromatic:

when

when the fumes form irregular ſtriæ, or are collected in drops like oil, the receiver muſt be removed; for then an acid liquor only is produced, which is ſucceeded by the black froth above mentioned: ſo for the dulcified ſpirit of vitriol, the diſtillation ſhould not be continued until the black froth appears.

E. D. *Spiritus Vitrioli dulcis.*

Take of rectified ſpirit of wine 4 pounds, cautiouſly drop into it by very ſlow degrees of oil of vitriol 6 ounces; digeſt them for 3 days, and then diſtil according to art.

The proportion here given of the oil of vitriol to the ſpirit of wine ſeems much more proper than that of the college of London, though that is but half the quantity directed in former Diſpenſatories. But this holds only true in regard to its uſe, as dulcified ſpirit; ſince, if it is intended for the elixir *Vitrioli dulce*, it is proper that it ſhould be prepared as in the London Diſpenſatory, with equal parts: and certainly by that proceſs, one may ſuppoſe the college of London intended no other uſe of it.

The dulcified ſpirit of vitriol has been for ſome time greatly eſteemed both as a menſtruum and a medicine. It diſſolves ſome reſinous and bituminous ſubſtances more readily than ſpirit of wine alone, and extracts elegant tinctures from many vegetables. As a medicine, it promotes perſpiration and urine, expels flatulencies, relieves ſpaſms, &c. the doſe from 10 to 100 drops, in any convenient vehicle. Hoffman frequently directed this ſpirit, as a ſuccedaneum to his anodyne mineral liquor.

E. D. *Liquor Ætherus Vitriolicus.*

Vitriolic Ethereal Liquor.

Take of rectified ſpirit of wine 32 ounces by weight, acid of vitriol 16 ounces by weight. Put the ſpirit into a glaſs retort previouſly heated, and pour the acid to it in one ſtream. Gradually mix by gently and often ſhaking; then immediately diſtil in ſand (heated previous to this operation,) into a receiver cooled by water or ſnow. Regulate the fire ſo as quickly to boil the liquor, and continue to boil, until 6 ounces by weight is brought over; then remove the retort from the ſand. To the diſtilled liquor add two drams of the ſtrong common cauſtic; then diſtil it again from a deep retort into a receiver properly cooled, until ten ounces by weight of æther are obtained.

Spiritus Ætherus.

Ethereal Spirit.

Take of rectified ſpirit of wine three pounds; put it into a two-gallon ſtone bottle; add to it, by two ounces at a time, allowing the interval of a quarter of an hour between each addition, three pounds and ſix ounces of the ſtrong oil of vitriol; let the mixture digeſt, without heat, for the ſpace of a night: in the morning decant it from one veſſel to another three or four times; convey it thro' a glaſs funnel and long tube into a retort capable of containing three times the quantity; place it in an iron pot with an inch of ſand at the bottom; add more ſand round the retort to the height of the mixture; ſet it over a quick fire; lute a large receiver to the retort, leaving a pin-hole in the luting, unleſs the receiver is perforated; continue the fire till an ebullition, ac-

companied with large bubbles, is obſerved in the mixture, then remove the fire entirely: the heat of the ſand will be ſufficient to complete the diſtillation of the æther, which is to be ſeparated from the ſpirit of wine diſtilled before the ebullition, in the manner hereafter mentioned.

The proceſs being finiſhed, a large quantity of liquor is found in the retort: this liquor conſiſts of ſome ſpirit of wine, a quantity of æther, and often ſome ſulphureous volatile ſpirit. To ſeparate the æther, pour the liquor into a clean retort; add two or three ounces of pot or pearl aſh; lute a large receiver; draw off one half by a very gentle heat; ſhake it with an equal quantity of pump water; whatever portion of ſpirit of wine roſe with it will mix with the water; the pure æther being immiſcible with it, will riſe to the top.

Æther, if duly prepared, is nither acid nor alkaline, is immiſcible with leſs than twenty times its weight of water; it will not mix with acids, nor alkalines, nor vinous ſpirits; it diſſolves oils, reſins, balſams, gums, gum-reſins, wax, and extracts oily and reſinous parts of vegetables: applied to parts affected with pains, it gives, for the moſt part, immediate relief: internally adminiſtered, it is perſpirative, and ſo potently diuretic as, if long continued, to occaſion a diabetes; the only inconvenience hitherto obſerved from its uſe.

E. D. *Acidum Vitriolicum Vinoſum, vulgo Spiritus Vitrioli dulcis.*

Take of the vitriolic ethereal liquor by weight one part, ſpirit of wine rectified by weight two parts, mix.

Liquor Anodynus Mineralis Hoffmanni.

Hoffman's Mineral Anodyne Liquor.

Into half a pound of the concentrated oil of vitriol, placed in a large glaſs retort, pour by little and little, thro' a long-ſtemmed funnel, one pint and a half of highly rectified ſpirit of wine. Stop the mouth of the retort, digeſt for ſome days, and then diſtil with a very gentle heat. At firſt a fragrant ſpirit of wine will ariſe; and after it, a more fragrant volatile ſpirit, to be caught in a freſh receiver. The receiver being again changed, a ſulphureous, volatile, acid phlegm comes over; and at length a ſweet oil of vitriol, which ſhould be immediately ſeparated, leſt it be abſorbed by the phlegm. Mix the firſt and ſecond ſpirits together, and in two ounces of this mixture diſſolve twelve drops of the ſweet oil. If the liquor hath any ſulphureous ſmell, rediſtil it from a little ſalt of tartar. Ph. Pariſ.

Hoffman frequently ſubſtituted the dulcified ſpirit of vitriol for this preparation. It hath preciſely the ſame virtues as the vitriolic æther, which is now frequently uſed in its ſtead. All its virtues appear to depend on the æther which is in it. The dulcified ſpirit of vitriol, æther, and this liquor, are nearly if not equally alike efficacious, in their gently ſtimulating, carminative, antiſeptic, diaphoretic, and anodyne virtues. It is impoſſible to ſay whether the above is the exact preparation recommended by Hoffman. It is evident from his writings, that his anodyne liquor was compoſed of the dulcified ſpirit of vitriol, and the aromatic oil which ariſes after it, but not in what propor-

proportions he uſed them together. The phyſicians of Paris aſcertain the proportions as above; thoſe of Wirtemberg think that all the oil was mixed with all the ſpirit obtained in one operation, without regard to the preciſe quantities.

Spiritus Febrifugus Di Clutton.
Clutton's Febrifuge Spirit.

Take of the oil of ſulphur by the bell, rightly prepared, rectified oil of vitriol, and ſpirit of ſalt, of each equal parts; add to theſe of rectified ſpirit of wine, three times the quantity of the whole. Digeſt for a month, then diſtil to dryneſs.

Great difficulty attends the preparation of this medicine, by this direction, tho' exactly as related by Mr. Clutton in his publication on the method of curing all continued fevers. However, as his ſucceſſor, Mr. Corbyn, in Holbourn, has continued the proceſs, his integrity ſecures to us a genuine production.

Sal Sedativum Hombergii: or the Volatile Narcotic Salt of Vitriol, of Monſr. Homberg.

Diſſolve 9 ounces of borax in a ſufficient quantity of warm water, and add thereto 2 ounces of the oil of vitriol. Evaporate this mixture, till thin plates appear upon the ſurface; then ſuffer the fire to decay, and let the veſſel ſtand unmoved till plenty of cryſtals are formed.

This ſalt was firſt diſcovered by Homberg. He obtained it by ſublimation, and thinking that it was the produce of the vitriol, and that the borax only diſengaged it (the reverſe of which is in reality the caſe), he called it the Volatile Narcotic Salt of Vitriol. The ſedative ſalt is the produce of the borax, and if it is combined with the cryſtals of ſoda, a regenerated borax is obtained, which in no reſpect differs from borax before its decompoſition.

There are various methods of obtaining this ſalt: and though the vitriolic acid is generally uſed, any other will anſwer as well. The ſedative ſalt appears to the taſte, a neutral ſalt, but examined with alkalies, has the properties of an acid, effervеſeing, uniting, and cryſtallizing with them, and deſtroying their alkaline quality. It diſſolves in water, and in rectified ſpirit of wine, though not very readily in either.

It is ſuppoſed to be a mild anodyne, to calm the heat of the blood in fevers, to prevent or remove delirious ſymptoms, and to allay ſpaſmodic ſymptoms, whether hyſterical or hypochondriac. The doſe from 2 to 12 grains in any convenient liquor, and repeated as required.

L. D. *Lapis Medicamentoſus.*
The Medicinal Stone.

Take of alum, litharge, bole armenic, or French bole, each half a pound; the colcothar of green vitriol three ounces, vinegar a quarter of a pint; dry the whole mixed together over a fire till it grows hard.

This powder is aſtringent, is uſed to faſten looſe teeth, heal the gums, check defluxions in the eyes, &c.

L. D. *Spiritus, Sal, et Oleum Succini.*
Spirit, Salt, and Oil of Amber.

Let amber be diſtilled in a ſand-heat, with a fire gradually increaſ-

ed, and there will riſe a ſpirit, oil, and ſalt, impure with a part of the oil.

The oil, by rediſtillation, will ſeparate into a thinner part, which will aſcend; and a thicker part left behind, called Balſam of Amber.

The ſalt muſt be boiled either in the ſpirit, or with water: then ſet aſide to cryſtallize, and it will by this means be freed from the oil adhering to it: every repetition of this proceſs will render the ſalt more pure.

In the diſtillation of amber, the heat ſhould ſcarcely exceed that of boiling water, until all the aqueous liquor and the thin oil have ariſen; after which it muſt be gradually increaſed. If the fire is haſtily urged, the amber is in danger of ſwelling ſuddenly, and riſing into the receiver. When ſand is intermixed with the amber, it is leſs ſubject to this rarefaction, and the fire may be raiſed ſomewhat more expeditiouſly. The receiver may be left unluted, that it may occaſionally be removed as the ſalt riſes and concretes in the neck of the retort, from whence it ſhould be ſcraped to prevent the oil from carrying it down into the receiver. When a groſs thick oil appears, and no more ſalt is ſeen to ariſe, the diſtillation is ſtopped.

The Pruſſians diſtil the amber without any ſand, or other intermedia mixed with it; they permit the oil to carry down the ſalt into the receiver, and afterwards ſeparate it by means of bibulous paper, which imbibes the oil, and leaves the ſalt dry; which paper is afterwards ſqueezed and diſtilled: they continue the diſtillation till all that can be forced over has ariſen, with care only to catch the laſt thick oil in a ſeparate receiver; and from this they extract a conſiderable quantity of ſalt, by ſhaking it in a ſtrong veſſel with three or four freſh portions of hot water, and evaporating and cryſtallizing the filtered waters.

The ſpirit of amber is only a ſolution of a ſmall quantity of the ſalt in water; it is therefore properly employed for diſſolving the ſalt in order to its cryſtallization.

Pure ſalt of amber diſſolves both in water and in rectified ſpirit, though not readily; of cold water in ſummer, it requires for its ſolution about twenty times its own weight; of boiling water only about twice its weight. Expoſed in a glaſs veſſel, to a heat a little greater than that of boiling water, it firſt melts, then riſes in a white fume, and concretes again in the upper part of the glaſs, into fine white flakes, leaving, unleſs it was perfectly pure, a little coaly matter behind. It effervesces with alkalies both fixt and volatile, and forms with them neutral compounds, greatly reſembling thoſe compoſed of the ſame alkalies and vegetable acids. Mixed with acid liquors it makes no ſenſible commotion. Ground with fixt alkaline ſalts, it does not exhale any urinous odour. By theſe characters, this ſalt may be readily diſtinguiſhed from all the other matters that may be mixed or ſold with it.

The oil differs from all thoſe of the vegetable kingdom, and agrees with the mineral petrolea, in not being ſoluble, either in ſpirit of wine, fixt alkaline lixivia, or volatile alkaline ſpirit; the oil, after long digeſtion or agitation, ſeparating as freely as common oil does from water.

E. D.

E. D. *Sal Volatile, Spiritus, & Oleum Succini.*

Volatile Salt, Spirit, and Oil of Amber.

Take of powdered amber and clear ſand equal parts; being mixed, put them into a glaſs retort, of which they will fill one half; then fit on a large receiver, and diſtil in a ſand-heat, with a fire gradually increaſed: at firſt a ſpirit will come over with ſome yellow oil, then a yellow oil with ſalt; after which, the heat being increaſed, more ſalt will riſe with a reddiſh oil.

When the diſtillation is completed, empty the fluid out of the receiver, and having collected the ſalt, which adheres to the ſides, dry it by a gentle preſſure, betwen the folds of ſpongy paper. The oil may be ſeparated from the ſpirit by filtering, and afterwards rectified by diſtilling it four times in clean retorts, each time leaving behind about one eighth in the retort. The ſalt may be farther purified by diſſolving it in warm water, and then cryſtallizing it.

The addition of ſand, or any other ſubſtance, may be better omitted, if the fire be judiciouſly conducted, the intent of ſuch being only to prevent the amber from raiſing a froth into the receiver.

We have included three medicines in our proceſs, becauſe they ſo naturally ariſe out of the ſame ſubject. The rectified oil is ſometimes internally preſcribed in nervous caſes, joined with ſpirit of *Sal Ammoniac*, or of lavender, or other liquors, from five to fifteen drops. The thicker oil is moſt uſed externally, in fixed rheumatic pains and aches; as alſo to paralytic limbs: but ſome commend it inwardly in old gleets; and ſay it anſwers even when the beſt turpentine balſams fail. The ſpirit is uſed much to the ſame purpoſe, both internally and externally, from ten drops to one dram, in any convenient vehicle inwardly; and outwardly rubbed in, *per ſe*, or mixed with other ſuitable liquors. But the volatile ſalt is the main part, and ſo much in uſe, that the others are of little value, with reſpect to it. It is of a penetrating acid taſte; it diſſolves both in water and rectified ſpirit of wine. It is a moſt admirable cephalic detergent, in that ſenſe as has been explained in the firſt Claſs of the firſt Section. In the convulſive deliriums of fevers it is mightily preſcribed; and reckoned not inferior to any thing in ſuch intentions; becauſe, beſides its peculiar efficacy upon the nerves, it alſo conduces much, with alexipharmics, to promote a diaphoreſis: in all chronic caſes likewiſe, as epilepſies, palſies, and the like, it is ſcarce ever left out of preſcription. The doſe is uſually from three to fifteen grains. This ſalt has further one uſeful property, which ſeems attended to by few; and that is quickening the operation of ſome cathartics; eſpecially of the aloetic and reſinous kinds. A few grains, with any of the milder officinal pills, as *Pil. Ruffi*, and the like, will make them briſker by much in operation, and yet rather milder. Boerhaave calls it *Diureticorum & anti hiſtericorum princeps*, and in that difficulty of making water, which frequently comes on, and is a very troubleſome ſymptom in the ſmall pox, nothing is ſo effectual as a few grains of this ſalt.

The great conſumption of this medicine, in compariſon to what

the amber produces of it, and the price which upon that account it bears, is ſo tempting to the avarice of the chemiſts, that it is moſt abominably adulterated; and therefore not to be truſted to from any hands but thoſe who make it for their own uſe; ſome ſophiſticate it with *Sal Ammoniac*, with nitre, ſome with cream of tartar, and others with ſalt of coral. The firſt of theſe cheats may be diſcovered by a ſtrong urinous ſcent, if it be rubbed with ſalt of tartar; the ſecond, by its nitrous taſte; the third, by ſolution in clear water; for the ſalt of amber will much ſooner diſſolve than the tartar, and therefore manifeſtly leave that behind to view: and the laſt is diſcoverable by trying it upon a red hot iron; for the genuine ſalt will fly away, the vinegar which the coral hath abſorbed will be deſtroyed, and nothing but an inſipid earth be left upon the iron.

This ſalt beſt fits the forms of boles, pills, or electaries, for taking; becauſe in juleps and draughts, in which ſometimes it is inadvertently ordered, it is extremely naufeous; the genuine ſalt having a mixed reliſh of ſalt and ſulphur; which in a liquid form lies ſo naked to the palate, that it often urges the patient to eject it by vomit immediately after taking.

Tinctura Succini. Tincture of Amber.

Put four ounces of amber (in very fine powder) into a bolt-head; pour upon it ſpirit of wine twelve ounces; invert a ſmall bolt-head into the mouth of the bigger; lute well the juncture, and digeſt upon a heat of ſand for four or five days, ſhaking it about two or three times a day. When the ſpirit is well tinged of an amber-colour, pour it into a phial; and put on the remains half a pound more of ſpirit of wine: digeſt as before, and extract a tincture; both which put into a matraſs; and in a gentle heat of aſhes draw off one half of the ſpirit of wine, which will ſerve again for the ſame uſe; and put the tincture into a phial well ſtopt.

This is preſcribed for the ſame intentions as the preceding preparations; and is given from ten to ſeventy or eighty drops in any proper vehicle.

Tinctura Succini.
Tincture of Amber.

To two ounces of yellow amber in powder, add a pound of *Spiritus vitrioli dulcis:* digeſt the tincture in a ſand-heat for four days, and then filter for uſe, the doſe is from ten to a hundred drops.

This is a very elegant prepration of amber, of a grateful baſamic taſte and fragrant ſmell. It is recommended in diſorders ariſin from a lax ſtate of the ſolids, debility of the nerves, ſuppreſſion o the menſes, *Fluor Albus*, ſemina gleets, &c.

Poteſtates Succini. Powers of Amber.

Take oil of amber one ounce, volatile *Sal Ammoniac* half an ounce: grind the oil and ſalt well together in a little mortar; pour to them ſpirit of wine tartarized half a pound; and put them afterwards into a bolt-head; invert a little glaſs to make it fit for circulation. Lute well the joint; and put it in warm ſand, to ſtand in digeſtion for four or five days, ſhaking it two or three times every day; in which time the ſpirit of wine will have imbibed the oil and

ſalt:

ſalt: ſet it by, and when it is cool, put it in a phial well ſtopt for uſe.

This has the virtues of the oil; and is fitter for preſcription internally, becauſe it better mixes with any vehicle for the conveniency of taking. Its doſe is from 10 drops to 30 or 40; it is ſeldom or never uſed.

Cryſtalli Tartari.
Cryſtals of Tartar.

Take of white tartar powdered any quantity, which boil till it is perfectly diſſolved in twenty times its weight of water; let the ſolution, while yet hot, be filtered through paper, and received in a wooden veſſel; then expoſe it a night or longer to the cold air, that cryſtals may be formed, and ſhoot to the ſides of the veſſel; the water being afterwards poured off, the cryſtals are to be collected and dried for uſe.

This does not differ from the

Cremor Tartari.
Cream of Tartar.

Boil a ſolution of tartar till a thick ſkin appears on the ſurface, take it off and dry it; then boil it till there is a new ſkin, ſo on.

L. D. The cryſtals, or cream of tartar are now ſo ſeldom prepared by thoſe who practiſe pharmacy, being ſupplied by thoſe who make it their proper buſineſs, that the college of London, not regarding it any longer as a part of pharmacy, have omitted to give any proceſs for preparing them, and ranked them, in their prepared ſtate, amongſt the ſimples.

The virtues of this are known to every one. It is a cooling gentle cathartic, and partly paſſes off, as moſt ſaline purgatives do, by urine. It may be given with good effect in ſmall doſes as an alterative, particularly where there is a tendency to an alcaline putrefaction in the *primæ viæ*, or in the whole habit. It is eſteemed a ſpecific in the dry gripes, excited by the fumes of lead. The doſe is from half a drachm to one ounce.

L. D. *Sal Tartari.*
Salt of Tartar.

Let crude tartar, of either kind, folded up in wet brown paper, or contained in a proper veſſel, be put into the fire, and continued there till all the oil is burnt out; the ſalt is then to be procured from it by ſolution in boiling water, with a ſubſequent evaporation, after having been filtered through paper.

Fixt alkaline ſalts, perfectly purified, appear to be one and the ſame, whatever kind of vegetables they were produced from; thoſe of ſome marine plants excepted. In volatile alkalies rendered pure, there appears to be the ſame idendity.

E. D. *Sal Tartari.*
Salt of Tartar.

Take any quantity of tartar, wrap it in wetted blotting paper, or put it into a crucible, about which apply a gentle heat, until it is burnt to a coal; then powder it, and calcine it in an open crucible, by means of a moderate fire, and without fuſion, until it becomes white, or at leaſt an aſh. Then diſſolve it in hot water, and ſtrain it through a linen cloth. Evaporate this ſtrained ſolution in a clean iron veſſel, and towards the concluſion carefully ſtir it with an iron ſpoon, that no matter may adhere to the bottom of the veſſel. The whiteſt ſalt remains if it is left a little longer on the fire, even until the bottom of the veſſel becomes reddiſh. Laſtly, place it to cool in a glaſs veſſel well ſtopped.

As to the origin of fixt vegeta-

ble

ble alkaline ſalts, it is diſputed whether it exiſts ready formed in vegetables, previouſly to their combuſtion, by which it is obtained; or whether vegetables contain only the materials proper for its formation. By incineration is the uſual mode of obtaining this kind of ſalt; but Mr. Margraff obtained the vitriolated tartar, nitre, and regenerated common ſalt, by diſſolving cream of tartar in the vitriolic, nitrous, and marine acids; and it is demonſtrated that the conſtituents of cream of tartar, are the peculiar acid of tartar and fixt vegetable alkaline ſalt.

The medicinal virtues of ſalt of tartar, and all other lixiviate ſalts, are of four kinds, to overcome acidity in the *via prima*;——to reſolve the viſcidity of the blood and ſeveral humours, and conſequently to remove the glandular obſtructions thence ariſing;——to looſen the texture of calcarious concretions in the liver, kidneys and bladder;——and to operate as a diuretic. The firſt of theſe qualities renders them efficacious in cholics, and the flatulent diſorders which ariſe from the defect of bile, or from eating fruit or other aceſcent diet. The ſecond makes them highly ſerviceable in cachectic and hypochondriac caſes, in ſchirrous livers, jaundice, and the ſtone and gravel. The fourth, in common with all the other kinds of ſalts which promote urine, conſtitutes them uſeful in dropſies. The doſe of fixed alkaline ſalts may be from a ſcruple to a drachm, which may, without the leaſt inconvenience, be taken twice a day, if diluted with half a pint of water.

E. D. *Sal Lixivius Purificatus.* Purified Lixivial Salt.

Lixivial ſalt, (that which the Engliſh call pearl aſhes) put into a crucible, and made red hot in the fire, that the oily ſordes, if any there are, may be burnt. Then diſſolved in an equal weight of water, let it ſtand until the feces are ſettled; pour off the clear liquor into a clean iron veſſel and boil it to dryneſs, carefully ſtirring it at the concluſion that nothing may adhere to the veſſel. It is duly purified if when perfectly dry it wholly diſſolves by rubbing it with an equal weight of water, and is free from colour and odour.

L. D. *Lixivium Tartari.* Deliquiate Salt of Tartar, commonly called Oil of Tartar *per deliq.* Set tartar calcined to a whiteneſs in a moiſt place, that it may be diſſolved by the air.

The ſalt of tartar freed from the aſhes, ſeems much fitter to make this lixivium than the tartar only calcined without further ſeparation; for in the latter there will neceſſarily be a mixture of the white aſhes or earth, from which the deliquiated ſalt cannot be freed, without ſuch dilution as deſtroys the intention of the preparation; and therefore only a very minute quantity of clear fluid will be, by this method, obtained. This lixivium, though thus prepared with much trouble, differs in no reſpect with a ſaturate ſolution of lixiviate ſalts, in cold water, provided care be taken that a proportion of the ſalt, greater than the quantity of water uſed can diſſolve, be added. This oil mixed with oil of almonds and roſe water makes a ſafe waſh for pimples, morphew, &c.

Liquamen Salis Tartari, vulgo Oleum Tartari per deliquium dictum. Oil of Tartar *per deliquium.*

Take any quantity of ſalt of tartar,

tartar, put it in a flat glaſs diſh, and, expoſing it to the air ſeveral days in a moiſt place, it will run into a fluid; which is either to be filtered through paper, or ſeparated from the fæces by decantation. The more the ſalt has been calcined the more eaſily it will run.

L. D. & E. D. *Tartarum Solubile.*
Soluble Tartar.

Take of any fixed alkaline ſalt one pound, water one gallon; to the ſalt, diſſolved in the water boiling, throw in cream of tartar gradually, till the effervеſcence, that before aroſe on each addition, ceaſes to appear; which will be when, or before, three times the weight of alkaline ſalt has been thrown in; then filter the ſolution through paper; and, after a proper evaporation, let it be ſet to ſhoot in cryſtals; or otherwiſe make a total evaporation of the water, that the ſalt may remain in a ſolid maſs.

To hit the point of ſaturation exactly is not neceſſary, for if the liquor is permitted to cool a little before it is committed to the filter, and then properly exhaled and cryſtallized, no error of this kind can happen; for, the ſuperabundant cream of tartar will cryſtallize and remain on the filter, and if the alkali exceeds, the preparation will remain uncryſtallized. The cryſtallization of this ſalt is troubleſome: it is moſt convenient, to let the acid prevail at the firſt, to ſeparate the ſuperfluous quantity, by ſuffering the liquor to cool a little before the filtration, and then proceed to the total evaporation of the aqueous fluid, which will leave behind it the neutral ſalt required. The moſt proper veſſel for this purpoſe is a ſtone ware one; iron diſcolours the ſalt.

In doſes of from a ſcruple to a dram, it is a cooling aperient; two or three drams looſen the belly; and an ounce is briſkly purgative. It is an uſeful addition to reſinous purges.

L. D. *Tartarum Emeticum.*
Emetic Tartar.

Take of waſhed crocus of antimony, and cryſtals of tartar, each half a pound, water three pints; boil them half an hour, then filter the water through paper, and, after due evaporation, ſet it to cryſtallize.

E. D. *Tartarum Emeticum.*
Emetic Tartar.

Take of cream of tartar four ounces, powdered glaſs of antimony ſix ounces; mix and caſt it by little and little into a gallon of water whilſt boiling in a glaſs veſſel placed on ſand. Continue to boil it gently for ſix hours, duly ſupplying freſh water as the evaporation requires it; then filter the liquor, and evaporate it ſo as that it may afford cryſtals.

This is a very briſk emetic, and will operate from two to eight grains. Three or four grains with half a ſcruple of teſtaceous powder will vomit, purge, and ſweat, and produce all the effects of Dr. James's powders.

Mr. Beaume affirms from experiment, that the acid of tartar may be eaſily ſaturated with the reguline part of antimony; and as the glaſs of antimony is the moſt emetic and moſt ſoluble of all the antimonial preparations by fire, it ſhould be preferred for making a neutral antimonial ſoluble tartar: yet, reflecting on the nature of the glaſs of antimony, it is not always of the ſame ſtrength. It is made by fuſing the grey calx of antimony calcined

calcined to an uncertain degree; and we know that if it be too little calcined, we ſhall obtain an opake matter that reſembles the liver more than the glaſs; if it is too much calcined, it cannot be vitrified, nor even fuſed, by the moſt intenſe heat; between the degree of calcination which is ſufficient to give an opake fuſed matter, and the degree in which it begins to be unfuſible, there are many intermediate ones; all of which are ſufficient to produce glaſſes of antimony; but theſe glaſſes differ in the degrees of tranſparency, intenſity of colour and fuſibility, according as the calcination has been more or leſs complete. We cannot doubt that different glaſſes of antimony muſt be more or leſs emetic, and that perhaps different quantities of theſe glaſſes are required for the perfect ſaturation of the acid of tartar; beſides, we are both ignorant of the degree of calcination which renders the glaſs of antimony moſt emetic, and alſo of the method of obtaining it if we knew it. Hence we are not certain that ematic tartar made with glaſs of antimony is equally and conſtantly emetic; therefore inſtead of the glaſs of antimony, we recommend the *Pulvis Algarothi* for making the emetic tartar. Mr. Beaume further obſerves, that the *Pulvis Algarothi* hath the advantages of the glaſs of antimony, in being convertible into a neutral ſalt, by means of the acid of tartar, and is not ſubject, like the glaſs of antimony, to give the emetic tartar prepared with it an uncertain degree of ſtrength; though of itſelf, it is like the other calces, uncertain; but it is the beſt preparation of antimony from which to obtain a certain and uniformly effectual medicine. The *Pulvis Algarothi* is not ſaline, and from the quantity of marine acid which it contains, it is ſomewhat cauſtic; but, when it is waſhed with a little fixed alkali, all the acid is ſeparated, and then it is totally ſoluble by cream of tartar, and is thereby convertible into a ſoluble emetic tartar, perfectly neutral, and for which purpoſe uſe it as follows:

Mix an equal quantity of cream of tartar, and the powder of Algaroth, (or as much of the latter as is required to ſaturate the former) throw this mixture gradually into boiling water, and continue the boiling gently, till there is no effervescence, or till the cream of tartar is well ſaturated. Filter the liquor, and when this liquor is cool, fine cryſtals will be formed in it, which are ſoluble tartar perfectly ſaturated with the Algaroth's powder: as ſoon as the cryſtals are formed, carefully dry them, and keep them in a well cloſed glaſs veſſel.

In preparing the emetic tartar, veſſels, &c. of glaſs ſhould be uſed; for iron, tin, lead, copper, decompoſe it by attracting the acid more ſtrongly than the antimony does; whence one cauſe of inequality in different parcels of this preparation, made at different times. The powder of Algaroth is a calx of antimony conſtantly of the ſame degree of emetic ſtrength; it is emetic becauſe the regulus of antimony firſt diſſolved by marine acid, and afterwards ſeparated from that acid, retains the quantity of phlogiſton that is neceſſary to give an emetic quality to the calx of antimony; the quantity of phlogiſton which it retains, and therefore its emetic power, muſt always be the ſame for the marine acid, of the coroſive

ſublimate,

ſublimate, which afterwards becomes the acid of the butter of antimony, is always the ſame in quantity, and in its degrees of concentration, and of activity; conſequently the calx of antimony ſeparated from it muſt always contain an equal quantity of phlogiſton, and is therefore much preferable to the glaſs of antimony, which contains ſometimes more, ſometimes leſs phlogiſton. Thus, by uſing the powder of Algaroth inſtead of the glaſs of antimony, we obtain an uniform and certain emetic tartar. An uniformly active emetic tartar being poſſeſſed, phyſicians will only have to attend to the ſenſibility or irritability of the conſtitutions of their patients.

Tartarum Emeticum & Catharticum.
Emetic and Cathartic Tartar.

Take of ſalt of tartar half a pound, *Crocus Metallorum* two ounces; reduce them both into fine powder, and mix them well; put them into a crucible, and let them melt together for half an hour: then take it from the fire, and diſſolve it in clean water; filter the diſſolution, and evaporate to a pellicle upon the ſurface; then drop gradually into it oil of vitriol, till the ebullition ceaſes; and over a gentle heat of ſand, evaporate to drineſs.

This works both by vomit and ſtool; and agrees well enough with ſome groſs conſtitutions, that can bear thorough ſhaking; and whoſe ſtomach and glands of the *primæ viæ* are foul. It is proper in the firſt approaches of the dropſy, ſcurvy, and jaundice; and alſo in hypochondriacal melancholy it cannot fail of doing good, by accelerating the motion of the fluids, and agitating the ſpirits. Its doſe is from three to fifteen grains.

L. D. *Tartarum Vitriolatum.*
Vitriolated Tartar.

Take of green vitriol eight ounces, water four pounds; throw ſalt of tartar, or any other fixed alkaline ſalt, to the vitriol diſſolved in the water boiling till all ebullition ceaſes, which will be when four ounces, or ſomething more, of the ſalt has been uſed; then filter through paper, and, after due evaporation, ſet it to ſhoot.

Vitriolated tartar is with much more convenience made from oil of vitriol, than from crude vitriol; as the ſmall expence ſaved by uſing the firſt inſtead of the latter, will in no degree countervail the trouble and the waſte of the neutral ſalt, that is occaſioned by the large quantity of the ſolution, which the large maſs of precipitated oker retains in the filter; and if the operation be not conducted with the greateſt care in the filtering, a diſagreeable ochrous flavour and brown colour, from which it is ſcarcely poſſible to keep it free, when made by this method, will deprave the ſalt. The ſalt prepared according to this proceſs was formerly called *Sal Vitrioli catharticum.*

E. D. *Tartarum Vitriolatum.*
Vitriolated Tartar.

Take any quantity of the acids of vitriol, diluted with an equal quantity of water, put it into a large glaſs veſſel, and by little and little, pour into it pure lixivial ſalt diſſolved in double its weight of water, enough to completely neutralize the acid; when the effervescence is finiſhed, filter the liquor through paper, and after a ſufficient evaporation ſet it aſide, that the cryſtals may be formed.

Tartar vitriolate may, on occaſion, be likewiſe made from lixiviate

iviate ſalts and alum, by the ſame method the London Diſpenſatory directs in the caſe of green vitriol. It may be alſo procured by mixing crude ſulphur with fixed alkaline ſalt, and firing the ſulphur, ſtirring the mixture till it will no longer flame, and recovering, and purifying the ſalt by ſolution, filtration, and cryſtallization. But the moſt commodious proceſs is this of the Edinburgh Diſpenſatory given here, the difference of the expence in uſing oil of vitriol being more than balanced by the eaſineſs of the proceſs, as was before obſerved.

Though the manner of preparing this ſalt, as directed by the Edinburgh college, is the moſt commodious, yet there is one imperfection in the proceſs, viz. a deficiency in the quantity of water. For want of water, as faſt as the alkaline ſalt is neutralized by the acid, great part of it falls to the bottom in a powdery form. In the Leyden Pharmacopœia, this inconvenience is provided againſt: the oil of vitriol is diluted with four times its quantity of water, and the alkaline ley being gradually dropt into it till the point of ſaturation is obtained, four times the quantity more of water is added, and the mixture boiled, that ſuch part of the ſalt as had precipitated, may be diſſolved: the liquor is then filtered while hot, and ſet by to cryſtallize. To obtain perfect and well formed cryſtals, the liquor ſhould be continued in a moderate heat, ſuch as the hand can ſcarcely bear, that the water may ſlowly evaporate. When the cryſtals are perfect they are oblong, with ſix flat ſides, and terminated at each end by a ſix ſided pyramid: ſome appear compoſed of two pyramids joined together by the baſes, and many, in the moſt perfect cryſtallizations, are very irregular.

This is the ſame with the *Sal Polychreſt* of the ſhops; what is ſold under the name of vitriolated tartar being extremely acid; as it is, in fact, nothing but the *caput mortuum* of Glauber's ſpirit of nitre reduced to powder. The acrid appearance of this ſubſtitute has occaſioned the ſalt to be but little uſed in practice as a purgative: but, when duly neutral, it is in many caſes preferable to any purging ſalt whatever; being an excellent hydragogue, and of great efficacy in ſcorbutic and cachectic caſes. The doſe ſufficient, in general, to purge gently, is half an ounce. And whoever would procure this medicine properly prepared from the ſhops, ſhould inſiſt on having it in cryſtals; otherways, if vitriolated tartar be demanded, they will have the acid ſalt above-mentioned; or, if *Sal Polychreſt*, they will have tartar vitriolate powdered with Epſom ſalt, or ſome ſuch mixture. If the vitriolated tartar is given in doſes of a ſcruple or half a dram, it is an uſeful aperient: in larger ones, as to four or five drams, it is a mild cathartic, which does not paſs off ſo haſtily as the *Sal Coth. Amar.* or the *Sal Glaub.* and it ſeems to extend its action farther.

Sapo Tartari. Soap of Tartar.

Take any quantity of the ſalt of tartar well calcined and powdered, whilſt hot; immediately pour upon it, in a broad glaſs veſſel, twice its quantity of the oil of turpentine; and let them ſtand together in a cellar for ſome weeks, till the oil hath penetrated the ſalt: then add more oil by degrees, till the

ſalt

ſalt hath abſorbed thrice its own quantity, and both appear united into a ſoap; which, if the matter is every day ſtirred, will happen in a month or two. The effect ſucceeds ſooner, if the containing veſſel be fixed to the ſail of a windmill, or any other machine that turns round with great velocity.

This proceſs will ſoon be finiſhed if the oil be poured upon the pulverized ſalt whilſt very hot; they will then immediately unite, with a hiſſing noiſe, and by rubbing for a few minutes in a hot mortar, form a truly ſaponaceous maſs. If the ſalt is cold before the oil is added, it is ſcarce poſſible to unite them without the addition of a little water. Mr. Beaume ſays, that the ſoap conſiſts of only the reſinous part of the oil united with the alkali: that the more fluid and well rectified the oil is, the leſs ſoap is obtained; and that by adding a little turpentine in ſubſtance to the mixture, the preparation is conſiderably accelerated.

This is ſometimes called *Sapo Philoſophorum*, and Starkey's ſope. Of itſelf, it is an excellent diuretic; and is conveniently enough mixed in a bottle. It may be given from ten grains to half a drachm, and is very good againſt the gravel in the kidneys, or bladder; but as it is hardly ever preſcribed for theſe purpoſes, it is not kept in the ſhops; and only made for Mathews's pill, in which it is accounted the corrector.

L. D. *Lixivium Saponarium.*

Sope, or Capital Lee.

Take of pearl-aſhes, and quicklime, an equal weight; pour water on them, till the lime is ſlaked; then a large quantity of water being added, ſtir them well together, that the ſalts may be melted out of the aſhes; then let them ſtand till the ſolution becomes clear, which either pour off into another veſſel, or filter through paper. A wine pint of this ſolution, examined with the greateſt accuracy, ought to weigh exactly 16 ounces troy. If it be found heavier, for each drachm in which it exceeds this ſpecific weight, let an ounce and half of water be added to every pint; but if it prove lighter than this proportion, then let the ſolution be evaporated, till ſo many half ounces of water have exhaled as countervail the defective drachm; or let it be poured back on freſh lime and aſhes. Quicklime greatly increaſes the ſtrength of alkaline ſalts; and hence this ley is much more acrimonious, and acts more powerfully as a menſtruum on oils, fats, &c. than a ſolution of the pot-aſh alone. The lime ſhould be uſed freſh from the kiln; by long keeping, even in cloſe veſſels, it loſes of its ſtrength: ſuch ſhould be made choice of as is thoroughly burnt or calcined, which may be known by its comparative lightneſs. All the inſtruments employed in this proceſs ſhould be either of wood, earthen ware, or glaſs; the common metallic ones would be corroded by the ley, ſo as either to diſcolour, or communicate diſagreeable qualities to it.

E. D. *Lixivium Cauſticum.*

Cauſtic Lee or Lixivium.

Take freſh burnt quicklime 8 ounces, pure lixivial ſalt 6 ounces. Put the lime into an iron or earthen veſſel with 28 ounces of warm water. The ebullition and extinction of the lime being finiſhed, immediately add the lixivial ſalt, this being alſo well mixed, cover the

the veſſel until it is cold. The matter being cooled ſhake it, and pour the whole into a glaſs funnel, having firſt covered its pipe with a little clean lint, cover the upper mouth of the funnel, whilſt the narrow one of its pipe is inſerted into another glaſs veſſel, that the lixivium may drop into it. When the lixivium ceaſes to drop, pour into the funnel ſome ounces of water: do this warily that it may float above the matter. Repeat the inſtillations of water as often as may be required, until 32 ounces by meaſure, or 36 ounces by weight of the lixivium are obtained, which will be in two or three days; laſtly, the upper part of the lixivium being mixed with the lower, by ſhaking them well together, keep it for uſe in a well cloſed glaſs veſſel.

The lixivium is duly prepared when it is free from colour and odour; nor effervesces with acids, except perhaps very ſlightly.

L. D. *Sapo Amygdalinus.*
Almond Soap.

Take of freſh expreſſed oil of almonds any quantity, the ſopeley (as above) three times the meaſure of the oil; let them be digeſted together in a heat ſcarcely ſufficiently to make them boil, and in a few hours they will incorporate; the mixture, being then boiled for a ſhort time, will appear tranſparent, and of a mucilaginous conſiſtence, and being cold, will concrete into a jelly-like ſubſtance; then throw in common ſalt, till the fluid no longer remains mucilaginous; but continue the boiling till, being dropped upon a tile, the water ſhall be found to ſeparate readily from the coagulated ſope; then extinguiſh the fire, and the ſope will gradually float, which, before it is cold, ſhould be taken off, and put into a wooden mould with a bottom of linen; after ſome time, let it be taken out, and kept, that it may acquire a proper conſiſtence.

In the ſame manner, ſope may be made from oil of olives; but the ſweeteſt and beſt of oil ſhould be uſed, that it may be as little as poſſible diſagreeable to the palate or ſtomach.

The ſtrength of ſopes varies with their age, and the manner in which they are kept. Freſh ſope loſes by being thoroughly dried near one third of its weight; the whole of the loſs is mere water, a circumſtance to be attended to in preſcription; if it is dried, by being long expoſed to the air, it will imbibe a portion of the acid floating therein, which, by uniting with the alkaline ſalt, will diſlodge a proportionable quantity of the oil: the external coat ſhould be ſhaved off.

Tinctura Salis Tartari.
Tincture of Salt of Tartar.

Take of pure ſalt of tartar ſix ounces. Melt it in a crucible until it acquires a red colour; pulverize it whilſt hot, and immediately pour upon it, in a ſtrong necked matraſs as much rectified ſpirit of wine as will ſtand three or four inches above it: digeſt for ſeveral days in a pretty ſtrong ſand-heat, that a tincture may be obtained.

Pure alcohol does not diſſolve alkaline ſalts; hence, the quantity of the ſalt taken up into the tincture will only be in proportion to the phlegm which it contains. This tincture is uſually expected to be of a red colour, but if neither the ſalt nor the tincture have

any oily tincture, the ſpirit tho' it acquires from the alkali a hot pungent taſte, will ſcarce receive any colour, except from ſome ſpark flying into the ſalt while it is calcining. A little antimony is uſually added, and thence the two tinctures are the ſame. As to the medicinal qualities, however former practitioners extolled this medicine, the preſent totally neglect it.

L. D. *Sal Diureticus.* Diuretic Salt.

Take of any kind of fixed alkaline ſalt one pound; let it be boiled, with a very ſlow fire, in four or five pints of diſtilled vinegar; the efferveſcence, which will for ſome time be ſeen, being over, let more diſtilled vinegar be added at ſeveral times, till the aqueous part of what was before uſed being, in the mean time, almoſt conſumed, no further fermentation appears on the addition of freſh vinegar, which will happen when nigh twenty pounds has been employed; afterwards let it be ſlowly evaporated to drineſs; an impure ſalt will be left behind, which, with a gentle fire ſuffer, but not too long, to run into fuſion; then diſſolve it in water, and filter it through paper: if the fuſion be properly conducted, and ſucceeds, the filtered ſolution will be limpid and colourleſs; but if it miſcarries, the ſolution will appear brown: laſtly, evaporate the water in a very ſhallow glaſs veſſel, ſtirring the ſalt as it concretes, that it may the ſooner attain a proper drineſs, and preſerve it in a veſſel very carefully cloſed, to prevents its deliquiating by the air.

This ſalt ought to appear of the pureſt whiteneſs, and diſſolve intirely in water or ſpirit of wine, without forming the leaſt ſediment; but if the ſalt, notwithſtanding it appears of a proper whiteneſs, depoſites any ſediment in ſpirit of wine, let it be diſſolved in the ſame ſpirit, and the filtring and ſubſequent evaporation again repeated.

An extraordinary nicety in the appearance of this ſalt has been inſiſted on, without regard to any reaſons taken from the real nature and intention of the medicine, which would be equally efficacious if all the ſubſequent parts of the proceſs was omitted, and the vinegar neutralized with pure lixiviate ſalt was uſed; but as it is neceſſary that apothecaries ſhould be provided with the medicines in the form wherein the college have thought proper to order them, the following directions may ſerve to obviate the difficulties which attend producing this ſalt, with the qualities preſcribed. The great nicety lies in the juſt management of the fuſion; the proper time of which muſt be diſcovered by dropping a little into water, and obſerving if the diſſolved part frees itſelf eaſily from the black coally ſubſtance which was mixed with it; for then the whole muſt be immediately removed from the fire: it is neceſſary, likewiſe, to be careful to prevent its melting in the laſt drying; for if that is ſuffered to happen, it diſcolours the ſalt, and renders it not wholly ſoluble in ſpirit of wine; but if the foliated appearance, whence it has derived the name of *Terra Foliati Tartari*, be required, melting is then neceſſary.

E. D. *Tartar Regeneratus.*

Regenerated Tartar.

It is the Sal Diureticus of the London Diſpenſatory. It was formerly

merly called The Grand Corrector.

L. D. *Cauſticum commune fortius.*
The ſtrong common Cauſtic.

Boil ſoap lee to a fourth part of its quantity, then throw in, while it is yet boiling, of quick-lime powdered, ſifted, and kept ſeveral months in a bottle well corked, ſuch a quantity as will abſorb all the fluid, and form a paſte, which muſt be preſerved for uſe, in a veſſel very carefully cloſed.

The reaſon of keeping the lime ſeveral months, is ſaid to be in order to render it mild; but then the keeping, as directed, well ſecured from the air, entirely defeats that intention: for in that condition it will retain its power any length of time.

L. D. *Cauſticum commune mitius.*
The weak common Cauſtic.

Take of ſoft-ſope, and freſh quick-lime an equal weight; let them be immediately mixed, when wanted for uſe.

This may be accuated to any degree, by the admixture of lixiviate ſalts, and made to anſwer all the purpoſes of cauſtics. Theſe have gone under the name of velvet-cauſtics; and ſome, in order to render their operation leſs painful, have added opium to them. They are much to be preferred to the *Lapis Infernalis*, and other cauſtics of a ſaline ſubſtance, which diſſolving, ſpreads a troubleſome inflammation much farther than they are intended to act.

E. D. *Cauſticum commune Acerrimum.* Common ſtrong Cauſtic. *Olim Lapis Septicum, ſeu Cauterium Potentiale.*
Potential Cautery.

Take any quantity of cauſtic ley. In a clean iron veſſel evaporate on a gentle fire, until the boiling ceaſes, and the ſaline matter flows quietly and like oil, which will be before the veſſel is red hot. Thus liquified, pour the cauſtic on a clean iron plate, to be cut into proper pieces before it hardens; and then it muſt be put up for uſe in well cloſed phials.

This is much inferior to the common cauſtic of the London Diſpenſatory, being attended with all the inconveniencies of the *Lapis Infernalis*, and other cauſtics, compoſed wholly of ſaline bodies.

E. D. *Cauſticum commune mitius.*
Milder common Cauſtics.

Take any quantity of the cauſtic ley, evaporate it in an iron veſſel to a third part; then add quick lime newly extinguiſhed a ſufficient quantity to form a paſte of a proper conſiſtence; which muſt be kept in well cloſed phials.

Eſſential and fixed Salts of the Edinburgh Diſpenſatory.

Sal Eſſentiale Acetoſæ.
Eſſential Salt of Sorrel.

Take juice of ſorrel, clarified by decantation from the ſediment, after having been ſuffered to ſtand at reſt a proper time, any quantity; evaporate till only one third remains; filter it through a flannel bag, and repeat the evaporation, till the ſalt appears to concrete in the furnace; the fluid is then to be put in a glaſs veſſel, and a little oil of olives being poured upon it, place it in a cellar till cryſtals are copiouſly produced, which being gently waſhed in clean water, are to be dried for uſe. In the ſame manner may be prepared

The

The ſalts of all ſuch acid, auſtere, aſtringent, and bitter plants, as contain only a ſmall quantity of oil. The plants that are naturally more dry, ſhould be ſprinkled with water as they are bruiſed, that the juice may be the more eaſily preſſed out.

The waters of theſe plants, which are not to be procured by diſtillation, may be obtained by diſſolving a proper quantity of their eſſential ſalt in common water.

Theſe eſſential ſalts are rarely demanded in practice, being very troubleſome and tedious in their preparations; and as their analyſis ſhows them to conſiſt only of a volatile alkaline ſalt, and vegetable acid, their place may be ſupplied by the *Spiritus Mindereri*. Their qualities are diuretic and deobſtruent, from their reſolving the viſcidity of the blood and humours. As to what has been imagined of their poſſeſſing any particular qualities proper to the herbs which produce them, there is not the leaſt foundation for ſuch an opinion; the ſpecific properties of vegetables reſiding in the reſinous, or ſulphureous part of their juices, as may be experimentally demonſtrated. The doſe of eſſential ſalts may be from ten grains to a ſcruple.

To increaſe the quantity of the ſalt, the magma after preſſure may be boiled in water, and the decoction added to the expreſſed juice. The whole may be afterwards depurated together. The evaporation ſhould be in ſhallow ſtone-ware veſſels. Theſe ſalts require ſo long a time to prepare them from the viſcid juices, that they are rarely made with us.

Sal Fixium Abſinthii.

Fixed Salt of Wormwood.

Take any quantity of the wormwood, either freſh gathered, or gently dried, put it into an iron pan, and with a gentle fire reduce it into white aſhes, which are afterwards to be boiled in a ſufficient quantity of ſpring-water, ſo as to make a lye; filter the lye, and exhale it over a gentle fire, till a brown ſalt is left behind, which, by repeated ſolutions, filtrations, and evaporations, may be rendered pure and white.

In the ſame manner may be prepared

Sal Fabarum Stipitum.

Salt of Bean-ſtalks.

Sal Geniſta. Salt of Broom, &c.

The fixed ſalts of all vegetables, are at preſent well known not to differ from ſalt of tartar, or each other, when perfectly pure; the various appearance of their colour being only cauſed from a remainder of their oil, in conſequence of an imperfect incineration; they may therefore be promiſcuouſly uſed; or the purified ſalts of pearl-aſhes, provided the pearl aſhes be free from the adulteration with common ſalt, may be ſubſtituted in their place.

BOOK III.

Of Metals and Metalline Preparations.

IT is a much harder taſk, in this part, not to ſay too much, than to ſay what is neceſſary. Many perſons, who have chiefly given themſelves up to the Chemical Pharmacy, have entertained ſuch notions of mercuries, ſulphurs, and other imaginary exiſtences in the compoſitions of metals, that the ſhops are loaded with their volumes. And a ſerious purſuit of their reaſonings would not only be the buſineſs of one's life, according to the uſual age of man; but would alſo run a perſon into enthuſiaſm, if not diſtraction. And this contagion has raged ever ſince the expulſion of mechanical knowledge, and the uſurpation of a ſpiritual kind of philoſophy, propagated by the Sons of Fire: for by this title have the Furnace-Sages thought fit to diſtinguiſh themſelves, until very lately. Of metals, the moſt obvious characters are their brightneſs, opacity, and gravity: but no leſs remarkable are their tenacity, ductility, fuſibility, and their property of concreting by cold, after fuſion, into their former ſtate. All the metals, except platina, are fuſible by means of fire. Gold and ſilver are unaffected by fuſion; but, the other metals, if air be admitted to them whilſt in a ſtate of fuſion, are gradually converted into a friable ſubſtance called Calx, which is deſtitute of the metallic appearance, and is much lighter, in proportion to its bulk, than the metal itſelf. This change in their properties is generally accompanied with a conſiderable alteration in their medicinal virtues, *e. g.* Crude quickſilver ſeems inactive when taken into the body; but when it is calcined, it becomes a powerful alterative in very ſmall doſes, and an emetic, or a cathartic, or both in a little larger doſe.

All metallic bodies diſſolve in acids; ſome only in particular acids, as ſilver and lead in the nitrous; ſome only in compoſitions of acids, as gold in a mixture of the nitrous and marine; and others, as iron and zinc, in all acids. Some diſſolve in alkaline liquors, as copper; and others, as lead, in expreſſed oils. Fuſed with a compoſition of ſulphur and fixt alkaline ſalt, they are all, except zinc, made ſoluble in water.

All metallic bodies, diſſolved in ſaline liquors, have powerful effects in the human body, though many of them appear in their pure ſtate to be inactive. Their activity is generally in proportion to the quantity of acid combined with them: thus lead, which when crude hath no ſenſible effect, but when united with a ſmall portion of vegetable acid into a ceruſs, hath a ſtyptic and malignant quality, which when united with more of the acid, as in the ſaccharum ſaturni, is yet more ſtyptic and malignant: and mercury, with

the

the marine, acid becomes the corroſive ſublimate, which is an active and ſpeedy poiſon.

As to the preparations of metals, thoſe only which are really uſeful are retained, and thoſe we ſhall endeavour to account for, both as to their manner of preparation and medical virtues, upon ſuch principles as are intelligible and convincing.

Preparations of Silver.

L. D. *Cauſticum Lunare.*

Lunar Cauſtic.

Diſſolve pure ſilver in about twice its weight of *Aqua Fortis* in a ſand-heat; then the heat being increaſed, evaporate to drineſs; afterwards melt the matter in a crucible, that it may be poured into proper moulds; carefully avoiding too great a heat, leſt it grow thick beyond the juſt degree.

E. D. *Cauſticum Lunare.*

Take of pure ſilver, flatted into thin plates, and cut in pieces four ounces, weak acid of nitre (*a*) eight ounces, and pure water four ounces.

Diſſolve the ſilver in a phial by the heat of a ſand-bath, and evaporate the ſolution to dryneſs, then put the maſs into a large crucible, place them in a gentle fire, which muſt be gradually increaſed, until the maſs flows like oil (*b*); on which it muſt be poured into iron pipes a little heated and greaſed; and laſtly, put up for uſe into well cloſed glaſs bottles.

(*a*) In order to make the ſpirit of nitre ſufficiently pure for perfectly diſſolving ſilver, it ought to be prepared previouſly, as by the refiners, in this manner: take a ſmall quantity of ſpirit of nitre, in which ſome ſilver is already diſſolved, drop a few drops into the quantity of ſpirit of nitre deſigned to be purified; a white cloudineſs will immediately appear, if the ſpirit of nitre hath in it the leaſt mixture of any other acid; ſuffer this turbidneſs (which is the ſilver precipitated) to ſubſide, which will ſoon happen; and then add a few drops more, and repeat the ſame method, till no turbidneſs appear on further addition, then pour off the ſpirit of nitre from the white powder, and it will be now perfectly freed from any ſpirit of vitriol, or ſea ſalt, which was before mixed with it, and rendered the proper menſtruum for the ſolution of ſilver.

(*b*) The preparation ſhould be immediately removed from the fire, when it appears capable of being poured into the moulds; for if you wait till it ceaſes to emit fumes, the acid which gives the cauſtic quality will be expelled, and the virtues of the medicine, which conſiſts alone in that, will be much impeded.

The ſolution will be moſt ſpeedy, if the plates of ſilver are only turned round into ſpiral circumvolutions, ſo as to be conveniently put into the glaſs, with care that the ſeveral ſurfaces do not touch one another: for thus a greater extent of the ſurface is expoſed to the action of the menſtruum, than when the plates are cut in pieces and laid above one another. The crucible ſhould hold five or ſix times the quantity of the dry matter, for it bubbles and ſwell up greatly, ſo as otherwiſe to run over: during this time, alſo, little drops are now and then ſpirted up, whoſe cauſticity is increaſed by their heat, and which the operator ought therefore to be on his guard againſt. The fire muſt be

kept moderate till this ebullition ceaſes, and till the matter becomes conſiſtent in the heat that made it boil before: then quickly increaſe the fire till the matter flows thin at the bottom like oil, on which it muſt be poured into the mould.

This preparation is a ſtrong cauſtic, and is uſed for conſuming warts and other fleſhy excreſcences. Its uſe for making deep eſchars or opening abſceſſes, is ſuperceeded by the common cauſtic, which, where it can anſwer, is by far preferable, as the ſaline nature of this lunar cauſtic makes it ſpread its action to the great inflammation and injury of the parts around where it is applied, without a poſſibility of reſtraining it by defenſive plaſters, or other means.

Argentum, Silver.

Many medicinal virtues are attributed to this metal, in the diſeaſes of the head, as to gold in thoſe of the heart; but they ſeem to have no foundation, beſides the imagination of Aſtrologers and furnace Philoſophers; who fancied that the moon, whoſe influence they place this metal under, held a very friendly correſpondence with the head; as the ſun does with the heart; which therefore they make to be comforted by the ſolar metal, gold.

Preparations of Steel.

E. D. *Ferri Limatura Purificata.*
Filings of Iron purified.

Place the filings of iron on a coarſe ſieve, and draw them thro' it by moving under it a magnet.

This method fails if the filings are ruſty; it is alſo defective when bits of braſs adhere to the iron. The ruſt of iron may be purchaſed pure, and is the beſt of theſe preparations.

L. D. *Chalabis Rubigo præparata.*
Prepared Ruſt of Steel.

Let ſteel filings expoſed to the air be ſprinkled with water, or vinegar, till they are changed into ruſt; then beat them in a mortar, and water being added, waſh over the fineſt part of them: expoſe again to the air what remains, and cannot be eaſily reduced to powder, and let it be ſprinkled, pounded, and waſhed over, as before. The fine powder thus produced muſt be dried and kept for uſe.

This is the medicine formerly called, improperly, *Crocus Martis aperiens*; but the ſuppoſition of an aperient quality in ſteel prepared by any method whatever, ſeems very groundleſs, and contrary to fact; for this and the following preparations have ſimilar qualities, and ſuch only as are common to them, as ſteel; of which ſee the article Steel.

The doſe may be from ten to thirty grains. Theſe medicines are moſt uſeful if given in ſmall doſes, and frequently repeated.

Dr. Willis's Preparation of Steel.

Take clean filings of iron, and cream of tartar in fine powder, of each a like quantity; mix them well, and make them into a paſte, with white wine. Then ſet them to dry in the ſun, or other gentle heat; break the maſs, and if it has not acquired a greeniſh colour, powder it, moiſten and dry it, as before.

This preparation is as opening as any which are made of this mineral; and is conveniently enough adminiſtered

adminiſtered in boles or electuaries; for theſe preparations render pills ſo bulky, as to make a doſe irkſome. It alſo yields its virtues very readily in tincture, with wine or any proper liquor. Its doſe is from ten to thirty grains.

E. D. *Martis Limatura præparata.*
Filings of Iron prepared.

Set filings of iron, firſt cleanſed by the magnet, in a moiſt place, that they may turn to ruſt, which is afterwards to be ground into an impalpable powder. They may likewiſe be prepared by wetting them with vinegar.

Mars ſolubilis ſeu Chalybs Tartarizatus.
Soluble or tartarized Steel.

Take of iron unprepared and cryſtals of tartar, equal parts; rain-water ſufficient to make the whole into a paſte, which is to be formed into balls, baked in an oven, ground to powder, and again made into balls with freſh water, and baked as before: repeat the operation till the matter is capable of being eaſily ground into an impalpable powder.

This preparation is evidently taken from the foregoing of Dr. Willis, only more explicitly directed.

Mars Saccharatus.
Candied Steel.

Put any quantity of clean iron filings unprepared into a braſs kettle, placed over a ſlow fire; pour to them by degrees twice their weight of ſugar; boil them to the conſiſtence of a candy, moving the kettle, ſo that the filings may be cuſted over with the ſugar, and their coheſion prevented.

Mars cum Tartaro præparatus.
Iron prepared with Tartar.

Take equal quantities of filings of iron, and of common white tartar; put them into a crucible, and ſet it in a fire ſtrong enough to make the materials red-hot; in which condition let them continue ſome time. Afterwards remove it, and when they are cool, powder them in a mortar; and what will not paſs a fine ſieve, heat ſo again, and again powder. And this repeat until all goes through. Mix the ſeveral ſiftings; and keep them in a veſſel cloſe ſtopt from the air.

This is indeed more aperient than the former prepararions; but that quality it receives from the tartar. The laſt burnings and ſifting will be more difficult to perform than the firſt; becauſe moſt of the tartar goes off then. It muſt be kept from the air, elſe it will run like the lixivial ſalts, on account of the tartar which is amongſt it; and for this reaſon it is not fit to be preſcribed in any dry forms, as powders. There are other ways of preparing this with tartar; but that here delivered ſeems moſt ſuited to anſwer the intention of an opener.

Mars cum Sulphur præparatus.
Iron prepared with ſulphur.

Take equal quantities of the filings of ſteel, and flowers of ſulphur; mix them together, and make them into a paſte with water; and leave it to ferment for four or five hours: after which, put it into a crucible over a good fire, and ſtir the matter with an iron ſpatula. It will flame, and when the ſulphur is burnt, it will appear black: but by raiſing and

continuing the heat, it will change to a red colour; which ſhews when it is enough.

That which the College have lately given under this title, is little elſe but ſulphur; it being only common brimſtone melted by a hot iron.

This is called alſo an aperient ſaffron of Mars: but the ſalts it receives from the ſulphur, make it more fixed, and leſs opening than the former: and indeed there is not much difference between this and the aſtringent crocus, which follows.

L. D. *Chalybs cum Sulphure præparatus.*

Steel prepared with Sulphur.

Let ſteel made quite hot in the moſt intenſe fire be touched with a roll of brimſtone, that it may melt and fall by drops into water placed under it, then let it be ſeparated from the brimſtone which falls along with it into the water, and afterwards reduced to the fineſt powder.

Mars Sulphuratus.

Sulphurated Iron.

Take any quantity of ſteel filings, with twice their weight of powdered ſulphur, and with a ſufficient quantity of ſpring water, make them into a paſte, and let them ferment for ſix hours; then deflagrate the mixture in a crucible, continually ſtirring it with an iron ſpatula, by which it will become a very black powder. If it is expoſed to a greater degree of heat ſo as to acquire a red colour, it is called

L. D. *Crocus Martis aperiens.*

If this is reverberated a long time in the moſt extreme degree of heat, it is called

Crocus Martis aſtringens.

Colcothar of virriol will very properly ſupply the place of both.

The diſtinction of theſe preparations into aperient and aſtringent, ſeems not to have the leaſt foundation; the only real difference of all theſe preparations is, that thoſe prepared by the corroſion of acids, are more likely to be ſo divided, as to find an eaſier paſſage into the habit.

All the foregoing preparations are good to raiſe the blood in poor weakly conſtitutions; if there be but ſtrength enough to paſs it, without diſorders, through the firſt digeſtions. There is no kind of medicine more efficacious than theſe in cachexies, jaundice, and dropſies; in many hyſterical and hypochondriacal caſes likewiſe, they are very effectual. They are convenient almoſt in any form, particularly in boles, electuaries, and pills. Their doſes are from ten grains to half a dram, if not taken above once a day; but leſs, if oftener.

A reſtringent Preparation of Iron ſold by the name of Colbatch's Styptic Powder.

Take any quantity of filings of iron, and pour upon them ſpirit of ſalt to the height of three or four fingers above them; let them ſtand in a gentle digeſtion till the fermentation is over, and the ſpirit of ſalt is become ſweet; then pour off what is liquid, and evaporate it in an iron or glaſs veſſel until half is conſumed; at which time put to it an equal quantity of *Sacchaum Saturni*, and evaporate to a dry powder. If upon its firſt becoming dry, the operation be ſtopt, it has exactly the appearance of Colbatch's powder; but if it be

continued

continued longer, and the heat raiſed, it will turn red: it muſt be kept cloſe ſtopt from the air.

If this is not kept cloſe ſtopt, it will imbibe the air, and flow ſo as to loſe its efficacy. I have been informed from very good hands, that this is the ſtyptic with which there was ſo much noiſe made ſome time ago.

L. D. & E. D. *Sal Martis.* Salt of Steel.

Take of ſtrong ſpirit or oil of vitriol eight ounces, ſteel filings four ounces, water two pints, mix them, and the efferveſcence being over, let the mixture ſtand for ſome time in hot ſand; then pour off the fluid, and filter it through paper; and after due evaporation, ſet it to cryſtallize. Copperas purified by a freſh cryſtallization is often uſed as a ſubſtitute for this preparation. And indeed our ſpecies of vitriol ſcarce containing any metallic parts beſides iron, is leſs unfit for this purpoſe than all others.

E. D. *Vitriolum Martis. ſeu Sal Chalybis.* Salt of Steel.

The ſame as the *Sal Martis* of the London Diſpenſatory.

The place of ſalt of ſteel prepared as above, is in general ſupplied by common Engliſh copperas, or green vitriol purified by filtering, and a careful recryſtallization; nor is there the leaſt difference betwixt them, except that a deficiency of the acid in the vitriol, which makes it turn brown if long kept, is avoided in the other: but this defect may be eaſily remedied, by adding a ſmall quantity of oil of vitriol to the ſolution of the commom vitriol intended to be purified.

The doſe of *Sal Martis* is from three grains to ten.

The ſalt of ſteel is one of the moſt efficacious preparations of this metal; and not unfrequently uſed in cachectic habits to ſtrengthen the *viſcera*, &c. Ten grains diſſolved in a pint of water may be drank at a time, divided into different doſes: this quantity is not very diſagreeable to the taſte. If the doſe is increaſed to half a dram or a dram, it generally purges gently, and promotes urine freely, eſpecially if the patient walks in the cool air. Theſe ſolutions are not contemptible ſubſtitutes for the natural chalybeate waters.

If the ſalt of iron meets with an alkali, it leaves its acid and becomes an aſtringent calx. Iron is uſeful when acids abound in the body, but is hurtful when the body is bileous or hot. When iron filings are taken, when the body is weak, languid, and abounds with acidity, the metal thus produces eructations as of garlic and putrid eggs, on account of the acid it meets with. And hence the heat, before wanting in the body, is excited, and the excrements generally turn black. In this caſe the powder of iron filings proves much more ſerviceable than the ſalt, or any other, though the moſt elaborate preparation.

Flores Martis. Flowers of Iron.

Take equal quantities of iron and *Sal Ammoniac*, and ſublime them in an earthen cucurbit over an open fire, into a glaſs head, as long as any thing will riſe. The flowers will be between a red and yellow colour.

Theſe are alſo ſometimes entitled in the ſhops *Flores Salis Ammoniaci Martiales.* They are reckoned very attenuating and aperient; and therefore are preſcribed

in

in many obſtinate chronic diſeaſes, from obſtructions; and in aſthmas. From the reſiduum in the cucurbit ſome draw a tincture with ſpirit of wine; and this is called in the new London Diſpenſatory, *Tinctura Florum Martialium.* From the flowers alſo diſſolved in warm water, and precipitated with *Ol. Tartari per deliquium*, is produced that powder which is called *Mars Diaphoreticus*; and by Zwelfer, *Sulphur Vitrioli Anodynum Martiale.* Theſe flowers diſſolved in ſpirit of wine, make the *Sedativum Archæi*, which Bates retains. But they are little uſed in the preſent practice.

Ens Veneris.

Take ſalt of ſteel one part, *Sal Ammoniac* two parts, and ſublime as in making the *Flores Ammoniaci Martiales* preceding; and there will be at the top a collection of yellow flowers.

This is directed by the College with blue vitriol inſtead of the ſalt of ſteel; but by the moſt experienced in chemical Pharmacy, the latter is accounted much preferable.

It may ſeem mighty ſtrange, that a preparation of ſteel or iron ſhould derive its name from copper; but perhaps it being uſeful in diſtempers, which women are very ſubject to, might influence its inventor to give it the appellation it bears. However that may be, it is certainly a wonderful good medicine; not only in all intentions where chalybeates are preſcribed, but alſo in hyſterical affections, and all nervous diſorders. It is much in extemporaneous preſcriptions, from ſix grains to one ſcruple, and ſuits the form of a bole beſt; for it is nauſeous in a liquid, and makes pills ſwell and crumble, except ſuch as are made of the gums.

L. D. *Flores Martiales.*
Flowers of Steel.

Take of waſhed colcothar of green vitriol, or of ſteel filings one pound, *Sal Ammoniac* two pounds; being mixed, ſublime them in a retort, and remix what remains in the bottom of the retort with the flowers, by pounding them together; repeat the ſublimation till the flowers acquire a beautiful yellow colour: to what remains after the laſt ſublimation half a pound of *Sol Ammoniac* may be added, and the mixture ſublimed as before; and this method may be repeated as long as flowers of a good colour can be produced.

This is one of the preparations formerly called *Ens Veneris*, of which there are two kinds. The one made of iron or its calx, and the other of blue vitriol, whoſe baſis is copper; it has been diſputed, from an ambiguity in the name of the vitriol that Mr. Boyle the inventor employed, which is the true preparation; but certainly, which ever ingredient is uſed, the ſublimed matter muſt be *Sal Ammoniac* and ſteel, not copper, of which the leaſt taint would be extremely diſtinguiſhable in its effects; and therefore iron or its calx cannot but be the moſt proper ingredient; though the Edinburgh Diſpenſatory have retained the following preperation of the *Ens Veneris.*

The ſucceſs of this proceſs depends principally upon the fire being haſtily raiſed, that the *Sal Ammoniac* may not ſublime before the heat is ſtrong enough to enable it to carry up a ſufficient quantity of iron. Hence earthen iron or veſſels,

not

not glaſs ones, ſhould be uſed; for if the retort is of glaſs, the fire cannot be raiſed quick enough without danger of breaking it. The moſt convenient veſſel is an iron pot, with an inverted earthen jar luted to it; the jar ſhould have a ſmall hole at its bottom for the paſſage of elaſtic vapours. It is uſeful to mix the ingredients well, by moiſtening them with water, and then gently drying them; and ſo repeat the ſame two or three times or oftener. Thus the *Sal Ammoniac* may be increaſed to three times the quantity of the iron, or farther; and a ſingle ſublimation will often ſuffice to raiſe flowers of a very deep orange colour.

E. D. *Floris Martialis vulgo Ens Veneris.*

Take of the colcothar of green vitriol well waſhed, and afterwards dried, and *Sal Ammoniac*, each an equal quantity. Mix them well and let them be ſublimed.

Extractum Martis.

Take eight ounces of the ruſt of iron, put it into an iron pot, and pour upon it three pounds of the water of honey, and four pounds of muſt, or the juice of white grapes perfectly ripe; add to it four ounces of the juice of lemons: cover it with an iron cover, and ſet it on a furnace with a little fire; leave the matter in digeſtion three days; then boil it gently for three or four hours, uncovering the pot every now and then, to ſtir up the bottom with an iron ſlice; then cover it again, that the moiſture may not evaporate too faſt. When you perceive the liquor to be black, you muſt take away the fire, and leave it a while to ſettle: paſs warm through a cloth that which is clear, and evaporate the liquor in a ſand-heat, in an earthen pan, or glaſs veſſel, to the conſiſtence of an extract.

This may very conveniently be contrived to make other proper ingredients into pills; or may be itſelf made into that form, and taken from ten grains to half a dram, in caſe of obſtructions, or where the opening preparations of ſteel are required.

L. D. *Lixivium Martis.*

Deliqueate Steel or Lye of Iron.

Let what remains in the retort after the ſublimation of the ſteel flowers be placed in a moiſt place, and let the fluid which runs from it be preſerved for uſe. This may be given in doſes of a few drops in any convenient vehicle for the ſame purpoſe that the other chalybeates are recommended.

Some call this preparation *Oleum Martis per deliquium*, and *Eſſentia Martis*. In doſes of one or two drops it is given in any convenient vehicle, for the ſame intentions as other chalybeats.

L. D. *Vinum Chalybeatum.*

Chalybeate Wine.

Take of ſteel filings four ounces, cinamon and mace each half an ouce, Rheniſh wine four pints; infuſe a month without heat, often ſhaking the mixture; then filter.

Rheniſh wine is an excellent menſtruum for ſteel, and diſſolves a conſiderable quantity of it. Here it is directed to be infuſed without heat, whence it is more agreeable to the taſte; and what is of yet greater importance, the quality of the wine is preſerved. Boerhaave extols this preparation as one of the beſt medicines with which he is acquainted,

acquainted, for promoting that power in the body by which blood is made, when weakened by a bare debility of the over relaxed ſolids, and an indolent cold aqueous indiſpoſition of the juices: for in this caſe he ſays, no virtue of any vegetable or animal ſubſtance, no diet nor regimen can effect that, which is effected by iron. But it is hurtful, where the vital powers are too ſtrong, whether this proceeds from the fluids or the ſolids.

Vinum Chalybeatum.

Take ſteel filings unprepared three ounces, cochineal half a dram, Rheniſh wine a quart, digeſt in a ſand-heat for ten days, then filter the wine for uſe.

This is preſcribed from two drams to half an ounce in ſome convenient vehicle. It is often given in a chlorofis, *i. e.* green ſickneſs, with good ſucceſs. It is alſo of ſervice in all cachexies and decays of natural heat in the blood; and is very ſuitably joined with the ſtomachic bitters in ſuch caſes.

L. D. *Tinctura Martis in Spiritu Salis Marini.* Tincture of Steel in Spirit of Salt.

Take of iron filings half a pound, Glauber's ſpirit of ſalt three pounds, rectified ſpirit of wine three pints; digeſt the iron filings in the ſpirit of ſalt, till all effervescence ceaſes, then, after the fæces have ſubſided, evaporate the ſolution to one pound, and add to it the ſpirit of wine.

There appears to be ſome miſtake in the directing the ſolution to be evaporated to one third; for in that caſe the quantity of fluid would be much too ſmall to keep diſſolved the ſalt formed from the iron and the acid ſpirit; and conſequently a precipitation of the far greater part would happen, attended with a proportionable waſte and turbidneſs of the tincture.

The tincture of flowers of ſteel is the weakeſt, and this with Glauber's ſpirit of ſalt is the ſtrongeſt of the tinctures of this metal. The dulcified ſpirit of ſalt diſſolves but does not ſuſpend it. Theſe tinctures are all preferable to the calces and croci of iron, being both more certain and more ſpeedy in their effects. The doſe from ten to twenty drops three times a day.

E. D. *Tinctura Martis.*
Tincture of Steel.

Take the ſcales of iron prepared and powdered three ounces, ſpirit of ſalt enough to diſſolve the powder; digeſt in a gentle heat, and when the powder is all diſſolved, add as much rectified ſpirit of wine, as that the whole liquor may meaſure two pints.

L. D *Tinctura Florum Martialium.*
Tincture of Flowers of Steel.

Take of flowers of ſteel four ounces, of proof ſpirit one pint, after digeſtion ſtrain off the ſpirit.

Theſe preparations are very improperly called tinctures, as they are in fact no other than ſolutions of iron in the acid menſtruum, forming a *Sal martis*, which the ſpirit of wine no way changes or alters; and therefore as the addition of it has no uſeful effects, it would be much better omitted, and the ſolution alone ſubſtituted in its place. But there is no reaſon to believe that this kind of *Sal Martis* is better than that made with oil of vitriol.

The uſual doſes of theſe preparations are from ten to forty drops.

Theſe

Theſe tinctures differ from one another only in ſtrength; and in all caſes are highly preferable to the calces or croci.

L. D. *Tinctura Saturnina*, formerly *Tinctura Antiphthiſica.*

Take ſugar of lead and green vitriol, each two ounces, rectified ſpirit of wine two pints; powder the ſalts ſeparately, and then put them into the ſpirit, after which digeſt without heat, and filter the tincture through paper.

E. D. *Tinctura Saturnina, vulgo Antiphthiſica.*

Take ſugar of lead one ounce and a half, of vitriol of iron one ounce, rectified ſpirit of wine one pint, extract a tincture without heat.

This tincture has been eſteemed good in hectic fevers, as alſo in hyſterical diſorders; but certainly the internal uſe of all ſuch medicines ought to be rejected, into whoſe compoſition the leaſt quantity of ſugar of lead enters; whoſe violent aſtringency on the kidneys and other glands, has frequently produced irremediable and fatal diſorders, even where only very ſmall quantities have been taken.

This is a tincture of iron with an uncertain portion of lead in it. The acid in the vitriol decompoſes the ſugar of lead, and renders it of no effect if it is wholly decompounded.

Theſe are all the preparations of iron now in uſe; and notwithſtanding they are greatly extolled by different practitioners, yet certain it is that the beſt and moſt efficacious method of exhibiting ſteal, is in its unprepared ſtate, in the form of filings.

Ærugo Æris. Verdigriſe.

This is no other than copper turned into a ruſt by the corroſion of the acid of grapes; the preſſings of which are made to ſerve, by laying them between copper-plates: when the firſt ruſt is ſcraped off, freſh huſks are laid upon the plates, till all the metal is ſo changed.

That which comes from France is much the beſt. It enters many external compoſitions, and is a good cleanſer of ſloughy and foul ulcers. It alſo keeps down proud fleſh; and is very ſerviceable in deſtroying thoſe cancerous ſpecks, as the nurſes call them, ſo apt to be troubleſome in children's mouths; for which purpoſe, a little of it is mixed with honey, and gently rubbed upon the parts affected.

Le Mort made a tincture of copper, which ſome perſons value themſelves greatly upon; and many have pretended to be authors of a ſpecific in gonorrhœas, which is nothing elſe. It is as follows:

E. D. *Cuprum Ammoniacum.*

Take of blue vitriol two ounces, and boiling water ſix ounces. Diſſolve, and to the ſolution add, by little at a time, a ſufficient quantity of the ſpirit of *Sal Ammoniac*, to precipitate the copper, and perfectly to diſſolve it again into a fine blue liquor. The filtered liquor is to be evaporated to dryneſs in a broad ſhallow veſſel placed over a gentle fire. Laſtly, the fine blue concrete reduced to a powder muſt be kept in a well cloſed phial.

Tinctura Veneris. Tincture of Copper.

Take verdigriſe one drachm, ſpirit

ſpirit of *Sal Ammoniac*, and rectified ſpirit of wine, each half an ounce: let them ſtand until they are of a deep ſky-blue colour.

It makes an admirable injection for a gonorrhœa; and if care be taken, and ſkill enough acquired to know when the infection is only in the urethra, a perſon may be ſoon and infallibly cured by it. But it is adviſable that beginners be not too buſy with it.

Tinctura Veneris Volatilis. Volatile Tincture of Copper,

Take of copper-filings 1 dram; ſpirit of *Sal Ammoniac* 12 drams. Let them ſtand together in a cloſe veſſel, frequently ſhaking it, until the liquor is tinged of a beautiful violet colour.

This ſolution of copper hath been given internally in the doſe of a few drops, as a diuretic. Boerhaave directs at firſt three drops to be taken in a morning faſting, with a glaſs of mead, and this doſe to be daily doubled till it comes to twenty-four drops, which laſt quantity is to be continued for ſome days: he ſays, that by this means, he cured a perſon of a confirmed aſcites, and that this medicine procured ſurpriſing diſcharges of urine: but that in another ſimilar caſes it had no effect.

This tincture is a good ſubſtitute for the *Cuprum Ammoniacum*.

Plumbum. Lead.

This is called Saturn, from the planet under whoſe influence it is imagined to be. It is of a cold, drying quality, which makes thoſe who work in it apt to be paralytic, and troubled with a ſtrange kind of cholic.

Lemery obſerves, that lead ſerves to purify gold and ſilver; as the white of eggs does ſyrups; that is, by joining with the groſs and impure part of thoſe metals, and ſeparating them. This metal by itſelf is of no inward uſe in medicine; but in ſome preparations, and moſt of them too, have a place only among the topics.

L. D. *Aqua Sapphirina.*

Take of lime-water one pint; *Sal Ammoniac* one drachm; put them into a copper veſſel, or any other, with a few bits of copper, till the water has acquired a blue ſapphirine colour.

E. D. *Aqua Sapphirina.*

Freſh lime-water eight ounces, *Sal Ammoniac* two ſcruples, powdered verdigriſe twenty-four grains. Mix, and after twenty-four hours, pour off the clear liquor.

This preparation is at preſent much uſed as a detergent of foul and obſtinate ulcers.

Minium. Red-lead.

Take of lead any quantity, melt it in an unglazed earthen veſſel, and ſtir it continually, till it changes into a blackiſh powder; which afterwards will become yellow, and at length very red, and will be then what is called *minium*, or red-lead. If this be urged with a violent heat, it runs into a vitreous ſubſtance.

Ceruſſa. Ceruſe, or White-lead.

Take any quantity of very thin plates of lead, ſuſpend them in an earthen veſſel, containing a proper quantity of vinegar, in ſuch a manner, that the vapour ariſing from the vinegar, may circulate about the plates; ſet the veſſel in the heat of horſe-dung for three weeks; and if, at the end of the

three

three weeks the plates are not totally corroded, ſcrape off the white powder, and expoſe them again to the ſteam of vinegar, till the whole be reduced to a white powder. This preparation is now no part of the practice of Pharmacy, being either brought from abroad, or made here by perſons who have large works: it is however neceſſary for thoſe who uſe it for medicinal purpoſes, to guard againſt the adulterations almoſt univerſally practiſed by thoſe who deal in this commodity: in order to which, the beſt method is to chuſe the kind brought from abroad, and called white flake; and to prepare it themſelves, by levigation and waſhing over; by which means they will avoid the adulteration of it, by adding whiting, practiſed by thoſe who make white lead here; and that of the colourmen who prepare the flake by putting in ſtarch.

L. D. *Plumbum Uſtum.*
Calcined Lead.

Melt lead over a gentle fire, and ſtir it continually, till it becomes a powder.

Theſe are all of a drying nature, and mixed with many of the officinal unguents and emplaſters of that intention, with which they eaſily unite, and give them their chief conſiſtence.

L. D. *Saccharum Saturni.*
Sugar of Lead.

Boil ceruſe in diſtilled vinegar in a lead veſſel, till the acid taſte of the vinegar is changed to ſweetneſs, then filter the vinegar through paper, and after a proper evaporation, ſet it to cryſtallize.

E. D. *Saccharum Saturni.*

Take of ceruſe any quantity; put it into a cucurbit, and pour thereon as much diſtilled vinegar as will riſe four inches above it; digeſt them for ſome days in a ſand-heat, till the vinegar has acquired a ſweetiſh taſte; then, having ſuffered it to ſettle, pour it off: add freſh vinegar to the remainder, and repeat the ſame proceſs till the vinegar no longer attains any ſweetneſs: then let all the ſolutions ſtand together for ſome time, and afterwards, being poured from the fæces, evaporate them in a glaſs veſſel to the conſiſtence of thin honey, when, being ſet in a cool place, they will ſhoot in cryſtals, which are to be dried in the ſhade. Exhale the remaining liquor to a pellicle, ſet it again in the cold, and more cryſtals will ſhoot; repeat this operation till no cryſtals can be any longer obtained.

It is indifferent, in regard to the ſalt produced, in what ſtate the lead is uſed; but white lead is the ſooneſt diſſolved, as being already in part changed towards a ſaline ſtate by the acid of the vinegar employed in its corroſion. Boiling is the moſt expeditious manner of making the ſolution; but if the mixture be ſuddenly brought to that heat, a great part of the acid will be exhaled before it can be fixed by its combination with the lead: this is prevented by the digeſtion in a ſand-heat, but the gain in that view does not counterbalance the trouble and expence of a fire continued ſo long, unleſs where other purpoſes make it neceſſary; but both theſe inconveniencies are avoided by omitting the uſe of heat, and letting the mixture ſtand till the vinegar becomes ſweet; which, if the veſſel be frequently ſhaken, will be nearly

nearly as ſoon as in the heat of digeſtion.

That ſort of ceruſe, called flake-lead, is the beſt for obtaining the ſugar of lead: for the corroſion, which it hath already undergone from the ſteam of vinegar, diſpoſes it to diſſolve more readily. It ſhould be finely powdered before the vinegar is put to it, and during the digeſtion, or boiling, every now and then ſtirred up with a wooden ſpatula, to promote its diſſolution, and prevent its concreting into a hard maſs at the bottom. If a ſmall quantity of rectified ſpirit of wine be prudently added to the ſolution as ſoon as it is duly exhaled, and the mixture ſuffered to grow cold by ſlow degrees, the ſugar will concrete into very large and tranſparent cryſtals.

The ſugar of lead found at preſent in the ſhops of the druggiſts and apothecaries, &c. is moſtly brought from abroad, where it is made from oil of vitriol, inſtead of vinegar, and can therefore be afforded at a fourth part of the price it coſts when prepared with diſtilled vinegar.

Sugar of lead is a moſt powerful aſtringent, and therefore uſed with great effect in many unguents, collyriums, &c. It has alſo a place in officinal compoſitions, and is uſed by ſome in extemporaneous preſcription as an internal medicine; but ſuch practice is certainly much to be condemned, as it is liable to produce all the terrible conſequences that thoſe deplorable objects experience, whoſe trades oblige them to be much concerned with lead in any form.

Extractum Saturni Di Goulard.
Goulard's Saturnine Extract.

Take as many pounds of litharge of gold as quarts of vinegar (if the vinegar is made of French wine it is the better), boil them in a proper veſſel, or rather ſimmer for an hour, or an hour and a quarter, ſtirring it often with a wooden ſpatula, then take it from the fire, let the whole ſettle, and pour off the liquor into bottles for uſe. If this liquor is made into the common conſiſtence of an extract, it muſt boil yet longer, after its ſeparation from the maſs; it will then be of a reddiſh colour.

Goulard's Vegeto-Mineral Water.

Put two tea ſpoons full, or one hundred drops of Goulard's *Saturnine Extract* to a quart of water, and four tea ſpoons full of brandy. N. B. The quantity of the extract and of the brandy may be increaſed or diminiſhed at pleaſure.

This water is Mr. Goulard's univerſal ſpecific in external inflammations, and particularly of the eye, in which caſe begin with it very mild, and increaſe ſo as to avoid irritation. Againſt fluxions on the tympanum, occaſional deafneſs, in this caſe, to the drops of the extract, add twice the number of drops of camphorated brandy. For waſhing ulcers, cancers, ſcrofulas, contuſions, phlegmons, eryſipelas, piles, chilblains, whitloes, tettars, ſcalds, gangrane, &c. It may be uſed in the form of waſh, injection, pumping, bath, gargariſm, &c.

Dr. Wall of Worceſter ſays, that Goulard's Extract merits in a great degree the character that he gives

gives of it: that it relieves inflammatory and indurated tumours: that it is peculiarly uſeful in the hernia humoralis; that in recent ſtrains, &c. if the extract is mixed with a ſmall portion of rectified ſpirit of wine, it is of excellent uſe, abating the ſwelling and tenſion much ſooner than the Spiritus Mindereri does, or than any other of the uſual applications.

Preparations of Tin.

Stannum. Tin.

This has Jupiter for its governor, according to the old chemical enthuſiaſm. It is very rare or never uſed in medicine unprepared; and there are but few inſtances wherein that management makes it taken notice of in the preſent practice.

L. D. *Stannum Pulveratum.*
Powdered Tin.

Let melted tin be poured into a proper wooden box, whoſe inner ſurface is chalked, and being ſhaken, part of the tin will be reduced to powder; let the reſt, being again melted, undergo the ſame operation, till the whole quantity be converted to powder.

Calx Jovis.
Calcined, or Earth of Tin.

Take of tin any quantity, melt it in an unglazed earthen veſſel, and keep it continually ſtirring with an iron ſpatula, till it is reduced to a duſky powder. This is reckoned the beſt deſtroyer of worms in the whole *materia medica*, and the only thing that will deſtroy the joint worm: it muſt be given in large doſes; half a drachm is the leaſt that ſhould be given, twice or thrice a day.

Sal Jovis, Salt of Tin.

Take any quantity of calcined tin, (which is done exactly as lead) and put it into a matraſs, with as much diſtilled vinegar as will riſe four fingers breadth above it; let it digeſt three or four days and ſtir it in that time often. Then pour off the liquor, and put on more, three or four times. Filter all the liquors together, and evaporate about two thirds: Then let it ſtand in a cool place, and it will ſhoot into ſalt on the ſides of the veſſel. Evaporate the liquor again, and continue to repeat the ſame operation until all is obtained, juſt as in making the ſugar of lead. N. B. The true ſalt of tin is extremely difficult and chargeable to make; that commonly ſold for it by the chemiſts being prepared from potters glazing, and not differing from ſugar of lead.

Sal Jovis. Salt of Tin.

Take of calcined tin any quantity; *Aqua Regia*, diluted with eight times its quantity of water, as much as will cover the calx to the height of ſome inches; digeſt them together in a gentle ſand heat till the tin is diſſolved; filter the ſolution through paper; evaporate, cryſtallize, and dry the ſalt for uſe. The calx which is left undiſſolved may be digeſted with a freſh quantity of *Aqua Regia*, as before, and the ſolution mixed with the liquor which remained after the firſt cryſtallization; whence, by a due evaporation, &c. a further produce of cryſtals may be obtained.

This is commended chiefly as a coſmetic in pomatums; but it is often given inwardly in nervous caſes, and particularly in convulſions and epilepſies, from two

grains to eight. I have known two or three extraordinary inſtances, where the ſucceſs ſhould be aſcribed to nothing beſides this medicine. To young children it is apt to give a puke, which is never the worſe. There is not a more efficacious anti epilectic. It is not indeed agreeable in any liquids, but paſſes down conveniently enough in a bole.

Antihecticum Poterii.

Take of martial *Regulus* of antimony ſix ounces; of the beſt tin three ounces; melt them together in a crucible, and then pour them into a warm mortar greaſed; when the maſs is cold, powder it, and add to it thrice its weight of the pureſt nitre; deflagrate the mixture in a crucible, throwing in a ſpoonful at a time; then calcine it for one hour; and, having afterwards again ground it to an impalpable powder, pour on it warm water, and waſh it over till nothing remains but groſs fæces; waſh the fine powder thus obtained with repeated effuſions of warm water, and dry it for uſe.

The colleges of London and Edinburgh, have rejected this medicine, and with great reaſon: for the good qualities attributed to it were extremely doubtful, and even improbable; but the hazard of its doing great harm, from ſome ſlight miſconduct in its preparation, and in ſome caſes, even when moſt judiciouſly prepared, is much more clear and certain. The authorized doſe is from ſix grains to a ſcruple, to grown perſons; for thoſe who have ventured to uſe it, have ſeldom had the temerity to give it to children.

L. D. *Aurum Moſaicum.*

Moſaic Gold.

Take of tin one pound, flowers of ſulphur ſeven ounces, *Sal Ammoniac* and purified quick-ſilver, each half a pound; melt the tin, and add the quickſilver to it; when the mixture is become cold, powder it, and mix it intimately with the ſulphur and *Sal Ammoniac*, and then ſublime them in a matraſs; the *Aurum Moſaicum* will be found under the ſublimed maſs, with ſome droſs in the bottom of the matraſs.

This preparation is left out of the laſt Edinburgh Diſpenſatory, and appears from proper experiments to be only the tin reduced to an impalpable powder, and coloured by the ſulphur, of which nevertheleſs it retains but a ſmall quantity: it is but little uſed in the preſent practice, and then chiefly to kill worms in children, which perhaps is the only inſtance wherein it can be ſerviceable. The doſe is from four grains to a ſcruple.

Preparations of Mercury.

Purificatio Argenti vivi.

Diſtil the quickſilver in a retort, and then waſh it well with water and ſalt, or vinegar.

The diſtillation of quickſilver in a retort is very difficult and hazardous, the heat of the condenſed vapour ſeldom failing to crack the neck of the retort. The beſt method is that practiſed by the refiners, &c. which is, to inſert obliquely a gun barrel into a round body of iron near the top, the end of which muſt be ſo bent, as to admit of its being immerged in a veſſel of water; this body being charged with mercury, by a hole made in the top (which hole being afterwards ſecured with lute) may be placed on an open fire; the end

end of the pipe being immerged in the veſſel of water, the diſtillation will be quickly performed without the leaſt trouble.

L. D. *Mercurius ſublimatus corroſivus, vel albus.* White or corroſive Mercury ſublimate.

Take of purified quickſilver forty ounces, ſea-ſalt thirty three ounces, nitre twenty-eight ounces, green vitriol calcined, ſixty-ſix ounces; let the quickſilver be mixed in a veſſel of ſtone or wood with one ounce or more of mercury ſublimate already made, and broken into ſmall grains; then let it be ground with the nitre, and afterwards with the ſea-ſalt, till there is no longer the leaſt appearance of the quickſilver; then add the calcined vitriol, in whoſe commixture the operation muſt not be too much prolonged, leſt the quickſilver ſhould revivify, or reaſſume its fluid ſtate; laſtly ſublime the mixture in a glaſs matraſs, to which at diſcretion a proper head may be fitted to ſave the ſpirit, which will riſe in a ſmall quantity.

This ſublimate is a violent eſcarotic, and eats away proud fleſh: half a drachm of it diſſolved in a pound of lime water, turns it yellow; and is called phagedenic-water; which is uſed to waſh ulcers, and ſome tetterous eruptions.

Mercurii Solutio.
Solution of Mercury.

Take of pure quickſilver and double *Aqua Fortis*, an equal quantity, digeſt them together in a phial placed in a ſand-heat, till a limpid ſolution is made.

A very ſmall part of the ſalt formed will remain diſſolved, if, according to this proceſs, double *Aqua Fortis* be uſed: the addition of a ſufficient quantity of water after the mercury diſappears ought to have been directed, in order to procure a limpid ſolution; but when this is done (as in the proceſs below for white precipitate,) preparatively to the calx, it is not neceſſary.

Calx Mercurii.
Calx of Mercury.

Take of the ſolution of mercury any quantity, evaporate it over a gentle fire to a white dry maſs.

This preparation is very improperly called a calx, being in reality a ſalt of mercury, and indeed the moſt ſoluble of any that can be made of it.

E. D. *Mercurius ſublimatus corroſivus.* Corroſive mercury ſublimate.

Take of quickſilver and the weaker nitrous acid of each four ounces, calcined ſea-ſalt and calcined vitriol of each five ounces. Diſſolve the quickſilver in the nitrous acid, and evaporate the ſolution to a white maſs and perfectly dry; afterwards add the ſalt and the vitriol. Powder and mix them well, then put them into a proper veſſel, which may be filled to one half by them; place them in a ſand-bath, at firſt with a gentle heat, afterwards let it be gradually increaſed till all the ſublimate hath ariſen.

The difference betwixt uſing *Aqua Fortis*, and calcined vitriol and nitre, is only in reſpect to expence and convenience; the *Aqua Fortis*, inſtead of being previouſly diſtilled, being produced from the two ſalts during the operation; they may therefore be promiſcuouſly uſed, according to expedience; but if the ſalts be employed, the fire ſhould be more intenſe,

and the apparatus conſequently more defended, than if *Aqua Fortis* be uſed.

The Mercurius Corroſivus Albus.

The Mercurius Corroſivus Albus conſiſts only of the mercury and marine acid, which are brought into combination only when they meet in a ſtate of vapour. The addition of the ſublimate ready made is to facilitate the extinction of the mercury, or its mixture with the other materials. To make the ſublimate form a cake at the top of the veſſel, when a large quantity is made, place the matraſs no deeper in the ſand than the ſurface of the matter contained in it; and removing a little of the ſand from the ſides of the glaſs, as ſoon as the flowers begin to appear in the neck; when the heat ſhould likewiſe be ſomewhat lowered and not at all raiſed during the whole proceſs. The ſublimation is known to be completed by the edges of the cryſtalline cake, which will form upon the ſurface of the caput mortuum, appearing ſmooth and even, and a little removed from it.

This ſublimate diſſolved in proof ſpirit, is given in doſes from a quarter to half a grain once or twice a day. Van Swieten diſſolves 8 grains in 16 ounces of proof ſpirit; though the medicine is milder if diſſolved in rectified ſpirit of wine. Of this ſolution, from two drams to an ounce is given twice a day in any convenient vehicle. Plentiful dilution with this medicine is neceſſary to prevent it from purging.

L. D. *Mercurius dulcis ſublimatus.* Calomel.

Take of corroſive mercury ſublimate one pound; purified quickſilver nine ounces; the mercury ſublimate being firſt powdered, put it together with the quickſilver into a glaſs matraſs, and digeſt them with a ſlow heat in ſand, the glaſs being frequently ſhaken till they incorporate, then augment the heat, and ſublime them; powder the ſublimed matter; having freed it from the acrid upper part, and the globules of quick ſilver, if any appear, ſublime it again: the ſublimation muſt be ſix times repeated.

E. D. *Mercurius ſublimatus dulcis. Mercurius dulcis* and Calomel.

Take of corroſive mercury ſublimate, powdered in a glaſs mortar, four ounces, of pure quickſilver three ounces and a half, mix them intimately in a mortar till the quickſilver ceaſes to appear, put the powder in an oblong glaſs body, of ſuch ſize, that only one third may be filled, ſet it in a ſand furnace, whereof the ſand may reach up half its height. By degrees of fire ſucceſſively applied almoſt all the mercury will be ſublimed, and adhere to the upper part of the glaſs, which being broken, and the red powder which is found in the bottom, together with the whitiſh hanging about the neck, being thrown away, let the white mercury be again ſublimed three or four times.

If this operation be repeated ſeven times the preparation is called calomel, or *Aquila Alba.*

It may be much doubted whether repeated ſublimations are of any advantage to this medicine; ſince the corroſive quality of the ſublimate, which depends on the acid it contains, is corrected, not, as has been aſſerted, by the ſpicula being broken by the triture and

heat, but by being neutralized with a due quantity of mercury, and thereby rendered inactive: it ſeems therefore more material to regard the trituration after the firſt ſublimation; that no part of the ſublimate which roſe firſt, without being conjoined with the due proportion of the mercury, may poſſibly eſcape in the ſecond ſublimation; this, if it be effectually done, may produce as perfect calomel as any number of ſublimations whatever.

Calomel, when properly prepared, is, whether we regard it in reſpect of its ſafe or certain operation, the beſt mercurial medicine Pharmacy has hitherto produced: and indeed if we conſider, in what the preparation of mercury deſigned for internal uſe, conſiſts, we may believe it to be as perfect a medicine as that ſimple is capable of being rendered, and may alone anſwer all the intentions of it, when uſed as an internal medicine, except that of an emetic, in which caſe Turpeth mineral muſt be ſubſtituted. The general qualities of mercury are before given in treating of it as a ſimple. The particular manner of adminiſtering calomel is either as an evacuant or alterative, and theſe general intentions demand likewiſe to be conſidered, as being of ſeveral kinds. As an evacuant, calomel may be either ſalivant, cathartic, or diaphoretic; when given in order to raiſe a ſalivation, the doſe may be one ſcruple every night, till the ſpitting is begun; the uſe of purgatives or whatever may conduce to promote a looſeneſs being cautiouſly avoided: but this uſe of it is now much neglected: the method of unction having ſuperſeded it. When given as a cathartic, it is neceſſary to join therewith ſome other medicine of that kind, in order to determine with more certainty its action to the inteſtinal glands; and the doſe may then be ten grains, a ſubſtraction of half the uſual doſe being made from the purgative joined to it. As a ſudorific, it is neceſſary likewiſe to take the aid of guaiacum, and to ſuffer a conſtant confinement to a warm room, as long as the diaphoreſis is to be ſupported: the uſe of mercury in this view, is only, where a continual and gentle increaſe of perſpiration is required, and not a copious ſweat, to produce which it is not at all fitted; and indeed the benefit of this practice in moſt caſes depends rather on determining the mercury to the ſkin, in order to its ſpecific action there, than on the ſecretion excited by it. The doſe in this caſe may be three grains every day, taking along with it one drachm of extract of guaiacum twice a day, and rigorouſly obſerving the above given direction, to keep continually in a warm room. If this method is complied with, inveterate cutaneous poxes, which reſiſt ſalivations, and all other means at preſent in practice, may be radically cured; as may alſo leprous, habitual ſcorbutic eruptions, and almoſt all diſeaſes of the ſkin. When calomel is given as an alterative, its doſe may be from two to ten grains; but if the greater extreme be uſed, it is neceſſary to take a gentle cathartic once in three days, to prevents its forcing a paſſage through the ſalival glands, and even, if the leſſer doſes are taken continuedly, the ſame uſe of cathartics muſt be obſerved at proportionable diſtances.

E. D. *Cinnabaris Factitia.*
Artificial Cinnabar.

Take of purified quickſilver 3 pounds and a half, waſhed flowers of ſulphur one pound. Melt the ſulphur in a large iron veſſel, over a gentle fire, and add to it by degrees the quickſilver previouſly heated, ſtirring them conſtantly together with an iron ſpatula, that they may be perfectly mixed. Immediately fit upon the veſſel a wooden cover, to prevent the mixture from taking fire; before the matter is grown cold, grind it into powder, and ſublime it in a proper veſſel.

This makes the common vermilion of the ſhops, uſed chiefly in painting. There is a ſecret in making this to perfection; and it lies chiefly in contriving the ſubliming veſſel of a proper height, and working very expeditiouſly, with a quick fire.

L. D. *Cinnabaris Factitia.*
Factitious Cinnabar.

Take of purified quickſilver twenty-five ounces, ſulphur ſeven ounces; melt the ſulphur, and add the quickſilver to it, and if the mixture take fire, extinguiſh it by covering the veſſel; afterwards let the maſs be reduced to powder and ſublimed.

Mercurius reſuſcitatus.
Mercury revived from Cinnabar.

Take cinnabar one pound, calcined tartar or pot-aſhes one pound, *Calx Viva* two pounds; grind theſe well together, and put them into a retort; leaving, at leaſt, one part in three empty. Place it in a reverberatory furnace, and fit to it a receiver: let it ſtand twelve hours; and then kindle a fire; increaſing it gradually to the fourth degree; keep it ſo till the mercury is all come over into the receiver; which will be in ſeven or eight hours time: then waſh away the filth, and ſtrain the clean mercury through a clean napkin into an earthen diſh.

The two proceſſes are not of any great moment in themſelves; the firſt being not uſed, or very little, in any preſcription; and the other deſigned for the higheſt purification of mercury; which thus revived, is preferable to any other for many purpoſes. The mercury joined ſo with the ſaline parts in the ſulphur, and riſing with them in a cinnabar, depends upon the ſame diſpoſition and mechaniſm of parts, as was before taken notice of in ſublimate. In the firſt operation the mercury is beſt ſet in a chimney while the ſulphur is mixing with it, to give vent to the ſtench; for its fumes are very offenſive. And the ſulphur is to be kept but juſt hot enough to remain fluid, until all the mercury is mixed, leſt it ſhould carry away any of the mercurial particles along with the fumes. In the laſt proceſs, the reaſon why the mixture is to retain ſo long before it is put to the fire, is to give time to the alkaline matter of the calx, gradually to ferment with the ſulphureous particles which hold the quickſilver. And by this means likewiſe the retort is ſecured from being broke; becauſe the ſudden rarefaction of the mixture, by immediately applying the heat to it, would make it fly. Some put water in the receiver.

Mercurius Præcipitatus corroſivus rubeus. Red corroſive Precipitate of Mercury.

Take crude mercury and of compound

compound *Aqua Fortis* equal parts, let theſe ſtand in the heat of aſhes, in an open upright glaſs, ſhaped like the Hungary-water phials, until the flowers begin to appear, and the mercury ſeems all diſſolved into a white maſs: then gradually increaſe the fire to the third degree, and ſo keep it till it turns of a deep red: then take it away; let it cool, and break the phial to get out the precipitate, which will look of a moſt beautiful bright colour.

The marine acid in the compound menſtruum, diſpoſes this preparation to aſſume the bright ſparkling appearance admired in it, which, tho' of no advantage as a medicine, is yet a mark of its goodneſs and ſtrength. As ſoon as it gains this appearance, remove it from the fire, otherwiſe it will ſoon loſe it again. This medicine is ſubject to great uncertainty in point of ſtrength; more or leſs of the acid exhaling, according to the degree and continuance of the fire. The beſt criterion of its ſtrength is its brilliant appearance; which is alſo a mark of its genuineneſs. If mixed with minium it hath a duller hue.

The precipitate thus made (tho' very improperly ſo called) will weigh eighteen ounces; ſo that the mercury gains two ounces by the addition of the ſaline parts of *Aqua Fortis*. This is rarely given inwardly, but by empirics, and ignorant bold perſons. It is a good eſcarotic, and much uſed among the ſurgeons for that purpoſe in baſilicon, and other dreſſings: as it is alſo in ungents for the itch, and other cutaneous foulneſſes; it is to be uſed with caution.

L. D. *Mercurius corroſivus ruber*, Red precipitate, the ſame as the preceding.

E. D. *Mercurius corroſivus Ruber, vulgo Præcipitatus ruber.* Red Precipitate.

Take of quickſilver and of the weaker nitrous acid, of each one pound. Diſſolve the quickſilver, and over a ſlow fire evaporate the ſolution into a white dry maſs; which being powdered, and put into a glaſs cucurbit, is to be calcined in the fire gradually augmented, until a little of it taken out by means of a glaſs ſpoon, and cooled, reſembles bright ſhining red ſcales. The matter muſt be diligently ſtirred about with a glaſs ſtick, that all the parts may be equally calcined, and the intended change is thro' the whole completed; on which, the veſſel muſt be removed from the fire.

Pulvis Principis. Prince's Powder.

Take of the foregoing precipitate half a pound; grind it very well upon a marble or porphyry ſtone; put it into a cucurbit with two quarts of water; place it in a ſand-furnace, and give it a fire to make it ſcalding hot; let it ſtand ſo twelve hours, ſtirring it about once in two hours: then let it cool, and decant the water. Put this precipitate into water a ſecond time, and a third, repeating the operation as before. Then dry the precipitate, and grind it with double its weight of the ſalt extracted from the reſidue of the *Tinctura Metallorum*: put them into a cucurbit with water; proceeding in all things as above, till the precipitate remains inſipid; then dry it, and boil it in ſpirit of wine; decant the ſpirit when cool, and dry the precipitate.

This is emetic and carthartic; and is preſcribed in venereal and chronic caſes. The doſe is from

three grains to half a ſcruple. The ſeveral ablutions ſerve only to leſſen the quantity and pungency of the ſalts, which the precipitate received, in making, from the *Aqua Fortis*; and ſo to render it milder in its operation.

Panacæa Mercurii rubra.

Take any quantity of red precipitate; put it into a cucurbit, with eight times its weight of ſpring water; let it ſtand in a heat of ſand twenty-four hours, ſhaking it three or four times; pour off the water, and keep it for uſe. Then dry the precipitate, and pour to it eight times its weight of ſpirit of wine; fit a glaſs to the mouth of the cucurbit; lute it well, and ſet it in a gentle heat. Let it continue there fifteen days; ſhake it often, and after it is cool, pour off the ſpirit of wine, by decantation. Then take the precipitate, and put it in a china diſh, with twice its weight of tincture of ſulphur: ſet it on fire, and burn off the tincture; and then put on freſh ſpirit of wine: let it ſtand in a very gentle heat two or three hours; and after it is ſettled, decant: dry the precipitate, and put it up for uſe.

This is by ſome mightily eſteemed in venereal caſes. It works by ſtool, but will ſometimes vomit. Its doſe is from three to twelve or fifteen grains.

Panacæa Mercurii alba.

Grind calomel to a very fine powder, and put it into a cucurbit, with eight times its weight of ſpirit of wine: place it in warm ſand; let it ſtand fifteen or twenty days, and ſhake it every day two or three times. Then fit a glaſs to the mouth of the cucurbit, and make it a circulating glaſs. Separate the ſpirit either by decantation or diſtillation; and dry the powder in a gentle heat.

This is yet milder than calomel; and therefore may be ventured in larger doſes as a cathartic, eſpecially to children; it has the ſame virtues with that.

Lemery gives us a mercurial *Panacæa* in the laſt edition of his Courſe of Chemiſtry; which he calls violet mercury; but it ſeems too tedious to be worth making; and is after all little other than an Æthiops; being quickſilver incorporated with *Sal Ammoniac* and ſulphur. The ſame author alſo preſcribes a *Panacæa* not much unlike the preceding, but more elaborate; and no ways excelling it in virtue. He has alſo multiplied his precipitates; but I cannot ſee it worth the while to follow him in any of them: and the ſhops ſeem already ſufficiently ſupplied with ſuch medicines.

L. D. *Mercurius Præcipitatus albus.*
White Precipitate of Mercury.

Take of *Sal Ammoniac* and corroſive ſublimate, each an equal weight; diſſolve them together in water, filter through paper, and precipitate with a ſolution of any fixed alkaline ſalt; waſh the precipitated powder till it is perfectly ſweet.

The ſolution of alkaline ſalt ſhould be added by degrees, with great care; the leaſt exceſs in the quantity deſtroys the colour of the precipitate; a ſmall part ſhould be therefore reſerved from the whole to be added after the alkaline ſalts and by this means the colour may be recovered, though the above mentioned error ſhould happen.

There

There are two kinds of preparations which have gone under the name of white precipitate; as we ſee in the preceding proceſſes: which may very probably produce inconveniencies to the public. For though this kind may anſwer moſt of the purpoſes of medicine in regard to human ſubjects; yet the farriers, who have depended on the common white precipitate, in their application of it, and uſed it as an eſcarotic, will be hereby miſled, and uſe as a corroſive a ſubſtance perfectly inactive, for ſuch the ſweet precipitate moſt evidently is, the mercury being deprived of the acids by the alkaline ſalts. The college of Edinburgh have therefore acted much more judiciouſly in admitting both, and diſtinguiſhing this by the name of ſweet, which very properly expreſſes its nature.

E. D. *Mercurius Præcipitatus albus.* White Precipitate of Mercury.

Take of corroſive Mercury ſublimate any quantity, diſſolve it in hot water; gradually drop into the ſolution ſome volatile ſpirit of *Sal Ammoniac*, as long as any precipitation follows; waſh the white precipitated powder upon a filter with ſeveral ſucceſſive quantities of warm water; and afterwards dry it for uſe.

Sublimate in general ſuffers ſolution in water with extreme difficulty, and where the acid happens to be deficient, ſcarcely at all: on this account the college of London have ordered an equal quantity of *Sal Ammoniac* to be added; but if warm water be uſed, much leſs may anſwer the purpoſe. This precipitation will ſuffer waſhing without loſing any part of the proper precipitate.

Theſe precipitates are now rarely imployed as internal medicines; calomel anſwering all the intentions wherein they might be given, with much more certainty and ſafety. Their principal preſent uſe is in ungents, particularly for the itch and other cutaneous diſorders.

L. D. *Mercurius emeticus flavus.* Yellow emetic Mercury, or Turpeth Mineral.

Put any quantity of quickſilver into a glaſs, and pour on it double its weight of ſtrong ſpirit or oil of vitriol; heat the mixture by ſlow degrees till it boils, and continue it in that ſtate till only a white maſs is found at the bottom; which, the fire being increaſed, muſt be made perfectly dry: this maſs, on the pouring water to it, will immediately turn yellow and fall to powder; let it be ground with this water for a conſiderable time in a glaſs mortar, and after the powder has ſubſided the water muſt be poured off, and ſucceſſive quantities added, till it is entirely ſweet.

The doſe of this is from two to ſix grains: it is too rough for children; but ſafe enough to grown perſons. This, as indeed all preparations of the ſame kind, which are ponderous, and given in little quantity, ought not to be exhibited in liquors; where they ſo ſuddenly fall to the bottom, as to be difficult to take: but in boles, with conſerve of roſes, or ſome ſuch thing, they are neither inconvenient nor unpleaſant. The turpeth is accounted the moſt efficacious of all the mercurial preparations, in venereal caſes; it works ſmartly upwards, and will ſometimes of itſelf raiſe a ſpitting, if a carthartic

a carthartic be not given ſoon after it. In virulent gonorrhœas, and where the humours flow much to the privy parts, it is of great ſervice; particularly in the *fumia veneris*, *phymoſis*, or *paraphymoſis*, when in a high degree, but muſt be uſed with great care, and particularly not to take cold. The moſt obſtinate leproſies generally yield to it. The water with which it is waſhed, is by ſome uſed for the itch, and other cutaneous deformities; in which it does much good, if the patient is not too buſy with it; for it is ſo loaded with ſaline ſpiculæ as not to be inferior to a poiſon, if much of it ſhould get into the pores.

This preparation was ſome time ago offered to the public as a remedy againſt the bite of a mad dog, and is ſaid to avail even after the ſymptoms begin to appear. The manner of adminiſtering it in theſe caſes, is, to give two grains of turpeth every fourth hour with one drachm of cinnamon, by which method, it is ſaid, a briſk ſalivation will be raiſed at the end of ſixteen hours. A ſufficient number of caſes have not yet occurred, to ſhew the certainty of this practice in regard to human ſubjects, but it is clear from unqueſtionable experience, that dogs may be almoſt infallibly cured by it.

E. D. *Mercurius flavus, vulgo Turpethum Minerale.*

Yellow Mercury, or Turpeth Mineral.

Take of pure quickſilver, four ounces; rectified oil of vitriol, eight ounces: having mixed them carefully, diſtil them to drineſs, in a retort placed in a ſand-furnace; the white calx which is found at the bottom being ground to powder, and thrown into warm water, immediately becomes of a yellow colour; waſh this in renewed quantities of water till it has loſt its acrimony; then dry it for uſe.

Care ſhould be taken, when the oil of vitriol begins to bubble, to ſteadily keep up the heat, without at all increaſing it, till the ebullition ceaſes, when the fire ſhould be augmented to the utmoſt degree, that as much as poſſible of the redundant acid may be expelled. A calx may be made from leſs than an equal weight of the oil, if it be good.

Mercurius Præcipitatus viridis, Green Precipitate of Mercury.

Diſſolve four ounces of the mercury ſublimate (previouſly powdered) in a quart of hot water: digeſt an ounce and a half of copper filings with eight ounces of volatile ſpirit of *Sal Ammoniac* in a matraſs, till a deep blue tincture is extracted: filter this tincture, and drop it by degrees into the ſolution of the ſublimate; after the precipitate has ſubſided, evaporate to drineſs in a ſand-heat.

This medicine is at preſent with much reaſon diſuſed; for the copper muſt certainly render it an emetic too violent to be hazarded.

L. D. *Mercurius calcinatus* Precipitate *per ſe.*

Let purified quickſilver be placed in a ſand-heat for ſeveral months, in a proper glaſs with a ſmall hole by which the air may have acceſs; let it remain till it is calcined into a red powder.

A very wide mouthed flat bottomed glaſs body, of ſuch a height

that

that the mercury may not eſcape, is to be preferred; for thus the air, which is neceſſary to the calcination, will be more freely admitted. If the veſſel is ſo contrived that a continual flux of air may paſs over it, it will be ſo much the better.

This preparation is by ſome highly eſteemed in venereal caſes, and ſuppoſed to be the moſt efficacious and certain of all the mercurials. It may be advantageouſly given in conjunction with opiates: a bolus or pill, containing from half a grain to two grains of this calx, and a quarter or half a grain or more of opium, with the addition of ſome warm aromatic ingredient, may be taken every night. Thus managed, it acts mildly, though powerfully, as an alterative and diaphoretic: exhibited by itſelf in larger doſes, as five or ſix grains, it proves a rough emetic and cathartic.

L. D. *Mercurius Corallinus.*

Pour to red corroſive mercury about three times its weight of rectified ſpirit of wine, and digeſt them for two or three days in a gentle heat, often ſhaking the veſſel; then fire the ſpirit, and continually ſtir the powder, till the ſpirit is burnt out.

Here the corroſive becomes ſomewhat milder, a part of the acid being diſſipated by the heat of the burning ſpirit; (whether the ſpirit takes up any in the digeſtion, is greatly to be doubted;) the preparation nevertheleſs ſeems to be ſcarce ſufficiently ſafe for internal uſe: a few grains of it generally prove cathartic or emetic, and ſometimes occaſion violent ſymptoms.

L. and E. D. *Æthiops Mineralis.*

Take flowers of ſulphur, and clean crude mercury, of each equal quantities; grind them together in a glaſs or ſtone mortar, till they are incorporated into a black powder.

The Edinburgh Diſpenſatory alſo orders another with double the quantity of Mercury.

There are other ways of making it by deflagration; but this is the moſt ſimple and natural, and therefore to be preferred; unleſs, for expedition, the ſulphur be melted, and the mercury ſtirred into it. The rubbing in the firſt way ought to be continued five or ſix hours; elſe the mercury will not be ſufficiently mixed. This is a ſafe medicine, and may be given to young children for worms, and all crudities and acrimony of the humours. Its doſe is from ten grains to one drachm.

Æthiops Antimonialis.

Antimonial Æthiops.

Flux equal quantities of antimony and ſea ſalt together in a crucible one hour; then let the matter cool, break the crucible and ſeparate the ſcoria; afterwards rub the regulus thus obtained, with an equal quantity of mercury, till they are incorporated.

This medicine is highly recommended by ſome as being of the greateſt efficacy in ſcorbutic and ſcrophulous caſes, as alſo in all glandular obſtructions and many chronical caſes out of the reach of common medicines; and it is likewiſe ſaid to avail more than any other medicine in cancerous humours, and obdurate venereal caſes; the allowed doſe is a ſcruple,

ple, but ſmaller quantities are adviſed to be firſt taken.

Mercurius Alcaliſatus.
Alcalized Mercury.

Take of purified quickſilver three drams, prepared crabs-eyes 5 drams, rub them in a glaſs mortar, as in the preceding preparation.

This medicine has been ſome time in uſe, and though excluded the two laſt editions of the Edinburgh Diſpenſatory, after having had a place in the former, is now much regarded, eſpecially in ſcorbutic caſes; in regard whereof I have lately ſeen an eminent inſtance of its efficacy, even where other mercurials had failed; it is equally proper in all other caſes, where mercurial alteratives are wanted. The doſe may be from five grains to a ſcruple, gentle cathartics being joined with it.

E. D. *Antimonium Præparatum.*
Prepared Antimony.

Powder crude antimony as fine as poſſible in an iron mortar; then on a porphyry levigate it with a little water to a ſubtil powder; after which dry it on a chalk ſtone, then on paper placed where the atmoſphere is warm and dry.

If crude antimony is reduced to an exquiſitely fine powder, its efficacy as a medicine is conſiderable, if it is but coarſely levigated it only ſtimulates the firſt paſſages to eject it.

E. D. *Regulus Antimonii Medicinalis.*
Medicinal Regulus of Antimony.

Take of antimony, five parts; common ſalt four parts; ſalt of tartar, one part. Grind them together, and inject the mixture into a red hot crucible, and when it flows ſufficiently thin, pour it into a cone, ſmoaked and heated: gently ſhake the cone, or ſtrike it on the ſides, that the regulus may ſink to the bottom. This regulus, freed from the ſcoriæ, appears bright like poliſhed ſteel; powdered, it aſſumes a reddiſh or purple colour.

This medicine is ſimilar in quality to one made with one eighth of nitre. In both proceſſes, the antimony is freed from a ſmall portion of its ſulphur, which is diſſipated in flame by the nitre, and abſorbed by the alcaline ſalt. This preparation is greatly celebrated by Hoffman, and other German phyſicians, in ſundry obſtinate chronical diſorders, and eſteemed one of the beſt antimonials that can be given with ſafety as alterants: it operates chiefly as a diaphoretic, and ſometimes, though rarely, proves emetic. The doſe is from three or four grains to twenty.

This regulus, reduced into a ſubtile powder, is the genuine Febrifuge Powder of *Craanius* (*Pharm. Boruſſo-Brandenburgh*, edit. 1734, pag. 107.) and has been greatly commended in all kinds of fevers, both of the intermittent and continual kind. (*Pharm. Argent.* 1725, pag. 252.) A doſe or two have frequently removed theſe diſorders, by occaſioning either a ſalutary diaphoreſis, or acting mildly by ſtool or vomit. The colour of the levigated powder is a purpliſh brown. The antimonial emetic of Boerhaave already mentioned, which is white, is nearly ſimilar to it.

The common ſalt is of no farther uſe in the proceſs, than as it ſerves to promote the fuſion; and even for this it is not neceſſary. The medicine proves rather more mild and certain in operation, if prepared without it.

Regulus

Regulus Antimonii.

Regulus of Antimony.

Take antimony, nitre, crude tartar, of each equal parts. Grind them ſeparately into a powder; then mix, and rub them all together. Inject the powder, at ſeveral times, into a red hot crucible, taking care to break the cruſt, which forms on the ſurface, with an iron rod: when the detonation is over, let a ſtrong fire be made, that the matter may flow like water, then pour it out into a warm greaſed cone, which is to be gently ſtruck on the ſides, that the regulus may ſeparate and fall to the bottom; when grown cold, let the regulus be cleared from the ſcoriæ that lie a top of it.

In this proceſs, an alcaline ſalt is produced from the nitre and tartar, in ſuch quantity as entirely to abſorb the ſulphur of the antimony: the alkali, thus ſulphurated, will take up more or leſs of the reguline part, according to its quantity, and the continuance of the fuſion.

As the ingredients are above proportioned, the yield of regulus proves extremely ſmall, and if the fuſion is long continued, ſcarce perceptible, almoſt the whole of it being taken up into the ſcoriæ: in order to obtain the largeſt quantity, the nitre ought to be diminiſhed one half. It is convenient to rub the nitre and tartar together, and deflagrate them in an iron ladle or pan, before their mixture with the antimony; for by this means the loſs of ſome part of the antimony, which otherwiſe happens from the vehemence of the deflagration, will be prevented, a ſmaller crucible will ſerve, and leſs time and labour complete the proceſs.

The mixture of nitre and tartar deflagrated together, will reduce any of the antimonial calces (as the diaphoretic antimony, ceruſe, or antimony calcined by itſelf) into regulus; the oily matter of the tartar ſupplying the inflammable principle, which all calces require for their revival into a metallic form; and the alkaline ſalt promoting their fuſion. It is the common reducing flux of the chemiſts; by whom it is called, from its colour, the black flux. The largeſt yield of regulus, hitherto obtained from antimony, has been got by calcining it without addition, as directed hereafter for making glaſs of antimony, and reviving the calx by fuſion, with this, or other like compoſitions. Mr. Geoffroy, who firſt communicated this method to the French academy, ſeems to look upon ſoap (the ſubſtance he happened to make uſe of himſelf) as the only one that will ſucceed: but the effects of this are not different from thoſe of the foregoing flux. Both conſiſt of an alcaline ſalt, and an inflammable, (not ſulphureous) ſubſtance, which are the only materials here neceſſary.

Regulus Antimonii Martialis.

Martial Regulus of Antimony.

Take antimony, nitre, crude tartar, of each one pound; ſmall pieces of iron, half a pound. Heat the iron in a crucible to a white heat: then gradually add the other ingredients, firſt powdered and mixed together, and proceed in the ſame manner as in the foregoing proceſs.

The nitre might here be diminiſhed to one fourth its weight, and the tartar to half that quantity. The pieces of iron may be

ſmall

ſmall nails; the filings of the metal, lying cloſer together, are not ſo readily acted upon by the antimony.

Regulus Antimonii Stellatus.

Stellated Regulus of Antimony.

This is made by melting the martial regulus ſeveral times with freſh nitre and tartar.

The ſimple regulus of antimony is more readily made to exhibit a ſtarry appearance on its ſurface than the martial; which it will alſo do by one, as well as by any number of fuſions: the phænomenon entirely depends upon the regulus being pure, brought into extreme thin fuſion, and cooled ſlowly in the cone, without ſhaking or moving it.

The three foregoing *reguli* are at preſent rarely, if ever, made uſe of in medicine: the emetic cups, and perpetual pills, formerly made from them, have long been laid aſide as precarious and unſafe. The ſcoriæ, produced in the ſeveral proceſſes, afford medicines leſs violent, ſome of which are in conſiderable eſteem. Theſe ſcoriæ conſiſt of the ſulphur of the antimony united with an alcaline ſalt, and a part of the regulus taken up by this compound, and rendered ſoluble in water.

E. D. *Sulphur Antimonii Præcipitatum, volgo Sulphur Auratum.*

Golden Sulphur of Antimony.

Take of the *Cauſtic Lixivium* four pounds, water three pints, and two pounds of finely powdered antimony. Boil them in an iron pot, on a gentle fire, for three hours, continually ſtirring it with an iron ſpatula, adding water as required. Strain the hot lixivium through a double linen cloth, and whilſt it is yet hot, drop into it, by little and little, the weaker acid of nitre a ſufficient quantity to precipitate the ſulphur, which muſt be carefully waſhed with warm water.

L. D. *Sulphur Antimonii Præcipitatum.*

Precipitated Sulphur of Antimony.

Take of antimony, ſixteen ounces; tartar, a pound; nitre, half a pound. Let theſe be reduced ſeparately into powder, then mixed, thrown by degrees into a red hot crucible, and melted with a ſtrong fire. Pour out the matter into a conical mould; the metallic part, commonly called regulus of antimony, will ſink to the bottom, the ſcoriæ ſwimming above it. Diſſolve theſe ſcoriæ in water, filter the ſolution through paper, and precipitate the ſulphur by dropping in ſome ſpirit of ſea ſalt: laſtly, waſh the ſulphur from the ſalts, and dry it for uſe.

Theſe preparations are not ſtrictly ſulphurs: they contain a conſiderable quantity of the metallic part of the antimony, which is reducible from them by proper fluxes. That made by the firſt of the above proceſſes contains the greateſt part of the ſemi-metal; for as we have already ſeen, very little, ſometimes ſcarce any at all, ſeparates in the fuſion. The quantity of regulus taken up in the ſecond alſo will be different, according to the degree of fire employed, and the length of time that the fuſion is continued. Theſe medicines, therefore, muſt needs be liable to great variation in point of ſtrength, and in this reſpect there is not perhaps any of the antimonials more precarious; notwithſtanding

ſtanding the aſſertion in a former edition of this work, that they are the moſt certain of them.

Theſe preparations prove emetic when taken on an empty ſtomach, in a doſe of four, five, or ſix grains; but in the preſent practice, they are ſcarce ever preſcribed in this intention; being chiefly uſed as alterative deobſtruents, particularly in cutaneous diſorders. Their emetic quality is eaſily blunted by making them up into pills with reſins or extracts, and giving them on a full ſtomach: with theſe cautions, they have been increaſed to the rate of ſixteen grains a day, and continued for a conſiderable time, without occaſioning any diſturbance upwards or downwards. As their ſtrength is precarious, they ſhould be exhibited at firſt in very ſmall doſes, and increaſed by degrees according to their effect.

A compoſition of the *ſulphur auratum*, with *mercurius dulcis*, has been found a powerful, yet ſafe, alterative, in cutaneous diſorders; and has completed a cure after ſalivation had failed: in venereal caſes likewiſe, this medicine has produced excellent effects. A mixture of equal parts of the ſulphur and calomel (well triturated together, and made into pills with extracts, &c.) may be taken from four to eight or ten grains, morning and night; the patient keeping moderately warm, and drinking after each doſe, a draught of a decoction of the woods, or other like liquors. This medicine generally promotes perſpiration, ſcarce occaſioning any tendency to vomit or purge, or at all affecting the mouth. See the Edinburgh Eſſays vol. I. and the *Acta natur. curioſ.* vol. V.

Kermes Mineralis, ſive Pulvis Carthuſianorum. Kermes Mineral or Poudre des Chartreux.

Take of antimony four pounds; ſolution of fixed nitre *per deliquium*, one pound; rain water, three pounds; boil them two hours, and then filter the boiling decoction through paper; let it ſtand at reſt twenty-four hours, and it will let fall a yellowiſh or ſaffron-coloured powder, the fluid becoming clear. This fluid being then poured off by inclination, the powder muſt be waſhed by repeated affuſions of warm water; and four ounces of ſpirit of wine being burnt upon it, afterwards dried and kept for uſe.

This preparation is in fact only a ſulphur of antimony, and perhaps differs very little from that made by the common proceſſes, to which however this is to be preferred, as being more readily performed. It is a moſt efficacious deobſtruent, and therefore extremely uſeful in ſcrophulous, obſtinate ſcorbutic, and all ſuch caſes as ariſe from glandular obſtructions; as likewiſe in chloretic, cachectic, and hyſterical habits, where the vitiated craſis of the blood has impaired the *vis vitæ*, and debilitated the ſecretive powers: it has been recommended alſo in fevers; but the uſe of medicines of this claſs is not yet enough authoriſed by experience to render ſuch a practice eligible. The doſes given have been from one grain to four, but it is beſt to begin firſt with the ſmalleſt doſe, eſpecially with young perſons, as the force of its operation varies greatly in different conſtitutions.

E. D. *Vitrum Antimonii.*
Glaſs of Antimony.

Take of crude antimony reduced

to a ſand like powder; ſpread it on a ſhallow unglazed earthen veſſel, and place it on a gentle fire, that the antimony may be moderately heated; this powder ſhould be diligently moved about to prevent its running into lumps. The ſulphur riſes in white vapours, as theſe decreaſe, increaſe the fire that more vapours may be produced, and ſo go on, until the powder being urged by a red hot fire produces not any more vapours. Melt the calx in a crucible placed in an intenſe fire, until it appears like a liquid glaſs; then pour it out upon a heated tile or braſs plate.

This is alſo called ſtibium. It is the ſtrongeſt emetic of any preparation of antimony. It is too rough to take in ſubſtance, though ſome allot its doſe from two to eight grains.

E. D. *Vitrum Antimonii ceratum.*
Glaſs of Antimony prepared with Wax.

Take of yellow wax one dram, glaſs of antimony one ounce. To the wax melted in an iron ladle, caſt the glaſs reduced to a fine powder, calcine during half an hour on a gentle fire, continually ſtirring it with a ſpatula, then pour out the matter on paper, and when it is cold powder it.

This preparation has been in great eſteem at Edinburgh, for the cure of dyſenteries; and ſeveral extraordinary inſtances of its efficacy have been related in the Medical Eſſays. It operates moſt generally as a carthartic, and ſometimes as an emetic, but it is in ſome inſtances ſaid to have effected a cure without any ſenſible evacuation. The doſe is from two or three grains to twenty.

E. D. *Crocus Antimonii, vulgo Crocus Metallorum.*
Saffron of Metals.

Take antimony and nitre of each equal weights. Reduce them ſeparately into powder, then mix and inject them into a crucible heated to a white heat; when the detonation is over, ſeparate the reddiſh metallic matter from the whitiſh cruſt, rub it into a powder, which waſh in ſeveral portions of warm water until it becomes inſipid.

The operation of this is emetic: but the infuſion of it in white-wine or canary is generally uſed. and is the officinal *Vinum Benedictum*; one ounce of the crocus being allotted to two pounds of wine. Its doſe is from two drachms to one ounce for grown perſons: but for children it is too ſtrong: and indeed all theſe antimonial emetics begin to be in neglect, upon account of their roughneſs.

L. D. *Crocus Antimonii, vulgo Crocus Metallorum.*

Take of antimony and nitre an equal weight; being ſeparately powdered, let them be thoroughly mixed, and put by degrees into a red hot crucible that they may melt; having poured them out of the crucible, let the ſcoria be taken away. The maſs will then appear of various colours; and the longer it has continued melted in the fire, the more it will approach the yellow.

L. D. *Crocus Antimonii lotus.*
Waſhed Crocus of Antimony.

Boil crocus of antimony, reduced to the fineſt powder, in water; the firſt being poured off, waſh it in ſucceſſive quantities of hot water, till it is entirely ſweet.

This

This proceſs is chiefly deſigned for making emetic tartar.

L. D. *Calx Antimonii.*

Diaphoretic Antimony.

Let powdered antimony be thoroughly mixed with three times its weight of nitre, and gradually put into a crucible juſt beginning to glow; then the mixture being taken from the fire, let it be purified by waſhing with water, as well from the ſalts as from the groſſer parts leſs perfectly calcined.

The following calx is given, as a copy taken from that in the Chapel of the Rolls, for the preparation of Dr. James's powder.

Take antimony, calcine it with a continual long protracted heat, in a flat unglazed veſſel, adding to it from time to time, a ſufficient quantity of any animal oil, and ſalt well dephlegmated; then boil it in melted nitre for a conſiderable time, and ſeparate the powder from the nitre by diſſolving it in water.

E. D. *Calx Antimonii Nitrata.*

Take glaſs of antimony and nitre, of each equal parts. Mix and put them into a crucible, to be calcined ſo as that the matter may continue red hot for an hour; after which, having poured it out of the crucible, it muſt be powdered, and frequently waſhed in warm water ſo as to deprive it of all taſte.

Antimonium Diaphoreticum lotum.

Waſhed diaphoretic Antimony.

To the diaphoretic antimony prepared as above, and powdered, pour water till it riſes ſome inches above the antimony; digeſt them together for a night, and then pouring off the water; add a freſh quantity: repeat this five or ſix times. The ſeveral waſhings being mixed together, filtered, and evaporated over a gentle heat till a cuticle appears, yield, on ſtanding in the cold, the

Nitrum Stibiatum.

Antimoniated Nitre.

The calx of antimony, when freed by waſhing from the ſaline matter, is extremely mild, if not altogether inactive. Hoffman, Lemery, and others aſſure us, that they have never experienced from it any ſuch effects as its uſual title (that under which it ſtands in the laſt of the above proceſſes) imports; Boerhaave declares, that it is a mere metallic earth, intirely deſtitute of all medicinal virtue; and the committee of the London college admit that it has no ſenſible operation. The common doſe is from five grains to a ſcruple, or half a drachm; though Wilſon relates, that he has known it given by half ounces, and repeated two or three times a day, for ſeveral days together.

Some report, that this calx, by being kept for a length of time, contracts an emetic quality: from whence it has been concluded, that the powers of the reguline part are not entirely deſtroyed; that the preparation has the virtues of other antimonials which are given as alteratives, that is in ſuch ſmall doſes as not to ſtimulate the *primæ viæ*; and that therefore, diaphoretic antimony, as it is certainly among the mildeſt preparations of that mineral, may be uſeful for children, and ſuch delicate conſtitutions where the ſtomach and inteſtines are eaſily affected.

Tinctura Antimonii.

Tincture of Antimony.

Take of *Antimonium*, one pound; ſalt-petre, three pounds; let them be finely powdered and well mixed; then, by a ſpoonful at a time, put them into a red-hot crucible: let it ſtand half an hour in a ſtrong melting heat, then pour the matter into a warm iron mortar; beat it to powder, and before it attracts the air, return it into a matraſs, and add to it of tartarized ſpirit of wine three pounds. Let it digeſt three days and nights; and there will be a fine tincture, pleaſant to the taſte, very fragrant, and far excelling all other antimonial tinctures.

The doſe is from ten to ſixty drops. It is very diuretic, as well as ſudorific, and good in all kinds of cachexies, and chronical diſtempers. The ceruſe of antimony is made with the regulus and nitre, in the ſame proportions and manner as the *Antimonium Diaphoreticum*: it is given in the ſame quantities, and is of the ſame virtues; but not ſo often preſcribed. Or thus:

L. D. *Tinctura Antimonii.*

Tincture of Antimony.

Take of any fixed alkaline ſalt, one pound; of antimony, half a pound; of rectified ſpirit of wine, one quart; mix the antimony powdered with the ſalt, and keep them melting for an hour in a ſtrong fire; then pour the whole out, and, being powdered, put them into the ſpirit of wine; digeſt for three or four days, and afterwards ſtrain them off.

Ceruſſa Antimonii.

Ceruſe of Antimony.

Take of regulus of antimony one part, nitre two parts, mix them well, then gradually inject the powder into a crucible, heated to a light white heat, and proceed as is directed for the Calx Antimonii.

It is diaphoretic, and by ſome reckoned to equal bezoar mineral in its virtues. Its doſe is from ten grains to one drachm.

Antimonium Catharticum.

Purging Antimony.

Take of the glaſs of antimony four ounces, finely powdered; put to it gradually of oil of vitriol twelve ounces; let it digeſt forty-eight hours: diſtil it in a ſand-heat; let it cool; then waſh the powder *ſ. a.* till all the acrimony is gone. Dry it, and grind with it an equal weight of *Sal Mirabile*, and of *Sal Enixum*, a double quantity. Put this mixture in a crucible, which place in a wind-furnace; after it has ſtood a quarter of an hour in gentle fuſion, take it from the fire: when cold, waſh the powder, dry it, and keep it for uſe.

It is the moſt certain cathartic that is made with antimony; and good in all ſcorbutic and chronic diſtempers. Its doſe is from half a ſcruple to two ſcruples. Mr. Wilſon tells us, that he knew three confirmed poxes cured with this medicine, in a ſmall ſpace of time.

Panacæa Antimonii.

Take of antimony, ſix ounces; nitre, two ounces; of common ſalt, one ounce and a half; and of charcoal, one ounce. Let them all be made into a fine powder, and well mixed, and be put into a red-hot crucible, by half a ſpoonful at a time: continue the fire a quarter of an hour after. Then either

pour the matter into a cone, or let it cool in the crucible; and there will be three ſubſtances, viz in the bottom a little regulus; above that a compact matter, ſomething like the liver of antimony; and upon the ſurface, a more ſpongy maſs. Separate them one from another; and put by the regulus: powder the ſpongy maſs; and waſh it till it hath no taſte of the ſalts; dry it gently, and keep it for uſe.

The uppermoſt ſubſtance is counted the beſt; tho' ſome direct the middle and uppermoſt parts to be mixed together; and is of a fine golden colour, when waſhed: the middle ſubſtance is not of ſo pleaſant a colour, and works more churliſhly. The regulus is equal to the regulus of antimony. The operation is emetic and cathartic; and it is given in the pox, gout, dropſy, ſcurvy, and all obſtinate chronic caſes. The doſe is from two to five or ſix grains. This is the baſis of Lockyer's pills; which have ſo long been a celebrated purge. If ten grains of the finer ſort of this *panacæa* be mixed with white ſugar candy one ounce, in a fine powder, and made up into a maſs with the mucilage of gum tragacanth, it may be divided into a hundred ſmall pills; of which, one, two, or three may be taken at a time, and they will gently work by vomit and ſtool.

Butyrum et Cinnabaris Antimonii.

Butter and Cinnabar of Antimony.

Take of antimony and mercury ſublimate, an. one pound; powder and mix them well; put them into a coated retort, which muſt not be charged above a third part; ſet it upon an iron bar, in a little flat diſh with ſome ſand in it, in an open furnace: make a ſmall fire at firſt; but increaſe gradually to the ſecond degree, and the butter will riſe in the neck of the retort: which melt into the receiver with live coals. Keep the fire ſtill in that degree, till the neck of the retort is tinged red: then change the receiver, and increaſe the fire to the third degree; in which keep it for two hours; after that give two hours fire of the fourth, and it will raiſe the cinnabar into the neck of the retort. When all is cold, take it off, break the retort, and take out the cinnabar.

In this proceſs there is both the butter and cinnabar made at once. The former is only uſed externally, being very cauſtic. It is a mighty ſecret among ſome to ſtop a mortification, by drawing a line with it round the part affected, which defines the bounds of the ſpreading evil. The cinnabar of antimony is compoſed of the ſulphur of the antimony, and the mercury of the ſublimate, which are perfectly the ſame with the common brimſtone and quickſilver, of which the *cinnabaris factitia* is made. The antimonial cinnabar therefore, whoſe ingredients are laborioufly extracted from other ſubſtances, is not different from the common cinnabar, made with the ſame materials procured at a much cheaper rate. The former indeed is generally of a darker colour than the other, and has ſomewhat of a needled appearance like that of antimony itſelf; from whence it has been ſuppoſed to participate of the metallic part of that mineral. But it appears from experiment, that both the colour and needle form are entirely acci-

dental, and owing to the mixt containing a larger proportion of ſulphur, and being ſublimed in a more languid manner.

E. D. *Cauſticum Antimoniale, vulgo Butyrum Antimonii.*
Butter of Antimony.

Take of crude antimony one part, corroſive mercury ſublimate two parts, powder them firſt ſeparately, then mix them well together, carefully avoiding the vapours. Put this matter into a glaſs retort, with a ſhort wide neck, ſo as to fill one half of it; then fix the receiver to the retort, and diſtil in a ſand-heat until a thick liquor aſcends and adheres to the neck of the retort, which is to be melted down by a live coal cautiouſly applied: afterwards diſtil this oily matter in a glaſs retort, into a pellucid liquor.

L. D. *Cauſticum Antimoniale.*
Antimonial Cauſtic.

Take of antimony one pound; corroſive ſublimate two pounds; powder them ſeparately, and let them be thoroughly mixed, and diſtilled with a ſand-heat in a retort whoſe neck muſt be large; that which riſes into the neck, on expoſing it to the air, will become fluid.

L. D. *Cinnabar Antimonii.*
Cinnabar of Antimony.

Sublime what remains in the retort after making the antimonial cauſtic, in a coated matraſs, placed in the open fire.

Mercurius Vitæ. Commonly called Powder of Algarot.

Take of rectified butter of antimony, as much as you pleaſe; pour to it a ſufficient quantity of pure water, and an exceeding white powder will be precipitated: edulcorate this by repeated affuſions of warm water, and dry it by a ſlow fire.

This powder has not, as its name ſhould ſeem to imply, any thing of mercury in it, but is ſolely compoſed of the reguline part of the antimony, corroded by the acid ſpirit of ſea ſalt, which acid is ſo cloſely united, as not to be ſeparable by any ablution with water. Le Mort directs ſome alcaline ſalt to be diſſolved in the water, in order to ſaparate the acid; ſeveral other methods alſo have been contrived for abating the force of this violent emetic; but they either leave it inert or ſtill violent. See Emetic Tartar.

Bezoarticum Minerale.
Bezoar Mineral.

Take of the butter of antimony three ounces, drop upon it ſlowly as much ſpirit of nitre as is neceſſary to prevent any further effervеſcence; draw that off again in a ſand-heat; which pour back again, with the addition of another ounce of the ſame; which draw again; and repeat that operation three or four times: let the remaining matter be powdered, and calcined for half an hour in a crucible, and heated to almoſt a white heat; then edulcorate by waſhing, and burn it three or four times with ſpirit of wine.

This ſeems to have been originally the contrivance of Crollius; though Quercetan, Sennertus, Hartman, and many other practical writers, give ſeveral proceſſes for its preparation; as does alſo Schroder give one not much differing from this. Bezoar mineral was formerly held in great eſteem

as

as a diaphoretic: but its reputation is at preſent almoſt loſt. It is not different in medicinal virtue, or in any ſenſible quality, from the calces of antimony made directly by deflagration with nitre, ſome of which have generally ſupplied its place in the ſhops. It appears at firſt pretty extraordinary, that the violent cauſtic, butter of antimony, ſhould be rendered indolent by the corroſive ſpirit of nitre: how this happens will be eaſily underſtood, upon conſidering that the nitrous acid expels the marine to which the cauſtic quality of the butter is owing. The doſe is from ten grains to a dram.

The nitrous acid alone is capable of depriving the regulus of antimony of all its phlogiſton, and of reducing it to a white calx, entirely ſimilar to the bezoar mineral. Inſtead then of employing butter of antimony, the nitrous acid may be directly poured upon the powdered regulus. This acid readily corrodes the ſemi-metal, without diſſolving it; becauſe it deprives it of its phlogiſton while it attacks it, and quickly reduces it to a white calx. When this acid is carried off, and more acid poured on, and this operation repeated ſeveral times, till the matter is at laſt calcined, a white calx of antimony is obtained entirely ſimilar to bezoar mineral.

Magiſtery of Biſmuth.

Put ſpirit of nitre one pound, made with oil of vitriol, into a great uncut body, and add to it as much powder of tin-glaſs, or biſmuth, by an ounce at a time, as the ſpirit is capable of diſſolving; which will be about ſeven or eight ounces. Then take two gallons of water and diſſolve it in four ounces of common ſalt; filter the whole, and put it into a clean earthen pan. Pour upon it the diſſolution of biſmuth, and immediately it will turn milky, and let fall a precipitate. Permit it to ſtand till ſettled, and by gentle inclination pour off the water from the magiſtery. Put on more freſh water, ſtir it well, and when well ſettled pour it off; and ſo continue the ablutions, till the magiſtery becomes inſipid; which dry gently, and keep for uſe.

This has the ſame virtue as the flowers, and is uſed only as a coſmetic. The veſſel in which the diſſolution is made, ought to be placed in a chimney, to avoid the fumes, which are very noxious and ſuffocating.

Flores Biſmuthi. Flowers of Biſmuth.

Beat biſmuth into a very fine powder, and to four ounces of it put half a pound of nitre, alſo in fine powder: put the mixture, by half a ſpoonful at a time, into an earthen body perforated in the ſide, and furniſhed with aludels: when the body is red hot, and the operation is over, take away the aludels, and ſweep off the flowers with a feather.

Theſe are very white, and uſed as an excellent fucus, mixed with pomatum, or roſe water: but they muſt not be too buſy with it, who try it upon their complexion; for it may do miſchief many ways.

BOOK IV.

Of Officinal Compoſitions.

HAVING already taken ſuch notice of the medicinal ſimples as concern them, either as they are diviſible into claſſes, correſponding in ſome common properties, and requiring particular management in preparation; or as they afford medicines of conſiderable efficacy from the chemical Pharmacy; we now come to inquire into the moſt advantageous way for managing them in compoſition, and how to procure more important effects from their united virtues, than could be well had from them when ſeparate. For medicinal compoſition is, or at leaſt ought to be, a contrivance to obtain ends from thoſe materials in conjunction, which cannot be anſwered to equal advantage from any of them ſingle: but for the very ſame reaſon we ought not to have recourſe to ſuch trouble, where, with equal certainty, an intention can be anſwered by a more ſimple procedure.

As to the advantages of compoſition in general, ſome carry their good opinion of it ſo far, as to contend for an additional efficacy thereby to the virtues of particular ſimples, which, without ſuch an union of them with others of ſimilar properties, would not be ſo ſtrongly exerted. Thus Diemerbroeck, in his notes upon the *Theriaca Andromachi*, frequently ſuggeſts, that the compoſition is not only a more efficacious medicine from the concurrent powers of ſo many ingredients, alike in virtue, but that the ſeveral ſimples contained therein, do, as it were, overact their parts, by a mutual emulation, which ſeparately, they would not be ſo provoked to do. Charas, on the ſame ſubject, inſinuates ſomething alſo of the like nature. But how much ſoever ſuch conceits may lie beyond the common way of judging concerning theſe things, yet thus far may eaſily be conceived, how by a regular and well-contrived compoſition, ſome intentions of moment may be anſwered much more effectually, and in ſome caſes with more ſafety, than from any ſimple medicine.

To obtain then the moſt important ends, and the greateſt advantages poſſible from compoſition, the following rules will appear abſolutely neceſſary to be particularly regarded.

1. That one main intention be purſued throughout the whole. To compound a medicine with ingredients of different virtues, in order to make it more extenſively uſeful, very much hazards its being good for nothing; both on account of that contrariety, or diſagreement in the things themſelves, which may very probably hurt or deſtroy one another whilſt in conjunction; and the different manner in which they may affect a conſtitution by their operation. So that where caſes are ſo complicated,

that

that more than one thing of moment is to be done, the means are much better ſought for in different medicines, than in any compound. And it hath been plainly owing to a neglect of this rule, that ſome of the old Diſpenſatories abound with compoſitions which contain ingredients, not only very remote in intention, but ſometimes even oppoſite, and repugnant in qualities to each other. And it is greatly to be feared, moſt of the more complex compoſitions are chargeable with this fault; that is, of aiming at too much in one thing. But this error is no where ſo remarkably fallen into, as in ſome of the old emplaſters, where we ſhall frequently meet with ingredients hot and cold, repellers and drawers, diſcuſſers and ſuppuratives together; as if the contrivers, in diffidence of what way an obſtructed matter might take to throw itſelf off, were reſolved to provide for it all ways; and ſo in reality made an application of what could do juſt nothing at all. The ſame bad way of judging likewiſe uſed to furniſh us with plenty of catholicons, and univerſal purgers, where the compoſition was deſigned to contain ſomething againſt all humours; but theſe are now juſtly come into neglect. All the true advantage then of compoſition, is to chooſe ſuch a ſet of ſimples, whoſe medicinal virtues do all ſo contribute to the ſame end, that in conjunction, they may be more likely to anſwer that end, than any of them ſingly could be expected to do. Thus out of thoſe fetid gums, for inſtance, which are generally preſcribed in hyſteric affections, *Ammoniacum*, *Galbanum*, *Opopanax*, or any three or four of them may be put together to advantage; becauſe every one of them ſingly might fail to reach the caſe in ſome particular conſtitutions, whereas thus in conjunction there is a much greater chance to ſucceed: and though the benefit may perhaps be aſſignable to ſome one, yet they all by a ſimilitude of qualities have their chance to be that one, and therefore the end is more likely to be anſwered. Thus likewiſe in ſtomachics, ſome variety of bitters and ſpices together, are, for the ſame reaſons, more likely to do ſervice, than any ſingle ingredient, not only from the greater chance of ſome one amongſt ſo many agreeing with a particular conſtitution, but from a concurrence of properties, all conſpiring to the ſame end. The ſame may be obſerved of pectorals, emollients, or compoſitions of any other view: but this by no means juſtifies mixing theſe different things one with another, though in caſes complicated enough to require more than one intention to be anſwered at a time. An hyſteric patient may want ſtomachics, as alſo one labouring with an aſthma, but bitters are not therefore to be joined with fetid gums in any one form; or with emollients, or pectorals. But both on account of neatneſs, and efficacy in every mixture, an uniformity of intention is beſt preſerved and complicated caſes are moſt conveniently provided for by different forms, exhibited at times leaſt interfering with one another.

7. Another thing worth our conſideration in compoſition is, that when a ſet of ſimples are choſen, agreeing in intention, too many of them be not crouded in together: a few of like efficacy may concur and aſſiſt each other in operation,

and anſwer with more certainty by ſome little varieties in the ſame qualities, extending the virtues of the whole farther than could be expected from either ſingly, as was before obſerved; but when a great many are crouded in, it is a great chance but ſome will rather prove clogs to the efficacies of others, than aſſiſtants to them; and a much greater hazard is riſqued of having in them ſomething diſagreeable to particular conſtitutions. Thus, for inſtance, in ſelecting a ſet of aromatics for a cordial, in a diſtilled water, or any other proper form, not only the utmoſt care is to be taken, that they be all of this claſs, but likewiſe, that they are the moſt fragrant, and the moſt ſuitable in all their qualities to this intention; as roſemary, marjoram, lavender, and a few more of like flavour and volatility: but if everything that claims a place in this rank from ſome one quality, was to be admitted, the compoſition, inſtead of obtaining an uniform, and an agreeable ſcent and taſte, would be confounded into a diſtaſteful and nauſeous medicine; for after all, thoſe which excel in any one particular property, moſt ſuitable to the main intention of the medicine, are choſen out; all additions afterwards cannot but make it worſe, either by ſubtracting from the efficacies of the better ſort, which then cannot be admitted in ſuch large proportions, or diſturbing their virtues and ſcents with thoſe not ſo agreeable. Herein alſo, many of the older compoſitions are very culpable, and thoſe chiefly which have been imported to us from foreign writers: for many of them, which well enough agree in uniformity of intention, do notwithſtanding take in ſuch a multitude of ingredients, that they are more troubleſome, more unpleaſant, and leſs efficacious, than if fewer of the ſame tribe only had been made uſe of.

But this fault of crouding too many ingredients into one compoſition, does not always ariſe from an injudicious fondneſs to enhance its virtues, by ſuch variety, but ſometimes alſo from a notion of reſtraining and qualifying the too powerful efficacies of ſome things, with others, which are commonly termed their correctors; and this cuſtom hath moſt obtained in cathartics. What we are ſtrictly and properly to underſtand by a corrector, as it relates to this claſs of medicines, may be pretty eaſily conceived, becauſe no more is meant by it, than reſtraining ſome things of too violent operation in themſelves, and cauſing them to work more mildly. Under ſome preparations of the chemical Pharmacy before taken notice of, under mercurials and ſaline cathartics, it was ſhewn, how this was done by leſſening their ſtimuli, only by comminution, as in repeated ſublimations; by triture, and firing ſpirit upon them; or, if they were of the reſinous kind, by dividing them with lixivious ſalts: but there is yet a farther way, which more ſtrictly anſwers the natural import of this word; and that is by a mixture of ſomewhat that makes their irritations either leſs in themſelves, or leſs ſenſible to the membranes; and this is commonly by a mixture of the warmer ſpices, eſpecially the ſeeds, or the eſſential oils drawn from them. How theſe materials anſwer this end, and obtain the name of correctors, may eaſily enough be conceived by the direct oppoſition of their

their manifeſt properties to thoſe of a ſharp cathartic; which by their ſoft, oily texture, are fitted to cover and leſſen the force of a ſtimulus. And upon the ſame foundation it is, that gruel and broths are directed in the operation of cathartics. But this neceſſary precaution by no means juſtifies loading a compoſition with too many things, under ſuch a notion, eſpecially where the effective ingredients are even in themſelves mild enough and require ſuch large quantities for a doſe, as to render them troubleſome to take. And this ſeems to be the reaſon, why many of the larger compound purging electuaries are rejected in the modern Diſpenſatories; and why thoſe which are ſtill retained are not often met with in preſcription; ſix drams, or an ounce of ſome of them, being requiſite for a doſe.

The foundation of mixing opiates with moſt alexipharmic compoſitions, the larger ones eſpecially, might take up a good deal of thought to inquire into; but leſt it ſhould be judged not ſtrictly a part of our preſent buſineſs, I ſhall only farther obſerve, that,

3. Another very material regard in compoſition is, that there be a natural fitneſs of every ingredient to that particular form it is to enter. A ſimilitude in their medicinal virtues only, is not ſufficient to juſtify the collection of ſimples into a compound, unleſs there be likewiſe a ſuitableneſs in their natural textures for like management, and to be preſerved together in the ſame forms. Thus in a cordial water, every aromatic hath not a right to be there as an ingredient, by virtue of that particular quality, without a ſuitableneſs in it, alſo from its natural texture, which diſpoſes it to give out its virtues that way to advantage; though there may be as few exceptions perhaps to this form, taken out of this claſs, as any; becauſe that very propriety which entitles them to the appellation of aromatics, furniſhes them with ſomething capable of being brought over in diſtillation; but when a ſpicy cordial flavour ariſes from ſubſtances which are tenacious, fat and oily, they are not fit for this form, becauſe they will ſend over what will make a water foul, turbid, and milky: ſo that gums and oily ſeeds are but ſparingly, if at all, to be received herein. And thus particular inſtances may be produced of the particular forms, into which all the ſimples of any one claſs are by no means reducible, on account of ſome natural unfitneſſes in their texture for ſuch forms. So that an uniformity and ſimilitude of texture, as well as of intention, is neceſſary to be obſerved in every compoſition. But the fitneſs or unfitneſs in this reſpect, will ſo eaſily appear from the things themſelves, as they occur in diſpenſation, that it is needleſs to enumerate more particular caſes here.

4. All compoſitions ought to be rendered as agreeable as poſſible to the ſight, ſmell, and taſte; and to be of efficacy enough to render a ſufficient quantity for a doſe, eaſily to be taken. Thus, in the liquid form eſpecially, every thing ought to be avoided that gives an unſightly colour, as green or black, as all alkalious ſubſtances mixed with red will occaſion. All fetid ſubſtances are likewiſe inconvenient herein, becauſe their ſcents are more diffuſed, and more perceived in taking, than in the dryer forms.

And

And all things very brackiſh and ſaline, for the ſame reaſons, are to be confined only to the drier forms, as the *Sal Succini*, *Ens Veneris*, and the like, becauſe they are very nauceous in liquid mixtures. But inſtances of all caſes neceſſary to direct us herein, will ſufficiently occur in paſſing thro' the ſeveral forms themſelves.

Thus much it hath been thought needful to obſerve concerning compoſition in general; what farther of conſequence requires our attention, ariſes upon its diviſion into officinal and extemporaneous compoſition.

The firſt of theſe we have recourſe to, either upon account of neceſſity, or convenience. Abundance of our materials are ſupplied only at certain ſeaſons of the year; all medicines therefore from that ſtock are ſo directed, that they may be made at thoſe ſeaſons, and preſerved in readineſs in the ſhops for preſent occaſions. Thus many of the waters, moſt of the ſyrups, all the conſerves, as likewiſe almoſt all the ointments and oils, are to be made only at the ſeaſons when their reſpective ingredients are to be had in greateſt perfection. So that one great end in officinal preſcription, that is, the compiling a ſet of rules, as a ſtandard for the ſhops to go by, is to take in all thoſe medical ſimples, which afford their virtues but at certain ſeaſons, or then to the greateſt advantage into ſome form or other, moſt ſuitable to their make or natural production. All that branch of Pharmacy, which is now got into the hands of the confectioners, hath been the reſult of this neceſſity. What the apothecaries yet retain from this foundation, as ſyrups and conſerves, are ſo neceſſarily clogged with ſugar in their keeping, that many of them grow into diſeſteem, as medicines of themſelves not to be truſted to; nevertheleſs they have their uſe, in giving to other forms the neceſſary conſiſtence, or as vehicles to more efficacious medicaments.

The other occaſions of officinal compoſition ariſing from convenience, furniſh us with all thoſe medicines which require much trouble and time to make; and the main end of ſuch contrivances, is to have in readineſs more efficacious remedies, than can be procured in that haſte in which many exigencies require them.

One of the moſt obvious regards then in ſuch campontions is, that nothing enter into them which is of itſelf ſoon liable to ſpoil, or to hurt other things with which it is put in company. Thus every thing apt to ferment, grow rancid, or mouldy, or any way indeed to deviate from its natural and acquired properties, ought not to come into this rank of medicines. There are many things alſo which require an higher conſiſtence for their preſervation, than is neceſſary to the ſame forms in extemporaneous practice. A neglect in both theſe reſpects is the cauſe, that ſometimes we meet with very bad medicines in the ſhops, which at firſt may have been made of very good materials. And theſe defects occur in nothing oftener than in the ſpecies Haly, *Diatragacanthi frigid* and the lenitive electuary, with ſome others of like make: the firſt ſpoil from the oilineſs of their ingredients, which will not ſuffer them to keep without growing rancid; and a want of a due conſiſtence, which is a fault in the maker only, and not the preſcriber,

though

though it ought to be looked after by the latter, is the reaſon why the others fall into fermentation, and are utterly ſpoiled thereby. The *Pilulæ Fœtida* is likewiſe an inſtance of a compoſition where things are put together which cannot keep long without growing mouldy. But how to avoid theſe faults, will more readily occur in examining ſome particular compoſitions.

But not only care is be taken, that in officinal compoſitions ſuch things be put together, as will keep in company, without loſing or changing their properties, but alſo, that they have a fitneſs in themſelves to preſerve an uniform conſiſtence: though an error in this reſpect can hardly be fallen into, unleſs in the larger electuaries, or confections, whereinto if ſome of the heavier ſpecies are ordered, and particularly the teſtaceous powders, with any liquor or moiſture not thick enough to ſuſpend them, they will fall to the bottom, and make the whole of a very unequal conſiſtence. The *Confectio de Hyacintho*, *Alkermes*, *Electuarium é Saſſafras*, with ſome others, have been chargeable with this fault; but the college have now avoided theſe inconveniencies, either by altering thoſe compoſitions, or expunging them.

In the laſt edition of the London Diſpenſatory, there are a few medicines, under the title of Infuſions, which cannot be ſuppoſed to ariſe from that of the aforementioned conſiderations, either of neceſſity or convenience, in having them ready, becauſe they may be made at all times, and will not keep; ſo that they muſt be made only when called for in extemporaneous practice. And therefore their preſcription in an officinal Diſpenſatory ſeems only to ſave the trouble of directing theſe ingredients ſeparately on all occaſions, as they are called for; and to give to every preſcriber a form, for what before was directed with much uncertainty. And as far as is conſiſtent with the diverſities of caſes, and circumſtances, ſuch ſtandards might be of uſe in other forms, which have not hitherto been made official. Quincy's Lectures, page 97—107

In this part are intended to be given all the compoſitions of the colleges of London and Edinburgh, according to their laſt amendment of their Diſpenſatories. Next will be collected many from Dr Bates's Pharmacopœia, and others. Some recipes alſo will be retained, that have fallen into diſregard; either through the difficulty of making, or their liableneſs to ſophiſtication, but are of uncommon efficacy; and likewiſe ſome inſerted, which may be preſumed worth bringing into the rank of officinal medicines, both upon account of their eaſy compoſition, convenient keeping, and their efficacy in many intentions of cure.

SECT.

SECT. I.

Of Waters, Spirits, and Eſſential Oils.

WATER, diſtilled over from certain plants, &c. by a boiling heat, becomes more or leſs impregnated with their flavour and virtue. The diſtillation is performed in the ſame kind of inſtruments as that of eſſential oils, and the diſtilled liquor owes the qualitirs it acquires, to a portion of the oil of the ſubject elevated and mingled with it.

The virtues capable of ariſing in this proceſs, are thoſe only which conſiſt in warmth, pungency, and ſmell or flavour; and hence ſuch ſubſtances as are eminently endued with theſe, are the proper ſubjects for diſtilled waters to be drawn from; ſuch are ſpices, warm ſeeds and berries, fragrant herbs, flowers, and fruits, and ſome of the acrid plants. Cathartic, emetic, aſtringent, bitter, ſweet, cooling, emollient, nutritious qualities, are in vain expected to come over the helm.

Some vegetable matters, even of the more odoriferous kind, undergo ſuch an alteration from the aqueous medium, and the degree of heat neceſſary in this operation, that though the ſubject loſes all its fragrance, yet the diſtilled liquor has little or nothing of it, but proves both in ſmell and taſte diſagreeable.

In order to collect the volatile virtues of theſe kinds of vegetables, the chemiſts have contrived another proceſs, which Boerhaave ſeems particularly fond of. The ſubject is included in proper veſſels, without any additional matter, and expoſed to a heat no greater than that of the ſummer's ſun: the vapour, which ariſes in this degree of warmth, and condenſes in the receiver, is ſuppoſed to contain the more fragrant, ſubtile, and aromatic parts of the plant; and to be in reality, the effluvia that would exhale from it in the open air, caught and collected by the means of art.

This proceſs however, is, upon trial, found defective; the liquors obtained by it proving greatly different in ſmell from the natural effluvia of the ſubject. And indeed the principle it is founded upon, appears to be erroneous: it is not the ſun's heat alone that raiſes and impregnates the air with the odorous effluvia of vegetables; this fluid itſelf, as a menſtruum, diſſolves and imbibes them. It is when the air is humid, not when it is warmeſt, that odoriferous herbs and flowers diffuſe their fragrance; exſiccated in a warm dry air, they in good meaſure retain the flavour which an humid one, though cool, would totally rob them of.

The natural effluvia of vegetables therefore, which may be looked upon as an infuſion of them made in air, may have very different

effects

effects from thoſe parts of them which are capable of being elevated in diſtillation. Thus, though the effluvia of poppies ſhould procure ſleep or bring on lethargic diſorders, and thoſe of the walnut tree bind the belly, (as they are reported to do) it is not to be expected that their diſtilled waters ſhould do the like. Lemery relates, from his own knowledge, that ſeveral perſons were purged, by ſtaying long in a room where damaſk roſes were drying; an effect daily experienced from aqueous infuſions of theſe flowers, but never from their diſtilled water.

Many have been of opinion, that diſtilled waters may be more and more impregnated with the virtues of the ſubject, and their ſtrength increaſed, to any aſſigned degree, by cohobation, that is, by rediſtilling them a number of times from freſh parcels of the plant. Experience, however, ſhews the contrary; a water ſkilfully drawn in the firſt diſtillation, proves on every repeated one, not ſtronger, but more diſagreeable. Aqueous liquors are not capable of imbibing above a certain quantity of the volatile oil of vegetables, and this they may be made to take up by one, as well as by any number of diſtillations: the oftener the proceſs is repeated, the ungrateful impreſſion which they generally receive from the fire even at the firſt time, becomes greater and greater. Thoſe plants which do not yield at firſt waters ſufficiently ſtrong, are not proper ſubjects for this proceſs, ſince their virtues may be obtained much more advantageouſly by others.

The wormwoods, the carduus, and the fumitory, are in no reſpect fitted for this management: as to the firſt, if they have any ſcent that will come over, is ſo much the worſe; becauſe they are to moſt very offenſive, eſpecially that of the common wormwood; and all of them have their medicinal virtues only in a bitter, earthy ſalt, that will not riſe in the ſtill, and is to be come at only by decoction. Celendine, parſley, and ſaxifrage, have nothing in them volatile to ſend over in diſtillation; but abound with a nitrous ſalt, that proves diuretic, when ordered in proper forms: and the plantane and oaks buds yield only a viſcid mucilaginous juice, which will afford nothing over the helm but an inſipid phlegm, that will ſoon mother and grow ropy. The ſame is chargeable upon the frogs ſpawn, ſuccory, and eye-bright, which likewiſe give over nothing diſcernible in a water: and what comes from fennel, ſoon grows rank, and is ſo ill ſcented as not to be endured; beſides its aptneſs to grow ropy. From flowers, as thoſe of oranges, camomile, roſemary, damaſk roſes, and elder, the moſt fragrant waters are procurable; but from the reſt very little of value. The citron peel alſo, among the fruits, makes a moſt delightful water; but neither raſpberries nor walnuts ſend over any thing that will ſmell, taſte, or keep.

It may indeed, in ſome caſes, with good reaſon, be required to have ſimple waters under the denomination of coolers, or ſuch as have no other property than being ſoft vehicles to other things; and theſe are beſt procured from inodorous or ſoft ſubſtances, as plantane, frogs ſpawn, and the like. And certainly a diſtilled water is more ſtrictly and ſimply elementary, and more a diluter than any other;

other; but it is almoſt impoſſible to keep theſe the year round, which can be had only from vegetables at certain ſeaſons; and therefore ſuch as are deſired for mere diluters, or coolers, may poſſibly be had freſher drawn, at any ſeaſon, from ſubſtances of like ſmoothneſs and texture. The ſimple waters indeed from the lighter ſcented plants, as baum, and the like, are very ſubject to the ſame decay; but that may in ſome meaſure be remedied by ſprinkling the green herb, before it is put into the ſtill, with a little ſpirit; which will be ſo far from a prejudice to the flavour of the water, that it will rather help and improve it.

Thoſe odorous ſimples, which are, ſingly, or in conjunction only with ſome ſpicy ingredient, moſt ſuitable in intention, drawn over with a fictitious ſpirit, or, as it now is commonly ordered, with French brandy, make, what are entitled in the ſhops, the leſſer compound waters, or ſpirits, diſtinguiſhed by the names of the things they come from; as the *Aqua Abſinthii*, and *Angelicæ minùs compoſita*, the *Spiritus Croci*, and the like; and this management admirably fits the finer ſcented plants, or any of the ſpecies; which may be ſo preſerved as high as a cordial can be taken; or diluted as low as any caſe can require in extemporaneous practice.

In this way of drawing off the more volatile and ſcented parts of many ſimples, ſome alſo afford a very good medicine in their reſiduum. Thus when the ſpirit of ſaffron is made, the remainder may be formed into an extract of great virtue and efficacy; not as a cordial, becauſe thoſe parts moſtly ariſe with the ſpirit; but as a moſt powerful detergent in icterical caſes, and all chronic affections, where the viſcera are foul. It may alſo be ordered to make the *Syrupus Croci* with this reſiduum; for thoſe who look upon it as a cordial in this form, uſe it to the worſt advantage poſſible; the very term of a cordial ſyrup almoſt implying an abſurdity; conſidering to how much better purpoſes things of that intention come into other forms. In the ſame manner, after the *Aqua Gentianæ compoſita* is come over, the reſiduum may as conveniently be exhaled into an extract, as if no diſtillation had been made; and in this laſt inſtance it is much to be queſtioned whether the reſiduum be not the better part on this account; for neither gentian nor centaury, though good ſtomachics in infuſion, ſeem fitted to ſend over the helm any thing valuable in that, or in any other intention. After the diſtillation likewiſe of the damaſk roſes (as was before obſerved on another occaſion) may the purging ſyrup be made of the reſiduum to the beſt advantage. Other extracts have been procured by the ſame good huſbandry in the old Diſpenſatories, with the *Reſidua* of the *Aqua Theriacalis*, *Aqua Bryoniæ compoſita*, &c. but the modern practice hath ſo much neglected them, that they are now come intirely into diſuſe.

The more compound waters we may diſtinguiſh into cephalics, or cordials, alexipharmics, carminatives, hyſterics and nephritics. Among the firſt, I reckon the *Spiritus Caſtorei*, *Croci*, and *Lavendulæ*; *Aqua Pæoniæ compoſita*, *Aqua Imperialis*, *Mirabilis*, *Stephani*, and the *Cinnamomi*. Under the ſecond diviſion,

diviſion, the *Aqua Epidemia*, *Theriacalis*, *Frotheriacalis*, and *Lectis Alexiteria*. Under the third, the *Aqua Abſinthii*, and *Angelicæ magis compoſita*, and the *Aqua florum Chamæmeli compoſita*. To the fourth belongs only the *Aqua Bryoniæ compoſita*; and to the laſt, the *Aqua Raphani* and *Aqua Nephritica*; the *Aqua Limacum* remaining under a different intention from them all, being deſigned for a reſtorative, or ſtrengthener; and the *Aqua Gentianæ*, and *Aqua Abſinthii minus compoſita*, for ſtomachics.

As this claſs of medicines ſtands thus ranged under ſome common intention, we ſhall be the better able to obſerve the ſuitableneſs of their reſpective ingredients to the main deſign of each compoſition.

Under the firſt diviſion, in the ſpirit of lavender, the *Matricaria* is too fetid a plant, and much better fits the *Aqua Bryoniæ*, wherein it is an ingredient; all the other ingredients that are ordered in diſtillation ſuiting well enough to the whole, or doing no harm; for in diſtillation an inſipid ingredient, as ſome of theſe nearly are, will not hinder the aſcent of thoſe which afford ſomething of efficacy; whereas it is quite otherwiſe in tincture, becauſe then they do miſchief by helping to load the menſtruum, and render it leſs able to take up parts which would be of conſequence: and thus the red ſaunders and red roſe leaves would hardly be worth putting into the ſecond proceſs of this medicine, were it not for the tincture that is expected from them; but eſpecially the ſaunders, to which it owes a moſt beautiful colour. The ſpirit of caſtor is very remarkable for the exact agreement of its ingredients in every reſpect; but it is attended with an inconvenience common to all ſpirituous tinctures loaded with ſuch ſubſtances, of changing milky when diluted for taking. The *Aqua Pæoniæ compoſita* hath ſome ingredients in it of little or no efficacy to the main purpoſe, and others entirely unfit for this form: of the firſt are the *Radix Dictamni albi*, and *Ariſtolochiæ longæ*; neither of which will ſend any thing diſcernible over the helm. The *Semina Pæoniæ*, and *Viſcus Quercus* likewiſe, however agreeable they may be to this intention in other forms, will not ſend out any thing of that kind by diſtillation. The ſeeds will make well enough into an emulſion, when huſked, and the miſletoe is beſt reduced into a powder; but huſking the ſeeds to be diſtilled, were they proper for it, is a circumſtance very trifling. The caſtor is here increaſed in its quantity to what it was before, but although it may be the moſt conſiderable ingredient in the whole for the main intention, yet the more it ſends over the helm, the more will it deform the water with a milkineſs and diſagreeable ſcent; and therefore it is much better contrived into other forms, though in the quantity it now ſtands here, it is too little to do much harm in this reſpect; ſo that this water in the main is pleaſant enough, and now obtains in common preſcription beyond any other of the ſame rank.

The *Aqua Imperialis* is very uniform, both in the virtues of its ingredients, and their fitneſs for diſtillation: but ſome of the oily ſpices, as the nutmegs and cloves, are in ſuch large quantities, that the common way of drawing by the hot ſtill make it come over very

very foul and milky; however, this happens to be ſo ſeldom preſcribed, that it is rarely to be met with in the ſhops.

The *Aqua Mirabilis* is unexceptionable, unleſs in regard to the large quantities of its oily ſpices; and the *Succus Chelidonii*, which ſeems to contribute ſo little to it, that very few give themſelves the trouble to put it in.

The *Aqua Stephani* is in a leſs degree culpable in this reſpect, ſo that it makes a very agreeable cordial; but the penny-royal is no advantage to it, the fetidneſs of that better ſuiting it for an hyſteric in the *Aqua Bryoniæ comp.*

The *Aqua Epidemia* takes in many things for which it is not much, if at all, the better; as the celandine, agrimony, carduus, centaury, betony, and gentian root; and indeed the whole is by many not ſo well eſteemed as the foregoing, either for its uniformity of intention, or efficacy.

The juices of walnuts, carduus, and marigolds, are reckoned to contribute but little to the *Aqua Theriacalis*. The reſt of the ingredients agree in every reſpect; and the diſtilled vinegar, as ordered to be put in, is a very great improvement of the medicine.

The *Aqua Protheriacalis* is ſo ſeldom made or preſcribed, that we need not be very careful about it; though it hath ſome ingredients for which it is little the better; as the ſcabius, carduus, and goats rue.

The *Aqua Lactis alexiter*, is likewiſe chargeable with redundancy in the carduus, goats rue, and meadow-ſweet; unleſs it is deſigned as an inſipid, and for the ſame purpoſe as was taken notice of concerning ſome ſimple waters from plantane, frogs-ſpawn, and the like; but then the wormwood, rue, and other ingredients would be blameable, and its title Alexiterial would be wrong.

Amongſt the carminatives, the *Aqua Abſinthii* and *Angelicæ magis compoſita* are ſufficiently uniform in their intentions, but have too many of the oily ſeeds to let it come over fine, eſpecially the latter; and they are neither of them much preſcribed or made. The *Aqua Florum Chamæmeli compoſita* would be a much more pleaſant medicine, were the common wormwood and penny-royal omitted; becauſe they both ſend over an ungrateful flavour.

The *Aqua Bryoniæ compoſita* takes in ſome of the moſt efficacious of the fetid ſimples, and ſeems admirably well contrived for the intention of an hyſteric, ſo far as their virtues are procurable this way: but they who would have it good, muſt expect it very foul and milky; for where it is otherwiſe, either it has been defrauded of its due quantity of the beſt ingredients, or their better parts have been precipitated with alum, or taken out with the filtre.

The *Aqua Raphani compoſita* aims at the intention of a diuretic; but will, if good, be attended with the like foulneſs as the former. The ſame alſo happens to the *Aqua Nephritica*, from the quantity of nutmegs in it.

The *Aqua Limacum tenuis* conſiſts ſo much of mucilaginous ingredients, that what comes over ſoon grows ropy and ſour, eſpecially in warm weather; and the quantity of Canary directed in the *Aqua Limacum fortis*, will not without good care preſerve it from the ſame inconvenience; ſo that all of this intention

intention are much better directed in extemporaneous preſcription, not only on account of having them freſh, but alſo better ſuited to the circumſtances of particular caſes, which frequently vary in the patients requiring them.

If we conſider the wormwood and gentian waters as ſtomachics, little can be expected from them; becauſe the materials they are drawn from are not ſuited to ſend any thing over by diſtillation, that comes within this intention: ſo that if there be any thing good in them, we are more beholden to the ſpirit than the ingredients for it. After the gentian water is drawn, the extract is eaſily made from its reſiduum, as hath been already obſerved.

Amongſt the *Aquæ Medicamentoſæ*, the Sapphirina is moſt in uſe as a collyrium, and remarkable chiefly for its beautiful colour. The *Aqua Aluminoſa* is uſed chiefly as a lotion in cutaneous foulneſſes; but it is ſeldom preſcribed.

N. B. The ſenſe of the word *ſimple*, when applied to diſtilled waters, in the London Diſpenſatory, means ſuch as are diſtilled with water only, in oppoſition to thoſe waters that are diſtilled with ſpirit, and are called ſpirituous diſtilled waters. In the Edinburgh Diſpenſatory, it ſignifies ſuch as have one ſimple, or ingredient, for their ſubject, in contradiſtinction to thoſe that are drawn from two or more. This is evident in the inſtance of the *Aqua Alexiteria*, which, though conſiſting of ſeveral ingredients, is called, in the London Diſpenſatory, a ſimple water; and though drawn without ſpirit, obtains in the Edinburgh Diſpenſatory the name of a compound water.

Rules to be obſerved in making Simple Waters.

I. The ſeveral plants, or parts of plants, ought to be freſh gathered.

II. Having bruiſed the plants, pour on them thrice their quantity of ſpring-water. Such as are either dry or ſucculent in an extraordinary degree, require a greater or leſſer proportion. The diſtillation may be performed in an alembic with a refrigeratory (the junctures being luted), and continued as long as the water, which comes over, has any ſmell or taſte of the plant, care being always taken to avoid an empyreuma.

III. If any drops of oil ſwim on the ſurface of the waters, they ought to be carefully taken off.

IV. That ſimple waters may keep longer, about one twentieth part of proof ſpirit may be added to them after they are diſtilled.

V. The herbs, if they are of prime goodneſs, are to be taken in the weights directed for each. Where green are preſcribed, ſuch are to be uſed. But in ſome of the waters, dry herbs are allowed, becauſe they are to be had at all times of the year; the green plants, or ſuch as are but newly dried, afford rather the more elegant waters. The weights here directed ſhould be varied by the judgment of the operator, not only when green are uſed inſtead of dry, but whenever the plants by a leſs favourable ſeaſon are weaker in flavour.

L. D. *Aqua Alexiteria ſimplex.*
Simple Alexiterial Water.

Take of ſpearmint leaves, freſh, a pound and a half; ſea wormwood tops, freſh, angelica leaves, freſh, each one pound; water, as much as is ſufficient to prevent an empyreuma. Draw off by diſtillation three gallons.

Or, according to the late Edinburgh Diſpenſatory,

Take of elder flowers, moderately dried, two pounds; angelica leaves, freſh, one pound; water, *q. ſ.*

Theſe waters, particularly the firſt, are ſufficiently elegant with regard to taſte and ſmell; though few expect from them ſuch virtues as their title ſeems to imply. They are uſed occaſionally for vehicles of alexipharmic medicines, or in juleps to be drank after them, as coinciding with the intention; but in general are not ſuppoſed to be themſelves of any conſiderable efficacy.

L. D. *Aqua Seminum Anethi.*
Dill Seed Water.

Take of dill ſeeds, a pound and a half; water, as much as is ſufficient to prevent an empyreuma. Draw off by diſtillation one gallon.

This water, which turns out pretty ſtrong of the dill ſeeds, is ſometimes employed as the baſis of carminative juleps. It is ſimilar in flavour to a water drawn from caraway ſeeds, but leſs agreeable.

E. D. *Aqua Seminum Anethi Simplex.*
Simple Water of Dill Seed.

To a pound of dill ſeed, add as much water as is neceſſary to draw off a gallon, and enough to remain that an empyreuma may be prevented. After the needful maceration draw off a gallon.

In the ſame manner is prepared a gallon of ſimple water from cinnamon, half a pound; leaves of peppermint, a pound and a half; penny-royal, a pound and a half; Paſqua flower, with the leaves and flowers, two pounds; Jamaica pepper, half a pound, and damaſk roſes, ſix pounds.

L. D. *Aqua Corticum Aurantiorum ſimplex.*
Simple Orange Peel Water.

Take of yellow peel of Seville oranges, dried, four ounces; water, as much as is ſufficient to prevent burning. Diſtil off one gallon.

This water proves very weak of the orange peel. It is deſigned for a diluter, in fevers, and other diſorders where the ſtomach and palate are ſubject to receive quick diſguſt; in which caſes (as the committee obſerve) cordial waters, eſpecially if their uſe is to be long continued, ought to be but lightly impregnated with any flavour, however agreeable.

L. D. *Aqua Caſtorei.* Caſtor Water.

Take of Ruſſia caſtor, one ounce; water, as much as will prevent burning. Draw off two pints.

Caſtor yields almoſt all its flavour in diſtillation to water; but treated in the ſame manner with ſpirit of wine, gives over nothing. The ſpirit of caſtor formerly kept in the ſhops, had none of the ſmell or virtues of the drug; whilſt the water here directed proves, when freſh drawn, very ſtrong of it.

It is remarkable, that the virtues of this animal ſubſtance reſide in a volatile oil, analagous to the eſſential oils of vegetables: ſome

ſome are reported to have obtained, in diſtilling large quantities of the drug, a ſmall portion of oil which ſmelt extremely ſtrong of the caſtor, and diffuſed its ungrateful ſcent to a great diſtance.

This water is made uſe of in hyſteric caſes, and ſome nervous complaints; though it has not been found to anſwer what many people expect from it: it loſes greatly of its flavour in keeping.

Aqua Ceraſorum Nigrorum.
Black Cherry Water.

Let any quantity of black cherries be bruiſed, ſo as that the ſtones may be broken; and then diſtilled, according to art, with only a ſmall proportion of water.

This is a very grateful water, and has long maintained a place in the ſhops. It has frequently been employed by phyſicians as a vehicle, in preference to the other diſtilled waters; and among nurſes, and others who have the care of young children, has been the firſt remedy againſt the convulſive diſorders to which children are ſo often ſubject.

This water has nevertheleſs of late been brought into diſrepute, and by ſome looked upon as poiſonous. They obſerve, that it receives its flavour principally from the cherry ſtones; and that theſe kernels, like many others, bear a reſemblance and taſte of the leaves of the lauro-ceraſus, which have ſome time paſt been diſcovered to yield, by infuſion or diſtillation, the moſt ſudden poiſon known. Some phyſicians of Worceſter have lately found, by trial purpoſely made, that a diſtilled water very ſtrongly impregnated with the flavour of the cherry kernels (no more than two pints being diſtilled from fourteen pounds of the cherry ſtones) proved in like manner poiſonous to brutes: the committee of the London college repeated the ſame experiment, and found the effects agreeable to thoſe gentlemen's report.

It by no means follows from theſe trials, nor after ſuch long experience can it be imagined, that black cherry water, when no ſtronger than the ſhops have been accuſtomed to prepare it, is unſafe. Theſe kernels, as the committee obſerve, plainly reſemble opium, and ſome other things, which poiſon only in too great quantity; the water from the very laurel leaves is harmleſs when duly diluted.

It is poſſible, however, that this water in any degree of ſtrength may not be altogether ſafe in the tender age of infants, where the principles of life are but juſt beginning as it were to move: it is poſſible, that it may here have had pernicious effects, without being ſuſpected; the ſymptoms it would produce, if it ſhould prove hurtful, being ſuch as children are often thrown into from the diſeaſe which it is imagined to relieve.

L. D. *Aqua Cinnamomi ſimplex.*
Simple Cinnamon Water.

Take of cinnamon, one pound; water, as much as will prevent burning. Diſtil off a gallon.

The virtues of all theſe waters depend upon their containing a portion of the oil of the ſubject. The oil of cinnamon is extremely ponerous, and ariſes more difficultly than that of any of the other vegetable matters from which ſimple waters are ordered to be drawn. This obſervation directs us, in the diſtillation of this water, to make

uſe of a quick fire, and a low veſſel. For the ſame reaſon, the water does not keep ſo well as might be wiſhed; the ponderous oil parting from it in time, and falling to the bottom, when the liquor loſes its milky hue, its fragrant ſmell, and aromatic taſte. Some recommend a ſmall proportion of ſugar to be added, in order to keep the oil united with the water.

L. D. *Aqua Fœniculi.*
Fennel Water.

Take of ſweet fennel ſeeds, one pound; water, as much as is ſufficient to prevent an empyreuma. Diſtil off one gallon.

L. D. *Aqua Menthæ vulgaris ſimplex.*
Simple Spearmint Water.

Take of ſpearmint leaves, dried, a pound and a half; water, as much as is ſufficient to prevent burning. Draw off by diſtillation one gallon.

Theſe waters ſmell and taſte very ſtrong of the mint; and prove in many caſes an uſeful ſtomachic. Boerhaave commends them (cohobated) as a preſent and incomparable remedy for ſtrengthening a weak ſtomach, and curing vomiting proceeding from cold viſcous phlegm; as alſo in lienteries.

L. D. *Aqua Menthæ Piperitidis ſimplex.*
Simple Pepper-mint Water.

Take of pepper-mint leaves, dry, a pound and a half; water, as much as will prevent an empyreuma. Draw off by diſtillation one gallon.

This is a very elegant and uſeful water: it has a warm pungent taſte, exactly reſembling that of the pepper-mint itſelf. A ſpoonful, or two, taken at a time, warm the ſtomach, and give great relief in cold, flatulent colics. Some have ſubſtituted a plain infuſion of the leaves, which is not greatly different from the diſtilled water.

L. D. *Aqua Piperis Jamaicenſis.*
Water of Jamaica Pepper.

Take of Jamaica pepper, half a pound; water, as much as will prevent burning. Diſtil off one gallon.

This is the only officinal preparation, in which Jamaica pepper is an ingredient. The diſtilled water is a very elegant one, and has of late come pretty much into uſe: the hoſpitals employ it as a ſuccedaneum to the more coſtly ſpice waters.

L. D. *Aqua Pulegii ſimplex.*
Simple Penny-Royal Water.

Take of penny-royal leaves, dry, a pound and a half; water, as much as will prevent burning. Draw off by diſtillation one gallon.

This water poſſeſſes in a conſiderable degree, the ſmell, taſte, and virtues of the penny-royal. It is frequently taken in hyſteric caſes, and not without good effects.

L. D. *Aqua Roſarum Damaſcenarum.*
Damaſk Roſe Water.

Take of damaſk roſes, freſh gathered, ſix pounds; water, as much, as will keep them from burning. Diſtil off a gallon of the water.

This water is principally valued on account of its fine flavour, which approaches to that generally admired in the roſe itſelf.

Former

Former Simple Waters of the College.

From the Leaves and Buds of

Both the wormwoods, angelica, carduus B. ſuccory, the greater celandine, eyebright, fennel, fumitory, hyſſop, marjoram, baum, mint, parſley, plantane, penny-royal, oak, rue, ſaxifrage, and meadow-ſweet.

From the Flowers of

Oranges, camomile, beans, lilies of the valley, red poppies, cowſlips, piony, roſemary, white, red, and damaſk roſes, elder, and limes.

From the Fruits of

Citron (the peel), raſpberries, green walnuts, and black cherries: from twelve pounds of the latter of which, bruiſed with the ſtones, draw one gallon.

From an Animal.

Frogs-Spawn.

Here a very great reduction is made of the ſimple waters, with which the Diſpenſatories formerly abounded; and certainly with good reaſon; becauſe there were not only many before ordered of no efficacy, but likewiſe they were ſo numerous, that a great deal of needleſs trouble and expence were employed to keep them all in readineſs. It may poſſibly be diſputed, whether thoſe now retained, are of importance or efficacy enough to deſerve it; but it is to be remembered, that very little dependence is had upon any ſimple water; they being ſeldom uſed but as vehicles to things of greater virtue; and in many circumſtances a vehicle is ſo much the better, for being deſtitute of any medicinal flavour or taſte, as it the more gratefully conveys down what the greateſt ſtreſs is laid upon. But here it may not be amiſs to advertiſe the reader, that whatſoever properties any ſimple has in the groſſer or more ſolid of its parts, where it acts as an emetic, cathartic, or aſtringent; the reſiduum, which is left after diſtillation, will remain in full poſſeſſion of them; and therefore the operator may huſband it accordingly.

Of theſe waters, though they all bring over ſomething beſides phlegm, as is manifeſt from the ſmell and taſte of the reſpective ſimples whence they are drawn; yet it is ſo faint in ſome of them, that they will not keep long without mothering and growing ropy. Such therefore ſhould have a ſmall quantity of ſpirit thrown into the ſtill with them; about one pint to each gallon intended to be drawn; which will not alter the virtues, but make the water keep much longer. The waters, whoſe excellency conſiſts in their flavour, as the orange-flower and damaſk-roſe waters, ought to be drawn into a receiver fitted to the worm with a bladder, as before directed under the Preparation of Simples; ſo that no particles may exhale and be loſt. As for the red and white-roſe waters, which are expected in the ſhops, they are very honeſtly deceived, who have damaſk-roſe water diluted, put upon them for the other; becauſe there is nothing riſes from either in the ſtill, but what is common to them all; which is in the ſcent: and therefore, as the damaſk moſt abounds with that, it is very imprudent and ill huſbandry to diſtil the other; although the reſiduums are as different as can be; that of the damaſk being purgative, and that of the red aſtringent, as was before obſerved.

Spirituous Waters of the London *and* Edinburgh *Pharmacopœias.*

L. D. *Aqua Alexiteria ſpirituoſa.*
Spirituous Alexiterial Water.

Take of ſpearmint leaves, freſh, half a pound; angelica leaves, freſh, ſea wormwood tops, freſh, each four ounces; proof ſpirit, one gallon; water as much as will prevent burning. Diſtil off one gallon.

This is a tolerable pleaſant water; it is looked upon as an alexipharmic and ſtomachic, and in theſe intentions is not unfrequently made uſe of in juleps, &c.

L. D. *Aqua Alexiteria ſpirituoſa cum Aceto.*
Spirituous Alexiterial Water with Vinegar.

Take of ſpearmint leaves, angelica leaves, each half a pound; ſea wormwood tops, four ounces; proof ſpirit, one gallon; water, as much as is ſufficient to prevent burning; vinegar one pint.

Diſtil the freſh herbs with the ſpirit and water, drawing off one gallon; and add to this the vinegar.

Perhaps it would be more eligible to add the vinegar occaſionally; for when mixed with the liquor at firſt, it is apt to throw down, upon keeping, ſome of the more valuable parts which the water received from the herbs. This water is given inſtead of the *Aqua Theriacalis* or treacle water.

L. D. *Aqua Seminum Aniſi compoſita.*
Compound Aniſeed Water.

Take of aniſe ſeeds, angelica ſeeds, each half a pound; proof ſpirit, one gallon; water, as much as is ſufficient to prevent burning. Draw off by diſtillation one gallon.

This is a very elegant aniſe ſeed water, the angelica ſeeds greatly improving the flavour of the aniſe; it is apt to turn out milky, if drawn ſo low as here ordered.

L. D. *Aqua Corticum Aurantiorum ſpirituoſa.*
Spirituous Orange Peel Water.

Take of outer rind of Seville orange peel, dried, half a pound; proof ſpirit, one gallon; water, as much as is ſufficient to prevent an empyreuma. Diſtil off one gallon.

This is conſiderably ſtronger of the orange peel than the ſimple water. It is uſed as a cordial, ſtomachic, and carminative.

L. D. *Aqua Seminum Cardamomi.*
Cardamom Seed Water.

Take of leſſer cardamom ſeeds, freed from the huſks, four ounces; proof ſpirit, one gallon; water, as much as is ſufficient ro prevent burning. Diſtil off one gallon.

This water is a grateful cordial and carminative, the cardamom ſeeds giving over in this proceſs the whole of their flavour. It is not perhaps very neceſſary to be at the trouble of ſeparating the huſk, for theſe communicate nothing diſagreeable: if employed unhuſked, a proportionably larger quantity of them muſt be taken.

L. D. *Aqua Seminum Carui.*
Caraway Water.

Take of caraway ſeeds, half a pound;

pound; proof ſpirit, one gallon; water, as much as will prevent burning. Diſtil off one gallon.

This is a cordial in common uſe: it contains the flavour of the caraway ſeeds in perfection.

E. D. *Aqua Carui Spirituoſa.*
Spirituous Caraway Water.

Take of carui ſeeds, half a pound; proof ſpirit, a gallon, macerate two days in a cloſe veſſel; then add water enough to prevent an empyreuma, and ſo draw off a gallon.

In the ſame manner is prepared a gallon of ſpirituous water, from cinnamon, half a pound; pepper-mint, a pound and half; nutmegs well bruiſed, two ounces; and Jamaica pepper, half a pound.

L. D. *Aqua Cinnamomi ſpirituoſa.*
Spirituous Cinnamon Water.

Take of cinnamon, a pound; proof ſpirit, a gallon; water, ſo much as will prevent burning. Draw off by diſtillation one gallon.

The author of the *Pharmacopœia reformata* propoſes making this water by mixing the *aqua cinnamomi ſimplex* with ſomewhat leſs than an equal quantity of rectified ſpirit: on ſhaking them together, the liquor loſes its milky hue, ſoon becomes clear, and more elegant than the water diſtilled as above: it is equally ſtrong of the cinnamon, and free from the nauſeous taint which the common proof ſpirits are impregnated with.

L. & E. *Aqua Juniperi compoſita.*
Compound Juniper Water.

Take of juniper berries, one pound; ſweet fennel ſeeds, caraway ſeeds, each an ounce and a half; proof ſpirit, one gallon; water, as much as is ſufficient to prevent burning. Diſtil off one gallon.

This water, mixed with about an equal quantity of the rob of juniper berries, proves an uſeful medicine in catarrhs, debility of the ſtomach and inteſtines, and difficulty of urine. The water by itſelf is a good cordial and carminative.

L. D. *Aqua Menthæ Piperitidis ſpirituoſa.*
Spirituous Pepper-mint Water.

Take of pepper-mint leaves, dry; a pound and a half; proof ſpirit, a gallon; water, as much as is ſufficient to prevent an empyreuma. Draw off by diſtillation one gallon.

This water is made uſe of in flatulent colics and other like diſorders; in which it oftentimes gives immediate relief. It is not near ſo ſtrong of the pepper mint as the ſimple water, though the ſame quantity of the herb is employed in both.

L. D. *Aqua Menthæ Vulgaris ſpirituoſa.*
Spirituous Spearmint Water.

Take of ſpearmint leaves, dry, a pound and a half; proof ſpirit, a gallon; water, as much as will prevent burning. Diſtil off one gallon.

This water is alſo conſiderably weaker of the mint than the ſimple water: nevertheleſs, if the ſpirit be good, the medicine turns out a very elegant one, and preferable, in weakneſs of the ſtomach, reaching to vomit, and the like, to many more elaborate preparations.

L. D. *Aqua Nucis Moſchatæ.*
Nutmeg Water.

Take of nutmegs, two ounces; proof ſpirit, a gallon; water, as much as will prevent burning. Draw off by diſtillation one gallon.

This water (with the addition only of ſome hawthorn flowers, an article of very little ſignificance) was formerly celebrated in nephritic diſorders, under the name of *Aqua Nephritica.* At preſent, it is regarded only as an agreeable ſpirituous liquor, lightly impregnated with the nutmeg flavour.

L. D. *Aqua Pulegii ſpirituoſa.*
Spirituous Penny-royal Water.

Take of penny-royal leaves, dry, a pound and a half; proof ſpirit, a gallon; water, as much as will prevent burning. Diſtil off one gallon.

This water has a good ſhare of the flavour of the penny-royal, and is pretty much in uſe as a carminative and antihyſteric.

L. D. *Aqua Raphani compoſita.*
Compound Horſe-Radiſh Water.

Take of garden ſcurvy graſs leaves, freſh, four pounds; horſe-radiſh root, freſh, orange peel, freſh, each two pounds; nutmegs, nine ounces; proof ſpirit two gallons; water, a ſufficient quantity to prevent burning. Draw off by diſtillation two gallons.

E. D. Take of horſe-radiſh, freſh, three pounds; rectified ſpirit of wine, four pounds: diſtil in the heat of boiling water, and draw off four pounds; to which add of the ſimple Jamaica pepper water, eight pounds.

Both theſe waters are very elegant ones, and as well adapted for the purpoſes of an antiſcorbutic, as any thing that can well be contrived in this form.

Aqua Aromatica vulgo Mirabilis.
Aromatic Water.

Take of cinnamon, two ounces; of freſh lemon peel, and angelica ſeeds, each one ounce; of mace, half an ounce; pepper-mint, three ounces; French brandy, a gallon. Digeſt for two days, and draw off by diſtillation a gallon.

This is a very pleaſant and elegant water; it is warm, cordial, and carminative, and ſeldom fails of relieving in languors, flatulencies, and colicy pains.

Aqua Epidemia.
Plague Water.

Take of maſterwort roots, a pound and a half; of angelica ſeeds and elder flowers, each half a pound; of French brandy, three gallons: let them digeſt two days, and draw off by diſtillation two gallons and a half, add to the diſtilled liquor two quarts of diſtilled vinegar.

This water is inſtead of the *Aqua Theriacalis* in the former Edinburgh Diſpenſatory, and very well adapted for putrid malignant fevers.

Compound Valerian Water.

Take of wild valerian root, a pound and a half; of lovage ſeed, half a pound; of penny-royal leaves, four ounces; of the tops of ſavine, two ounces; of French brandy, two gallons: digeſt for two days, and draw off by diſtillation two gallons of water. This is inſtead of the ancient bryony water; it is leſs diſagreeable and a better antihyſteric.

E. D. General Rules to be obſerved in diſtilling Compound Waters.

I. The herbs, or parts of herbs, ſhould be moderately dried near the time they are uſed; except thoſe which are expreſly preſcribed green.

II.

II. After the requiſite infuſion, a quantity of water, ſufficient to prevent an empyreuma, or even more, ſhould be added.

III. It is not neceſſary that the time of diſtillation be determined by the drawing off a quantity equal to the ſpirit employed, but it may be advantageouſly continued, as long as the water diſtilled appears clear.

IV. The fluid which firſt comes over, is by ſome kept ſeparate, under the name of ſpirit; and the other part artificially freed from its whiteneſs; but it is better to mix them all together, without any depuration, that the waters may contain all the virtues of the plants; the clearneſs and beauty being leſſer conſiderations.

Compound Waters of the former Diſpenſatory of the College of London.

Aqua Abſinthii minus compoſita.
The leſſer Compoſition of Wormwood Water.

Take of the leaves of dried wormwood, two pounds; of the leſſer cardamom ſeeds, two ounces; and of coriander ſeeds, half a pound. Infuſe them all in four gallons of French brandy, and draw off the ſame quantity by diſtillation.

After the ſame manner, omitting the ſeeds, may be made the ſpirit of any medicinal plant whatſoever, that it is thought proper for ſuch management. This indeed is commonly uſed in ſtomachic infuſions, on a ſuppoſition that it claims a right to ſuch virtues from the wormwood; but the water riſing from it, partakes not of thoſe qualities which belong to it in tincture, ſo that it ſeems only to be carminative from the ſpice and ſeeds now ordered in it.

Aqua Abſinthii magis compoſita.
The greater Compoſition of Wormwood Water.

Take of common wormwood and that of the ſea, dried, each one pound; of ſage, mint, and baum, dried, ana two handfuls; of the roots of galangal, ginger, *calamus aromaticus*, and elecampane, of the ſeeds of ſweet fennel and coriander, each three drachms; cinnamon, cloves, and nutmegs, ana two drachms; of the leſſer cardamoms and cubebs, ana two drachms. Cut and bruiſe the ingredients as they require; and after ſome time infuſing of them in twelve pounds of French brandy, draw off the ſame quantity by diſtillation.

Aqua Angelicæ magis compoſita.
The greater Compoſition of Angelica Water.

Take of angelica root, and the leaves of carduus, ana ſix ounces; of baum and ſage, ana four ounces; of angelica ſeeds, ſix ounces; and of ſweet fennel ſeeds, nine ounces. Let the dried herbs and ſeeds be groſly bruiſed; and add to them of cinnamon two drachms; of cloves and mace, ana one drachm and a half; of nutmegs, and the leſſer cardamom ſeeds, ana one drachm; of cubebs and galangal root, ana one drachm and an half; of Jamaica pepper and ſaffron, ana one drachm. Infuſe them in two gallons of French brandy, and draw off as much by diſtillation.

In this are rejected the *Species Diamoſcu dulcis*, and *Aromaticum Roſatum*, that were in the former; but in this the carduus avails nothing,

thing, and the ſweet fennel ſeed is in too great a quantity: which will make the water foul and milky.

Aqua Bryoniæ comp.
Compound Bryony Water.

Take juice of bryony roots, four pounds; the leaves of rue and mugwort, ana two pounds; ſavin, three handfuls; feverfew, catmint, penny-royal, ana two handfuls; baſil, dittany of Crete, ana one handful and a half; orange-peels, four ounces; myrrh, two ounces; Ruſſia caſtor, one ounce; French brandy, eight pounds; diſtil twelve pounds after proper maceration; for the longer things of this kind infuſe together, the better is the water.

If this water be drawn too low, the oily parts of the ingredients will make it milky and foul; which ſome throw down with a little burnt alum; but that ſpoils the medicine: and therefore it is better kept white as it is: this is a very unpleaſant compoſition, and of very little efficacy in hyſterical caſes, notwithſtanding it has been highly extolled.

Aqua Flor. Chamæmeli compoſita.
Compound Camomile Flower Water.

Take of dried camomile flowers, one pound; of the outer peel of oranges, two ounces; of the leaves of common wormwood and penny-royal, ana two handfuls; of the ſeeds of aniſe, cummin, and ſweet fennel, of the berries of bay and juniper, each one ounce: infuſe them in one gallon of French brandy, and draw off double that quantity by diſtillation.

This is taken, with ſmall variation, from Bates, and is well calculated for a carminative.

Aqua Mirabilis.
The Wonderful Water.

Take of cloves, galangal, cubebs, mace, the leſſer cardamoms, nutmeg, and ginger, ana one drachm; juice of the greater celandine, half a pound; French brandy, two pounds and a half; digeſt together for twenty-four hours; and then diſtil off two pounds and a half.

The *Aqua Mirabilis* of the former edition of the Edinburgh Diſpenſatory ſeems much better contrived than this; and is ordered as follows.

Take of the leſſer cardamoms, cloves, cubebs, galangal, mace, nutmeg, and ginger, each one drachm; the yellow part of citron peel, and cinnamon, each three drachms; leaves of baum, three ounces: bruiſe them together, digeſt them with three pints of French brandy; and draw off the like quantity by diſtillation.

The juice of celandine has nothing to do in this compoſition; for its parts will afford nothing more than common water. It is generally dulcified with loaf-ſugar at pleaſure. If it be drawn low, the oily part of the ſpices will ſhow themſelves in a milky cloud, and render it unſightly. It is beſt therefore not to draw it lower than will keep its tranſparency.; and it will then be enough ſated with the ſpices. What runs afterwards will make an excellent carminative water; which may be preſerved under that title. Some who draw it lower, fine it with alum; but that throws down the beſt part of the ingredients, and leaves the

water

water much worſe. Great age will make it fall without any ſuch help; or it may be filtered out; which is the better way of the two. It is a pleaſant and good cordial; and greatly breaks the wind off the ſtomach, and diſperſes flatulencies. Some put pimento inſtead of all the ingredients; in the proportion of two ounces to one gallon of ſpirit; and if the ſpirit be good, it can hardly be any way diſtinguiſhed from the genuine ſort. The *Aqua Piperis Jamaicenſis Spirituoſa*, is the beſt *Aqua Mirabilis*.

Aqua Piperis Jamaicenſis Spirituoſa.
Spirituous Jamaica Pepper Water.

Take of Jamaica pepper, half a pound; proof ſpirit, three gallons; water enough to prevent an empyreuma. Draw off by diſtillation three gallons.

Compound Piony Water.

Take of lily of the valley flowers freſh gathered, one pound, and infuſe them in two gallons and a half of French brandy; to the ſame put of lime-flowers, half a pound; of piony, four ounces; of the male piony root, two ounces and a half; white dittany and long birthwort, ana half an ounce; of miſletoe of the oak and rue, ana two handfuls; of piony ſeeds huſked, ten drachms; and of the ſeeds of rue, three drachms and a half; of Ruſſia caſtor, cubebs, and mace, ana two drachms; of cinnamon, one ounce and a half; of roſemary flowers, ſix pugils; of Arabian ſtæchas and lavender flowers, ana four pugils; of betony, clove, and cowſlip flowers, ana eight pugils: of the juice of black cherries, four pounds; and from the whole draw off by diſtillation four gallons.

This is the ſame as was originally inſerted by the college in their firſt Diſpenſatory, under the title of *Aqua Antiepileptica Langii*. The quantities alſo of ſome of the ingredients are blameable, as three drachms and a half (extremely exact!) of the ſeeds of rue; when the whole might be taken in ſubſtance at one doſe, without any viſible effect. The like may be alſo obſerved of ſome of the ingredients of efficacy.

Aqua Protheriacalis.
A Succedaneum for Treacle-Water.

Take ſcordium, *i. e.* water-germander, ſcabious, carduus bened. goats rue, ana two handfuls; freſh citron and orange peel, ana half an ounce; ſeeds of citron, hart-wort, and treacle-muſtard, ana one ounce; flowers of marigold and roſemary, ana one handful; cinnamon two drachms; French brandy two pounds; and draw off ſix pounds.

This is deſigned to uſe as the treacle-water; when that proves deficient in ſeaſons not fit to make it. The ſeeds of carduus, and its diſtilled water, were before ordered; but are here juſtly left out as inſignificant: and the cinnamon is a good addition: but the carduus and goats rue are uſeleſs.

Aqua Scordii comp.
Compound Scordium Water.

Take of the juices of goats rue, ſorrel, ſcordium, and citrons, ana one pound; London treacle, two ounces: digeſt for three days, and then diſtil off the water.

This will keep better, if the herbs (though none ſignify much beſides the ſcordium) be put into an alembic with a ſufficient quantity of water, and two pounds of ſpirit of wine with them; drawing off about one gallon: for otherwiſe

otherwiſe the water will not keep long without ſouring. Its virtues may be beſt known by thoſe of the ſimple, whence it takes its name.

Aqua Doctoris Stephani.
Dr. Stephens's Water.

Take of cinnamon, ginger, galangal, cloves, nutmegs, grains of paradiſe, of the ſeeds of aniſe, ſweet fennel, and caraway, ana one drachm; of the leaves of thyme, mother of thyme, mint, ſage, penny-royal, roſemary, flowers of red roſes, camomile, origanum, and lavender, ana one handful; French brandy, ſix pounds; and draw off one gallon by diſtillation.

All the ingredients of this compoſition well ſuit the main intention of a cephalic, a cordial, and carminative. It is likewiſe ſomething hyſterical; and therefore frequently uſed by the midwives amongſt their women; though ſome for the pleaſantneſs only of it to the palate, leave out the penny-royal; but then they rob the medicine of a principal ingredient.

Treacle Water.
Aqua Theriacalis.

Take of the juice of green walnuts, four pounds; of the juice of rue, three pounds; of carduus, marigold, and baum, ana two pounds; of freſh gathered butter-bur roots, one pound and a half; of burdock, one pound; of angelica and maſter-wort, ana half a pound; of green ſcordium, four handfuls, of old Venice treacle and Mithridate, ana eight ounces; of lemon juice, one pound; of French brandy, one gallon and a half: draw off by diſtillation three gallons and a half; and then add four pounds of diſtilled vinegar.

And doubtleſs it would be better to add the lemon juice alſo after diſtillation. The predominant flavour of this water is from the rue and angelica, the reſt only make it offenſive: the ſpecies of the theriaca employed in half an ounce of the water, its uſual doſe, amounts not to a ſingle grain: no compoſition in the ſhop partakes more of antient ſuperſtition than this.

From Bates and Others.

Aqua Antiſcorbutica.
Antiſcorbutic Water.

Take of the leaves of fumitory, water-creſſes, both ſorts of ſcurvy-graſs, and brook-lime, ana twelve handfuls; harts-tongue, ſuccory, pine-tops, germander, horehound, agrimony, and the leſſer centaury, ana ten handfuls: Roman wormwood, liverwort, ana four handfuls; bryony roots, half a pound; roots of female fern, ſharp-pointed dock, the inner barks of bitter-ſweet, and aſh, ana ſix ounces; ſeeds of aſh (*i. e.* what are called the aſhen-keys) one ounce and a half; angelica, half an ounce: let them be all bruiſed together, and put to ſix pounds of Rheniſh wine, in which a piece of iron of a pound has been twenty times quenched: then let all be ſtrongly preſſed from the ingredients, and put into a glaſs body; to which fit a receiver; and in a ſand-heat draw off till the remainder grows as thick as honey; which may be kept under the title of *Extractum Antiſcorbuticum*; ſtirring into it in fine powder, troches of capers ſix drachms, and of the prepared filings of iron one ounce and a half.

This has ſome uſeleſs ingredients, but makes a very good water for the purpoſes expreſſed by its title;

title; and may be uſed in about the ſame quantity, and in the ſame caſes as the compound horſe-radiſh water of the college. Its extract likewiſe will make a good medicine; taking care to ſtir it down often at firſt, if the powder of iron ferments it; which it is very likely to do ſome time after mixture. This is not kept in the ſhops; or made but by particular preſcription.

Aqua Camphorata.
Camphorated Water.

Take Roman vitriol and bole armoniac, ana four ounces; camphor one ounce; and powder them together. Of this mixture ſprinkle one ounce at a time into four pounds of boiling water, in which ſtir it well about; then take it off the fire; let it ſettle, and decant that which is clear, by inclination.

This is an excellent medicine for many purpoſes externally; it greatly cleanſes ulcers, by waſhing them frequently with it warm. It almoſt infallibly cures defluxions of rheum upon the eyes. If it be too ſharp for that uſe, it may be diluted with a little water, at the time of application. It keeps the gums clean and firm to the teeth, if they are frequently rubbed with it.

Aqua Cephalica.
Cephalic Water.

Take male piony root, four ounces; angelica, and valerian, ana one ounce and a half; avens, one ounce; leaves of ſage, roſemary, betony, marjoram, baum, flowers of lavender, betony, piony, marigolds, ſage, roſemary, lilies of the valley, and of the lime-tree, ana one handful; ſtæchas, one ounce and a half; red roſes, cowſlips, ana two handfuls; rhodium wood, yellow ſanders, ana ſix drachms; nutmegs, one ounce and a half; galangals, half an ounce; cardamoms and cubebs, ana three drachms: bruiſe and infuſe them all in fourteen pounds of the beſt white-wine, for ten days: then add one pound of cinnamon, which let ſtand in infuſion two days longer; and then diſtil off as much as the wine put on.

This is, in the main, an excellent compoſition for the purpoſe its title expreſſes, though there are two or three ingredients in it that are uſeleſs.

Aqua Hormini comp.
Compound Clary Water.

Take freſh leaves of clary, twelve handfuls; ſprinkle upon them one pound of ſpirit of wine, and diſtil to drineſs in a cold ſtill: to what comes off put ten handfuls of freſh leaves, of flowers of archangel ſix handfuls, and make a ſecond diſtillation; which repeat with freſh ingredients, and the ſame liquor, a third time; adding to the laſt one ounce of nutmegs, and letting the water diſtil upon ſix ounces of fine ſugar in a bottle: wherein is ſuſpended in a rag three grains of ambergriſe.

All theſe materials except the nutmegs, are very unfit for diſtillation; but the frequent repetition makes the water ſomewhat partake of them. It is very pleaſant, and amongſt the good women in great eſteem againſt abortion, the whites, and other female weakneſſes. But the ambergriſe will give the vapours to a great many, with whom ſuch ſweets do not agree.

Aqua Styptica Camphorata.

Take of camphorated vitriol one ounce; ſteep in it three pounds of

of ſpring-water, and let it ſtand till the fæces are fallen to the bottom.

Aqua Aluminoſa.
Alum Water.

Take of red roſe and plantane-water, each one pound; of white mercury ſublimate and roch-alum, each two drachms: let the alum and ſublimate be rubbed together, and be both boiled with the waters, in a glaſs veſſel having a narrow neck, to the conſumption of half the quantity; and after five days, when the fæces are ſettled, pour off the clear for uſe.

Theſe are chiefly for external uſes; and moſt commonly come under the direction of the ſurgeon, in ulcers and cutaneous eruptions. The ſteam of the alum-water, when boiling, is carefully to be avoided by the operator; becauſe it may have bad effects from its poiſonous qualities. It was firſt preſcribed by Fallopius, *cap.* 93. *De Morbo Gallico.*

From the Royal Diſpenſatory by Zwelfer.

Aqua Nephritica.
Water againſt the Gravel and Stone.

Take the kernels of black cherries two ounces, of peaches ſix ounces, of bitter almonds four ounces: beat them to a thin paſte in a mortar, with Malaga or Rheniſh wine: then take ſeeds of ſmallage, treacle-muſtard, gromwel, and parſley, each two ounces; which beat in like manner; and mix with the former. To both theſe put four ounces of juniper-berries, and half an ounce of winter-cherries green; freſh garlick, two ounces; onions, ſix ounces; leeks, four ounces; pimpernel, three ounces; horſe-radiſh, half a pound; calamus aromaticus, three ounces; leaves of wall-rue, four ounces; cinnamon, three ounces; mace and nutmegs, each one ounce: put them together to macerate in one gallon of Rheniſh wine, ſpirit of black cherries half a pound, water of black cherries and parſley, each one pound: then in a large retort, with a ſand-heat, the juncture of the receiver being well luted, draw off the water to drineſs.

This is as well contrived for its intention, as any thing by diſtillation could poſſibly be. The ſpirit and water of black cherries, and of parſley, are of little moment; it may be given from one to three or four ounces, and repeated as often as the exigency of the caſe requires.

From private Practice.

Aqua Antiphthiſica.
A Water againſt Conſumptions.

Take ſnails freſh out of the garden, with their ſhells, four pounds; leaves of liver-wort, lung-wort, ground-ivy, ſcabious, Paul's betony, ſelf-heal, each ſix ounces; cruſt of bread, half a pound; conſerve of red roſes and ſuccory-flowers, each twelve ounces; nutmegs, No. 6. Let all be bruiſed together into a maſh; and pour upon them of milk, hot from the cow one gallon and a half; ſtirring them well together: about an hour after put to them of Malaga wine one gallon, damaſk roſe water two pounds, and draw off with a ſand-heat two gallons.

This water was long kept in a particular ſhop, for the uſe only of the preſcriber, who was a phyſician of great note; many inſtances are produced of perſons recovered almoſt from the grave, by drinking it in great plenty, for a conſiderable time together; but it muſt be freſh made pretty often, becauſe

becauſe it has hardly ſpirit enough to keep it long in hot weather without ſouring; and ſuch waters ought always to ſtand in a cool cellar or vault, where they will keep the longer from alteration. This compoſition yields as much to deſerve the title it ſtands under, as any that can be well contrived: and becauſe the college Diſpenſatory has very little under this intention, we ſhall give the reader his choice of two or three more of the like kind.

Another.

Take garden-ſnails, ſix pounds; earth-worms, three pounds; leaves of clary, comfrey, ſage, and ground-ivy, each ſix handfuls; nutmegs, one ounce and a half; cloves ten drachms: reduce the ſpices to a groſs powder, and bruiſe all the other together into a maſh; and then pour upon them one gallon of new milk; Brunſwic mum and Malaga wine, each ſix pounds: draw off by a ſand-heat two gallons; to which put two drachms of ſaffron, tied in a rag, and half a pound of fine loaf ſugar: and keep it in a cool cellar for uſe.

Another.

Take garden ſnails, two gallons; earth-worms, four pounds; maſh them together, and put them into an earthen pan, with two gallons of the ſtrongeſt ſpruce-beer; which ſtir well together, and let it ſtand an hour or two. Then take colts-foot, clary, comfrey, pine-tops, hore-hound, and ground-ivy, each four handfuls. Take out the ſtalks and lower parts of each plant, bruiſe them all together, and mix with the former: to which add of nutmegs, two ounces, benjamin four ounces, and ſaffron one ounce; which have a week before ſtood in infuſion with one gallon of a clean cyder ſpirit: throw in all theſe together with one gallon of new milk; and diſtil almoſt to drineſs: to each pound put one ounce of the fineſt ſugar, and keep it for uſe.

This will keep without much danger of decay; and is a moſt admirable medicine for the purpoſe it is preſcribed.

Aqua Antiſcorbutica.

Water againſt the Scurvy.

Take ſage and mint, each two handfuls; water-creſſes and brook-lime, each four handfuls; and ſix nutmegs: bruiſe all together, and put it into a ſtill with two gallons of white wine; to which quantity draw off the water; taking care of the junctures as much as can be.

This is very eaſily made, both by reaſon of the plenty of the ingredients, and their ſmall coſt: and it makes a good water to drink of, almoſt at pleaſure, during any antiſcorbutic courſe of medicines. For theſe are not to be depended on alone; though the pleaſantneſs of the form makes them moſt eligible.

Another.

Take guaiacum, groſly powdered, one pound; ſaſſafras, in ſmall chips, half a pound; Winter's bark bruiſed, four ounces; of oranges and lemons, each three ounces: put all theſe together into three gallons of proof ſugar ſpirit; and let them ſtand a week or two, ſtirring the ingredients ſometimes; then take both ſorts of ſcurvy-graſs, freſh gathered, ana twenty-handfuls; brook-lime and water-creſſes, each ſix ounces; flowers of broom, five handfuls; ſharp-pointed dock root, of celandine, ſtraw-berries, each four ounces; camomile flowers, two handfuls;

juniper-berries eight ounces: let theſe be cut and bruiſed, as they ſeverally require; and put with the dry ingredients, and the ſpirit wherein they are infuſed, into an alembic with four pounds of lime-juice, and a ſufficient quantity of water. Then draw off ſix gallons; taking care to join the receiver to the worm by a bladder, eſpecially at the firſt running, elſe a great deal of the volatile parts will be loſt.

This takes in almoſt the whole circle of antiſcorbutics, that are capable of communicating any virtues to a medicine of this form. In any ill habit of body from indigeſtion, bad air, diet, or any other cauſe, this is a good medicine; and will, by continued uſe, mightily deterge and ſcour the viſcera and glands, ſo as to bring them to perform their proper offices. The kidneys, which are loaded with ſabulous or ſlimy matter, as they often are, and diſcover it by heat and pains in the ſmall of the back, will be wonderfully relieved by the uſe of ſuch a medicine, if it be continued. In all cutaneous foulneſſes, and even in obſtinate leproſies, this, with other proper helps, will go a great way towards a cure: and theſe ingredients will not be by much ſo nauſeous in this form as they are in infuſion, and in diet-drinks; where they are frequently preſcribed.

Aqua Anhaltina.
Anhalt Water.

Take of the beſt turpentine, half a pound; olibanum, one ounce; wood of aloes powdered, three drachms; grains of maſtich, clove July flowers, or roſemary flowers, nutmegs, cubebs or galangals, and cinnamon, each ſix drachms; ſaffron, two drachms and a half; fennel ſeeds and bay-berries, each half a drachm: powder the whole, and digeſt them in five pints of ſpirit of wine ſix days, adding fifteen grains of muſk incloſed in a little bag; then diſtil ſlowly *in balneo*, and ſeparate the clear part of what comes over from the turbid.

This water is a high aromatic cordial; and conſequently antihyſteric and corroborative, invigorating more particularly the inteſtines, and thence promoting digeſtion and diſpelling flatulencies. But it is more frequently uſed externally than given inwardly, being reputedly of great ſervice in catarrhs and pains ſuppoſed to ariſe from a mild cauſe; as alſo in palſies, epilepſies, apoplexies, vertigos, tremors, and lethargies, the part affected being well rubbed with it. This water is not hitherto much regarded here, but it holds a conſiderable place in the preſcriptions and writings of foreign phyſicians. Some of the ingredients however may be advantageouſly retrenched; the galangals and cubebs more properly imparting their virtues to decoctions than diſtilled waters, as their efficacious part is not volatile; and the fennel ſeeds and bay berries ſeem very inſignificant, if not injurious ingredients.

Aqua Meliſſæ compoſita, commonly called *Eau de Carmes.*

Take of the freſh leaves of baum, four ounces; yellow rind of freſh lemon peels, two ounces; nutmegs and coriander ſeeds, each one ounce; cloves, cinnamon, and the root of angelica, each half an ounce: having bruiſed the leaves, and pounded the other ingredients,

put

put them with a quart of brandy into a glaſs cucurbit, of which ſtop the mouth, and ſet it in a warm place, to remain there two or three days. Add then a pint of ſimple balm water, and ſhake the whole well together: after this diſtil *guttatim in balneo*, till the ingredients are left almoſt dry; and preſerve the water thus obtained in bottles well ſtopt.

This water has been long famous at Paris and London, and carried thence to moſt parts of Europe: it has the reputation of being a cordial of very extraordinary virtues, and not only of availing in all common lowneſs of the ſpirits, but even in apoplexies; and it has been alſo much eſteemed in caſes of the gout in the ſtomach. It is indeed a very elegant dram; and the great benefit the Carmelite friars have reaped from the making it has had its principal ſource in that: but notwithſtanding the great care they have taken to keep their recipe a ſecret, this is ſaid on good authority to be the method by which they prepare it.

Aqua Sclopetaria ſive Vulneraria. Vulnerary Water, or *Eau d'Arquebuſade.*

Take of the leaves and roots of comfrey, leaves of ſage, of mugwort, and of bugle, each four handfuls; leaves of betony, of ſanicle, and of the ox-eye daiſy, the greater figwort, plantane, agrimony, vervain, wormwood, and fennel, each two handfuls; St. John's wort, long birth-wort, orpine, Paul's betony, the leſſer centaury, yarrow, tobacco mouſe-ear, mint, and hyſſop, each one handful; cut them and bruiſe them well in a mortar; then put them into a large earthen veſſel; pour twenty pints of white wine upon them; and ſtir the whole well together; cloſe up the veſſel, and digeſt in a warm dunghill or ſimilar heat twenty days; then pour the whole matter into an alembic of pewter, or copper tinned, and diſtil off the fluid; which when thus obtained, is the *Eau d' Arquebuſade*, and muſt be preſerved in a cloſe ſtopped bottle.

This water is in great reputation abroad; and highly eſteemed by many here: it is principally uſed externally in contuſions; the tumours that attend diſlocations, fractures, and mortifications; it is alſo, but leſs properly, applied by ſome to deterge foul ulcers, and incarn wounds.

Aqua Ophthalmica. Eye-Water.

Take white vitriol and bay ſalt, ana one ounce; pour upon them in an earthen pan, one pound of boiling water: ſtir them together, and let them ſtand ſome hours: a variouſly coloured ſkin will fix upon the ſurface; which carefully take off, and put the reſt in a phial for uſe.

This very ſafely cools and repels thoſe ſharp rheums which ſometimes fall upon the eyes; and clears them of beginning films and ſpecks. If it be too ſharp, it may be diluted with a little ſpring or roſe water. To diſguiſe it, a flavour might be given it with an odoriferous water.

Medicated Waters.

L. D. *Aqua Vitriolica Cærulea.* Roman Vitriol Water.

Take of blue, or Roman vitriol, three ounces; alum and ſtrong ſpirit, or oil of vitriol, each two ounces; water one pint and half;

boil the ſalts in the water to diſſolve them, then add the oil of vitriol, and filter them through paper.

E. D. *Aqua Styptica.*
Styptic Water.

Take of blue vitriol, alum, each three ounces; water, two pints. Boil them until the ſalts are diſſolved, then filter the liquor, and add to it an ounce of the oil of vitriol.

Theſe compoſitions are formed upon the ſtyptic recommended by Sydenham, for ſtopping bleeding at the noſe, and other external hæmorrhages: for this purpoſe, cloths or doſſils are to be dipt in the liquor, and applied to the part.

L. D. *Aqua Vitriolica Camphorata.*
Camphorated Vitriol Water.

Take of white vitriol half an ounce, camphor two drachms, boiling water two pints, diſſolve the vitriol by mixing them, and when the fæces have ſubſided, filter through paper.

E. D. *Aqua Vitriolica.*
Vitriol Water.

Take purified white vitriol, ſixteen grains; pure water, eight ounces; weak ſpirit of vitriol, ſixteen drops. Diſſolve the vitriol in the water, then add the acid, and filter the whole through paper.

Both theſe liquors are very uſeful ophthalmics; they cool, and repel the ſharp humours of the eyes, and prevent films and ſpecks.

L. D. *Lotio Saponacea.*
The Sope Lotion.

Take of damaſk roſe-water, three quarters of a pint; oil of olives, one quarter of a pint; lixivium of ſalt of tartar one ſpoonful: ſtir the oil of olives and the lixivium of tartar together, till they are mixed, then add the water gradually.

This is deſigned for a detergent waſh, and, like other ſoapy liquors, anſwers this purpoſe very effectually. Where it is required to be more deterſive, it may be occaſionally rendered ſo, by the addition of a ſmall quantity of a ſolution of any fixed alkaline ſalt.

L. D. *Aqua Calcis ſimplex.*
Simple Lime-Water.

Take of quick-lime, one pound; water, twelve pints: pour the water gradually upon the lime, and when the ebullition is over, let the whole ſtand to ſettle; then filter the liquor through paper.

Aqua Calcis.
Lime-Water.

Take of quick-lime, one pound; pour on, by degrees, of water two gallons: ſtir them well together, and when the lime has ſubſided, pour off the clear liquor, which is to be kept in cloſe veſſels. This water may likewiſe be made from calcined oyſter-ſhells.

This liquor ſhould be ſet in a cool place, and not kept too long; for, on long ſtanding, great part of what the water had taken up from the lime, will be ſeparated in form of a fine white cream.

The change produced by this proceſs is very remarkable: notwithſtanding the extreme acrimony of the quick-lime itſelf, neither the part which the water extracts, nor that which is left behind, nor the vapour which exhales, have any conſiderable acrimony: the remaining lime is almoſt inſipid; the ſolution has only a rough drying taſte; the vapour being catched,

proved

proved almoſt merely aqueous, and very ſlightly alkaleſcent.

Lime-water has been found of great ſervice in ſcrophulous and ſcorbutic complaints, ſome kinds of alvine fluxes, female weakneſſes, and other diſorders proceeding from a laxity and debility of the ſolids, particularly in corpulent and phlegmatic habits. It is given internally, in the doſe of a quarter of a pint, three or four times a day; and likewiſe uſed externally for waſhing foul ulcers.

Aqua Calcis compoſita.
Compound Lime-Water.

Take of ſaſſafras root and bark, ſhaved, two ounces; nutmegs, three drachms; liquorice, ſliced, or well bruiſed, one ounce; lime-water, freſh made, four pints; digeſt the lime-water with the roots and nutmegs for two days, in a cloſe veſſel; then ſtrain the liquor.

This compoſition is taken from Bates's Pharmacopœia; but the raiſins there ordered are here omitted, as they never fail to ferment and ſpoil the medicine.

L. D. *Aqua Calcis minus compoſita.*
Lime-Water leſs compounded.

Take of liquorice, one ounce; ſaſſafras bark, half an ounce; ſimple lime-water, ſix pints. Macerate without heat for two days, and then ſtrain off the liquor.

L. D. *Aqua Calcis magis compoſita.*
Lime-Water more compounded.

Take of guaiacum wood, ſhaved, half a pound; liquorice, one ounce; ſaſſafras bark, half an ounce; coriander ſeeds, three drachms; ſimple lime-water, ſix pints: macerate without heat for two days, and then ſtrain off the liquor.

In theſe compoſitions, the additional articles take off the ill flavour of the lime-water, render it more grateful both to the palate and ſtomach, and at the ſame time conſiderably promote its medicinal efficacy, eſpecially when intended againſt cutaneous diſorders, and foulneſſes of the blood: the doſe is the ſame as of the ſimple lime-water.

Aqua Phagedenica.
Phagedænic Water.

Diſſolve half a drachm of ſublimate mercury in a pint of lime-water.

This is deſigned for waſhing and cleaning old foul ulcers, and preventing the growth of fungous fleſh; it is rather too corroſive to be uſed without dilution.

Diſtilled Spirits.

L. D. *Spiritus Roſemarini.*
Spirit of Roſemary.

Take of roſemary tops, freſh gathered, a pound and a half; proof ſpirit one gallon: diſtil in the heat of a water-bath, till five pints are come over.

E. D. *Spiritus Roſemarini, vulgo Aqua Reginæ Hungariæ.*
Hungary Water.

Take of roſemary flowers, juſt gathered, two pounds; rectified ſpirit of wine, a gallon: put them

together, and immediately diſtil in a water bath.

This ſpirit is very fragant, inſomuch as to be in common uſe as a perfume. It is difficult to make it in the requiſite perfection: the vinous ſpirit ſhould be extremely pure; the roſemary tops gathered when the flowers are full blown upon them, and committed immediately to diſtillation, particular care being taken not to bruiſe or preſs them.

L. D. *Spiritus Lavendulæ ſimplex.*
Simple Spirit of Lavender.

Take of lavender flowers, freſh gathered, a pound and a half; proof ſpirit one gallon. Draw off, by the heat of a balneum, five pints.

The ſame cautions are to be obſerved here, as in the diſtillation of the foregoing ſpirit. Both of them, when made in perfection, are very grateful and fragrant: they are frequently rubbed on the temples, &c. under the notion of refreſhing and comforting the nerves; and likewiſe taken internally, to the quantity of a teaſpoonful, as a cordial.

E. D. *Spiritus Lavendulæ Simplex.*
Simple Spirit of Lavender.

Take of the ſpikes of flowering lavender, freſh gathered, two pounds, rectified ſpirit of wine a gallon; with the heat of boiling water draw off a gallon.

L. D. *Spiritus Lavendulæ compoſitus.*
Compound Spirit of Lavender.

Take of ſimple ſpirit of lavender, three pints; ſpirit of roſemary, one pint; cinnamon, nutmegs, each half an ounce; red ſaunders, three drachms: digeſt them together, and then ſtrain out the ſpirit for uſe.

The digeſtion ſhould be performed without heat, and not too long continued; otherwiſe the flavour of the ſpirit will be conſiderably injured.

E. D. *Spiritus Lavendulæ compoſitus.*
Compound Spirit of Lavender.

Take of the ſimple ſpirit of lavender, three pints; ſpirit of roſemary, one pint; cinnamon, one ounce; aromatic cloves and nutmegs, of each half an ounce; red ſanders, three drachms; macerate ſeven days, and ſtrain. The red ſaunders is of no uſe in theſe compoſitions, but as a colouring ingredient.

The compound ſpirit of lavender of the former London Pharmacopœia is as follows:

Take of lavender flowers, one gallon; ſage flowers, roſemary flowers, betony flowers, each one handful; borage flowers, bugloſs flowers, lilies of the valley, cowſlips, each two handfuls; balm leaves, feverfew leaves, orange tree leaves, orange flowers, ſtæchas flowers, bay berries, each one ounce; French brandy four gallons.

Pour the brandy on the other ingredients freſh gathered; and, after ſuitable digeſtion, draw off in balneo mariæ two gallons and a half. To this ſpirit add the following ingredients: citron peel, yellow ſaunders, each ſix drachms; cinnamon, nutmegs, mace, leſſer cardamom ſeeds, cubebs, each half an ounce; aloes wood, one drachm.

Digeſt theſe together for twenty-four hours; then filter the ſpirit, and ſuſpend it in the following ingredients

gredients (where they are judged proper) tied up in a thin linen cloth; viz. of muſk, ambergriſe, ſaffron, each half a ſcruple: red roſes dried, red ſaunders, each half an ounce.

All theſe ſpirits are grateful reviving cordials; the firſt, though conſiderably the moſt ſimple, is not inferior, in elegancy, to either of the others. This medicine has long been held in great eſteem, under the name of palſy drops, in all kinds of languors, weakneſs of the nerves, and decays of age. It may be conveniently taken upon ſugar, from ten to eighty, or an hundred drops.

Spiritus Aurantiorum.

Spirit of Oranges.

Take freſh orange peels, cleared from the white, one pound; of proof ſpirit, two gallons: draw off in an alembic one gallon and half, and dulcify it with fine loaf-ſugar at pleaſure.

This makes an admirable pleaſant cordial dram, and can hardly be exceeded by any thing, if a few freſh orange flowers be ſtrewed upon its ſurface afterwards, as directed in the *Aqua Odorifera* with the jeſſamy. The laſt running makes a good carminative; and if no ſuch uſe takes it off in the ſhop before, it will be worth keeping, to throw into the ſtill at the next making of the ſpirit. After the ſame manner are to be made the ſpirit of citrons, lemons, or any thing of the like kind; and their flavour will be greatly heightened with the leaſt touch imaginable of ambergriſe. From any ſpice, plant, ſeed, &c. likewiſe is their ſpirit thus to be made.

Spiritus Caſtorei. Spirit of Caſtor.

Take the beſt Ruſſia caſtor, four ounces; dried flowers of lavender, one ounce; of ſage and roſemary, half an ounce; cinnamon, ſix drachms; of mace and cloves, ana, two drachms; rectified ſpirit of French wine, ſix pounds: digeſt and draw off the ſpirit in a retort in B. M. to drineſs.

This is a much better medicine, for many purpoſes, than the tincture of caſtor, becauſe it is much pleaſanter both to the ſight and taſte; it may be given from ten to thirty, or forty drops, in any convenient vehicle.

Spiritus Croci. Spirit of Saffron.

Take of the beſt Engliſh ſaffron, four ounces; ſpirit of wine, four pounds: let them digeſt together in a retort for a week or two, then in a ſand-heat draw off the ſpirit to drineſs. Put to the reſiduum two pounds more of ſpirit, and after the ſame digeſtion draw that off alſo, and mix with the former. Put the whole back again, and draw a third time. Let the reſiduum be clean rinſed out with a little freſh ſpirits, as little as can be; then ſtrain it hard, and evaporate the liquor into an extract.

By repeating the diſtillation, the ſaffron may almoſt all be brought over; but the junctures muſt be well luted, and all parts of the operation managed with diſpatch and dexterity; elſe as much of the finer parts will be loſt, as will be obtained by ſuch repetition. What is got indeed this way, is loſt in the extract; and therefore the operator may manage it as either of the medicines are depended upon. If the ſpirit be but once drawn, the reſiduum may be mixed and

digeſted with a ſufficient quantity of Canary; then ſtrained, clarified, and made into a ſyrup; as good as can be made from the freſh ſaffron; for in the diſtillation nothing riſes, which can be retained in a ſyrup, howſoever made. This ſpirit is one of the greateſt cordials which medicine can produce; and has the advantage, at the ſame time, of being a noble alexipharmic, and diſpoſing the patient to ſweat, if duly encouraged. It may be given from one drachm to one ounce, or more for a doſe; and repeated as often as there is occaſion, in any proper diluter. The extract is ſeldom given alone; and is fit for no form but pills, or boles, wherein it may be mixed from two to twelve grains, for a doſe. From Bates.

Spiritus Theriacalis camphoratus.
Spirit of Treacle camphorated.

Take Venice treacle, five ounces; myrrh, ten drachms; ſaffron, half an ounce; camphor, two drachms; ſpirit of wine rectified, ten ounces: put them into a retort; and draw off to drineſs in a ſand-heat.

As the camphor all diſſolves in the ſpirit, it is too much loaded with it; becauſe, by its extraordinary heat, the doſe is required but ſmall. It is certainly a moſt compendious medicine; and an extraordinary alexipharmic. Doſe from one ſcruple to one drachm.

Spiritus Anti-Epileptícus Puerorum.
An Anti-Epileptic Spirit for Children.

Take flowers of lavender, roſemary, marjoram, and ſage, each two handfuls; caſtor, two ounces; camphor, three ounces; ſpirit of wine, three pounds; *Sal Ammoniac*, four ounces; ſalt of tartar, three ounces; and ſimple lavender-water, enough to cover the ingredients. Then after a digeſtion of three or four days, by a retort, draw off one pound and a half, or two pounds; in which drop thirty drops of oil of rue, oil of amber twenty drops, oil of mace, and juniper, each forty drops, and they will perfectly diſſolve in it.

This is taken out of the *Collectanea Chemica Leydenſia*, where it ſtands highly recommended for all ſpaſmodic affections, and whatſoever appears with convulſions of the nerves, and particularly in thoſe of children. The ingredients ſufficiently demonſtrate its properties that way; and it is very convenient for taking; though, if the chemical oils were omitted, it would be better, and not much the worſe in efficacy: for the other ingredients pretty well fate it, inſomuch as to turn any aqueous vehicle it is dropt into milky. It may be given from two drops to twenty, in any proper liquor, and repeated according to the urgency of the ſymptoms.

Olea per Diſtillationem.
Oils by Diſtillation.

The oils obtainable by diſtillation from vegetable matters are divided into two claſſes. The firſt comprehends ſuch oils as poſſeſs the ſmell, and ſometimes the taſte, of the ſubject from which they were drawn: theſe are called eſſential. The ſecond takes in thoſe which bear little or no reſemblance to the original vegetable, being ſo altered by the proceſs for obtaining them, that they all appear to the ſenſes nearly ſimilar, agreeing in one common burnt ſmell or taſte; whence they are named empyreumatic. The

eſſen-

eſſential oils are obtainable only from a few, the empyreumatic from every kind of vegetable matter.

L. D. Theſe oils are to be procured by diſtillation in an alembic, with a condenſer, or refrigerating veſſel ſufficiently large; but to prevent an empyreuma, or burnt ſcent, from riſing, water muſt be added to the matter to be diſtilled, in which that ſhould alſo be previouſly ſteeped. The oil comes over together with the water, and ſinks below, or floats above it, according to their ſpecific gravities.

E. D. In order to obtain the eſſential oil of herbs, they ſhould be moderately dried, then macerated a few days, in as much water as that they may conveniently float in it, and laſtly diſtilled with a degree of heat a little ſtronger than that neceſſary for diſtilling waters. But ſeeds and ſpices ſhould be bruiſed, and woods ſhaved, before maceration. The time of maceration varies according to the texture of the ſubject. The longer the maceration is continued, the greater quantity of ſea-ſalt muſt be added; the more viſcid yield their oil eaſier, if they are fermented a little while; in this caſe the ſalt is uſeleſs.

L. D. *Oleum Abſinthii.*
Oil of Wormwood.

This is very fetid and nauſeous, as are all thoſe which are drawn from plants of a tough, gummy, or balſamic tincture, as of box, ſavin, &c. and therefore it is not much, or hardly at all, in internal preſcription; but it is frequently ordered in emplaſters, againſt worms in children, to be applied to the belly; for its penetrating nauſeouſneſs is reckoned ſo far to get through the pores, as to diſturb thoſe ugly inhabitants, and promote their ejectment. Some make alſo the oil of Roman wormwood: but this is a plant which affords its oil with ſo much difficulty, and in ſuch ſmall quantities, that it is hardly worth drawing, both on account of its unpleaſantneſs and its ſcarcity; and therefore it is little uſed. And this may be taken for a general rule, in theſe preparations, that the eaſier any oil parts from its principle, the better it is for uſe, and brings along with it more of its virtues, for the force of extraction will, in ſome meaſure, vary its properties; and therefore does this of the Roman wormwood fall ſo ſhort of the virtues of the plant.

L. D. *Oleum Anethi.* Oil of Dill.

This is drawn from the ſeeds, and has all the virtues of the plant; but it is not ſo much uſed.

L. D. and E. D. *Oleum Aniſi.*
Oil of Aniſe.

This has exactly the ſmell and taſte of the ſeed, becauſe it abounds ſo much as to want very little force in ſeparation, as it likewiſe does in moſt ſeeds, and thoſe plants which run moſt to ſeed in their growth. This oil is a wonderful carminative, a good pectoral, and is much uſed. Its doſe is from eight to three or four drops, on ſugar; or with any convenient liquor. Moſt of theſe oils are ſo hot, that one drop is too great a doſe; therefore they are generally, by the intermediation of ſugar, diſſolved in ſome proper liquid, and diluted ſo, that a doſe

may not exceed a third, a fifth, or an eighth of that quantity, which is not diſtributable without ſuch a management. For this reaſon, under each of theſe, an aſſigned doſe is not to be expected; but every one may judge of the proportions proper by the heat and pungency of the oil upon the tongue; tho' ſome are ſo hot, as hardly to be endured upon ſuch a trial; as thoſe of origany, cloves, and ſome of the hot aromatics.

Oleum Anthos.
Oil of Roſemary.

This loſes little or nothing of the plant; and is beſt drawn when the plant is in flower. It is much in the *Sal Volatile Oleoſum*, eſpecially in ſuch kinds of it as are made extempore by inſtillation of eſſential oils into ſpirit of *Sal Ammoniac*, and tartarized ſpirit of wine, which is a common practice amongſt ſome coarſe operators, and ſuch as work for the wholeſale ſhops, and diſtant low-priced cuſtomers. Some have a trick likewiſe of making the Hungary-water off-hand by the ſame cunning: but its flavour is not by much ſo good as that drawn according to the directions given in their proper place; becauſe there is ſome part of a volatile ſalt in theſe aromatic plants, too fine to be held in their oils, which, by cloſe and careful diſtillation, may be preſerved in a large quantity of ſpirit. And for this reaſon it is, that thoſe poteſtates, or powers, with which Salmon ſtuffed his Diſpenſatory, and which were contrived only for quacks, and clandeſtine practice, will not make ſo good waters as the ingredients themſelves, regularly diſtilled.

Oleum Limonum.
Oil of Lemons.

This is made of the outer yellow rind or peel, which yields moſt when it is juſt pared off. It has thoſe virtues of the rind that make it carminative and cephalic; but it loſes that which makes the other ſo good a ſtomachic: for that in which the bitter conſiſts, will no more come over with the oil, than with the water. This is not often preſcribed; and is moſt uſed to ſcent pomatums and unguents for the nicer ſort of patients.

L. D. *Oleum Carui.*
Oil of Caraways.

This is very hot and diſcuſſive, and therefore a good carminative, and frequently uſed; the quantity of a drop is a doſe, with cathartic pills, to prevent their griping.

L. D. *Oleum Caryophyllorum.*
Oil of Cloves.

This is heavy, and will ſink in water. There is ſome of this imported, made from the bark of a tree which produces the ſpice, and is of a high red colour; but that is beſt which is made here, and looks pale. (It is often grievouſly adulterated; yet the genuine may, with care and ſkill, be made tolerably cheap in England.) It is uſed as the former, and is in great quantities in the *Pil. ex duobus.* It is very often preſcribed; and in one doſe of a cathartic, one drop is an outſide proportion.

L. D. *Oleum Chamæmeli.*
Oil of Camomile Flowers.

The plant affords but a ſmall quantity of this oil, as all do which ſeed little; and is therefore dear.

It

It is uſed chiefly, as the former, to correct purgers; and ſometimes alſo it is given as a carminative in boles, a drop or two to a doſe; and it often does good, by ſuddenly removing thoſe flatuſes which occaſion ſtitches and pains of the ſide.

L. D. *Oleum Cinnamomi.*
Oil of Cinnamon.

This is a noble medicine, and very frequently preſcribed in boles, or rubbed in powders, in all thoſe caſes where the ſpice it is drawn from proves uſeful. One drop is a good doſe, it being very warm. It is a great cordial, and mightily ſtrengthens the ſtomach and nerves. Many adulterate it; for what is genuine is extremely dear: that which is right ſinks in water. Some make an *Olæſaccharum* with it, and thence an extemporary cinnamon-water, but it is inferior to that regularly drawn. (There are thoſe who make excellent cinnamon-water by this means, when the oil is genuine, new, and drawn in England; and thus ſave the trouble and charge of a diſtillation.) The water uſed in the diſtillation of this oil will be impregnated ſo much with the ſpice, after all the oil is ſeparated, that it is worth ſaving, either to uſe again for the ſame purpoſe another time, or inſtead of the *Aqua Cinnamomi tenuis.*

Oleum Fœniculi. Oil of Fennel.

This has the properties of the plant it comes from, but is ſeldom preſcribed.

Oleum Hederae. Oil of Ivy.

This is an empyreumatical fetid oil, like that of wormwood, and hardly ever uſed in medicine; but it is in ſome eſteem amongſt anglers, in the compoſition of ſome of their paſtes. It is by ſome recommended for embrocations in rheumatic pains; but is never preſcribed for any ſuch purpoſes.

L. D. and E. D. *Oleum Juniperi.*
Oil of Juniper.

This is drawn from the berries, whoſe virtues it very powerfully contains. It is much of the turpentine kind; and is ſometimes adulterated with the oil thereof. It is uſually preſcribed in colics, and pains from the ſtone and gravel, from one to five or ſix drops, in any proper vehicle; and in ſuch caſes it frequently does great ſervice: it is alſo a powerful diuretic, and forcibly deterges the urinary paſſages, which may be known by its ſcent in the urine.

L. D. and E. D. *Oleum Lavendulæ.*
Oil of Lavender.

This has much of the ſcent and virtues of the plant, though it is ſeldom or never preſcribed ſingly; but as it makes a part in ſome other compoſitions. It is ſometimes dropped upon the volatile ſalts for ſmelling-bottles; and its flavour in them is very agreeable.

Oleum Macis.
Oil of Mace.

This differs little from that of cloves, and is ſeldom made, and rarely preſcribed; the oil made by expreſſion being moſt in uſe.

L. D. *Oleum Marjoranæ.*
Oil of Marjoram.

This poſſeſſes the virtues of its plant, but is very rarely preſcribed.

L. D.

L. D. and E. D. *Oleum Menthae.*
Oil of Mint.

This much fails of the virtues of its plant, as the oil of all aſtringents muſt neceſſarily do; for what gives them that property, and which, in many things, may be drawn out by tincture, will, notwithſtanding, refuſe to be elevated in diſtillation; and therefore the oil, as well as every thing elſe that comes over the helm, is deſtitute of that property. However, this is ſo much accounted warm and ſtomachic, that it is ſometimes directed upon emplaſters, to apply to the pit of the ſtomach, eſpecially in ſettled nauſeas, and vomittings; but it is otherwiſe very little preſcribed.

L. D. *Oleum Menthae Piperitidis eſſentiale.*
Eſſential Oil of the Leaves of Peppermint.

This poſſeſſes the ſmell, taſte, and virtues of the peppermint in perfection; the colour is a pale greeniſh yellow. It is a medicine of great pungency and ſubtility, and diffuſes, almoſt as ſoon as taken, a glowing warmth through the whole ſyſtem. In colics accompanied with great coldneſs, and in ſome hyſteric complaints, it is of excellent ſervice. A drop or two are, in general, a ſufficient doſe.

L. D. *Oleum Nucis Moſchate.*
Oil of Nutmegs.

This is a very pleaſant oil, of the virtues of the ſpice it comes from; but it is much more uſed in compoſitions, than preſcribed alone. It is often mixed with volatile ſalts to ſmell to, as that of lavender. It is accounted a cephalic, and holds a place in compoſition under that intention; but it does not well agree with the ſtomach, and ſtrangely regurgitates in ſome people.

L. D. *Oleum Origani.*
Oil of Origany.

This is an excellent hot oil, and ſeldom uſed inwardly; though it is a mighty thing with ſome people for the tooth-ach, they holding it, upon ſome lint or cotton in the mouth, as near the part in pain as can be.

L. D. *Oleum Pulegii.*
Oil of Pennyroyal.

This has the virtues of the plant, but is very rarely uſed.

L. D. *Oleum Rhodii.*
Oil of Rhodium.

This is of a wonderful fine ſcent, and makes one of the moſt delicate perfumes; for which purpoſe it is uſed in pomatums and liniments, but not otherwiſe. The wood from which it is drawn affords ſo little, that it is extremely dear, and therefore generally adulterated. A much larger proportion of this oil may be obtained than uſual, by a proper management of the ſtill, and a proper treatment of the wood before diſtillation; and this might be a gainful ſecret in ſome hands.

L. D. *Oleum Rutae.*
Oil of Rue with the Seed.

It is to be ſuſpected, that this fails much of the virtues of its plant; for that is of a viſcid contexture, and has a great deal which it will not part with, ſo as to riſe in the ſtill. It is hardly ever preſcribed.

Oleum

Oleum Salviae. Oil of Sage.

This fails of the virtues of the plant, for the ſame reaſon as that of mint; and though it ſtands made in the ſhops, it is ſeldom uſed, and hardly ever met with in preſcription.

L. D. and E. D. *Oleum Sabinae.* Oil of Savin.

This is reckoned to contain the virtues of its plant; but is not met with in any internal preſcription. Outwardly it is chiefly uſed to rub upon emplaſters for the belly, againſt worms in children; and in ſome balſams to deterge foul ulcers.

L. D. and E. D. *Oleum Saſſafras.* Oil of Saſſafras.

This has the virtues of the wood from whence it is drawn; but it is not ſo gratefully ſcented. It is ſeldom uſed, unleſs, by ſome, in venereal caſes, and in rheumatic pains; but this practice is little encouraged by its ſucceſs.

L. D. *Oleum Terebinthin. e.* Oil of Turpentine.

Diſtil any quantity of turpentine in four times its weight of water, a limpid oil comes over after the water is evaporated; a black reſin, called colophony, is left behind. This, by diſtillation, yields a yellow oil; urged by a ſtronger fire, a blackiſh red one, called balſam of turpentine. The limpid oil, improperly called ſpirit, is a true eſſential oil; it is a hot ſtimulating medicine, ſometimes given as a diuretic, in the quantity of a few drops, and is very uſeful in cold rheumatiſms.

Moſt of the foregoing oils are drawn by our chemiſts, and eaſily procurable in a tolerable degree of perfection; thoſe of cinnamon, cloves, nutmegs, and mace, excepted. Theſe are uſually imported from abroad, and are, for the moſt part, ſo much adulterated, that it is difficult to meet with ſuch as are at all fit for uſe.

Nor are the adulterations of theſe kinds of preparations eaſily diſcoverable. The groſſer abuſes indeed may be readily detected: thus, if the oil is mixed with ſpirit of wine, it will turn milky on the addition of water; if with expreſſed oils, rectified ſpirit will diſſolve the eſſential, and leave the other behind: if with oil of turpentine, on dipping a piece of paper in the mixture, and drying it with a gentle heat, the turpentine will be betrayed by its ſmell. But the more ſubtile artiſts have contrived other methods of ſophiſtication, which elude all trials of this kind.

Some have looked upon the ſpecific gravity of oils as a certain criterion of their genuineneſs; and accordingly we have given a table of the gravity of ſeveral. This, however, is not to be abſolutely depended on; for the genuine oils, obtained from the ſame ſubject, oftentimes differ in gravity as much as thoſe drawn from different ones. Cinnamon and cloves, whoſe oils uſually ſink in water, yield, if ſlowly and warily diſtilled, an oil of great fragrancy, which is, nevertheleſs, ſpecifically lighter than the aqueous fluid employed in the diſtillation of it; whilſt, on the other hand, the laſt runnings of ſome of the lighter oils prove ſometimes ſo ponderous as to ſink in water.

The commentator, on the laſt edition of the Edinburgh Pharmacopœia, recommends diluting the ſuſpected oil with a large quantity of

of rectified ſpirit, and then to examine it by the taſte and ſmell, comparing it with ſome of known goodneſs. By this means we may not only diſtinguiſh whether the oil is mixed with any other; but a judgment may likewiſe be formed of its degree of goodneſs when unmixed.

The ſame author recommends an oil drawn from pimento, as a cheap ſubſtitute to thoſe of ſome of the dearer ſpices: the flavour of this oil is more agreeable than that of cloves, and does not fall far ſhort of that of nutmegs. It is undoubtedly a very elegant oil, and is afforded by the ſpice in conſiderable quantity; forty ounces yield above one: it is of a fine pale colour, and like the oils of ſome of the eaſtern ſpices, finks in water.

SECT. II.

Of Decoctions, and Infuſions.

THE two forms, of decoction and infuſion, have very little ſhare in the officinal pharmacy, becauſe there is very little will keep when this way managed. Theſe differ chiefly, in that the former is choſe for things of an hard texture, which will not give out their efficacies without ſome force; and the latter for thoſe of a laxer conſiſtence, which immediately yield to a warm or hot water. Though if we examine the materials employed, and thoſe few examples given of theſe two forms, we ſhall not find much regard had to theſe differences. The *Decoctum Epithymi* and *Decoctum Traumaticum* are however hardly ever preſcribed or made, or at leaſt not enough to require much care to be taken about them; and the *Decoctum commune pro Clyſtere*, and *Decoctum Pectorale*, cannot well be hurt by boiling, becauſe there is nothing in them exhaleable to their detriment; and a little boiling may take out more of that ſoft ſubſtance which is required from their ingredients, than bare infuſion would.

The two bitter infuſions are ſufficiently known in common practice, and are for very obvious reaſons much better ordered thus than by way of decoction; but the firſt of theſe would be a much more grateful bitter without the wormwood. The infuſion is much found fault with for an over quantity of the *Sal Tartari*, which makes it ſlimy and mucilaginous: and it is certain, that ſo far as the ſalt of tartar is of uſe to draw out the tincture of the ſena, a much leſs quantity is ſufficient; but if it be conſidered as to any medicinal efficacy in itſelf, this much alters the caſe.

As it was obſerved, how in ſome compound tinctures the ingredients might be drawn ſeparately to advantage, on account of their different diſpoſitions for ſolution; ſo in decoction, for the ſame reaſon, ſome things require different periods of time in boiling. Thus where with the woods and harder

harder roots or barks there are ſometimes ordered herbs, ſeeds, and other things of a laxer texture, the latter are beſt ordered to be put in, after the other have boiled their due time; not only becauſe they leave the liquor in a better condition to draw out what is deſired from thoſe harder ſubſtances, but as themſelves alſo, by long boiling, might ſuffer, in a loſs of their more volatile parts.

Another remarkable circumſtance in decoction is, that when agglutinants or emollients are thus managed, they by no means ought to be clarified in the common way with the whites of eggs: becauſe all that is expected in them of any medicinal efficacy will by this means riſe from the ſcum and be loſt, or at leaſt the greateſt part of it: ſuch things therefore will admit of being made fine only by ſettling, and pouring off the clear part.

What is directed in extemporaneous preſcription in this form, is generally ſent to the patient under the title of an apozem, commonly in the quantity of a quart at a time, to be drank of plentifully as common drink.

The uſual intentions wherein tinctures and infuſions are ordered in common practice, are thoſe of cephalics, ſtomachics, or cathartics. The firſt takes in odorous and aromatic ſimples, and ſuch as are called for in nervous affections; the ſtomachics receive the ſame things in conjunction with bitters; the cathartics ſuch as are appropriated to that diſtinction by their purgative qualities. In all nervous caſes, the odorous ſimples are beſt brought into tincture with ſpiritous or vinous liquors, as they moſt readily give out their virtues to them; and this is beſt done cold; or, when heat is required, in cloſe veſſels, to prevent exhalation and loſs of the better parts. Tincture or infuſion likewiſe of the ſtomachics are beſt ordered without heat, and commonly in liquors moderately ſpirituous, as the ordinary white wines. And cathartics, whether reſinous or ſaline, for extemporaneous occaſions, want nothing more than hot water, as in making common tea, to draw out their virtues. The proportions of ingredients in all theſe caſes cannot be adjuſted but by examples, and experience of the patient's ſtrength; but for cephalics and ſtomachics it is a certain rule never to ſate a liquor with ingredients beyond what is agreeable to the palate; for an irkſome cordial or ſtomachic almoſt implies an abſurdity; though in hyſteric affections, and where the fetid ſimples are required, the caſe is quite otherwiſe.

In the exhibition of the officinal tinctures of any intention, all thoſe which are fated ſo with reſinous or gummy ſimples, that they turn milky in common water, are in a more agreeable and ſightly manner directed in wine, where the circumſtances of a patient will admit of it; and for bitters in particular, made with a vinous liquor, they are much better directed between the times of breakfaſt and dinner, or about an hour before the latter, than faſting, which was formerly the cuſtomary way, becauſe they then leſs affect the head.

Decoction chiefly takes place with agglutinants and aſtringents, and is fit for thoſe things only which will not, without ſome additional force, part with their medicinal virtues. In many other intentions

intentions all theſe forms are ſometimes directed; but becauſe the materials beſt fitting them generally come within the compaſs here mentioned, it will be ſufficient to give ſome examples of extemporaneous forms under theſe intentions.

A cordial or cephalic tincture for preſent occaſions is very readily made, and now occurs frequently in extemporaneous preſcription, with the *Species Diambræ*, and ſome generous white wine. In hyſteric and hypochondriacal affections, the *Radix Caſſamunair*, *Hellebori Nigri*, and others of the ſame tribe, are commonly directed in the *Aqua Byroniæ compoſita*, or *Pulegii:* and for a ſtomachic, centaury flowers, gentian root, galangal, Sevile orange peels, and other things of like properties, may be drawn with any white wine. And all theſe are to be varied in the proportion of the ingredients to the ſtrength of the liquor, and the quantities of a doſe, according to the ſeveral circumſtances of a patient.

Decoctions within the intention of an agglutinant, emollient, or ſtrengthener, are choſe out of the ſofter herbs, as marſh mallows, the two maiden-hairs, colts-foot, and roots of ſuch diſpoſition, as eringo, comfrey, and the like; and for a reſtringent in diarrhœas or any kind of fluxes, from calcined hartſhorn, tormentil, or biſtort roots, pomegranate peels or flowers, cinnamon, and the like.

General rules for making decoctions from the Edinburgh Pharmacopœia.

I.

Vegetable ſubſtances ought to be moderately and newly dried, unleſs they are expreſsly ordered otherwiſe. They ought likewiſe to be cut and bruiſed, before the menſtruum is poured on them.

II.

Woods, roots, ſeeds, and all thoſe ingredients which are dry and of a compact texture, are to be put in firſt; and the other added towards the end of the boiling: among theſe laſt, liquorice is to be reckoned.

III.

All decoctions are to be ſtrained, and after reſting for ſome time, poured off from the fæces, unleſs they are ordered to be turbid; and even in this caſe, they ought to be paſſed through a coarſe ſtrainer.

L. D. *Decoctum Album.*

The White Decoction.

Take of calcined hartſhorn, prepared, two ounces; gum arabic, two drachms; water, three pints.

Boil them till only two pints remain, and then ſtrain off the liquor.

Take of calcined hartſhorn, one ounce; ſpring water, three pints; boil till only two pints remain, adding juſt before the boiling is finiſhed one drachm of bruiſed cinnamon; to the turbid ſtrained liquor add two drachms of ſugar.

Decoctum Crataceum.

Chalk Decoction.

Take of white chalk one ounce, gum arabic two drachms; boil them in three pints of water to two, adding at the end of the decoction a drachm of bruiſed nutmeg: put half an ounce of white ſugar to the turbid ſtrained liquor.

Theſe decoctions are uſed as common drink in acute diſeaſes attended

attended with a looſeneſs, and where acrimonious humours abound in the *primæ viæ*. The gum is added in order to render the liquor highly glutinous, and thus enable it to ſuſtain more of the calx. Some have propoſed ſtarch as an ingredient in theſe decoctions; a ſmall quantity would be very uſeful.

Decoctum Album compoſitum.

Compound White Decoction.

Take of the greater comfrey roots and tormentil roots, each half an ounce, of ſpring-water three pints, adding at the end of the decoction one drachm of bruiſed cinnamon: to the ſtrained liquor add of calcined hartſhorn, chalk, and white ſugar, each half an ounce.

This is a very well contrived compoſition for the purpoſes of a mild, lightly incraſſating reſtringent. A quarter of a pint, more or leſs, may be taken occaſionally, according to the urgency of the ſymptoms. The two firſt ingredients, though they ſeem intended as the principal ones, are the leaſt uſeful.

Decoctum Japonicum.

Japonic Decoction.

Take of the Japonic confection one ounce, boil it in a pint and half of water to a pint: add to the turbid ſtrained liquor, an ounce of cinnamon water with wine and as much diacodium. This decoction is uſed by way of draught, as well as clyſter, as an anodyne and reſtringent in fluxes.

L. D. *Decoctum commune pro Clyſtere.*

The common Decoction for Clyſters.

Take of mallow leaves, dried, one ounce; camomile flowers dried, ſweet fennel ſeeds, each half an ounce; water, one pint. Boil them together, and ſtrain out the decoction for uſe.

Edinb.

Take of Camomile flowers, one ounce; carui ſeeds, half an ounce; water, four pints. Boil them a quarter of an hour, and then ſtrain.

The title of theſe decoctions ſufficiently expreſſes their uſe as the baſis of clyſters.

L. D. *Fotus Communis.*

The Common Fomentation.

Take of abrotanum leaves, dried, ſea wormwood tops, dried, camomile flowers, dried, each one ounce; bay leaves, dried, half an ounce; water, ſix pints. Lightly boil them, and ſtrain out the decoction for uſe.

It is left to the choice of the apothecary to take either the male or female *abrotanum*, that is ſouthernwood or lavender cotton; which, though differing from one another in ſome reſpects, may be looked upon as ſimilar with regard to the purpoſes for which this compoſition is intended: and poſſibly the fomentation would not be much the worſe if neither of them was uſed. Spirit of wine, which is commonly added in fomentations, is left to be directed by the preſcriber in ſuch quantity as particular caſes may require.

Decoctum ad Ictericos.

Decoction for the Jaundice.

Take of celandine roots and leaves, tumeric, madder, each one ounce; millepedes, two hundred; ſyrup of the five roots, two ounces; water, three pints.

Boil

Boil the celandine, turmeric, and madder in the water, till only a quart of liquor remains after ſtraining; then, having preſſed out the juice of two hundred of the millepedes, add this to the decoction.

The ingredients of which this decoction is compoſed, have been long held by many as ſpecifics for the cure of the diſeaſe expreſſed in its title. This medicine, though extremely unpleaſant, is well calculated to anſwer many uſeful purpoſes, if well managed and properly aſſiſted. A quarter of a pint may be taken twice a day or oftener.

E. D. *Decoctum Lignorum.*
Decoction of the Woods.

Take of guaiacum ſhavings, three ounces; raiſins of the ſun, ſtoned, two ounces; ſaſſafras wood, ſhaved, and liquorice, ſliced and cut, one ounce; water, one gallon.

Boil the guaiacum and raiſins with the water, over a gentle fire, to the conſumption of one half; adding towards the end the ſaſſafras and liquorice. Strain out the liquor, and having ſuffered it to reſt for ſome time, pour off the clear from the fæces.

This decoction is very well contrived, and if its uſe is duly continued, will do great ſervice in ſcorbutic and cutaneous diſeaſes, foulneſs of the blood and juices, and ſome diſorders of the breaſt; particularly in cold phlegmatic habits. It may be taken by itſelf, in the quantity of a quarter of a pint, two or three times a day, or uſed as an aſſiſtant in a courſe of mercurial or antimonial alteratives, the patient in either caſe keeping warm, in order to promote the operation of the medicine.

Decoctum ad Nephriticos.
Nephritic Decoction.

Take of marſh mallow roots and raiſins of the ſun ſtoned, each two ounces, boil them in ſix pints of water to four, adding at the end of the decoction, of liquorice root, and linſeed each half an ounce; of pellitory of the wall one ounce, pour off the clear liquor after ſtanding.

This decoction is intended chiefly as an emollient, to be liberally drank of in nephritic paroxyſms: in which caſes, by ſoftening and relaxing the parts, it frequently relieves the pain, and procures an eaſy paſſage for the fabulous matter.

Decoctum Nitroſum.
Nitrous Decoction.

Take of pure nitre, half an ounce; white ſugar, two ounces; cochineal, one ſcruple; water, two pints and a half. Boil to two pints, then ſuffer the whole to reſt for ſome time, and pour off the clear decoction.

This is an elegant way of diſguiſing nitre, and rendering it agreeable to the patient, both which intentions are fully anſwered by the cochineal and ſugar. There is no occaſion for boiling, unleſs to furniſh the medicine with a name; for the water will diſſolve a much larger quantity of the nitre and ſugar than is directed above, without any heat; and it eaſily extracts a fine colour from cochineal.

L. D. *Decoctum Pectorale.*
Pectoral Decoction.

Take of common barley, ſtoned raiſins, figs, each two ounces; liquorice, half an ounce; water, four pints.

Firſt

Firſt boil the water with the barley, then add the raiſins, and laſtly (juſt before the end of the proceſs) the figs and liquorice; the boiling is to be continued ſo long, that the liquor, when ſtrained, may be no more than two pints.

Take of ſtoned raiſins, barley, each one ounce; fat figs, in number four; Florentine orris root, liquorice, colts-foot flowers, each half an ounce; water, ſix pints.

Boil the water with the raiſins, barley, and figs, till only four pints remain: adding, towards the end, the other ingredients; then ſtrain out the liquor for uſe.

Both theſe decoctions are uſeful ſoft pectorals; and very agreeable to the palate, particularly the firſt. They are good auxiliaries in ſharp defluxions on the breaſt and lungs, and have ſometimes done ſervice by themſelves. They may be drank at pleaſure.

Decoctum Serpentariæ compoſitum.
Compound Decoction of Snake-root.

Take of Virginian ſnake-root, ſix drachms; Edinburgh treacle, half an ounce; cochineal, one ſcruple; water, two pints.

Boil the root in the water, to the conſumption of half the liquor; adding towards the end the treacle and cochineal.

This watery preparation is a medicine of conſiderable efficacy, poſſeſſing nearly all the virtues of the ſnake-root, and the opiate quality of the theriaca; the quantity here preſcribed contains about three grains of opium. It is obſervable that ſnake-root yields its virtues to water almoſt as perfectly as to ſpirituous liquors; and notwithſtanding its ſubtility of parts, does not looſe much in evaporation with either, unleſs the proceſs is performed by a more haſty fire than there is occaſion for.

Decoctum Tamarindarum cum Sena.
Decoction of Tamarinds with Sena.

Take of tamarinds ſix drachms, of cryſtals of tartar two drachms, boil them in a pint and a half of water to a pint when ſtrained: in which, while hot, infuſe a drachm of ſena leaves for four hours: then ſtrain off the fluid, and add to it half an ounce of cinnamon water without wine, and an ounce of the ſyrup of violets. This is a very gentle uſeful eccoprotic.

L. D. *Aqua Hordeata.*
Barley water.

Take of pearl barley, two ounces; water, four pints.

Firſt waſh the barley from the mealy matter that adheres to it, with ſome cold water; then boil it a little with about half a pint of freſh water, which will acquire a conſiderable tinge from it. Throw away this tinged water; put the barley into the water preſcribed, made firſt to boil; and continue the boiling till half the water is waſted.

This liquor is to be drank freely, as a diluter, in fevers and other diſorders; hence it is of conſequence that it ſhould be prepared ſo as to be as elegant and agreeable as poſſible: for this reaſon it was inſerted in the Pharmacopœia, and the ſeveral circumſtances which contribute to its elegancy ſet down. However trivial medicines of this claſs may appear to be, they are of greater importance in the cure of ſundry acute

diſeaſes than many more laborious preparations. The preſent Edinburgh College calls this *Decoctum Hordei.*

L. D. *Jus Viperinum.*
Viper Broth.

Take a middle ſized viper, freed from the head, ſkin, and inteſtines; and two pints of water. Boil them to a pint and a half; then remove the veſſel from the fire; and when the liquor is grown cold, let the fat, which congeals upon the ſurface, if the viper was freſh, be taken off. Into this broth, whilſt warm, put a pullet of a moderate ſize, drawn and freed from the ſkin, and all the fat, but with the fleſh entire. Set the veſſel on the fire again, that the liquor may boil; then remove it from the fire, take out the chicken, and immediately chop its fleſh into little pieces: put theſe into the liquor again, ſet it over the fire, and as ſoon as it boils up, pour out the broth, firſt carefully taking off the ſcum.

This ſeems to be one of the beſt preparations of the viper: all the benefit that can be expected from that animal being by this means obtained. It is a very nutritious and reſtorative food: continued for a length of time, it has ſometimes done good ſervice in leprous and other obſtinate cutaneous diſeaſes.

L. D. *Mucilago Seminum Cydoniorum.*
Mucilage of Quince Seeds.

Take of quince ſeeds, one drachm: water, ſix ounces by meaſure. Boil them, over a ſoft fire, till the water grows ſlimy, almoſt like the white of an egg; then paſs it through a linen cloth.

This is a pleaſant ſoft mucilage, of a ſomewhat ſweetiſh taſte, and a light agreeable ſmell: in theſe reſpects, and in its eaſy ſolubility in water, it differs from the mucilage of gum tragacanth, which ſome have ſuppoſed it ſimilar to: it ſoon grows mouldy in keeping.

L. D. *Serum Aluminoſum.*
Alum Whey.

Take of cow's milk, one pint; alum, in powder, two drachms. Boil them till the milk is curdled, and then carefully ſeparate the whey.

This medicine is a ſtrong, tho' not very grateful, aſtringent: immoderate uterine fluxes, and the diabetes, frequently yield to it, if taken in the quantity of a quarter of a pint three or four times a day. It has been recommended in intermittent fevers, the quantity above preſcribed to be taken before the approach of a fit, divided into different doſes.

L. D. *Serum Scorbuticum.*
Scorbutic Whey.

Take of cow's milk, one pint; ſcorbutic juices, a quarter of a pint. Boil them till the milk is curdled, and then carefully ſeparate the whey.

This whey may be uſed as common drink in ſcorbutic caſes: the quantity above directed, at leaſt, ought to be taken every day, if any conſiderable effect is expected from it.

E. D. *Infuſum Amarum.*
Bitter Infuſion.

Take of gentian root, half an ounce; orange-peel, dried, one drachm; coriander ſeeds, half a drachm; proof ſpirit of wine, four ounces; water, twelve ounces.

Firſt pour on the ſpirit, then the water;

water; let them ſtand without heat all night, and ſtrain.

L. D. *Infuſum Amarum ſimplex.*
Simple Bitter Infuſion.

Take of gentian root, freſh yellow rind of lemon peel, carefully freed from the inner white part, each half an ounce; dry yellow rind of Seville orange peel, freed in like manner from the white, one drachm and a half; boiling water, three quarters of a pint. Macerate for an hour or two, then filter the liquor through paper, or paſs it through a ſtrainer without preſſure.

Both theſe liquors are very elegant and uſeful bitters; the latter in particular is as agreeable a one as can well be contrived, the peels communicating a fine flavour, which is the only addition that the gentian ſtands in need of. The committee informs us, that moſt of the ingredients, which uſually enter the compoſition of bitter infuſions, being prepared by them ſeparately, amongſt all the ſtrong bitters, gentian gave the moſt unexceptionable colour; but it wants the aſſiſtance of ſome ingredient to furniſh an acceptable flavour; ſcarce any of the bitters accompanied with flavour, ſuch as zedoary, *Calamus aromaticus*, and the like appeared to be truly grateful, except orange peel and cardamom ſeeds; but cardamom ſeeds are mucilaginous, and render the liquor cloudy, and orange peel is accompanied with a hot oil that requires it to be but ſparingly uſed: lemon peel, in its outer rind, to which all its flavour is confined, is not a bitter, but ſupplies the gentian moſt ſucceſsfully with what is wanted; though the compoſition, by a moderate addition of orange peel, becomes yet more perfect.

L. D. *Infuſum Amarum purgans.*
Purging Bitter Infuſion.

Take of ſena, yellow rind of lemon peel, freſh, each three drachms; gentian root, yellow rind of Seville orange peel, dry, leſſer cardamom ſeeds, freed from the huſks, each half a drachm; boiling water, five ounces by meaſure. Macerate them together, and when cold ſtrain off the liquor.

Infuſum Amarum cum Sena
Bitter Infuſion with Sena.

Take of ſena, one drachm; gentian root, ſweet fennel ſeeds, each half a drachm; boiling water, a quarter of a pint. Infuſe them for four hours, and then filter the liquor.

This infuſion may likewiſe be prepared with two, three, or more times the quantity of ſena.

Both theſe are uſeful purging bitters. The quantities here preſcribed ſeem intended for a doſe; the firſt is the largeſt, and the other the ſmalleſt doſe, that ſena is uſually given in.

E. D. *Infuſum Foliorum Flammulæ Jovis.*
Infuſion of the leaves of the Upright Climber.

Take of the dried leaves of the Auſtrian upright climber (or virgin's bower) from two to four drachms; of boiling water, one pint. Macerate during a quarter of an hour, then gently boil them, and laſtly pour off the clear liquor.

N. B. The *Flamulæ Jovis* is the *Clematis Recta* of Linnæus.

L. D. *Infuſum Senæ commune.*
Common Infuſion of Sena

Take of ſena, an ounce and a half; cryſtals of tartar, three drachms; leſſer cardamom ſeeds,

freed from the huſks, two drachms; water, one pint.

Boil the cryſtals of tartar in the water, until they are diſſolved; then pour the water, whilſt it continues boiling, upon the other ingredients, and when cold ſtrain off the liquor for uſe.

In our former pharmacopœia, an alcaline ſalt was uſed in the infuſion of ſena, inſtead of the acid one here directed. The firſt contributed to promote the operation of the medicine, by ſuperadding a degree of purgative virtue of its own, and by enabling the water to extract ſomewhat more from the capital ingredient, than it would be capable of doing by itſelf; whilſt acids have rather a contrary effect. Experience however has ſufficiently ſhewn (as the committee aſſures us) that this infuſion, and the following one with lemon juice, do not fail in their intention: and in a medicine, very naufeous to many, it is of principal conſequence to prepare it ſo, that the lighteſt and leaſt diſguſtful parts may be extracted. Soluble tartar ſhould ſeem a good ingredient in theſe kinds of compoſitions; as it not only improves the taſte, but promotes the purgative virtue of this medicine; this addition is ſaid alſo to render the infuſion leſs apt to gripe, or occaſion flatulencies.

L. D. *Infuſum Senæ Limoniatum.*

Infuſion of Sena with Lemon.

Take of ſena, an ounce and a half; yellow rind of lemon peel, freſh, one ounce; lemon juice, one ounce, by meaſure; boiling water, one pint. Macerate them together, and when cold, ſtrain off the infuſion.

This is a very pleaſant and ſufficiently efficacious purge: the committee informs us, that it is the moſt agreeable form they have been able to contrive for the exhibition of ſena, to ſuch as are more than ordinarily offended with its flavour. The doſe is from two ounces to four.

Infuſum Senæ unciæ quatuor.

The four Ounces Infuſion of Sena.

Take of ſena, three drachms; ginger, twenty grains; boiling water, four ounces; infuſe them four hours, and then ſtrain off the fluid. The ginger abates the griping quality of the ſena, and makes it ſit better upon the ſtomach.

E. D. Infuſion of Rhubarb.

Take of ſliced rhubarb, one ounce; ſpirituous cinnamon water, two ounces; of boiling water, a pint: let them infuſe all night, and then ſtrain off the clear liquor. Rhubarb yields all its virtues to water as well as to ſpirit; this is therefore a very efficacious and uſeful preparation.

E. D. *Infuſum Tamarindorum cum Sena.*

Infuſion of Tamarinds with Sena.

Take of tamarinds, ſix drachms; cream of tartar and leaves of ſena, of each one drachm; coriander ſeeds, half a drachm; brown ſugar, half an ounce; boiling water, half a pint. Macerate them in an unglazed veſſel for four hours, then ſtrain.

N. B. The ſena may be added to two, three, or more times this quantity, as required.

Emulſio Camphorata.

Take of camphor, half a drachm; and ſix almonds; beat them well together

together in a ſtone mortar, adding by degrees half a pint of penny-royal water; ſtrain it, and add half an ounce of white ſugar.

E. D. *Emulſio communis.*
The common Emulſion.

Take an ounce of ſweet almonds, and a drachm of bitter almonds; bruiſe them in a marble mortar, and pour on by degrees two pints of water, and ſtrain it.

E. D. *Emulſio Arabica.*
The Arabic Emulſion.

It is made in the ſame manner as the preceding, except that half an ounce of gum arabic is to be boiled in the water, or two ounces and a half of the mucilage of gum arabic, may be added whilſt the almonds are bruiſed.

Theſe emulſions, particularly the firſt, are very uſeful in preventing the ſtrangury; in heats of urine, from whatever cauſe, they are cooling and obtunding.

L. D. *Extracta et Reſinæ.*
Extracts and Reſins.

Extracts are prepared from certain vegetable ſubſtances, by the means of water; which is firſt boiled on the ſubject till ſufficiently impregnated with its virtues, the decoction paſſed through a ſtrainer, and ſet by till the fæces have ſubſided: the liquor is then poured off clear, and evaporated to a pilular conſiſtence; care being taken towards the end of the operation, that the matter do not burn to the veſſel.

Reſins may be prepared nearly in the ſame manner, by uſing rectified ſpirit of wine inſtead of water.

General Rules for making Extracts with Water.

1. It is indifferent whether herbs are uſed freſh or dry; ſince nothing that can be preſerved in this proceſs will be loſt by drying.

2. The more compact and reſinous vegetable matters ſhould, if poſſible, be uſed freſh; as in this ſtate they moſt readily give out their virtues.

3. Very compact dry ſubſtances ſhould be reduced into exceeding ſmall parts, previous to the effuſion of the menſtruum.

4. The quantity of water ought to be no greater than is neceſſary for extracting the virtues of the ſubject. A difference herein will ſometimes occaſion a variation in the quality of the product: the larger the quantity of liquor, the longer fire will be requiſite for evaporating it, and conſequently the more of the volatile parts of the ſubject will be diſſipated. A long continued heat likewiſe makes a conſiderable alteration in the matter which is not volatile: ſweet ſubſtances by long boiling with water become nauſeous; and the draſtic purgatives loſe their virulence; though without any remarkable ſeparation of their parts.

5. The decoctions are to be depurated by colature; and afterwards ſuffered to ſtand for a day or two, when a conſiderable quantity of ſediment is uſually found at the bottom. If the liquor poured off clear, be boiled down a little, and afterwards ſuffered to

cool again, it will depoſit a freſh ſediment, from which it may be decanted before you proceed to finiſh the evaporation. The decoctions of very reſinous ſubſtances do not require this treatment, and are rather injured by it; the reſin ſubſiding along with the feculent matter.

6. The evaporation is moſt conveniently performed in broad ſhallow veſſels: the larger the ſurface of the liquor, the ſooner will the aqueous parts exhale: this effect may likewiſe be promoted by agitation.

7. When the matter begins to grow thick, great care is neceſſary to prevent its burning. This accident, almoſt unavoidable if the quantity is large, and the fire applied as uſual under the evaporating pan, may be effectually ſecured againſt, by carrying on the inſpiſſation after the common manner, no farther than to the conſiſtence of a ſyrup, when the matter is to be poured into ſhallow tin or earthen pans, and placed in an oven, with its door open, moderately heated; which acting uniformly on every part of the liquid, will ſoon reduce it into any degree of conſiſtence required. This may likewiſe be done in *balneo Mariæ*, by ſetting the evaporating veſſel in boiling water; but the evaporation is here exceeding ſlow and tedious.

8. Extracts are to be ſprinkled with a little ſpirit of wine, to prevent their growing mouldy (L.) They ſhould be kept in bladders, moiſtened with ſweet oil (E.)

Extractum Plantaginis.
Extract of Plantane.

Take any quantity of plantane juice, depurate it by ſuffering it to reſt till it is clear; or clarify it with the whites of eggs, then evaporate the juice in B. M. to the conſiſtence of honey. After the ſame manner may extracts be made from any acid, cold, ſucculent, and ſtyptic plants.

This is ſuppoſed to be a mild aſtringent, and is given from one to two drachms in diarrhœas; but the preſent practice eſteems it very little.

L. *Extractum Radicum Enulæ Campanæ.*
Extract of the Roots of Elecampane.

This extract retains a great ſhare of the virtues of the root; its taſte is ſomewhat warm, and not ungratefully bitteriſh. It is given, from a ſcruple to a drachm, in a lax ſtate of the fibres of the ſtomach, and ſome diſorders of the breaſt.

L.E. *Extractum Radicum Gentianæ.*
Extract of the Roots of Gentian.

E. *Extractum Gentianæ.*
Extract of Gentian.

Take gentian root, ſlice and bruiſe it well, and add four times its weight of water; boil to the conſumption of one half, then preſs out the juice as forcibly as you can, and afterwards ſtrain it; laſtly evaporate gently to the conſiſtence of honey.

In the ſame manner are prepared the extracts of black helebore, rue, white poppy ſeeds, and the ſeeds of hemlock.

E. *Extractum Aconiti.*
Extract of Aconite.

Bruiſe the freſh leaves of monkshood (or the large blue aconite), and through a coarſe cloth preſs out the juice, which evaporate in a water-bath to the conſiſtence of honey; and laſtly, carefully ſtir

it

it until it hath acquired a due conſiſtence.

Thus are prepared the extracts of deadly nightſhade, of virgin bower, of henbane, and of the thorn-apple leaves.

Extractum Foliorum Abſinthii.
Extract of the Leaves of Wormwood.

E. *Extractum Belladonnæ.*
Extract of Deadly Nightſhade.

Extractum Foliorum Centaurii. Minoris.
Extract of the Leaves of Leſſer Centaury.

Extractum Florum Chamæmeli.
Extract of Camomile Flowers.

Theſe extracts are almoſt ſimply bitter; the peculiar flavour of ſuch of the ſubjects as have any, being diſſipated in the evaporation: the chemiſts uſually prepare the extracts of wormwood and camomile flowers, from the decoction which remains in the ſtill after the diſtillation of their eſſential oils; and, provided the ſtill has been perfectly clean, and the liquors not ſtood too long in it after the diſtillation, this piece of frugality is not to be diſapproved of; ſince whether we catch the exhaling vapour, or ſuffer it to diſſipate in the air, the remaining extract will be the ſame.

For the virtues of theſe preparations, ſee the articles Bitters. The doſe is from one ſcruple, or leſs, to three or four.

E. *Extractum Flammulae Jovis.*
Extract of Upright Virgin's Bower.

L. E. *Extractum Radicum Hellebori Nigri.*
Extract of the Roots of Black Hellebore.

This extract purges with conſiderable leſs violence than the crude root, and is perhaps one of the beſt preparations of hellebore, when intended to act only as a cathartic. The doſe is from eight or ten grains to a ſcruple, or more.

E. *Extractum Hyoſcyami.*
Extract of Henbane.

L. *Extractum Foliorum Rutæ.*
Extract of Rue Leaves.

L. *Extractum Foliorum Sabinæ.*
Extract of the Leaves of Savin.

The virtues of theſe plants reſide chiefly in their volatile parts; nevertheleſs the extracts contain a greater ſhare of them than might be expected, provided they are prepared with ſuitable addreſs, according to the general directions.

E. *Extractum Foliorum Stramonii.*
Extract of Thorn Apple Leaves.

L. D. *Extractum Glycyrrhizæ.*
Extract of Liquorice.

Lightly boil freſh liquorice roots in water, preſs the decoction thro' a ſtrainer, and after the fæces have ſubſided, evaporate it until it no longer ſticks to the fingers, taking care, towards the end of the operation, to prevent an empyreuma.

It is convenient, before boiling the root, to cut it tranſverſely into ſmall pieces, that it may more readily give out its virtue to light decoction: if the boiling is long continued, the rich ſweet taſte, for which this preparation is valued, will be greatly injured.

L. *Extractum Jalapii.*
Extract of Jalap.

Upon powdered jalap pour ſome rectified ſpirit of wine, and with a gentle heat extract a tincture: boil the remaining jalap in freſh parcels

of water. Strain the firſt tincture, and draw off the ſpirit, till what remains begins to grow thick: boil the ſtrained decoction alſo to a like thickneſs; then mix both the inſpiſſated matters together, and, with a gentle fire, reduce the whole to a pilular conſiſtence.

This extract is an uſeful purgative, preferable to the crude root, as being of more uniform ſtrength, and as the doſe, by the rejection of the woody parts, is rendered ſmaller: the mean doſe is twelve grains. If the ſpirituous tincture was inſpiſſated by itſelf, it would afford a reſinous maſs, which occaſions violent griping, and yet does not prove ſufficiently cathartic; the watery decoctions yield an extract which operates exceeding weakly: both joined together, as in this preparation, compoſe an effectual and ſafe purge.

E. Take the roots of jalap one pound, rectified ſpirit of wine four pounds, water two pounds. Digeſt in a cloſe veſſel for eight days, and ſtrain. In a retort diſtil the ſtrained liquor to one half, the reſt may be evaporated to the conſiſtence of honey in an open veſſel placed in the vapour from boiling water; at the latter end of the evaporation ſtir it frequently, that the conſiſtence may be uniform.

L. D. *Extractum Ligni Campechenſis.*

Extract of Logwood.

Take of logwood reduced to powder, one pound; boil it in a gallon of water till half the liquor is conſumed, repeating the coction with freſh water four times, or oftener: the ſeveral decoctions are to be mixed together, paſſed thro' a ſtrainer, and evaporated to a due conſiſtence.

This wood very difficultly yields its virtue to watery menſtrua; and hence the reducing it into fine powder is extremely neceſſary. It has an agreeable ſweet taſte, with ſome degree of aſtringency; and hence becomes ſerviceable in diarrhœas, for blunting the acrimony of the juices, and moderately conſtringing the inteſtines and orifices of the ſmaller veſſels: it may be given from a ſcruple to half a drachm, and repeated five or ſix times a day to advantage.

E. D. *Extractum Ligni Campechenſis.*

Extract of Logwood.

It is prepared in the ſame manner as the extract of jalap, adding inſtead of the rectified ſpirit of wine, and the water, the proper quantity of proof ſpirit.

In the ſame manner alſo is prepared the Extractum Corticis Peruviani.

L.D. *Extractum Corticis Peruviani, molle & durum.*

Soft and hard Extract of the Peruvian Bark.

Take of the Peruvian bark powdered, one pound; of water, ten or twelve pints; boil them one or two hours, and pour off the fluid, which will be then red and clear, but as it cools will grow yellow and turbid; the ſame quantity of water being again put to the bark, let them be boiled as before; and let this be repeated, till the liquor poured off appears limpid when cold; then the ſeveral quantities of fluid being mixed together, let them be evaporated over a very ſlow fire to a due conſiſtence, carefully avoiding their acquiring any burnt ſcent.

This extract is to be prepared in a double form: the one ſoft, of

a conſiſtence proper for pills; the other ſufficiently hard, to ſuffer it being powdered.

This method of makipg the extract of bark is more expeditious, and leſs expenſive, than that with ſpirit of wine commonly practiſed; but it is diſputed which of the two affords the moſt efficacious medicine: Dr. Pemberton, in his tranſlation of their Diſpenſatory, aſſerts that it is the opinion of the college of London, that this extract contains all the medicinal parts of the bark, and is on other accounts preferable to that made with ſpirit of wine; and, on the other hand, Dr. Lewis, in his notes on the Edinburgh Diſpenſatory, gives the following account from experiments, which he ſays were purpoſely made.

A pound of the ſame bark, treated, with two quarts of ſpirit of wine, and a gallon of water, after the manner deſcribed in the preceding note upon the extract of jalap, yielded nearly the ſame quantity of extract as in the laſt experiment.

Upon comparing theſe two preparations together, that made with water alone was found much milder and far leſs ſtyptic than that prepared by ſpirit of wine and water; the latter much more perfectly reſembling the original bark. Upon boiling the firſt extract in water, and afterwards in ſpirit of wine, a conſiderable quantity remained indiſſolved in either of the menſtruums: the latter, treated in the ſame manner, ſcarce left any perceptible fæces. From theſe experiments it appears, that the extract prepared with water alone contains ſome of the woody parts of the bark; that its taſte is conſiderably injured, probably from the long decoction which that proceſs requires; that the taſte, and probably the medicinal virtues of the bark, are better extracted and preſerved, when both ſpirit and water are employed; that the proceſs is greatly expedited by this means, and that the doſe of the medicine, a point principally aimed at in theſe preparations, is leſs.

That there is a difference in the extracts made with or without ſpirit of wine, is extremely evident, on comparing them together; but whether it is ſuch as renders one leſs capable of anſwering its medicinal intention than the other, is not clear from the preſent experience; and it is therefore better, for the ſake of uniformity, to acquieſce in the preſcription of the college. The extract poſſeſſes the qualities of the bark in ſpecies, of which ſee Catalogue of Simples, but not perhaps in all caſes with the ſame degree of power. The doſe may be from one ſcruple to a drachm, according to the exigence.

L. D. *Extractum Ligni Guaiaci, molle & durum.*

Extract of Guaiacum Wood, ſoft and hard.

Boil a pound of ſhavings of guaiacum in a gallon of water, till half the liquor is waſted, repeating the operation four times, or oftener, with the ſame quantities of freſh water. The ſeveral decoctions, paſſed through a ſtrainer, are to be mixed and inſpiſſated together; when the aqueous parts are almoſt entirely exhaled, a little rectified ſpirit of wine is to be added, that the whole may be reduced into an uniform and tenacious maſs. This extract is to be prepared, as the foregoing, in a ſoft and hard form.

Here

Here the reſinous parts of the wood which were boiled out with the water, are apt to ſeparate towards the end of the inſpiſſation: hence an addition of ſpirit becomes neceſſary to keep them united with the reſt of the matter.

L. D. *Extractum Catharticum.*
Cathartic Extract.

Take of Succotorine aloes, an ounce and a half; colocynth, ſix drachms; ſcammony, half an ounce; leſſer cardamoms, huſked, half an ounce; proof ſpirit, one pint.

Having cut the colocynth ſmall, and bruiſed the ſeeds, pour on them the vinous ſpirit, and digeſt with a gentle heat for four days; preſs out the tincture, and diſſolve therein the aloes and ſcammony, firſt ſeparately reduced to powder: then draw off the ſpirit, and inſpiſſate the remaining maſs to a pilular conſiſtence.

The title of this medicine expreſſes its virtue. It is a very powerful cathartic, and relied on in caſes where the life of the patient depends on its taking effect: the doſe is from fifteen grains to two ſcruples. It does not retain ſo much of the flavour of the cardamom ſeeds as might be expected.

E. D. *Extractum Cicutæ.*
Extract of Hemlock.

Take freſh hemlock leaves, gathered juſt before the plant begins to flower, which it commonly does in July, or about the latter end of June; preſs out the juice, and immediately, without ſuffering it to ſettle, put it into a ſhallow glazed earthen pan, over a very gentle fire; keeping it continually ſtirring, to prevent its burning, 'till it is reduced to a thick greeniſh brown maſs. This maſs may be formed into pills with a little of the powder of the dried leaves of the plant.

This is the preparation of hemlock lately publiſhed at Vienna by Dr. Storck, who recommends it as a reſolvent, where all other medicines have failed. Two grains may be made into a pill; to be taken at the firſt twice a day, and gradually increaſe the doſe until the patient can take three or four drachms a day; which quantity may be continued for ſeveral weeks. It is equally ſafe in infancy, age, or pregnancy; it neither accelerates nor diſturbs the circulation; neither heats nor cools; nor affects the animal functions; it increaſes the ſecretions, and renders the mouth moiſt; ſeldom purges, and very rarely vomits; ſometimes augments perſpiration; often produces a copious diſcharge of viſcid urine; but more often produces no ſenſible evacuation; it removes obſtructions and their conſequences; diſcuſſes ſchirrous tumours, both internal and external; it often diſſolves cataracts, or ſtops their progreſs, and has ſometimes removed the gutta ſerena: it has been uſed with great advantage in inveterate cutaneous eruptions, ſcald heads, malignant ulcers, cancers, the worſt ſpecies of fluor albus, and caries of the bones often yield to it. For the moſt part it is neceſſary to continue its uſe for a conſiderable time before any ſenſible benefit is to be perceived. In ſome caſes it has failed of giving relief; and ſome perſons cannot bear its effects; yet the great number of deplorable caſes in which it has relieved, is ſufficient to recommend it as one of the moſt valuable medicines.

It is anodyne and narcotic; it promotes reſt, and eaſes pain; and ſeldom creates thirſt or heat, which are common effects of opium; it promotes the menſes, particularly when ſuddenly reſtrained by cold, ſurpriſes, &c.

As in different ſeaſons this plant will greatly vary in its degrees of ſtrength, conſequently the extract will be ſubject to the ſame inconvenience; to obviate which, begin the uſe of it with a ſmall doſe, and gradually increaſe it till the effects that manifeſt a full doſe is produced: theſe effects are different in different conſtitutions; but for the moſt part a giddineſs affecting the head and motion of the eyes, as if ſomething puſhed them outwards, are firſt felt, a ſlight ſickneſs and trembling, and a laxative ſtool or two following: ſome or all of theſe are marks of a full doſe, let the quantity be what it will.

It is generally obſerved, that this medicine, though continued a long time, is of no effect but when the doſes are as large as the patient can well bear.

Dr. Cullen propoſes, for the ſake of having this extract equally active, that it be prepared from the unripe ſeeds.

The preſent diſpenſatory of the Edinburgh college directs the ſtalks to be preſſed with the leaves; and the evaporation to be ſo far carried on, that one fifth part of the powdered leaves may give the proper conſiſtence for pills.

E. D. *Pilulae, ſeu Extractum, Rudii.*
The Pills or Extract of Rudius.

Take of black hellebore roots, colocynth, Succotorine aloes, each two ounces; ſcammony, one ounce; vitriolated tartar, two drachms; diſtilled oil of cloves, one drachm. Bruiſe the colocynth and hellebore, pour on them two quarts of water, and boil to the conſumption of half the liquor: paſs the decoction thro a ſtrainer, and evaporate it to the conſiſtence of honey; then add the aloes and ſcammony, reduced into fine powder: when the maſs is taken from the fire, mix into it the vitriolated tartar, and diſtilled oil.

L. D. *Gumma et Reſina Aloes.*
Gum and Reſin of Aloes.

Boil four ounces of Succotorine aloes in two pints of water, till as much as poſſible of the aloes is diſſolved. The ſolution, ſuffered to reſt for a night, will depoſite the reſin to the bottom of the veſſel: after which, the remaining liquor, ſtrained, if needful, is to be evaporated, that the gum may be left.

The gum of aloes is ſomewhat leſs purgative, and conſiderably leſs diſagreeable than the crude juice. This alteration is not owing, as might be ſuppoſed, to the ſeparation of the reſin; for the pure reſin of aloes is ſtill leſs diſagreeable, and leſs purgative, even than the gum.

The reſin of guaiacum may be more commodiouſly made from gum guaiacum than from the wood.

Gum guaiacum, as it is called, is very impure, and contains, beſides its reſin, a large quantity of mucilaginous and earthy matter: this method of purifying it therefore is very neceſſary.

SECT.

SECT. III.

Of Syrups, Honeys, and Juices.

THE Galenical Pharmacy next furniſhes us with medicines preſerved in ſugar or honey, under the titles of ſyrups, honeys, oxymels, juices, candies, confections, and conſerves; all which forms differ in little elſe than the management, whereby their reſpective materials are joined with ſugar or honey; and all of theſe ſeem contrived either to preſerve certain things as near as poſſible to the condition in which nature affords them, or elſe to render them more palatable in taking.

In order to judge what dependence may be had upon theſe things in any intention which may occur in extemporaneous practice, we muſt examine the fitneſs of the parts of the *Materia Medica* to be ſo mixed; to which purpoſe we are to conſider what it is which the ſugar or honey does.

In this view the materials thus ordered may be conſidered either in their whole ſubſtance with which the ſugar is immediately mixed, as in the conſerves; or elſe in their juices and decoctions, which are afterwards boiled up with ſugar or honey into ſyrup. And in ſuch a review of them, we are to have a great regard to that particular quality in the ſimples, in which their medicinal virtues conſiſt, as it is, or is not capable of preſervation by this means; and to its quantity or efficacy or power of operation; to ſee whether after this manner we can have enough of it in a convenient doſe, to depend upon as a medicine in caſes of moment.

Of things which are immediately mixed in ſubſtance with ſugar, thoſe only ſeem fitted for it whoſe predominant qualities are thus to be preſerved, and thus to be given as a medicine, from which ſomewhat may be expected to be done. Thus the flowers of lavender, roſemary, the outer peels of oranges and lemons, and a few more of thoſe ordered in conſerves, are preſervable with ſugar in ſuch a manner, that ſmall quantities of them will anſwer in ſuch intentions as they are ſuited to anſwer in any other form. But mint, ſcurvygraſs, rue, and ſuch things as require to be taken in large quantities before we can lay any ſtreſs upon them, are very unfit for this treatment; becauſe a doſe ſufficient to be truſted to is enough to nauſeate the ſtomach, and do miſchief otherwiſe, by the ſugar they neceſſarily carry along with them. All bitters are likewiſe unfit for this management, as wormwood, fumitory, and the like, becauſe they are too nauſeous to be endured; and thoſe of a glutinous and viſcid texture, as the comfrey, &c. by lying in ſugar loſe that very quality which ought to be expected, and ſoon become good for nothing. The ſame rules for judging hold likewiſe in all other forms where ſugar comes in: ſo that on examination we ſhall find few of the alterants improveable by this means: though as to emetics, and

cathartics, where a ſufficient efficacy for a doſe lies in a little rooms they are conveniently enough thus preſerved. And indeed if we conſider a conſerve or a ſyrup as a means to join other things of efficacy together, and to give to other forms conſiſtence, and a convenience of taking, they may moſt of them have their uſe; but little elſe can be ſaid in their favour.

In making the officinal ſyrups to the beſt advantage, ſome principal qualities in the things themſelves, before ſuch a proceſs is entered upon, ought particularly to be regarded. The moſt ſimple treatment in this form, is the diſſolving ſugar enough in the juice, or infuſion of ſome things, to give it a conſiſtence for keeping; the proportion required for this purpoſe is generally double the quantity of ſugar to that of the liquor; and where it is ordered with leſs ſugar, boiling is required to bring it to a due conſiſtence.

Amongſt the materials thus ordered, all acids ought to have their due quantities of ſugar to bring them to a conſiſtence without boiling; becauſe the very action of much heat upon them deſtroys their acidity, and makes them liable to candy; and this more particularly holds good where a juice hath any fragrancy in flavour, as that of oranges, lemons, citrons, and the like; becauſe boiling alſo exhales and deſtroys that fragrancy. Such infuſions likewiſe as give to a ſyrup a deſirable colour, ought at once to be ſo charged with ſugar as not to require boiling, becauſe their colour by ſuch procedure would be ſpoiled; as with the violets, red poppies, cloves, and the like; none of which can bear the fire, but to their detriment.

The alterant ſyrups, either ſimple or compound, which are made from decoctions, and take not in ſugar enough to give them a due conſiſtence without boiling, do moſt require clarification, which is commonly done with the whites of eggs; but this addition to their ſightlineſs, is an injury to their virtues, where any thing mucilaginous or viſcid is required, for the reaſons before given concerning decoctions: but amongſt this whole tribe, this caution is no where ſo neceſſary as in the *Syrupus de Meconio*. What is taken from the poppy, and which ſolely gives the virtue to this ſyrup, will make a decoction thick; and if that be taken out by clarification, the medicine becomes of little or no effect; ſo that a certain way to know when this may be truſted to, is by its making a draught thick and foul, and depoſiting a light ſediment upon ſtanding.

There are ſo many under this title of ſyrups yet retained in the Diſpenſatories, which are hardly ever made or preſcribed, that the particular examination of them would be a needleſs trouble; and therefore it may be ſufficient to obſerve that theſe are the *Syrupus de Abſinthio ſimplex*, juſtly neglected for its nauſeouſneſs; the compound ſyrup under the ſame title; the *Syrupus de Artemiſiâ*, *de Eryſimo*, *Myrtinus*, *de Pomis alterans*, *de Pæonia compoſitus*, *de Praſſio*, *de Stœchade de Symphyto*; and amongſt the *Syrupi purgantes*, the *Syrupus de Cichoreo cum Rhabarbaro*, *de Pomis purgans*, and *Roſaceus ſolutivus cum Senâ*.

Of thoſe which are frequently in uſe, the *Syrupus de Althæâ* is the moſt conſiderable compound; but if we examine the efficacies or fitneſs

neſs of the ſeveral ingredients for this form, we ſhall ſoon enter into the reaſon why it is moſt frequently ordered in its decoction, to be uſed like a common apozem, in large draughts at a time; which way it is certainly a good emollient, and ſerviceable in nephritic diſorders, by lubricating the paſſages; but if a quart or two of this may ſafely be drank in a day, very little can be expected from what ſyrup can be got down in the ſame time.

The ſame holds good in the *Syrupus Capillorum Veneris*, *de Glycyrrhizâ*, and *è quinque Radicibus*, for their decoctions may be drank in large quantities with ſafety, and require to be ſo taken when any thing is expected from them; ſo that all theſe things are of uſe in ſyrups only to ſweeten decoctions, or juleps of like intention; or elſe to make up boles or electaries into a due conſiſtence.

The *Syrupus de Menthâ* is a compoſition of ſome efficacy, being a grateful aſtringent. But even this ought to be truſted to only as a weak auxiliary. The ſame is obſervable of the *Syrupus de Roſis ſiccis*.

The *Syrupus de Cinnamomi* may anſwer in the intention of a reſtringent; but for its ſpicy and cordial quality, that muſt neceſſarily be loſt in ſo long boiling as is required to give it conſiſtence, with half a pound of ſugar to one pint of water. The other ſpices and ſeeds directed to be made into ſyrups after the ſame manner, are liable to the ſame inconveniencies: as are alſo the ſyrups from the citron, orange, and lemon peels. But all the flavour from theſe ingredients which can be retained in a ſyrup, as this form is commonly kept in the ſhops in open pots, or thoſe looſely covered, is ſoon loſt by ſtanding; ſo that ſuch things are to great diſadvantage ordered this way. The *Syrupus Balſamicus* is liable to the ſame loſs, but is directed with the utmoſt care poſſible, to preſerve its more fragrant and volatile parts This laſt mentioned ſyrup is frequently, for cheapneſs, made with ſtorax or benjamin, or both; the difference being hardly diſcoverable, and the fraud of no very ill conſequence.

The firſt way directed to make the *Syrupus Chalybeatus* is hardly practicable, becauſe the *Sal Martis* does not ſeem diſſolvable in the compound gentian water; and as the *Syrupus de Pomis alterans* is ſcarce ever made; this way, I believe, hath never been tried. That with only ſteel, wine, and ſugar, is the old and common way of making it, but it is very apt to run into candy; as is likewiſe the *Syrupus Croci*, and any other of this form made with a vinous liquor, becauſe the ſugar is not ſo naturally ſuſpended in them, as in water and the thicker fluids; and therefore they are more ready to ſhoot into cryſtals.

Amongſt the purging ſyrups, the firſt, from ſuccory with rhubarb, hath been heretofore much in eſteem; but the whole croud of ingredients in it, which have been thought either correctors or purgers of bile, are now known to be of ſo little efficacy as to any ſuch purpoſes, that they are grown into neglect; and that ſhorter compoſition, which bears the title of *Syrupus de Rhabarbaro*, is now much more valued; though the violet flowers, the ſuccory and fennel waters, ſeem but very inſignificant circumſtances in making it.

The

The *Syrupus è Floribus Malorum Perſicorum*, which orders the infuſion to be five times repeated with freſh flowers, is commonly made with one infuſion only, with juſt water enough to cover and ſcald the flowers; and that proves a good gentle emetic or purge to young children: the other way would certainly render it ſtronger; but ſo very few care for the trouble, that I never yet met with any who would vouch for its being thus made. The *Syrupus Roſaceus ſolutivus* is directed ſomewhat in the ſame manner; but a ſtronger infuſion of the dried damaſk roſes, or the reſiduum after diſtillation, will make it with leſs trouble, and full as good, if not better, than is here ordered by frequent infuſions, or from the expreſſed juice.

The ſyrup of buckthorn is of ſtrength ſufficient to require not above two ounces for its largeſt doſe, which may conveniently enough be given; but the cuſtomary way of putting in the ſpices hath been in a thin bag during its boiling to a conſiſtence, and the leſs time they are expoſed to ſuch treatment the better.

Amongſt the medicated honeys, or ſyrups made with honey inſtead of ſugar, there are none in uſe, unleſs the *Mel Mercuriale*, *Roſatum*, and *Oxymel Scilliticum*; though it is certain, that with things intended to expectorate and deterge, honey is more proper than ſugar. The *Mel Helleboratum* hath ſometimes been uſed in hypochondrical and maniacal affections, but its operation is ſo uncertain, that few care to truſt it; for ſometimes it acts as a violent emetic, and at others more by ſtool; and it is an evident ſign that this hath not been much uſed in practice, by the neglect of its preſcription in the common Diſpenſatories; where, with the ſame quantity of hellebore, they have ſometimes ordered thirteen pounds of honey, and ſometimes but three pounds. The *Mel Mercuriale* is chiefly uſed in clyſters; the *Mel Roſatum* in gargles, and for a ſore mouth; and the *Oxymel Scilliticum* as an emetic, unleſs when reſtrained by cordial aſtringents, as the cinnamon in mixture, which helps it to paſs farther, and promote expectoration, or to go off by urine. The *Oxymel compoſitum* is uniform in the intention of its ingredients, and ſerves for a good aperient, or detergent; but it is ſeldom made or preſcribed.

One caution in common practice is worth every one's regard; and that is, never to preſcribe any thing with honey in it, before enquiring of the patient whether he has any natural averſion to it, becauſe many conſtitutions have, inſomuch that a doſe of any of the officinal capitals, made the common way with honey, will occaſion very great and ſtrong diſorders.

Under the next diviſion of *Rob ſive Sapæ & Succi*, we have nothing either in officinal or extemporaneous preſcription, unleſs the *Acacia*, which is the juice of ſloes boiled to a conſiſtence, and the *Succus Glycyrrhizæ*; the latter of which is by many preferred to the *Succus Glycyrrhizæ Hiſpanicæ*, becauſe the foreign is very often foul and droſſy, whereas that of our own mixing is much cleaner, and more efficacious; beſides its greater readineſs, from its ſofter conſiſtence, to mix into any extemporaneous forms, as boles and the like.

The

The old officinal form, called *Lohoc* or *Eclegma*, uſed to ſupply us with abundance of things from the ancient and foreign Diſpenſatories: It is of a conſiſtence between a ſyrup and an electary or conſerve, and generally takes in ſo many things of a mucilaginous and ſlimy texture, mixed with ſugar, that ſoon makes them ferment and ſour; for which reaſon thoſe few now retained, which are but two in the laſt Diſpenſatory, are hardly ever made or preſcribed, and therefore are not worth examination, as to the uniformity of their ingredients in any intention.

Nothing ought to be brought into this form, but what is conveniently drawn out by decoction in an aqueous menſtruum, as are the expreſſed juices of plants, fruits, &c. for any thing of a volatile, or ſpirituous nature, will not be continued herein long; if it does not get away even in the making. The more, likewiſe, any ſubſtances are diſpoſed to fermentation, the leſs they are fit for this form; becauſe they will run into new coaleſcencies, and deſtroy the due conſiſtence of the medicine, by ſome parts being too thick and ropy, and others too thin: the juices therefore of fruits, for this reaſon, ſooneſt decay in ſyrups. Whatſoever medicinal ingredients then have their virtues conſiſting in their moſt ſolid and permanent parts, and ſuch as are of a ſaline and earthy nature, are conveniently enough reduced into, and preſerved in this form; becauſe ſuch will draw out in an aqueous body, and bear boiling up to that conſiſtency with ſugar, which is neceſſary for keeping without evaporating.

For this purpoſe, therefore, all decoctions from dry herbs are much fitter for this form than the juices expreſſed from thoſe herbs, which they are often ordered to be made with, becauſe the moſt forcible preſſure of a green plant muſt ſtill leave ſome portion behind, and that moſt probably which is the beſt, as the thin watery parts run off firſt; whereas the more ſaline and ſubſtantial are ſo intimately mixed as almoſt to make a part of the fibres, and therefore will remain in the preſſings; but when a plant is dried, which robs it only of the phlegm, or ſuperfluous moiſture, boiling water naturally opens its minuteſt cells, and joins with the eſſential ſalts, and moſt material parts of all. And this farther advantage a ſyrup has, made from the decoction of a dry plant, above that which is made from an expreſſed juice; that it will be both finer, and keep longer, as well as be ſtronger of the ingredient.

But becauſe a ſyrup can retain nothing but the groſſer and more rigid parts of the ingredients, which are concerned in its compoſition, this form is confined to very few intentions, which are to be anſwered only by the medicine's operation in the ſtomach or bowels; and therefore under this diviſion we are to look for little elſe beſides emetics and cathartics, unleſs for the conveniency of other forms, and to make dry ſubſtances up into pills, boles, or electaries, or to ſweeten juleps; and render ſome things palatable for taking. Whereſoever, therefore, we meet with a ſyrup, from any celebrated author, or how pompouſly ſoever dignified with a title; yet if its operation is pretended to lie beyond the *primæ viæ*, it ought to be rejected. How

can

can it be imagined that the intention of a cephalic, as it has already been fully explained, can be anſwered by a medicine that is inconſiſtent with any thing volatile in its compoſition? The ſame holds good againſt any thing herein being likewiſe diaphoretic, and almoſt diuretic alſo: though a ſyrup may be ſo loaded with fixed ſalts, as to carry ſome of them into the blood; but then ſuch as are much better managed in other forms. A cephalic, an antiſcorbutic, an alexipharmic, and even a diuretic ſyrup, are terms ridiculous; if not contradictory. And as for the number of thoſe, which are much the greateſt, that are made only for the conveniency of extemporaneous forms, there are hardly any of them better than ſo much plain ſyrup of ſugar, or common molaſſes; and therefore the preſent practice has, very juſtly, almoſt rejected them; for a julep is now rarely ordered to be ſweetened with any thing but plain ſugar.

General Rules to be obſerved in making Syrups.

I. The ſugar uſed for ſyrups made without boiling, ſhould be previouſly boiled with water, to a candy conſiſtence; being at the ſame time clarified by whites of eggs, and proper ſcumming.

II. The quantity of ſugar uſed for theſe ſyrups, ſhould be twice the weight of the fluid, (though a leſs proportion will generally ſuffice.) Diſſolve half the ſugar in the fluid; afterwards, by degrees, add more of it in powder than will diſſolve readily, but will remain at the bottom of the veſſel; then with the gentle heat of a balneum perfect the ſolution.

III. Acid ſyrups, and thoſe made with juices of fruits, muſt not be put into copper veſſels, unleſs tinned.

IV. The rules given for decoctions, in general, extend alſo to decoctions for ſyrups. The vegetables uſed either for decoctions or infuſions are to be moderately dried, except where they are expreſly preſcribed freſh.

L. D. *Syrupus ex Allio.* Syrup of Garlick.

Take of garlick, ſliced, one pound; boiling-water, two pints: macerate them in a cloſe veſſel for twelve hours; then ſtrain off the liquor, and diſſolve in it a proper quantity of ſugar, ſo as to make a ſyrup.

This ſyrup is occaſionally made uſe of for attenuating viſcid phlegm, and promoting expectoration in humoural aſthmas, and oppreſſions of the breaſt: in theſe caſes it proves a medicine of conſiderable efficacy, though a very unpleaſant one: it taſtes and ſmells ſtrong of the garlick.

L. *Syrupus ex Althæa.* Syrup of Marſhmallows.

Take of marſhmallow roots, freſh, one pound; double refined ſugar, four pounds; water, one gallon.

Boil the water with the roots to one half: when grown thoroughly cold, pour off and preſs out the decoction, and ſet it by for a night to ſettle: next morning, pour off the clear liquor, and adding to it the ſugar, boil the whole to the weight of ſix pounds.

E. D. Take of marſhmallow roots, a little dried, nine ounces; water,

water, one gallon; double refined ſugar, four pounds. Boil the water with the roots to the conſumption of one half, and ſtrain out the liquor by cloſe preſſure. Set the ſtrained liquor aſide to depoſit its fæces, and to the clear liquor add the ſugar, and boil it to the conſiſtence of a ſyrup.

This ſyrup is uſed chiefly in nephritic caſes, for ſweetening emollient decoctions, and the like; of itſelf, it can do little ſervice, notwithſtanding the high opinion which ſome have entertained of it; for what can be expected from two or three ſpoonfuls of the ſyrup, when the decoction, from which five or ſix pounds are made, may be taken at a draught or two?

L. *Syrupus e Corticibus Aurantiorum.*
Syrup of Orange-Peel.

Take of the yellow rind of Seville orange-peel, freſh, eight ounces; boiling-water, five pints: macerate them for a night in a cloſe veſſel; next morning, ſtrain out the liquor, and diſſolve in it the proper quantity of ſugar for making it into a ſyrup.

E. Take of the yellow rind of orange peel, freſh, ſix ounces; boiling-water, three pints. Macerate them for a night in a cloſe veſſel, then ſtrain the liquor; let it ſtand to ſettle: and having poured it clear off from the ſediment, diſſolve therein ſeven pounds and a quarter of white ſugar, ſo as to make it into a ſyrup with a gentle heat.

In making this ſyrup, it is particularly neceſſary, that the ſugar be previouſly powdered, and diſſolved in the infuſion with as gentle a heat as poſſible, to prevent the exhalation of the volatile parts of the peel. With theſe cautions, the ſyrup proves a very elegant and agreeable one, poſſeſſing great ſhare of the fine flavour of the orange-peel.

L. *Syrupus Balſamicus.*
Balſamic Syrup.

Take of Balſam of Tolu, eight ounces; water, three pints.

Boil them for two or three hours in a circulatory veſſel, or at leaſt in a long-necked matraſs, having its mouth lightly covered. When grown cold, ſtrain out the liquor, and mix therewith a proper quantity of ſugar, to make it into a ſyrup.

E. Take of the ſyrup of ſugar, juſt made, and warm from the fire, two pounds; tincture of balſam of Tolu, one ounce.

When the ſyrup has grown almoſt cold, ſtir into it the tincture, by little at a time, agitating them well together, till perfectly united.

The intention of the contrivers of the two foregoing proceſſes ſeems to have been ſomewhat different. In the firſt, the more ſubtile and fragrant parts of the balſam are extracted from the groſſer reſinous matter, and alone retained in the ſyrup: the other ſyrup contains the whole ſubſtance of the balſam, in larger quantity. They are both moderately impregnated with the agreeable flavour of the balſam.

It hath been objected that the ſpirit in the tincture, ſpoils the taſte of this ſyrup, and therefore after the mixture of the tincture with the ſyrup, it was directed to place the mixture on the heat of a ſand-bath, until the ſpirit is exhaled.

In

In ſome Pharmacopœias, an elegant ſyrup of this kind is prepared from a tincture of balſam of Peru, with roſe-water, and a proper quantity of ſugar.

L. *Syrupus Caryophyllorum Rubrorum.*
Syrup of Clove July-Flowers.

Take of clove July-flowers, freſh gathered, and freed from the heels, three pounds; boiling-water, five pints.

Macerate them for a night in a glaſs, or glazed earthen veſſel, then ſtrain off the liquor, and diſſolve therein its due proportion of ſugar to make it a ſyrup.

E. D. Take of clove July-flowers, freſh gathered, and freed from the heels, one pound; boiling water, three pints; fine white ſugar, ſeven pounds and a quarter. Macerate the flowers in the water for a night, then to the ſtrained liquor, add the ſugar powdered, and with a gentle heat make it into a ſyrup.

This ſyrup is of an agreeable flavour, and a fine red colour; and for theſe it is chiefly valued.

E. D. *Syrupus Colchici.*
Syrup of Meadow-Saffron.

Take of the freſh ſucculent roots of meadow-ſaffron, cut in thin ſlices, one ounce; vinegar, a pint, and pure ſugar twenty-ſix ounces. Digeſt the roots in the vinegar for two days, now and then ſhaking the veſſel, then ſtrain off the liquor by a gentle preſſure. To the clear liquor add the ſugar powdered, and boil them gently, ſo as to make a ſyrup.

L. D. *Syrupus Croci.*
Syrup of Saffron.

Take of ſaffron wine, one pint; double refined ſugar, twenty-five ounces. Diſſolve the ſugar in the wine, ſo as to make a ſyrup thereof.

Saffron is very well fitted for making a ſyrup, as in this form a ſufficient doſe of it is contained in a reaſonable compaſs. This ſyrup is at preſent more frequently preſcribed, than the wine from which it is made: it is a pleaſant cordial, and gives a fine colour to juleps.

L. D. *Syrupus Cydoniorum*
Syrup of Quinces

Take of quince-juice, depurated, three pints; cinnamon, one drachm; cloves, ginger, each half a drachm; red Port wine, one pint; double refined ſugar, nine pounds.

Digeſt the juice with the ſpices, in the heat of aſhes, for ſix hours; then adding the wine, paſs the liquor through a ſtrainer; and afterwards diſſolve it in the ſugar, ſo as to make a ſyrup.

This preparation is a very agreeable, mild, cordial reſtringent; and in ſome kinds of looſeneſs and diſorders of the ſtomach, may be either taken by itſelf, in the quantity of a ſpoonful or two at a time, or employed for reconciling to the palate medicines more ungrateful.

Syrupus Kermeſinus.
Syrup of Kermes.

Take of juice of kermes grains, one pound; white ſugar, two pounds. Make them into a ſyrup, without heat.

The ſyrup of kermes is brought to us ready made, from the ſouthern parts of France.

This ſyrup is of an agreeable taſte, and a fine red colour. It is accounted cordial and corroborant, and ſuppoſed to be particularly

ſerviceable in weakneſs, and other diſorders of pregnant women.

L. D. *Syrupus e Succo Limonum*
Syrup of Lemon Juice.

Take of the juice of lemons, ſuffered to ſettle till the fæces have ſubſided, and afterwards ſtrained, two pints; doubled refined ſugar, fifty ounces. Diſſolve the ſugar in the juice, ſo as to make a ſyrup thereof.

E. Take of lemon juice, depurated, two pounds; white ſugar, four pounds and two ounces. Make them into a ſyrup without boiling.

After the ſame manner are prepared,

L. *Syrupus e Succo Mororum.*
Syrup of Mulberries.

L. *Syrupus e Succo Fructus Rubi Idæi.*
Syrup of Raſpberries.

All theſe are very pleaſant, cooling ſyrups, and in this intention are occaſionally made uſe of, in draughts and juleps, for quenching thirſt, abating heat, &c. in bilious or inflammatory diſtempers. They are ſometimes likewiſe employed in gargariſms.

L. D. *Syrupus e Meconio, ſive Diacodion.*
Syrup of Meconium, or Diacodium.

Take of white poppy heads, dried and cleared from the ſeeds, three pounds and a half; water, ſix gallons.

Cut the heads, and boil them in the water, ſtirring them now and then to prevent their burning, till only but one third part of the liquor remains, which will be almoſt entirely ſoaked up by the poppies. Then remove the veſſel from the fire, ſtrongly preſs out the decoction, and boil it down to about four pints: ſtrain it whilſt hot, firſt through a ſieve, and afterwards through a fine woollen cloth; and ſet it by for a night, that the fæces may ſubſide. Next morning, pour the liquor off clear, and boil it with ſix pounds of double refined ſugar, until the weight of the whole is nine pounds, or a little more, that it may become a ſyrup of a proper conſiſtence.

E. D. *Syrupus Papaveris Albi, ſeu de Meconio, vulgo Diacodion.*
Syrup of White Poppies, or of Meconium, commonly called Diacodium.

Take of white poppy heads, juſt ripe, a little dried, and freed from their ſeeds, two pounds. Boiling water, three gallons; and of pure ſugar, four pounds. Slice the heads, and macerate them in the water for a night; then boil until one third only of the water remains, and ſtrongly preſs out the liquor. Boil this ſtrained liquor to one half, and ſtrain it again; laſtly, add the ſugar, and boil it to a ſyrup.

This ſyrup may alſo be made by diſſolving one drachm of the extract of white poppy heads in two pints of the ſimple ſyrup.

Particular care is requiſite, in the preparation of this ſyrup, that it may be always made as nearly as poſſible, of the ſame ſtrength. It is given to children, in doſes of two or three drachms: to adults, from half an ounce to an ounce and upwards, for obtunding acrimonious humours, eaſing pain, procuring reſt, and anſwering the other purpoſes of opiates.

L. D. *Syrupus Papaveris Erratici.*
Syrup of Wild Poppies.

Take of wild poppy flowers, freſh

freſh, four pounds; boiling water, four pints and a half.

Pour the water on the poppies, ſet them over the fire, and frequently ſtir them, until the flowers are thoroughly moiſtened; as ſoon as they are ſunk under the water, let the whole be ſet by to ſteep for a night; next day pour off, or preſs out, the liquor, and ſet it by for a night longer to ſettle: afterwards add the proper quantity of double refined ſugar to make it into a ſyrup.

This ſyrup has been recommended in diſorders of the breaſt, coughs, ſpitting of blood, pleuriſies, and other diſeaſes, both as an emollient, and as an opiate. It is one of the lighteſt of the opiate medicines, and in this reſpect ſo weak, that ſome have doubted of its having any anodyne quality.

L. D. *Syrupus Pectoralis.*
Pectoral Syrup.

Take of Engliſh maidenhair, dried, five ounces; liquorice, four ounces; boiling water, five pints.

Macerate them for ſome hours, then ſtrain out the liquor, and with a proper quantity of double refined ſugar, make it into a ſyrup.

The title of this compoſition expreſſes its medical intention: it is ſuppoſed to ſoften acrimonious humours, allay tickling coughs, and promote the expectoration of tough phlegm.

L. D. *Syrupus e Floribus Paralyſis.*
Syrup of Cowſlips.

This is made from cowſlip flowers, after the ſame manner as the ſyrup of clove July-flowers.

It has been ſuppoſed ſerviceable in nervous diſorders; its agreeable flavour recommends it to the patient, though at preſent there are few who ſuppoſe it to poſſeſs any ſingular virtues.

L. *Syrupus Roſarum ſolutivus.*
Solutive Syrup of Roſes.

Take the liquor that remains after the diſtillation of ſix pounds of damaſk roſes; of double refined ſugar, five pounds.

Having preſſed out the liquor from the roſes, boil it down to three pints, and ſet it by for a night to ſettle; next morning, pour it off clear from the ſediment, and adding the ſugar, boil the mixture to the weight of ſeven pounds and a half.

This ſyrup is made from a double infuſion of freſh gathered pale roſes, after the ſame manner as the ſyrup of wild poppies and is called,

E. *Syrupus Roſarum Pallidarum.*
Syrup of Damaſk Roſes.

Take the freſh leaves of damaſk roſes, a pound; boiling water, three pounds, and pure ſugar, three pounds. Macerate the roſes all night, then to the clear ſtrained liquor add the ſugar, and with a gentle heat make a ſyrup.

The liquor remaining after the diſtillation of roſes is as proper for making this ſyrup as a freſh infuſion of the flowers. This ſyrup is an agreeable and mild purgative for children, in the doſe of half a ſpoonful, or a ſpoonful. It likewiſe proves gently laxative to adults, and does good ſervice in coſtive habits.

E. *Syrupus de Riſis Siccis.*
Syrup of Dry Roſes.

Take of dried red roſes, ſeven

ounces; white ſugar, ſix pounds; boiling water, four pints.

Infuſe the roſes in the water for a night, then boil them a little, ſtrain out the liquor, and adding to it the ſugar, boil them to the conſiſtence of a ſyrup.

This ſyrup is ſuppoſed to be mildly aſtringent: but is principally valued on account of its red colour.

L. *Syrupus Scilliticus.*
Syrup of Squills.

Take of vinegar of ſquills, a pint and a half; cinnamon, ginger, each one ounce; double refined ſugar, three pounds and a half.

Steep the ſpices in the vinegar for three days; then ſtrain out the liquor, and add the ſugar, ſo as to make a ſyrup thereof.

E. Take of vinegar of ſquills, a pint and half; white ſugar, three pounds and a half. Make them into a ſyrup with a gentle heat.

The ſpices in the firſt of theſe compoſitions, ſomewhat alleviate the offenſiveneſs of the ſquills, though not ſo much as to prevent the medicine from being diſagreeable. It is uſed chiefly in doſes of a ſpoonful or two, for attenuating viſcid phlegm, and promoting expectoration, which it does very powerfully.

L. *Syrupus Simplex.*
The Simple Syrup.

Diſſolve in water ſo much double refined ſugar, as will make it into a ſyrup.

E. *Syrupus Simplex, ſive Communis.*
Common Syrup.

Diſſolve in water enough of the pureſt ſugar, ſo as to make a ſyrup.

These preparations are plain liquid ſweets, void of flavour or colour.

L. *Syrupus e Spina Cervina.*
Syrup of Buckthorn.

Take of the juice of ripe and freſh buckthorn berries, one gallon; cinnamon, ginger, nutmegs, each one ounce; doubled refined ſugar, ſeven pounds.

Set the juice by for ſome days to ſettle; then paſs it through a ſtrainer, and in ſome parts thereof macerate the ſpices. Boil the reſt of the juice, adding towards the end that part in which the ſpices were macerated, firſt paſſed thro' a ſtrainer: this part of the proceſs muſt be ſo managed, that the whole liquor may be reduced to four pints. Laſtly, put in the ſugar, and make the mixture into a ſyrup

E. Take of the juice of ripe buckthorn berries, depurated, ſix pounds; white ſugar, three pounds and a half, boil the juice with the ſugar, to the conſiſtence of a ſyrup.

In the former preparation, the diſagreeable qualities of the buckthorn berries are abated by the aromatics and the eſſential oil: they are nevertheleſs ſtill ungrateful. Three or four ſpoonfuls operate briſkly as a catharic, and bring away large quantities of ſerous humours. They ſometimes occaſion a thirſt and dryneſs of the mouth and fauces, and violent gripes: theſe may be prevented, by drinking liberally of water-gruel during the operation.

L. *Syrupus Violarum.*
Syrup of Violets.

Take of violets, freſh, and well coloured,

coloured, two pounds: boiling water, five pints.

Macerate them for a whole day, in a glaſs, or at leaſt a glazed earthen veſſel; then pour out the liquor, and paſs it through a thin linen cloth, carefully avoiding even the lighteſt preſſure: afterwards, adding the due proportion of ſugar, make it into a ſyrup.

E. Take of March violets, freſh, one pound; boiling water, three pints.

Steep them together for twenty-four hours; in an earthen veſſel cloſe covered: then ſtrain out the liquor without preſſure, and diſſolve in it ſeven pounds and a quarter of white ſugar powdered, and make a ſyrup without boiling.

This ſyrup is of a very agreeable flavour, and in the quantity of a ſpoonful or two, proves to children gently laxative. It is apt to loſe, in keeping, the elegant blue colour, for which it is chiefly valued.

L. *Syrupus Zinziberis.*
Syrup of Ginger.

Take of ginger, cut into thin ſlices, four ounces; boiling water, three pints. Macerate them for ſome hours, then ſtrain out the liquor, and make it into a ſyrup with a proper quantity of double refined ſugar.

This is an agreeable and moderately aromatic ſyrup, lightly impregnated with the flavour and virtues of the ginger.

E. D. Take of powdered ginger, three ounces; boiling water, three pints; and white ſugar, ſeven pounds and a quarter. Macerate the ginger in the water for twenty-four hours in a cloſe veſſel, then to the clear liquor add the ſugar powdered, and make a ſyrup.

L. D. *Confectio Alkermes.*
Confection of Kermes.

Take of juice of kermes grains, warmed and ſtrained, three pounds; damaſk roſe water, ſix ounces by meaſure; oil of cinnamon, half a ſcruple; double refined ſugar, one pound. Diſſolve the ſugar in the roſe water, by the heat of a water bath, into a ſyrup; then mix in the juice of kermes, and after it has grown cold, the oil of cinnamon.

E. D. *Syrupus Aceti.*
Syrup of Vinegar.

Take of vinegar, two pints; white ſugar, three pounds and a half; boil to the conſiſtence of a ſyrup.

This is reckoned good to expectorate, and cut phlegm; and in ſuch intentions any other ſyrup may be helpful; becauſe the ſugar itſelf has a tendency that way.

Syrupus de Berberis.
Syrup of Barberries.

This is made by boiling in a glazed earthen veſſel, two pounds of the juice of the fruit with one pound and a half of fine ſugar, to the conſiſtence of a ſyrup.

Boiling any acid ſyrup is an error upon two accounts; becauſe it blunts the acidity, from whence the efficacy is expected, and makes it candy: this is cooling and aſtringent, but not often uſed. It makes a good gargariſm.

Syrupus Capillorum Veneris.
Syrup of Maidenhair.

Take maidenhair five ounces, ſteep and boil it in a ſufficient quantity of water, with liquorice

root two ounces. And boil up the clear ſtrained liquor into a ſyrup, with three pounds of white ſugar.

This expectorates as much as the ſugar can help it; but as to the other ingredients, it might be all taken in a doſe, and therefore cannot have any efficacy to be depended upon.

Syrupus de Caryophyllis Aromaticis.
Syrup of Clove-Spice.

Slice one ounce of cloves, and infuſe them for ſome days in twelve ounces of white wine; then ſtrain and boil the liquor into a ſyrup, with a ſufficient quantity of ſugar, which is twenty ounces.

This ſyrup would not have been worth taking notice of, but that it is often uſed without order, as a ſuccedaneum to the ſyrup of clove July-flowers, when it is wanted; becauſe that can be made but once a year; and this, with cochineal, may be brought up exactly to its colour. Their virtues are the ſame; and in both ſo inſignificant, as not to make this fraud worth notice.

Syrupus Corticum Citriorum.
Syrup of Citron Peels.

Take five ounces of the outer yellow citron peel, full ripe and freſh; of kermes berries, or in their ſtead of the imported juice, two drachms; of ſpring-water three pounds; ſteep them together for one night in a bath heat; and to the ſtrained liquor put two pounds and a half of fine ſugar: and with a moderate heat boil them up to the conſiſtence of a ſyrup.

After the ſame manner are prepared ſyrups from the peels of oranges and lemons.

But care muſt be taken that with too haſty a heat the aromatic flavour be not evaporated.

Syrupus de Glycyrrhiza.
Syrup of Liquorice.

Take of freſh liquorice, cleanſed and bruiſed, two ounces; of white maidenhair, one ounce; of hyſſop, half an ounce. Pour upon theſe three pounds of boiling ſpring-water; and after twenty-four hours infuſion in a bath-heat, ſtrain out the liquor, clarify it; and with the beſt honey and fine ſugar, of each ten ounces, boil it up to a ſyrup in a bath-heat.

This was the contrivance of Meſue, and was continued in all the college Diſpenſatories till the laſt, without alteration.

Syr. Fl. Perſicorum.
Syrup of Peaches.

Take freſh flowers of peaches one pound, and pour upon them three pounds of warm water: after twenty-four hours ſteeping, preſs out the liquor, and repeat the infuſion with a freſh quantity of flowers five times in the ſame liquor; then in three pounds of the laſt ſtraining diſſolve two pounds and a half of ſugar; and boil it up to a due conſiſtence.

This is generally made by one infuſion; pouring on only ſo much as will ſcald the flowers. It is a pretty puke for children, and opens a little downwards; its doſe is from two drachms to one ounce.

Syrupus de Rhabarbaro.
Syrup of Rhubarb.

Take of the beſt rhubarb, and of ſena leaves, of each two ounces and a half; of cinnamon, one drachm and a half; of ginger, half a drachm; of water eight pounds.

pounds. Let them ſteep a whole night warm, and then boil the ſtrained liquor to a ſyrup with two pounds of white ſugar; towards the latter end mixing with it two ounces of the ſolutive ſyrup of roſes.

Mel Saponis. Honey of Soap.

Take common ſoap, and honey, of each four ounces; ſalt of tartar, half an ounce; fumitory-water, two drachms. Mix them together.

This ſtands recommended as a good thing to ſcour and whiten the ſkin; but it may alſo be put to a much more important uſe, and will frequently do great ſervice in rheumatic pains, if it be well rubbed into the part affected: but it is ſo penetrating, as ſometimes to raiſe a bliſter, and at firſt may enrage the pain. Great improvements may be made with the addition of due quantities of camphor and opium.

Syr. Reſtringens.
Reſtringent Syrup.

Take oak-bark one pound; pomegranate ſhells, roots of tormentil and biſtort, of each two ounces; boil them in cong. i. of ſpring-water to three pounds; ſtrain the liquor, and let it ſettle till fine; which pour off by inclination To the liquid add of the juice of ſloes, and barberries, of each one pound; evaporate all to two pounds; then add of fine ſugar two pounds, and boil to a due conſiſtence.

This makes a ſyrup ſo reſtringent, that it may be truſted in diarrhœas alone, where ſuch things are wanted; as alſo in all other kinds of fluxes. In agues, and all intermittents, it greatly helps the bark; and, in children, will ſometimes do without it. However, a great deal of that may be ſpared, if this be contrived into all the forms convenient for it; and the bark itſelf be made either into boles or electaries with it. In all kinds of hæmorrhages it is very proper, and will do good ſervice in the whites, and female weakneſſes.

Mella et Oxymelita.
Honeys and Oxymels.

L. *Mel Ægyptiacum.*

Take of verdegriſe, reduced into a very ſubtile powder, five ounces; honey, fourteen ounces by weight; vinegar, ſeven ounces, by meaſure.

Boil theſe ingredients together, over a gentle fire, till they have acquired a due conſiſtence, and a reddiſh colour. On keeping this mixture, for ſome time, the thicker part falls to the bottom; the thinner, which floats on the top, is called *mel Ægyptiacum.*

This preparation is deſigned only for external uſe, for cleanſing and deterging ulcers, and keeping down fungous fleſh: it is ſerviceable alſo in venereal ulcerations of the mouth and tonſils. If it ſhould be wanted more acrid, it may be rendered ſo by ſhaking the veſſel, ſo as to mix the thick matter at the bottom with the upper thin one.

L. *Mel Elatines.*
Honey of Fluellin.

Take of the depurated juice of fluellin, four pints; clarified honey, four pounds: boil them to a due conſiſtence.

This preparation made its firſt appearance in the preceding edition of our Pharmacopœia. It is very rarely made uſe of, and not often kept in the ſhops.

Mel

L. D. *Mel Helleboratum.*

Honey of Hellebore.

Take of white hellebore roots, dried and cut in ſlices, one pound; clarified honey, three pounds; water, four pints.

Let the roots be macerated in the water for three days, and then boiled a little; preſs out the liquor, and having paſſed it again through a ſtrainer, boil it with the honey to a proper thickneſs.

Particular care ought to be had to reduce this preparation as nearly as poſſible to the honey conſiſtence, that its ſtrength may not be too uncertain. It acts as a draſtic purgative or emetic, too violent and precarious for common uſe. It has been ſometimes given in maniacal caſes, in doſes of one or two drachms, and upwards; though more frequently employed in clyſters. The preſent practice very rarely makes uſe of it at all.

L. D. *Mel Roſaceum.*

Honey of Roſes.

Take of red roſe buds, freed from the heels, and haſtily dried, four ounces; boiling water, three pints, clarified honey, five pounds: ſteep the roſes in the water for ſome hours, then ſtrain off the liquor, mix with it the honey, and boil them to a due conſiſtence.

E. D. *Mel Roſaceum.*

Take of red roſes, dried, half a pound; boiling water, four pints; honey, ſix pounds. Steep the roſes in the water for a night, then ſtrain out the liquor, add to it the honey, and boil the mixture to the conſiſtence of a ſyrup.

This preparation is frequently made uſe of as a mild cooling detergent, particularly in gargariſms for ulcerations and inflammation of the mouth and tonſils.

L. D. *Oxymel ex Allio.*

Oxymel of Garlic.

Take of garlic, cut in ſlices, an ounce and a half; carraway ſeeds, ſweet fennel ſeeds, each two drachms; clarified honey, ten ounces, by weight; vinegar, half a pint. Boil the vinegar for a little time, with the ſeeds bruiſed, in a glazed earthen veſſel; then add the garlic, and cover the veſſel cloſe; when grown cold, preſs out the liquor, and diſſolve in it the honey, by the heat of a water-bath.

This oxymel is recommended for attenuating viſcid juices, promoting expectoration, and the fluid ſecretions in general. It is doubtleſs a medicine of conſiderable efficacy, though very unpleaſant, the flavour of the garlic prevailing, notwithſtanding the addition of the aromatic ſeeds.

Oxymel Colchicum.

Oxymel of Meadow Saffron.

Take of clarified honey, two pounds; vinegar of meadow ſaffron, one pint: boil them in a glazed earthen veſſel, over a gentle fire, to the conſiſtence of a ſyrup.

This oxymel is the mildeſt preparation of the root; it has an agreeable acid taſte, vellicates the tongue gently, has a moderately aſtringent quality, and is excellent for cleanſing the tongue from mucus. In an increaſed doſe, it is an emetic, and ſometimes a purge; but its moſt remarkable effect is as a diuretic.

Where the ſerum ſtagnates, or ſuperabounds, and the morbific matter may be prudently carried off by the kidneys, this oxymel may

may be uſed to great advantage; whence it is particularly adapted to the relief of hydropic patients. And it is peculiarly in the favour of this preparation, that a great quantity is not neceſſary to cure the moſt obſtinate diſtempers.

The doſe, when deſigned as a diuretic, is to begin with a teaſpoonful twice a day, in any convenient liquor: on the ſecond or third day, give the ſame doſe three times a day; after that four times a day: and if the patient eaſily bears this doſe, and the proper effect does not follow, it may be gradually increaſed to a whole ounce in a day, and even an ounce and a half; but if this laſt quantity has no effect, then little or nothing is to be expected from this or any other medicine.

Oxymel Pectorale.
Pectoral Oxymel.

Take of elecampane roots, one ounce; Florence orris roots, half an ounce; gum ammoniacum, one ounce; vinegar, half a pint; clarified honey, one pound; water, three pints. Let the roots, cut and bruiſed, be boiled in the water till a pint is waſted; then ſtrain off the liquor, and add to it the gum ammoniacum, previouſly diſſolved in the vinegar, and the honey: boil the whole together a little.

The title of this compoſition expreſſes its medical virtues. It is deſigned for thoſe diſorders of the breaſt that proceed from a load of viſcid phlegm (which this medicine attenuates, and promotes the expectoration of,) and obſtructions of the pulmonary veſſels. Two or three ſpoonfuls may be taken every night and morning, and continued for ſome time.

L. D. *Oxymel Scilliticum.*
Oxymel of Squills.

Take of clarified honey, three pounds; vinegar of ſquills, two pints, With E. D. four pounds of clarified honey. Boil them in a glazed earthen veſſel, over a gentle fire, to the conſiſtence of a ſyrup.

Oxymel of ſquills is an uſeful aperient, detergent, and expectorant; and of great ſervice in humoural aſthmas, coughs, and other diſorders, where thick phlegm abounds. It is given in doſes of two or three drachms, along with ſome aromatic water, as that of cinnamon, to prevent the naufea which it would otherwiſe be apt to excite. In large doſes it proves emetic.

L. D. *Oxymel ſimplex.*
Simple Oxymel.

Take of clarified honey, two pounds; vinegar, one pint: boil them in a glazed earthen veſſel, over a gentle fire, to the conſiſtence of a ſyrup.

Honeys of former Diſpenſatories.

Mel Anthoſatum.
Honey of Roſemary.

Take of roſemary flowers, freſh gathered, one pound; of clarified honey, three pounds: mix them together in a pot, expoſe them to the ſun, and keep the mixture for uſe.

Mel Mercuriale.
Honey of Mercury.

Take of the juice of mercury, three pounds; of honey, two pounds: let them be depurated, and boiled up together to the conſiſtence of honey.

Mel

Mel Mororum, vel Diamoron.
Honey of Mulberries.

Take of the juice of mulberries, both of the tree and ſhrub, gathered unripe, before ſun-riſe, and depurated by ſettling, of each one pound and a half; of honey ſtrained and deſpumated, two pounds: Let them ſimmer together, in a gentle heat, to a due conſiſtence.

Mel Violaceum. Honey of Violets.

It is made altogether as the honey of roſes.

Succi et Gelatinæ. Juices and Jellies.

L. D. *Succi Scorbutici.*
The Scorbutic Juices.

Take of the juice of garden ſcurvy-graſs, two pints; brooklime, one pint; water-creſſes, one pint; Seville oranges, a pint and quarter. Mix them together; let them ſtand till the fæces have ſubſided, and then either pour the liquor off clear, or paſs it through a ſtrainer.

E. D. *Succi Adſcorbuticos.*

Take of the juice of garden ſcurvy-graſs, oranges, and water-creſſes, each one pint; ſpirituous nutmeg-water a quarter of a pint; and let them ſtand until the fæces have ſettled, then pour off the clear liquor.

Both theſe compoſitions are of conſiderable uſe for the purpoſes expreſſed in the title: the orange juice is an excellent aſſiſtant to the ſcurvy-graſs, and other acrid antiſcorbutics, which, thus mixed, have been found from experience to produce much better effects than when exhibited by themſelves. Theſe juices may be taken from two or three ounces, to as much as the ſtomach can bear, two or three times a day: they generally increaſe the urinary ſecretions, and ſometimes introduce a laxative habit.

L. *Rob Baccarum Sambuci.*
Rob of Elder Berries.

Let the depurated juice of elder-berries be inſpiſſated with a gentle heat.

E. Take two quarts of the juice of ripe elder-berries, and half a pound of refined ſugar. Evaporate, over a gentle fire, to the conſiſtence of honey.

This rob is a powerful ſaponaceous reſolvent, opens obſtructions of the viſcera, promotes the natural ſecretions by ſtool, urine, and ſweat; and by this means does ſervice in ſundry chronical diſorders. The doſe is from a drachm or two to an ounce or more. A ſpoonful, diluted with water, is uſefully taken, in common colds, at bed time.

Succus Prunorum Silveſtrium, ſive Acacia Germanica.
Juice of Sloes, or German Acacia.

Let any quantity of the juice of unripe ſloes be inſpiſſated over a gentle fire.

This is a moderately ſtrong aſtringent, ſimilar to the Egyptian acacia, for which it is not unfrequently ſubſtituted. It is given in fluxes, &c. from a ſcruple to a drachm.

Gelatina ſeu Miva Cydoniorum.
Gelly or Marmalade of Quinces.

Take three pints of depurated quince juice, and a pound of white ſugar: boil them together according to art.

This is an uſeful, cooling, reſtringent medicine: it is given in weakneſs of the ſtomach, reachings to vomit, diarrhœas, and dyſente-

ries

ries proceeding from a hot indiſpoſition, or ſharp bilious humours. The doſe is from a drachm to half an ounce or more.

Gelatina Berberorum.
Gelly of Barberries.

Take a pound of barberries, picked clean from the ſtalks; and the ſame quantity of white ſugar. Boil them with a gentle heat to a due conſiſtence; then paſs the gelly through a flannel cloth.

Gelatina Ribeſiorum.
Gelly of Currants,

Is prepared after the ſame manner.

Both theſe preparations are gratefully *dulco-acid* and cooling, and in this intention are made uſe of for moiſtening the mouth and fauces in inflammatory diſtempers. Diſſolved in water, they afford an uſeful diluent drink, of a ſaponaceous nature, which mingles with the blood, or its ſerum, when thickened (as in ſome kinds of fevers) where pure water runs off by the kidneys almoſt unchanged.

L. *Elaterium.*

Slit ripe wild cucumbers, and having very lightly preſſed out the juice, paſs it through a fine hair ſieve, into a glazed earthen veſſel. After ſtanding for ſome hours, the thicker part will fall to the bottom, when the thinner is to be poured off, and what liquid matter is ſtill left, ſeparated by filtration. The remaining thick part is to be covered with a linen cloth, and expoſed to the ſun, or other gentle heat, till grown thoroughly dry.

The kind of filter proper to be uſed in this preparation, is a twiſt of cotton thread made wet, of which one end muſt lie in the fluid, and the other, being laid over the ſide of the veſſel, muſt hang down; by which means the liquid being attracted, will drop from it, till the greateſt part is drained off, and the more ſolid ſubſtance is left behind.

Elaterium is a ſtrong cathartic, and oftentimes proves violently emetic. It is exhibited in dropſies, where medicines of the moſt powerful kind are neceſſary, from one to four or five grains; and ſometimes added in ſmaller quantities, as a ſtimulus to the weaker purgatives.

From the former London Diſpenſatory, and common Practice.

Rob, ſive Sapa ſimplex.
The ſimple Rob, or Sapa.

Take of juice newly expreſſed from generous and white grapes, any quantity; and boil it over a ſlow fire, until one pint of it only remains out of three, or it becomes of a honey conſiſtence.

Rob de Berberis. Rob of Barberries.

Take of the clear ſtrained juice of barberries, one pound; of fine ſugar, half a pound. Let them be exhaled by a ſlow heat, to a due conſiſtence.

Rob de Ceraſis. Rob of Cherries.

Take of the juice of red tart cherries, as much as is thought fit, and with half its quantity of fine ſugar; boil them over a ſlow fire, as above directed.

Rob de Cornis. Rob of wild Cherries.

Take one pound of wild cherries, and macerate them in a ſufficient quantity of ſpring-water, till the pulp can be paſſed through a ſieve; then evaporate the ſuperfluous humidity, and with half a

pound of fine ſugar, boil it up to a due conſiſtence.

Rob Cydoniorum.
Rob of Quinces.

Take of the depurated juice of quinces, as much as you pleaſe; and after it is gently boiled to the conſumption of a third part, add to it half as much of the fineſt ſugar; and continue a ſlow heat, till it becomes of a due conſiſtence.

Miva vel Gelatina, eorundem.
Gelly of the ſame.

Take of the juice of quinces, clear from its fæces, twelve pounds; evaporate half by boiling, and to the remainder put five pounds of old white-wine, and again exhale to the conſumption of a third part, taking off the ſcum as it riſes. Let the remainder ſettle and be ſtrained, and with the addition of three pounds of ſugar, be boiled up to a due conſiſtence, *ſ. a.*

Rob Prunorum acidorum.
Rob of Sloes.

It is to be made in the ſame manner as the rob of quinces; and in both, the ſugar is of no great conſequence, but may be proportioned at pleaſure.

Rob de Ribes.
Rob of Currants.

This is to be made after the ſame manner as the *rob de berberis*, from the juice well defecated; and therefore it ought to be ſcummed over the fire, before it is put to ſettle.

Rob Baccarum Sambuci.
Rob of Elder-berries.

Take of the juice of elder-berries any quantity, and let it leiſurely be inſpiſſated over a gentle fire, either by itſelf, or with a fourth part of ſugar.

After the ſame manner is prepared the rob of dwarf-elder, of juniper, and veronica; unleſs that in the latter, the ſugar and juices are required of equal quantities. And after like manner others alſo may be prepared.

Succus Glycyrrhizæ ſimplex.
Simple Juice of Liquorice.

Take any quantity of the beſt liquorice root, after it is cleanſed, and a little bruiſed, ſteep it for three days in as much ſpring-water as will cover it about three fingers breadth: then give them a boil together, and preſs out the liquor, which with a ſlow fire exhale to a due conſiſtence, *ſ. a.*

The old Diſpenſatories, eſpecially thoſe of the German writers, abound very much with theſe forms, as they borrowed them from the Arabians; but they are greatly in diſuſe of late, inſomuch, that of what the college have here thought fit to retain, very few are made by the Apothecaries: moſt of the materials being managed by our Confectioners in a manner rather more elegant, and as well ſuited to any medicinal intention, eſpecially the quinces. The juice of liquorice is indeed greatly uſed, and, as here directed, ought to be prepared for all extemporaneous preſcriptions: becauſe what is brought from abroad is frequently too foul, or ſo much damaged, as not only to elude a Phyſician's intentions, but is alſo liable to do miſchief, by cauſing obſtructions, where it is given as a detergent and a deobſtruent.

Lohochs

Lohochs of the former Edinburgh Diſpenſatory.

Lohoch Commune.
Common Lohoch.

Take of freſh drawn oil of ſweet almonds, and pectoral or balſamic ſyrup, each one ounce; white ſugar, two drachms: mix, and make them into a lohoch.

Lohoch ex Amylo.
Lohoch of Starch.

Take of the ſtarch of tragacanth, two drachms; Japan earth, one drachm; whites of eggs beat into a fluid, one ounce; ſyrup of balſam as much; mix and make them into a lohoch.

Lohoch de Lino.
Lohoch of Linſeed Oil.

Take of freſh drawn linſeed-oil, and balſamic ſyrup, each one ounce; flowers of ſulphur, and white ſugar, each two drachms: mix, and make them into a lohoch.

Lohoch de Manna.
Lohoch of Manna.

Take of Calabrian manna, freſh drawn oil of ſweet almonds, and ſyrup of violets, each equal quantities; mix them into a lohoch.

Lohoch Saponaceum.
Soap Lohoch.

Take of Caſtile-ſoap, one drachm; oil of almonds, one ounce; ſyrup of lemon juice, one ounce and a half; make them into a lohoch.

Lohoch de Sperma Ceti.
Lohoch of Sperma Ceti.

Take two drachms of ſperma ceti, rub it together with yolk of eggs, as will fit it to mix with half an ounce of freſh drawn oil of almonds, and one ounce of balſamic ſyrup, into the conſiſtence of a lohoch.

Lohoch, eclegma, linctus or *Lambative*, is of a middle conſiſtence between a ſyrup and electary. It is calculated chiefly for the exhibition of pectorals. It is an ill-contrived form, and therefore almoſt entirely left off; the London Diſpenſatory has rejected them entirely, and alſo the preſent Edinburgh. The oily and mucilaginous ſubſtances are diſagreeable to the palate, and injure the ſtomach.

Lohoch Sanum.
The healing Lohoch.

Take of the leaves of garden hyſſop, and of calamint, of each half an ounce; of jujebs and ſebeſtens, ſtoned, of each number thirty; of ſtoned raiſins, of figs, and new dates, of each two ounces; of linſeed, and fenugreek-ſeed, of each five drachms; of maidenhair, one handful; of the ſeeds of aniſe and fennel, of orris root cut into ſlices; of liquorice, bruiſed, and cinnamon, of each half an ounce. Let them be all boiled, according to art, in four pounds of water to half its compoſition; then with the addition of two pounds of barley-ſugar, and the ſolution of gum tragacanth, and arabic, of each three drachms, made in the ſame decoction, boil them to a ſyrup; afterwards cut ſmall and bruiſe, of pine nuts, cleanſed, five drachms; of ſweet almonds blanched, of liquorice and ſtarch, of each three drachms; of orris root two drachms. Then take the ſyrup off the fire, and briſkly ſtir in theſe with a wooden peſtle, till the whole grows white.

SECT.

SECT. VI.

Of Wines, Tinctures, and Elixirs.

THERE can be nothing difficult in the management of this part, to one who has made himſelf acquainted with Part I. concerning digeſtion, diſſolution, and the difference of menſtruums. And as almoſt the whole of the Materia Medica is conveniently enough, upon many accounts, reducible into theſe forms, this diviſion will exhauſt a great ſhare of this part.

The next way to diſtillation, of drawing out the medicinal virtues of things, is by tincture. And theſe proceſſes differ only in this, that the former can take out thoſe lighter parts only which are able to riſe in vapour, and the latter all ſuch parts as are capable of being ſuſpended in a menſtruum. The chief rule is, that the liquor made uſe of for a menſtruum or vehicle, be more or leſs ſpirituous, as the ingredients which are ordered in it are of a lighter or more fixed nature; and the times of ſtanding in digeſtion, either hot or cold, are likewiſe to be proportioned accordingly.

Under the denomination of tinctures and elixirs, are generally included thoſe things of a volatile light texture, which beſt give out their virtues to ſpirituous liquors, and require nothing but digeſtion to prepare them; and theſe are either ſimple or compound. Of the former, are the *tinctura croci, caſtorei, myrrhæ ſimplex, ſulphuris, ſerpentariæ*, and *roſarum rubrarum*; all which are ordered in liquors judged ſuitable to their reſpective textures and virtues. Saffron is drawn with the *aqua theriacalis* in the intention of an alexipharmic; but as a cordial, and for the better preſervation of its colour, which ſoon fades with any acid, liberty is given to infuſe it likewiſe in Canary, or French brandy. The tincture of caſtor is likewiſe drawn by a ſpirit with equal eaſe and readineſs, becauſe both theſe are of a lax texture, and ſoon open in ſuch vehicles; but the myrrh, upon account of its tenacity, requires a mixture of ſalt of tartar with it, and to ſtand for ſome time, previous to its infuſion in ſpirit; by which means its adheſive texture is broken, and it comes more readily to unite with the ſpirit afterwards. Something like to this is ordered with the *radix ſerpentariæ Virginianæ*, it being directed to be drawn with the *tinctura ſalis tartari*; but if this root is broke ſmall in the mortar, it gives out all its warmth to a vinous ſpirit, and ſome the rather prefer it, becauſe the *tinctura ſalis tartari* gives to it a nauſeous, urinous ſcent, and makes it almoſt intolerably burning in the ſtomach; which quality, in itſelf, is frequently moderated with acids, which is a very oppoſite management to this. The red roſes are drawn only with hot water, acidulated with oil of vitriol, which not only greatly aſſiſts the intention of an aſtringent in all inſtances, as well as this, but likewiſe contributes to ſtrike a moſt beautiful red colour.

colour. The *tinctura papaveris* becomes a compound only by the addition of ſome nutmeg, and it agrees with the roſes in this reſpect, of being greatly improveable in its colour by acids, but both would change into a moſt unſightly green, were ſalt of tartar, or any alkalious matter, to touch them; a difference very proper to take notice of.

In all compound tinctures, or elixirs drawn with a ſpirit, and where the doſe is ſo ſmall as to be aſſigned in drops, eſpecial care ought to be taken not to interpoſe any ingredients which are not of proportionable efficacy with the reſt, howſoever they may agree in intention. For it is not here as in diſtillation, where an uſeleſs or a weak ingredient may do no harm; becauſe in tincture every ſuch one will ſo help to fate the menſtruum with ſomewhat, that it will be leſs able to take up things of more efficacy, and will conſequently be, in the whole, a weaker medicine. Thus in the elixir *vitrioli Mynſichti*, though mint certainly comes within the intention of a ſtomachic, and ſage may be allowed to do ſo too; yet in a medicine that will not bear exhibition in a larger quantity than twenty or thirty drops for a doſe, ſuch things are very improperly crowded; for beſides the hindrance they occaſion to the menſtruum in taking up the other more efficacious ingredients, by fating it with ſomething from themſelves, if we compute the ſhare they have in a doſe, it will vaniſh almoſt to nothing; for here is no more than half a handful of theſe things in a quantity that makes ſome thouſands of doſes; whereas common experience informs us that they may be, and frequently are, taken with our common food, in as large quantities, as they enter into the whole of this compoſition, without any inconvenience. What the ſugar-candy does in this compoſition is, likewiſe, not eaſy to gueſs or juſtify; and the *oleum vitrioli* ſeems to be ordered in too large a quantity, the ſharpneſs of that neceſſarily making a doſe ſo ſmall, that the ſpices have not a due proportion in it. But the greateſt error in this celebrated medicine conſiſts in the making, when they are all digeſted together; for the oil of vitriol entirely burns and hardens the ingredients, ſo that they not only give out their virtues the leſs, but alſo deform the whole with a blackiſh dirty colour; both which inconveniences might be avoided, by infuſing the ſpices in the ſpirit alone, and after that is ſtrained fine, the *oleum vitrioli* might be added, which then only gives to it a thicker conſiſtence, and ſomewhat raiſes its colour.

The ſame is obſervable of the acid in that ſort of *elixir proprietatis* which is made with it. If it be put upon the ingredients with the ſpirit, it unfits them for giving out their virtues, and will not admit of ſo good a colour or conſiſtence as when put in afterwards.

Theſe remarks naturally lead us to another circumſtance, very neceſſary to be regarded in the extraction of all compound tinctures; and that is, when the ingredients are ſo different in texture, that ſome open and fate the menſtruum much ſooner than others, they ought to be drawn ſeparately, with a proportionable part of the menſtruum, becauſe, otherwiſe, thoſe which with moſt difficulty give

out their virtues, will have very little or no ſhare in the compoſition. Thus in the common *elixir proprietatis*, though there are but three ingredients, yet they are ſo unequal in their fitneſs for ſolution, that if they are put in together, the hardeſt, which is the myrrh, will in a good meaſure be loſt, becauſe the ſpirit will be very ſoon loaded with the other two, and conſequently become leſs able to take up that. If therefore they are all infuſed in their proper ſhares of ſpirit, they will be all eaſily diſſolved; and when put together afterwards, with the addition of the acid, they will make a moſt beautiful high-coloured tincture, almoſt of the conſiſtence of a ſyrup. To this rule the *elixir proprietatis Helmontii* hath a particular regard, where the aloes and ſaffron, which are of the looſeſt texture, are diſſolved together, and the myrrh ſeparately from them both, the ſeveral tinctures being at laſt united.

Thus, likewiſe, in the compound tincture of myrrh, if the myrrh be firſt diſſolved, the aloes, with equal eaſe, will afterwards be taken up; but if they are put in together, the aloes load the ſpirit ſo ſoon, that the myrrh will be much longer in ſolution. And in all the liquid laudanums, if the ſpices are firſt drawn out, the opium will ſoon diſſolve afterwards; but if the opium be put in with them, they will give out their virtues to great diſadvantage. Thus alſo in the *elixir ſalutis*, if the ſeeds, liquorice, and raiſins, were added, after the harder ingredients had ſtood ſome time in the ſpirit, the medicine would be the better; but theſe are circumſtances which very few compounders will be exact enough to obſerve.

As to the medicated wines and vinegars, there is little remarkable. The chalybeate wine ſeems the beſt preparation of ſteel in a liquid form, and is much aſſiſted by the ſaffron. The *vinum & acetum ſcilliticum* ſeem both contrived for the ſame purpoſes, either to make into an oxymel with honey, or elſe to be given alone as gentle emetics, or in conjunction with warm cordials, as the cinnamon-water, by way of expectorants, or diuretics; for the laſt intentions, they are, with ſome, in great eſteem. It is diſputed whether the viper wine is beſt made with the vipers dry, as is here ordered, or alive; but the latter ſeems to have a chance of preſerving their virtues with moſt certainty, though the volatile ſalt is beſt drawn from them when dry.

Wines, Tinctures, and Elixirs

L. *Vinum Alocticum Alcalinum.*
Alcaline Aloetic Wine.

Take of any fixed alcaline ſalt, eight ounces; Succotrine aloes, ſaffron, myrrh, each one ounce; ſal ammoniac, purified, ſix drachms; mountain-wine, two pints. Macerate without heat for a week, or longer; then filter the wine through paper.

This is the *elixir proprietatis Helmontii*, with ſome little variations. It is obſervable, that though *ſal ammoniac* is uſed as an ingredient, yet the preparation, when finiſhed, does not contain any; the ſame change happening to that ſalt here, as in the diſtillation of the *Spiritus ſalis ammoniaci.*

Helmont's elixir, in our preceding Pharmacopœia, is thus directed: take of red tartar, nitre, each twelve ounces; white wine, two pints; aloes, ſaffron, each an ounce and

a

a half. Let the nitre and tartar be reduced into powder, and the mixture thrown by degrees into a hot crucible: when ſufficiently calcined, pour the matter into a glaſs mortar, and add the wine, ſo as to make a ley thereof; with which ley, a tincture is to be drawn from the aloes and ſaffron. Take alſo of ſal ammoniac, eight ounces; white wine, one pint; myrrh, an ounce and a half. Diſſolve the ſal ammoniac in the water, ſtrain the ſolution, and evaporate it to drineſs. One ounce of this dry ſalt is to be diſſolved in the water; and with this ſolution, draw a tincture from the myrrh. Mix both tinctures together, in a cloſe veſſel, ſo as to make them into an elixir.

The preparation made after this troubleſome method is not different from the foregoing. The nitre and tartar when calcined together, form an alcaline ſalt, ſimilar to thoſe which the ſhops are ſupplied with at a cheaper rate.

Helmont and others have entertained a very high opinion of this medicine, and looked upon it as a vivifying and preſerving balſam, capable of continuing health and prolonging life to the utmoſt poſſible limits. The medicine is doubtleſs a very efficacious one for many purpoſes: it attenuates viſcid juices, and opens obſtructions in the remoter parts, and promotes evacuation by almoſt all the emunctories. In doſes of one, two, or three drachms, it increaſes the urinary ſecretion; and if the patient is kept moderately warm, generally proves diaphoretic or ſudorific; in larger doſes, it gently looſens the belly.

L. *Vinum Amarum.*
Bitter Wine.

Take of gentian root, yellow rind of lemon peel, freſh, each one ounce; long pepper, two drachms; mountain wine, two pints: macerate without heat, and ſtrain out the wine for uſe.

This is a very elegant bitter, conſiderably warmer than the watery infuſion.

E. *Vinum Amarum.*
Bitter Wine.

Take of gentian root, half an ounce; Peruvian bark, one ounce; Seville orange-peel, dried, two drachms; white Canella bark, one drachm; proof ſpirit of wine, four ounces; mountain wine, two pints.

Firſt pour on the ſpirit, then the wine; and let them ſtand together, without heat, four days; and then ſtrain.

This wine is ſometimes uſed inſtead of the Tinct. ad Stomachicos.

L. *Vinum Antimoniale.*
Antimonial Wine.

Take of crocus of antimony, waſhed, one ounce; mountain wine, a pint and a half; digeſt without heat, and filter the wine through paper.

E. *Vinum Antimoniale.*
Antimonial Wine.

Take the glaſs of antimony, ſubtilly levigated, one ounce; mountain wine, one pint. Macerate three days, now and then ſhaking the mixture, then filter through paper.

The antimonial wine poſſeſſes the whole virtues of that mineral, and may be ſo doſed and managed, as to perform all that can be effected by any antimonial preparation; with this advantage, that as

the active part of the antimony is here already diſſolved and rendered miſcible with the animal fluids, its operation is more conſtant and certain. Given from ten to fifty or ſixty drops, it acts as an alterative and diaphoretic; in larger doſes, as a diuretic and cathartic; whilſt two, three, or four drachms prove virulently emetic. It has been chiefly uſed in this laſt intention, in ſome maniacal and apoplectic caſes, and hence gained the name of emetic wine.

L. *Vinum Chalybeatum.*
Steel Wine.

Take of iron filings, four ounces; cinnamon, mace, each half an ounce; Rheniſh wine, four pints. Macerate without heat for a month, frequently ſhaking the veſſel, then ſtrain off the wine for uſe.

Steel wine is a very uſeful preparation of this metal, and frequently exhibited in chlorotic and other indiſpoſitions where chalybeates are proper. Boerhaave recommends it as one of the nobleſt medicines he was acquainted with, for promoting that power in the body by which blood is made, when weakened by a bare debility of the over relaxed ſolids, and an indolent, cold, aqueous indiſpoſition of the juices; but it proves hurtful, where the vital powers are already too ſtrong, whether this proceeds from the fluids or the ſolids. The doſe is from a drachm to half an ounce, which may be repeated two or three times a day.

L. *Vinum Croceum.*
Saffron Wine.

Take of ſaffron, one ounce; Canary, one pint. Macerate without heat, and ſtrain off the wine.

The doſe of this tincture is from one drachm to three or more.

E. *Vinum Dictamni Albi.*
White Dittany Wine.

Take the powder of white dittany root, one ounce; filings of iron, not ruſted, three drachms; mountain wine, a pint. Digeſt them twenty-four hours, and filter through paper.

L. *Vinum Ipecacuanhæ.*
Wine of Ipecacuanha.

Take of ipecacuanha, two ounces; yellow rind of Seville orange peel, dried, half an ounce; Canary, two pints. Macerate without heat, and ſtrain out the wine.

E. *Tinctura Ipecacuanhæ.*
Tincture of Ipecacuanha.

Take of ipecacuanha, in powder, one ounce; mountain wine, one pint. After three days digeſtion, let the tincture be filtered for uſe.

Both theſe wines are very mild and ſafe emetics, and equally ſerviceable in dyſenteries alſo, with the ipecacuanha in ſubſtance. The doſe of theſe tinctures is half an ounce, more or leſs, according to the age and ſtrength of the patient.

L. *Vinum Viperinum.*
Viper Wine.

Take of dry vipers, two ounces; mountain, three pints. Macerate with a gentle heat for a week, and then ſtrain off the wine.

It has been diſputed whether live or dry vipers are preferable for making this medicine: ſuch as are moderately and newly dried, are perhaps the moſt eligible, ſince by exſiccation they ſeem to loſe only the aqueous parts. Whether they communicate to the wine ſo much virtue as they are ſuppoſed to do, is greatly to be doubted. Some compoſitions under this name have been

been highly celebrated, as reſtoratives, in debilities and decays of conſtitution; but what virtues of this kind they poſſeſſed, were ſupplied chiefly from other ingredients.

E. *Vinum Millepedatum.*
Wine of Millepedes.

Take of live millepedes, bruiſed, two ounces; Rheniſh wine, one pint. Infuſe them together for a night, and afterwards preſs the liquor through a ſtrainer.

This wine has been commended as an admirable cleanſer of all the viſcera, yielding to nothing in the jaundice, many chronical diſtempers, in ſcrophulous ſwellings, and in defluxions upon the eyes. But thoſe who expected theſe virtues from it, have often been deceived; and at preſent, there are few who have any great dependence on it. It is directed to be given from half an ounce to two ounces.

E. *Vinum Rhei.*
Rhubarb Wine.

Take of rhubarb, two ounces; canella alba, one drachm; proof ſpirit of wine, two ounces; mountain wine, a pint. Macerate ſeven days, and ſtrain.

Tinctura Cephalica.
Cephalic Tincture.

Take of wild valerian root, four ounces; Virginian ſnake-root, one ounce; roſemary tops, half an ounce; French white wine, ſix pints: digeſt them together for three days, and then filter the tincture.

The roſemary and valerian are very good cephalics. The doſe is from half an ounce to two ounces.

Tinctura Cephalica Purgans.
Purging Cephalic Tincture.

This is made by adding to the foregoing, of ſena, two ounces; black hellebore roots, one ounce; French white wine, two pints. The title of this medicine expreſſes the purpoſes it is deſigned for. It is but weakly purgative.

Tinctura Menthæ.
Tincture of Mint.

Take of ſimple ſpearmint water, one pint: ſpearmint leaves dried, half an ounce. Let them ſteep together in a cloſe veſſel, ſet them in a warm place, for four hours, and then ſtrain the tincture.

This tincture is very rich in the virtues of the mint, and proves much ſuperior as a medicine to the cohobated water, which ſome have ſtrongly recommended.

E. *Tinctura Moſchi.*
Tincture of Muſk.

Take of muſk, two drachms; rectified ſpirit of wine, a pint. Digeſt ten days, and ſtrain.

L. *Tinctura Rhabarbari Vinoſa.*
Vinous Tincture of Rhubarb.

Take of rhubarb, two ounces; leſſer cardamom ſeeds, freed from the huſk, half an ounce; ſaffron, two drachms; mountain wine, two pints. Macerate without heat, and then ſtrain off the tincture.

This is a warm, cordial, laxative medicine. It is uſed chiefly in weakneſs of the ſtomach and bowels; and ſome kinds of looſeneſſes, for evacuating the offending matter, and ſtrengthening the tone of the viſcera. It may be given from half a ſpoonful to three or four ſpoonfuls, or more, according to the ſtrength of the patient, and

the purpoſes herein intended to anſwer.

L. *Tinctura Sacra.*

Take of Succotrine aloes, eight ounces; canella alba, two ounces; mountain wine, ten pints. Reduce the aloes and canella ſeparately into powder, then mix, and pour on them the wine; afterwards macerate without heat, for a week or longer, occaſionally ſhaking the veſſel; laſtly ſtrain off the wine.

It will be convenient to mix with the powders ſome white ſand, well waſhed from dirt, to prevent the aloes from concreting, which it is apt to do upon being moiſtened.

E. Take of Succotrine aloes in powder, one ounce; ginger and Jamaica pepper, each one drachm; mountain wine, a pint and a half. Digeſt for ſeven days, and ſtrain off the tincture.

The *tinctura ſacra* (now called by the Edinburgh College *vinum aloeticum*) appears from long experience, to be a medicine of excellent ſervice in languid phlegmatic habits, not only for cleanſing the *primæ viæ*, but likewiſe for attenuating and diſſolving viſcid juices in the remoter parts, ſtimulating the ſolids, warming the habit, promoting or exciting the uterine purgations, and the hæmorrhodial flux. The doſe, as a purgative, is from one to four ounces, or more: it may be introduced into the habit, ſo as to be productive of excellent effects, as an alterant, by giving it in ſmall doſes, at proper intervals; thus managed, it does not for a conſiderable time operate remarkably by ſtool; but at length proves purgative, and occaſions a lax habit of much longer continuance than that produced by any other cathartic.

E. L. *Tinctura Roſarum.*
Tincture of Roſes.

Take of red roſe buds, freed from the white heels, half an ounce; ſtrong ſpirit (called oil) of vitriol, one ſcruple; boiling water, two pints and a half; double refined ſugar, one ounce and a half. Firſt mingle the ſpirits of vitriol with the water, in a glaſs or glazed earthen veſſel, and in this mixture macerate the roſes; when the liquor is grown cold, ſtrain it, and add the ſugar.

Take of red roſes, dried one ounce; ſpirit of vitriol, one drachm: boiling water, four pints; white ſugar, two ounces. Macerate the roſes with the water, in an unglazed earthen veſſel, four hours; afterwards, to the ſtrained liquor add the acid and the ſugar.

This tincture is of an elegant red colour, and makes a very grateful julep in all caſes that require mild coolers and ſubaſtringents: it is well ſuited for drinking after boluſes, or electaries of the bark; and likewiſe makes a good gargle.

E. *Tinctura Thebaica, vulgo Laudanum Liquidum.*

Take opium, two ounces; ſpirituous cinnamon water, twenty ounces; digeſt four days, then filter through paper.

In the ſpirituous tinctures, a part of the opium falls to the bottom, and in the vinous, forms a cruſt towards the ſurface, about the ſides of the glaſs: the quantity which thus ſeparates, if the tincture is long kept, amounts in either caſe, to about one fourth of the opium: ſo that the medicine, newly made,

made, is one fourth ſtronger than after it has been kept; a circumſtance certainly of great conſequence. An equal part of wine and brandy; or, one part alcohol of wine, mixed with two parts of pure water, are menſtrual, and free from this inconvenience.

Theſe preparations have no virtues diſtinct from thoſe of ſimple opium; the quantity of additional ingredients in the largeſt doſe that can be ventured on, being too inconſiderable to produce any ſenſible effect. The ſaffron has been looked upon as a corrector of opium; but the ill qualities it was ſuppoſed to correct, are merely imaginary. The principal advantages of exhibiting opium in this form are, that by being already diſſolved, it exerts itſelf the ſooner in the body; and that by ſome perſons, liquids are more commodiouſly taken, than the bolus or pill. The common doſes of theſe tinctures are from ten drops to forty, fifty, or more, according to the exigencies of the caſe.

Note. To all the foregoing wines, after they had been ſtrained, you may add about one twentieth their quantity of proof ſpirit, to preſerve them from fermentation. They may be conveniently kept in the ſame kind of glaſs bottles that wines generally are for common uſes, which ſhould likewiſe be corked with the ſame care.

E. *Tinctura Abſinthii.*
Tincture of Wormwood.

Take of the dried flowering tops of wormwood, four ounces; rectified ſpirit of wine, two pints; macerate two days, and ſtrain; to the ſtrained liquor, add two ounces more of the flowering tops of wormwood dried; macerate again during four days, then ſtrain through linen, and laſtly filter the ſtrained liquor through paper.

L. *Tinctura Amara.*
Bitter Tincture.

Take of gentian root, two ounces; yellow rind of Seville orange peel, dried, one ounce; leſſer cardamom ſeeds, freed from the huſks, half an ounce; proof ſpirit, two pints. Digeſt without heat, and ſtrain off the tincture.

This is a very elegant ſpirituous bitter. The Edinburgh Pharmacopœia has a compoſition ſimilar in intention to this, under the title of

E. D. *Tinctura Amara ſive Elixir Stomachicum.*
Stomachic Elixir.

Take of orange peel, one ounce; gentian, two ounces; white canella, half an ounce; cochineal, half a drachm; French brandy, two pints. Let them ſteep for four days, and then filter.

Both theſe medicines are uſeful ſtomachic bitters; their virtues as ſuch, may be ſeen under the head of *Bitters*.

L. D. *Tinctura Aromatica.*
Aromatic Tincture.

Take of cinnamon, ſix drachms; leſſer cardamom ſeeds, freed from the huſks, three drachms; long pepper, ginger, each two drachms; proof ſpirit, two pints. Digeſt without heat, and then ſtrain off the tincture.

E. D. *Tinctura Aromatica.*
The Aromatic Tincture.

Take of cinnamon, ſix drachms; leſſer cardamom ſeeds, one ounce; garden angelica ſeeds, three

drachms; long pepper, two drachms; proof ſpirit, two pints. Macerate ſeven days, and filter through paper.

Theſe are very warm aromatics. A tea ſpoonful or two may be taken in wine, or any other convenient vehicle, in languors, weakneſs of the ſtomach, and flatulencies. The ſtomachic tincture is ſimilar in intention to this, but contrived leſs hot of the ſpices, that it may be taken by itſelf.

Tinctura Balſamica.

Balſamic Tincture.

Take of balſam of Copaiba, one ounce and a half; of Peru, half an ounce; Engliſh ſaffron, one drachm; rectified ſpirit of wine, one pint. Digeſt in a ſand heat, for three days; and then ſtrain the tincture.

This tincture is an excellent balſamic. It is uſually given in doſes of ten, twenty, or thirty drops, in the *fluor albus*, gleets, cachexies, ſome kinds of aſthmas and nephritic complaints, for ſtrengthening the viſcera, and the nervous ſyſtem in general. In cold, languid, phlegmatic habits, they have for the moſt part good effects; but where there is any tendency to inflammation, they are manifeſtly prejudicial.

Tinctura Benzoini.

Tincture of Benzoine.

Take of benzoine, four ounces; rectified ſpirit of wine, one pint. Digeſt them together in a ſand heat for three or four days, and then decant off the tincture.

This tincture ſtands recommended in aſthmas, and other diſorders of the lungs, in doſes from twenty to ſixty or ſeventy drops. It has, however, been principally made uſe of externally, as a coſmetic, for clearing and ſmoothing the ſkin: for theſe purpoſes it is mixed with a large proportion of water, when it forms a white liquor called *lac virginis*. If this be ſuffered to reſt for ſome time, the benzoine precipitates, in form of a white magiſtery (of a very pleaſant ſmell, and not diſagreeable taſte), which, in the Brandenburgh Pharmacopœia, is preferred to the flowers of benzoine, as being free from the empyreumatic flavour which theſe are generally attended with. The precipitation is directed to be made with roſe water.

L. *Tinctura Cantharidum.*

Tincture of Cantharides.

Take of cantharides, bruiſed, two drachms; cochineal, half a drachm; proof ſpirit, a pint and a half. Digeſt them together, and afterwards filter the tincture thro' paper.

E. Take of cantharides, two drachms; proof ſpirit of wine, a pint and a half. Digeſt the cantharides in the ſpirit for four days; then filter the liquor thro' paper.

Theſe tinctures are the only officinal preparations of cantharides, deſigned for internal uſe. They poſſeſs nearly the whole virtues of the fly itſelf; and require the ſame cautions in their exhibition. See the article Cantharides. The uſual doſe is fifteen or twenty drops.

L. E. *Tinctura Cardamomi.*

Tincture of Cardamoms.

Take of leſſer cardamom ſeeds, huſked, half a pound; proof ſpirit, two pints. Digeſt without heat, eight days, and ſtrain the tincture.

This tincture is a pleaſant, warm

warm cordial, and may be taken, along with any proper vehicle, from a drachm to a ſpoonful or two.

L. *Tinctura Caſtorei.*
Tincture of Caſtor.

Take of Ruſſia caſtor, powdered, two ounces; proof ſpirit, two pints. Digeſt for ten days without heat, and ſtrain off the tincture.

E. Take of Ruſſia caſtor, an ounce and a half; rectified ſpirit of wine, one pint. Digeſt them with a gentle heat, for ſix days, and afterwards ſtrain out the liquor.

Dr. Lewis obſerves, that caſtor macerated without heat, gives out its finer and moſt grateful parts, to either proof or rectified ſpirit, tho' moſt perfectly to the rectified: that heat extracts alſo the groſſer and more nauſeous parts: and that with heat, proof ſpirit extracts more of the groſſer parts than the rectified does.

The tincture of caſtor is recommended in nervous complaints, and hyſteric diſorders; in the latter, it ſometimes does ſervice. The doſe is from twenty drops to forty, fifty, or more.

E. *Tinctura Caſtorei compoſita.*
Compound Tincture of Caſtor.

Take of Ruſſia caſtor, one ounce; *aſa fœtida*, half an ounce, volatile aromatic ſpirit, one pint. Macerate for ſix days in a bottle well ſtopped, ſhaking it frequently, then ſtrain off the tincture.

This is a more efficacious medicine, and more to be depended upon in the ſame intentions, than the preceding; the doſe is the ſame.

L. *Tinctura Cinnamomi.*
Tincture of Cinnamon.

Take of cinnamon, an ounce and an half; proof ſpirit, a pint. Digeſt eight days without heat, and ſtrain off the tincture.

This tincture poſſeſſes the aſtringent virtues of the cinnamon, as well as its aromatic cordial ones; and in this reſpect it differs from the diſtilled waters of the ſpice.

L. *Tinctura Corticis Peruviani ſimplex.*
Simple Tincture of Peruvian Bark.

Take of Peruvian bark, four ounces; proof ſpirit, two pints. Digeſt eight days, and ſtrain.

The menſtruum here directed is the moſt convenient of any, the proof ſpirit extracting nearly all the virtues of the bark. It may be given from a tea ſpoonful to half an ounce or an ounce, according to the different purpoſes it is intended to anſwer.

L. D. *Tinctura Corticis Peruviani Volatilis.*
Volatile Tincture of Peruvian Bark.

Take of Peruvian bark, four ounces; ſpirit of ſal ammoniac, two pints. Digeſt without heat, in a veſſel cloſe ſtopt; and afterwards ſtrain the tincture.

This tincture is but lightly impregnated with the virtues of the bark; nevertheleſs it may be ſerviceable in ſome caſes where the ſtronger are improper, as in difficulty of breathing, obſtructions, and oppreſſions of the breaſt. In caſes where the bark is indicated, and ſomething volatile wanted, it may with good ſucceſs be added to a doſe of the decoction, where the circulation is languid, the fi-

bres

bres relaxed, and where there is a periodical return of ſlight feveriſh complaints. In theſe caſes, I have often experienced ſalutary effects from a tincture in dulcified ſpirit of *ſal ammoniac*, given to the quantity of a tea ſpoonful five or ſix times a day, in any appropriated vehicle.

E. D. *Tinctura Corticis Peruviani.*
Tincture of Peruvian Bark.

Take of Peruvian bark, in powder, four ounces; French brandy, two pints. Let them ſteep together for ten days, and filter the tincture.

The ſubſtances here joined to the bark, in many caſes promote its efficacy in the cure of intermittents; and not unfrequently are abſolutely neceſſary. In ſome ill habits, particularly where the juices are ſluggiſh and tenacious, the viſcera and abdominal glands obſtructed, the bark by itſelf proves unſucceſsful, if not injurious; whilſt given in conjunction with corroborant ſtomachics and deobſtruents, it rarely fails of the due effect. Gentian and Virginian ſnake-root are among the beſt additions for this purpoſe; to which it is often neceſſary to join chalybeat medicines alſo.

E. *Tinctura Croci.*
Tincture of Saffron.

Take of Engliſh ſaffron, one ounce; proof ſpirit, one pint. After digeſting them for five days, let the tincture be ſtrained out.

This tincture is ſimilar in virtue to the ſaffron wine. A ſpirituous menſtruum is here preferred to the wine, as a tincture drawn therewith, retains its elegant colour longer, and is not apt to depoſite in keeping any part of what it had taken up from the ſaffron.

E. *Tinctura, ſive Eſſentia Dictamni Albi.*
Tincture (or Eſſence) of White Dittany Root.

Take of the roots of freſh white dittany, two ounces; rectified ſpirit of wine, fourteen ounces; digeſt eight days, and ſtrain thro' paper.

L. *Tinctura Fœtida.*
Fetid Tincture.

Take of *aſa fœtida*, four ounces; rectified ſpirit of wine, two pints. Digeſt and ſtrain.

This tincture poſſeſſes the virtues of the *aſa fœtida* itſelf; and may be given from ten drops to fifty or ſixty.

E. *Tinctura Fœtida.*
Fetid Tincture.

Take of *aſa fœtida*, two ounces; vinous ſpirit of ſal ammoniac, a pint. Macerate ſix days in a cloſe veſſel, and ſtrain.

L. D. *Tinctura Fuliginis.*
Tincture of Soot.

Take of wood ſoot, two ounces; *aſa fœtida*, one ounce; proof ſpirit, two pints. Digeſt and ſtrain.

E. Take of ſhining wood ſoot, one ounce; *aſa fœtida*, half an ounce; proof ſpirit, a pint. Digeſt for ſix days and ſtrain.

Theſe medicines are found ſerviceable, not only in hyſteric caſes, but likewiſe in epilepſies, and other nervous diſorders.

L. D. *Tinctura Guiacina Volatilis.*
Volatile Tincture of Guaiacum.

Take of gum guaiacum, four ounces; volatile aromatic ſpirit, a pint

a pint and a half. Digeſt without heat, in a veſſel cloſe ſtopt; and afterwards let the tincture be paſſed through a ſtrainer.

This is a very efficacious tincture, the volatile ſpirit diſſolving the gum, and at the ſame time promoting its medicinal virtue. In rheumatic caſes, a tea ſpoonful, taken two or three times a day in any convenient vehicle, has proved of ſingular ſervice.

L. D. *Tinctura Jalapii.*
Tincture of Jalep.

Take of jalap root, eight ounces; proof ſpirit, two pints. After proper digeſtion, ſtrain off the tincture.

This is too rough to be taken by itſelf, but very proper mixed in ſmall quantities with cathartic infuſions, or the like.

E. *Tinctura Jalapii.*
Tincture of Jalap.

Take of jalap, in coarſe powder, three ounces; rectified ſpirit of wine, one pint. Digeſt them in a gentle heat for eight days, and then ſtrain the tincture.

This is an almoſt purely reſinous tincture, and therefore never to be exhibited by itſelf. It is commonly given in mixtures of the tinctura ſacra, ſyrup of buckthorn, &c. which mixtures ſhould not be very liquid for fear of precipitation.

This objection againſt the tincture does not reach ſo far as ſome ſeem to ſuppoſe; it certainly behoves the apothecary to be careful in the choice of the root. The inferior ſorts may be employed for making the *reſina Jalapii*, which they yield in as great perfection, tho' not in ſo large quantity, as the beſt. Newman thinks even the worm-eaten jalap as good for that purpoſe as any other.

L. E. *Tinctura Japonica.*
Japonic Tincture.

Take of Japan earth, three ounces; cinnamon, two ounces; proof ſpirit, two pints. After proper digeſtion, let the tincture be paſſed through a ſtrainer. N. B. The Edinburgh College directs it to be digeſted eight days.

This tincture is of ſervice in all kinds of defluxions, catarrhs, looſeneſſes, uterine fluors, and other like diſorders, where mild aſtringent medicines are indicated. Two or three tea ſpoonfuls may be taken every now and then, in red wine, or any other proper vehicle.

E. *Tinctura e Kino.*
Tincture of Kino.

Take of gum kino, two ounces; proof ſpirit, a pint. Digeſt eight days, and ſtrain.

Tinctura Laccæ.
Tincture of Gum Lac.

Take of ſpirit of ſcurvy graſs, a pint and a half; gum lac, an ounce; myrrh, half an ounce. Digeſt with the ſpirit in a ſand heat for ſix days, after which ſtrain off the tincture for uſe.

This tincture is employed for ſtrengthening the gums, and in the bleedings and ſcorbutic exulcerations of them: it may be fitted for uſe in theſe intentions, by mixing it with honey of roſes, or the like. Some recommend it internally againſt ſcorbutic complaints, and as a corroborant in gleets, female weakneſſes, &c.

L. *Tinctura Melampodii.*
Melampodium, or Black Hellebore.

Take of black hellebore roots, four

four ounces; cochineal, two ſcruples; proof ſpirit, two pints. Digeſt them together, and afterwards filter the tincture through paper.

E. D. *Tinctura Melampodii, ſive Hellebori Nigri.*

Tincture of Black Hellebore.

The ſame as the preceding, except that half a drachm of cochineal is directed, inſtead of two ſcruples, and digeſtion is ordered for eight days.

This is the beſt preparation of hellebore, when deſigned for an alterative. It has been found, from experience, particularly ſerviceable in uterine obſtructions: in ſanguine conſtitutions, where chalybeats are hurtful, it ſcarce ever fails of exciting the menſtrual evacuations, and removing the ill conſequences of their ſuppreſſion. So great is the power of this medicine, that wherever the expected diſcharge does not ſucceed upon the exhibition of it, the blood, as Dr. Mead has obſerved, is ſo forcibly propelled, as to make its way through other paſſages. But others ſay, that its chief excellence as an emanagogue is when difficulty attends the approach of the menſes. A tea ſpoonful of the tincture may be taken twice a day, in warm water, or any other convenient vehicle.

L. *Tinctura Myrrhæ.*

Tincture of Myrrh.

Take of myrrh, three ounces; proof ſpirit, two pints. After due digeſtion, ſtrain off the tincture.

E. Take of myrrh, an ounce and a half; proof ſpirit, a pint. Digeſt them together in a ſand heat for ten days; then ſtrain off the tincture.

Rectified ſpirit extracts, without any addition, all that part of the myrrh, in which its peculiar ſmell and taſte reſide, viz. the reſin; and proof ſpirit diſſolves almoſt the whole of the drug except its impurities.

Tincture of myrrh is recommended internally for attenuating viſcid juices, ſtrengthening the ſolids, opening obſtructions, particularly thoſe of the uterine veſſels, and reſiſting putrefaction. Boerhaave greatly eſteems it in all languid caſes, proceeding from ſimple inactivity; in thoſe female diſorders which are occaſioned by an aqueous, mucous, ſluggiſh indiſpoſition of the humours, and a relaxation of the veſſels; in the fluor albus, and all diſeaſes ariſing from a like cauſe. The doſe is from fifteen drops to forty or more.

Tinctura Myrrhæ et Aloes.

Tincture of Myrrh and Aloes.

Take of myrrh, in powder, one ounce and a half: hepatic aloes, one ounce; proof ſpirit, two pints. Digeſt in a ſand heat for ſix days; and ſtrain.

This is deſigned for chirurgical dreſſings.

L. & E. *Tinctura Rhabarbari Spirituoſa.*

Spirituous Tincture of Rhubarb.

Take of rhubarb, two ounces; leſſer cardamom ſeeds, huſked, half an ounce; ſaffron, two drachms; proof ſpirit, two pints. Digeſt without heat, and ſtrain off the tincture for uſe.

E. D. *Tinctura Rhei Amara.*

Bitter Tincture of Rhubarb.

Take of rhubarb, one ounce; gentian root, two drachms; Virginian ſnake-root, one drachm; proof

proof ſpirit, one pint. Digeſt for ſeven days, and then ſtrain the tincture. This tincture may likewiſe be made with mountain wine.

E. D. *Tincture Rhei dulcis.*
Sweet Tincture of Rhubarb.

Take of rhubarb, three ounces; leſſer cardamoms, half an ounce; French brandy, two pints. Digeſt for ſeven days, and then having ſtrained out the tincture, add to it four ounces of white ſugar candy in powder, and digeſt again until the ſugar is diſſolved. N. B Without the ſugar, it is the tincture of rhubarb of the preſent diſpenſatory.

The tinctures are deſigned rather as ſtomachics and corroborants, than as purgatives: in weakneſs of the ſtomach, indigeſtion, laxity of the inteſtines, diarrhœas, colicky, and other like complaints, theſe medicines are frequently of good ſervice.

L. D. *Tinctura Senæ.*
Tincture of Sena.

Take of raiſins, ſtoned, ſixteen ounces; ſena, one pound; caraway ſeeds, one ounce and a half; leſſer cardamoms, huſked, half an ounce; proof ſpirit, one gallon. Digeſt without heat, and then ſtrain the tincture.

Compound Tincture of Sena.
E. D. Or, *Elixir Salutis.*
Elixir of Health.

Take of ſena, two ounces; jalap powdered, one ounce; coriander ſeeds, half an ounce; proof ſpirit, three pints. Digeſt for the ſpace of ſeven days; then ſtrain off the tincture, and add to it four ounces of powdered ſugar candy.

Both theſe tinctures are uſeful carminatives and cathartics, eſpecially to thoſe who have accuſtomed themſelves to the uſe of ſpirituous liquors; they oftentimes relieve flatulent and colicky complaints, where the common cordials have little effect. Several preparations of this kind have been offered to the public, under the name of Daffy's elixir; the two above are equal to any, and ſuperior to moſt of them.

L. *Tinctura Serpentariæ.*
Tincture of Snake-root.

Take of Virginian ſnake-root, three ounces; proof ſpirit, two pints. Digeſt without heat, and ſtrain off the tincture. This tincture may be taken to half an ounce or more.

E. D. *Tinctura Serpentariæ.*
Tincture of Snake-root.

Take of Virginian ſnake-root, two ounces; cochineal, one drachm; proof ſpirit, two pints. Digeſt in a gentle heat for four days, and ſtrain.

L. *Tinctura Stomachica.*
Stomachic Tincture.

Take of raiſins, ſtoned, four ounces; cinnamon, half an ounce; caraway ſeeds, leſſer cardamoms, huſked, cochineal, each two drachms; proof ſpirit, two pints. Digeſt without heat, and ſtrain off the tincture.

This is a moderately warm ſtomachic tincture; it may be taken without any vehicle, in the quantity of half an ounce or an ounce.

L. *Tinctura Styptica.*
Styptic Tincture.

Take of green vitriol, calcined, one drachm; French brandy (ſuch as has acquired a yellowiſh tinge from the caſk) two pints. Mix them

them together, that the ſpirit may grow black; then paſs it through a ſtrainer.

Any ſpirit that has gained an impregnation from the oak caſks, which theſe liquors are generally kept in, or from other vegetable aſtringents, will equally exhibit this phænomenon; and French brandy will not do it, without ſuch aſſiſtance. The celebrated ſtyptic of Helvetius (which is ſaid to be the ſame with that of Eaton,) differs from it no otherwiſe, than in being more operoſe in compoſition. They are recommended both for internal uſe, and for reſtraining external hemorrhages: their virtues depend not ſo much on the iron, as on the menſtruum.

Tinctura Sudorifica.

Sudorific Tincture.

Take of Virginian ſnake-root, ſix drachms; cochineal, Engliſh ſaffron, each two drachms; opium, one ſcruple; ſpirit of Mindererus, one pint. Digeſt them together in a gentle heat for three days, and then ſtrain the tincture.

This is a very efficacious medicine for the purpoſe expreſſed in its title. Half an ounce of the tincture, by meaſure, contains five eighths of a grain of opium.

L. *Tinctura Antimonii.*

Tincture of Antimony.

Take of any fixed alcaline ſalt, one pound; antimony, half a pound; rectified ſpirit of wine, two pints. Reduce the antimony into powder, mix it with the ſalt, and melt them together, with a ſtrong fire, for an hour. Then pour out the matter, pulverize it, add the ſpirit, and digeſt them for three or four days: after which ſtrain off the tincture for uſe.

In this proceſs, the alcaline ſalt unites with the ſulphur of the antimony, into a hepar. This tincture is ſuppoſed to contain ſome of the reguline parts, and ſaid to have ſometimes vomited, when taken even in a ſmall doſe. It ſtands recommended, in doſes from ten to ſixty drops or more, as a deobſtruent, promoter of urine, and purifier of the blood.

Tinctura Tolutana.

Tincture of Balſam of Tolu.

Take of balſam of Tolu, an ounce and an half; rectified ſpirit of wine, a pint. Digeſt in a ſand heat until the balſam is diſſolved; then ſtrain the tincture.

This ſolution of balſam of Tolu poſſeſſes all the virtues of the balſam itſelf. It may be taken internally againſt rheumatic pains, ſeminal and other weakneſſes, in the doſe of a tea-ſpoonful or two, in any convenient vehicle. Mixed with the plain ſyrup of ſugar, it forms an elegant balſamic ſyrup.

L. *Tincturæ Valerianæ ſimplex.*

Simple Tincture of Valerian.

Take of wild valerian root, four ounces; proof ſpirit, two pints. After due digeſtion, ſtrain off the tincture.

The root ought to be reduced into fine powder, otherwiſe the ſpirit will not ſufficiently extract its virtues. The tincture proves of a deep colour, and conſiderably ſtrong of the valerian; though it has not been found to anſwer ſo well in the cure of epileptic diſorders, as the root in ſubſtance. The doſe of the tincture is from half a ſpoonful to one or two ſpoonfuls.

L. & E.

L. & E. *Tinctura Valerianæ volatilis.*

Volatile Tincture of Valerian.

Take of wild valerian root, four ounces; volatile aromatic ſpirit, two pints. Digeſt, without heat, in a veſſel cloſely ſtopt, and afterwards ſtrain off the tincture.

The volatile ſpirit is here an excellent menſtruum, and, at the ſame time, conſiderably promotes the virtues of the valerian. The doſe may be a tea ſpoonful or two.

Tinctura Valerianæ volatilis.

Volatile Tincture of Valerian.

Take of wild valerian root two ounces, vinous ſpirit of ſal ammoniac a pint. Macerate ſix days in a cloſe phial, and ſtrain.

L. *Tinctura Veratri.*

Tincture of Veratrum, or white Hellebore.

Take of white hellebore root, eight ounces; proof ſpirit, two pints: digeſt them together, and filter the tincture through paper.

This tincture is ſometimes uſed as an emetic, in apoplectic and maniacal diſorders. It may likewiſe be ſo managed, as to prove a powerful alterative and deobſtruent, in caſes where milder remedies have little effect. But a great deal of caution is requiſite in its uſe: the doſe, at firſt, ought to be only a few drops; if conſiderable, it proves violently emetic or cathartic.

E. D. *Tinctura Veratri ſive Hellebori Albi.*

Take white hellebore root eight ounces, rectified ſpirit of wine two pounds, digeſt ten days, then filter through paper.

E. D. *Elixir Guaiacinum Volatile.*

Volatile Elixir of Guaiacum.

Take of guaiacum, four ounces; balſam of Peru, two drachms; eſſential oil of ſaſſafras, half a drachm; vinous ſpirit of ſal ammoniac, one pint; macerate the ſpirit with the gum and balſam, in a cloſe veſſel for ſix days; then ſtrain out the tincture, and add to it the diſtilled oil.

This compoſition is of great efficacy, it warms and ſtrengthens the habit, and promotes the perſpiration; and hence becomes ſerviceable in rheumatic, ſcorbutic, and ſcrophulous diſorders, particularly where the patient is of a phlegmatic temperament; as alſo in gleets, and in other ill conſequences of a weak relaxed ſtate of the ſolids. Twenty or thirty drops may be taken two or three times a day, or oftener, in any proper vehicle.

Balſamum Commendatoris.

Baume de Commandeur.

Take of dry Peruvian balſam, one ounce; ſtorax, in the tear, two ounces; Benjamin, three ounces; Succotrine aloes, myrrh, olibanum, angelica roots, St. John's-wort flowers, each half an ounce; ſpirit of wine, two pounds eight ounces, by weight. Let them ſtand together in the ſun, during the dog-days, in a glaſs veſſel, cloſely ſtopt; and afterwards ſtrain out the balſam through a linen cloth.

This balſam has been kept a ſecret, in private hands, under the titles of *Balſamum Perſicum*, balſam of Berne, Wade's balſam, Friar's balſam, Jeſuit's drops, &c. The form above is taken from the original receipt, publiſhed by Pomet

(*Hiſ-*

(*Hiſtoire des Drogues*, edit. 2. ii. 56.) It ſtands greatly recommended externally, for cleanſing and healing wounds, and ulcers even of the cancerous kind, for diſcuſſing cold tumours, allaying gouty, rheumatic, and other cold pains and aches; and, likewiſe internally, for warming and ſtrengthening the ſtomach and inteſtines, expelling flatulencies, and relieving colicky complaints. Outwardly, it is applied cold on the part with a feather; inwardly, a few drops are taken at a time in wine, or any other convenient vehicle.

L. *Balſamum Traumaticum.*

Traumatic, or Vulnerary Balſam.

Take of benzoine, three ounces; ſtorax, ſtrained, two ounces; balſam of Tolu, one ounce; Succotrine aloes, half an ounce; rectified ſpirit of wine, two pints: digeſt, that the gums may, as much as poſſible, be diſſolved; and then ſtrain off the balſam for uſe.

This is an elegant reform of the preceding compoſition, conſiderably more ſimple, yet not inferior in efficacy.

E. *Balſamum, ſive Elixir Traumaticum.*

Take of benzoine, powdered, three ounces; balſam of Peru, two ounces; hepatic aloes, in powder, half an ounce; rectified ſpirit of wine, two pints. Digeſt them in a ſand heat for ten days; and then ſtrain the balſam.

This is a farther contraction of the baume de commandeur, without any injury to it as a medicine.

L. *Elixir Aloes.*

Elixir of Aloes.

Take of tincture of myrrh, two pints; Succotrine aloes, ſaffron, each three ounces. Digeſt them together, and ſtrain off the tincture.

Elixir Aloes, vulgo Proprietatis.

Take of tincture of myrrh two pounds; Engliſh ſaffron, two ounces; Succotrine aloes three ounces. Digeſt eight days, then let them ſtand till the fæces ſubſide, after which the clear elixir may be poured off.

This is the *elixir proprietatis* of Paracelſus, improved with regard to the manner of preparation. The myrrh, ſaffron, and aloes, have been uſually directed to be digeſted in the ſpirit together; by this method, the menſtruum ſoon loads itſelf with the latter, ſo as ſcarce to take up any of the myrrh, whilſt a tincture, extracted firſt from the myrrh, readily diſſolves a large quantity of the others.

This medicine is greatly recommended, and not undeſervedly, as a warm ſtimulant and aperient. It ſtrengthens the ſtomach and other viſcera, cleanſes the firſt paſſages from tenacious phlegm, opens obſtructions in the remoter veſſels, and promotes all the natural ſecretions. Its continued uſe has frequently done good ſervice in cachectic and icteric caſes, uterine obſtructions, and other like diſorders; particularly in cold, pale, phlegmatic habits. The doſe may be from twenty drops to a tea ſpoonful, two or three times a day.

E. *Elixir ex Aloe et Rheo, vulgo Sacrum.*

Elixir of Aloes with Rhubarb, called Elixir Sacrum.

Take of rhubarb two drachms; Succotrine aloes ſix drachms; leſſer cardamom ſeeds, half an ounce; proof ſpirit, two pints. Digeſt ſeven days and ſtrain.

E. *Elixir*

E. *Elixir Aloes, ſive Proprietatis Vitriolicum.*

Take of myrrh, in powder, Succotrine aloes, in powder, of each an ounce and half; Engliſh ſaffron, an ounce; dulcified ſpirit of vitriol, a pint. Digeſt the myrrh with the ſpirit in a cloſe veſſel, four days; then add the aloes and ſaffron, and digeſt for four days more; after which let the fæces ſubſide, then ſtrain off the clear elixir.

Here the dulcified ſpirit of vitriol is very judiciouſly ſubſtituted to the ſpirit of ſulphur, ordered in other books of pharmacy to be added to the foregoing preparation; for that ſtrong acid precipitates from the liquor great part of what it had before taken up from the other ingredients. This elixir poſſeſſes the general virtues of the preceding, and is preferred to it in hot conſtitutions, and where the juices tend to a putreſcent ſtate.

E. *Elixir Guaiacinum.*
Elixir of Guaiacum.

Take of gum guaiacum a pound; balſam of Peru three drachms; rectified ſpirit of wine, two pounds and a half: digeſt ten days and ſtrain.

L. *Elixir Paregoricum.*
Paregoric Elixir.

Take of flowers of benzoine, opium ſtrained, each one drachm; camphor, two ſcruples; eſſential oil of aniſeeds, half a drachm; rectified ſpirit of wine, two pints: Digeſt and ſtrain.

E. D. *Elixir Paregoricum.*
Paregoric Elixir.

Take of flowers of benzoine, Engliſh ſaffron, each three drachms; crude opium, two drachms; eſſential oil of aniſeed half a drachm; volatile aromatic ſpirit, one pint: digeſt for four days in a well ſtopped bottle, and ſhake it frequently: add to the ſtrained liquor half a drachm of oil of aniſeed. Shake it well.

This elixir was originally preſcribed under the title of *elixir aſthmaticum*, none of the officinal compoſitions being equal to it in that intention. It excellently allays the tickling, which provokes frequent coughing; and yet at the ſame time opens the breaſt, and gives greater liberty of breathing: the opium procures a temporary relief from the ſymptoms, whilſt the other ingredients tend to remove the cauſe, and prevent their return. It is given to children againſt the chin-cough, &c. from five drops to twenty; to adults, from twenty to a hundred. Half an ounce, by meaſure, contains about a grain of opium.

Elixir Pectorale.
Pectoral Elixir.

Take of balſam of Tolu, two ounces; of Peru, one ounce; benzoine, an ounce and a half; Engliſh ſaffron, half an ounce; rectified ſpirit of wine, two pints: digeſt them in a ſand heat for three days, and then ſtrain off the elixir.

L. *Elixir Vitrioli Acidum.*
Acid Elixir of Vitriol.

Take of the aromatic tincture, one pint; ſtrong ſpirit (called oil) of vitriol, four ounces: mix them together, and after the fæces have ſubſided, filter the elixir through paper.

This preparation is altered from Mynſicht; the oil of vitriol, and

ſpirit of wine, being by him firſt mixed together, and then digeſted upon aromatics: when thus managed, the acid diſables the ſpirit from extracting the virtues of the aromatics; and indeed, when added to the tincture, as here ordered, it precipitates great part of what the ſpirit had before taken up.

Mynſicht's elixir of vitriol is directed in our preceding Pharmacopœia, as follows: take of cinnamon, ginger, cloves, each three drachms; *calamus aromaticus*, one ounce; galangal, an ounce and a half; ſage, mint, each half an ounce; cubebs, nutmegs, each two drachms; aloes wood, citron peel, each one drachm. Reduce theſe ingredients into a powder, to which add, of ſugar-candy, three ounces; ſpirit of wine, a pint and a half; oil of vitriol, one pint. Digeſt them together for twenty days, and then filter the tincture for uſe.

Theſe medicines are greatly recommended in weakneſs of the ſtomach; and in moſt caſes of this kind, where an acid does not already prevail, they have generally good effects. Sometimes they have proved ſerviceable after bitters had availed nothing, eſpecially in great relaxations from debauches and over-feeding.

L. *Elixir Vitrioli dulce.*
Sweet Elixir of Vitriol.

Take of the aromatic tincture, one pint; dulcified ſpirit of vitriol, eight ounces, by weight. Mix them together.

This is deſigned for perſons whoſe ſtomach is too weak to bear the foregoing acid elixir.

E. D. *Elixir Vitrioli.*
Elixir of Vitriol.

Take of rectified ſpirit of wine, two pints; drop into it, by degrees, ſix ounces of oil of vitriol: digeſt in the gentleſt ſand heat for three days; then add an ounce and a half of cinnamon; one ounce of ginger; dried leaves of peppermint, half an ounce. Digeſt again, for three days, in the ſame heat, and filter the elixir through a glaſs funnel. This is ſimilar to the preceding.

E. D. *Elixir Vitrioli dulce.*
Sweet Elixir of Vitriol.

It is made of the ſame aromatics, and in the ſame manner as the aromatic tincture, except that inſtead of ſpirit of wine, the ſweet ſpirit of vitriol is added.

L. D. *Elixir Myrrhæ compoſitum.*
Compound Elixir of Myrrh.

Take of extract of ſavin, one ounce; tincture of caſtor, one pint; tincture of myrrh, half a pint. Digeſt them together, and then ſtrain the elixir.

This preparation is improved from one deſcribed in former editions of this work, under the name of *Elixir Uterinum.* It is a medicine of great efficacy in all uterine obſtructions, and in hypochondriacal caſes, promotes the menſes, the expulſion of the *fœtus*, and the *lochia.* It may be given from five drops to twenty or thirty, or more, in penny-royal water, or any other ſuitable vehicle.

E. D. *Elixir Sacrum.*

Take of Succotrine aloes, in powder, ſix drachms; choice rhubarb, cut ſmall, ten drachms; leſſer cardamom ſeeds, half an ounce; French brandy, two pints: digeſt for ſeven days, and ſtrain the elixir.

E. D.

E. D. *Spiritus Vini camphoratus.*
Camphorated Spirit of Wine.

Take of camphor, one ounce; of rectified ſpirit of wine, one pint. This is chiefly intended for ſtrains.

Eſſentia Odorifera.
Odoriferous Eſſence.

Take of muſk, ten grains; civet, five grains; balſam of Peru, twelve drops; oil of cloves, four drops; oil of rhodium, two drops; ſalt of tartar, half a drachm; rectified ſpirit of wine, two ounces. Digeſt them together in a cloſe veſſel, with a heat equal to that of the ſun in ſummer for ſeveral days; and afterwards pour off the eſſence for uſe.

This is likewiſe a very high perfume; a ſingle drop of it gives a fine flavour to many ounces of other liquors.

Eau de Luce.

Take the higheſt rectified ſpirit of wine, two pounds; the oil of amber once rectified, one ounce; let them ſtand together ſome days, often ſhaking them. Then decant off the ſpirit from the oil which remains undiſſolved, and add to it four ounces of the volatile ſalt of ſal ammoniac diſſolved in a pint of water. If on mixture, the oil of amber appears to ſeparate from the ſpirit, which will be ſeen by a white cloudineſs; add highly rectified ſpirit of wine to it gradually, till the whole becomes clear; and if the volatile ſalt ſeparates, let it ſettle, and then pour off the clear liquor.

Various are the modes of preparing this fluid, according to the different intentions of the preſcriber; ſome requiring a clear, and others a turbid appearance; ſome only a volatile pungent, and others, beſides its pungency, aim at an agreeably flavoured liquor. When its only uſed in ſmelling-bottles, a beautiful blue colour is given to it by a drop or two of a ſolution of copper.

The following is preferred by ſome.

Take of gum olibanum, and gum maſtich, of each one drachm; the oils of lavender, two drachms; oil of roſemary, one drachm; alcohol of wine, ſix ounces; mix and digeſt them for ſome days.

Then take of ſpirit of ſal ammoniac, made with quick lime, any quantity; to which add of the above tincture, enough to give it the required colour and conſiſtence: mix, by ſhaking them well together.

L. *Spiritus Vinoſus Camphoratus.*
Camphorated Spirit of Wine.

Take of camphor, two ounces; rectified ſpirit of wine, two pints: mix them that the camphor may be diſſolved.

E. D. General rules for extracting Tinctures.

I. The ſeveral vegetable ſubſtances ought to be moderately dried, but not long kept, unleſs where they are expreſly directed otherwiſe. They ought likewiſe to be cut and bruiſed before the menſtruum is put to them.

II. If the digeſtion is performed *in balneo*, the ſucceſs of the operation depends entirely on the proper management of the heat, which ought to be gentle the whole time; except where the more tenacious texture of the ſubject requires that it ſhould be augmented; in which

caſe it may be increaſed, ſo as to make the menſtruum boil a little towards the end of the proceſs.

III. Very large circulatory veſſels ought to be employed for this purpoſe, which ſhould be made warm before they are luted together.

IV. The veſſel muſt be frequently ſhaken during the digeſtion.

V. All tinctures ſhould be ſuffered to depoſit their fæces before they are either ſtrained or filtered, as in the tinctures (and likewiſe diſtilled ſpirits) deſigned for internal uſe; no ſpirit drawn from malt, melaſſes, or any other fermentable matter, is to be uſed beſides that expreſly preſcribed.

From the former London Diſpenſatory, and others.

Vinum Scilliticum. Wine of Squills.

Take white ſquills dried, one pound; infuſe them in eight pounds of white wine fourteen days, and then ſtrain out the ſquills and keep the wine for uſe.

This is as gentle an emetic as the vinegar of ſquills, but it is more agreeable to cold weak ſtomachs. After ſome time uſing this medicine it will not vomit, but irritate, juſt enough to ſqueeze out ſome ſlimy water from the glands, and thereby greatly contribute to render them ready in the diſcharge of their proper offices; inſomuch that there is hardly any one medicine that better guards againſt thoſe inundations of rheums which drown old age, or are the conſequences of decays from frequent debauches, than this does. From one to four ſpoonfuls may be taken every morning.

Tinctura Theriacalis. The Alexipharmic Tincture.

Take of French brandy and the beſt vinegar, of each two pounds, of Venice treacle and Mithridate, of each half a pound; digeſt them in a gentle heat, and ſtrain out the tincture for uſe.

This is out of uſe, but it is ſo good a medicine, and in ſo convenient a form for ſuch as cannot take boles or electaries, that it was thought worth recommending here. It has all the virtues of the treacle; and by the help of the vinegar will ſometimes procure a diaphoreſis, where that fails. In ſhort, it is an excellent alexipharmic. It may be given from two drachms to two or three ounces, with any convenient vehicle, or by itſelf. This may alſo be enticed down with many children, who cannot be prevailed upon with any other form; they may take from one drachm to half an ounce. In fevers, if no other medicines of the ſame intention are uſed, it ought to be repeated every four or ſix hours; according to the exigency of the caſe, till a ſweat riſes.

Tinctura Aſthmatica. Tincture for an Aſtma.

Take roots of elecampane, Florentine orris, ſeeds of aniſe, caraway, liquorice, of each two ounces, leaves of carduus, carduus ben. two handfuls; raiſins ſtoned, one pound; ſena, ſix ounces; aniſeed water, ſix pounds. Let them all digeſt four days; then ſtrain the liquor, and keep it for uſe. This is from Bates.

The carduus here nauſeates the medicine, and contributes but little to its efficacy; and therefore is better

better left out. This may be taken two or three ſpoonfuls going to bed, and as much next morning, according to the ſtrength of the patient; and if it be long continued in corpulent habits, it is ſaid to do much good.

Tinctura Paralytica.

Tincture againſt the Palſy.

Take Spaniſh flies in powder, two ounces; ſeeds of biſhop's-weed, ſix drachms; ſpirit of wine rectified, one pound and a half. Let them digeſt together for ſome days in a ſand-heat, and then decant or filter the clear liquor from the ingredients.

This is deſigned for embrocations in numbneſs, and for paralytic limbs: in which caſes it is a notable ſtimulus; and if poſſible will rouze and ſtir the almoſt inſenſible and ſtupified fibres, and occaſion a proper derivation of their fluids. If much rubbed into the part, it is ſharp enough to excoriate.

Elixir Camphoratum.

Elixir of Camphor.

Take camphor, half an ounce; diſſolve it in tincture of ſaffron, that has been made with ſpirit of wine rectified, ſix ounces; and keep it cloſe ſtopt for uſe.

The virtues of this are plain from its ingredients, ſo fully deſcribed already. It makes a notable alexipharmic; and ſtands conveniently in readineſs to be preſcribed in any liquid form.

Elixir Proprietatis dulce.

Take myrrh, aloes, and ſaffron, of each one ounce; ſpirit of wine rectified, eight ounces; digeſt them together in a gentle ſand-heat for ſome days; then pour off what is clear for uſe.

The ſame method ought to be obſerved in this, as was before directed in that of the college; elſe the virtues of all the ingredients will not be ſo well obtained. It is good in all the diſorders of the ſtomach, as the foregoing; but gives not that firmneſs to relaxed fibres; although it is rather a greater cleanſer of the firſt paſſages, and better agrees with ſome tender conſtitutions, where acids draw and pull the fibres too much, ſo as to occaſion griping and colic pains.

Elixir Proprietatis Tartarizatum.

Take myrrh, aloes, and ſaffron, of each one ounce; tincture of ſalt of tartar, twelve ounces. Digeſt them together for ſome days, then decant what is clear, and keep it cloſe ſtopt.

This is not a better ſtomachic medicine than any of the foregoing; but more opening, not only of the firſt paſſages, but of all the viſcera, and particularly promotes the diſcharge by urine. Where therefore thoſe intentions are moſt in view, this is the beſt to preſcribe. In obſtructions of the menſes, likewiſe, this is the beſt preparation. This requires likewiſe the ſame caution in making as the former.

Elixir Vitæ. Elixir of Life.

Take nutmegs, mace, cinnamon, of each one ounce; cloves, half an ounce; the outer rinds of oranges and citrons, of each three drachms; ſaffron, two ounces. Digeſt all together, upon a ſand-heat, in three pounds of rectified ſpirit of wine for ſome days; and pour off the clear for uſe.

This is a very good compoſition of cordial and cephalic ſimples,

is eaſily made, and kept in the ſhops, and very readily mixed with any liquid forms for extemporaneous practices. It may be given from forty drops to two drachms in any convenient vehicle. This may be diſtilled with a retort, and what comes over, entitled, compound ſpirit of ſaffron; and an extract be made of the reſiduum, called the compound extract of ſaffron; and both will be excellent good medicines in the above mentioned purpoſes.

Tinctura Stomachica Amara.
The bitter Stomachic Tincture.

Take gentian root and orange peels dried, both cut very ſmall, of each one pound; pour upon them in a glaſs body ſpirit of wine rectified, one gallon and a half. Let them ſtand cloſe covered in a very mild warmth for ſome days; then preſs out the ſpirit ſtrongly; and let it fine down for uſe.

The peels muſt be of the moſt fragrant Seville oranges, cleared of the white, and carefully dried. This makes a tincture not to be known from ſeveral which are ſo extravagantly cried up in empirical advertiſements, and is the beſt that can be made. To this, centaury, and many things of the like kind, might be added; but they would rather clog the medicine, than increaſe its virtues. This is very conveniently kept in the ſhops to make the bitter draught *extempore*, with any kind of wine or other vehicle. From fifteen to ſixty drops is ſufficient for a doſe of two or three ounces. It is alſo very conveniently added to ſteel wine; as bitters are often joined with it. It has all the virtues of the common bitters, and warms and ſtrengthens the ſtomach; but anſwers that end much better when joined with a little acid; which makes a ſub-aſtringent of it, not much unlike the *elixir vitrioli*: one ounce of *ſpiritus ſulphuris per campanum*, would be enough for a pint of this tincture, and make it of a more beautiful colour, and pleaſanter to take.

Tinctura Martis Mynſichti.
Mynſicht's Tincture of Steel.

Take ſal ammoniac, two pugils; filings of ſteel, one pugil; mix them together, and put them into a retort; give a gentle fire at firſt in a ſand heat, and by degrees raiſe it, until ſome flowers are come over. Waſh the reſiduum with warm water till the *ſal ammoniac* is not diſcernible; then put it into a cucurbit, and with ſpirit of wine extract a tincture; which decant, and put on more, until it will tinge no longer: then evaporate about half the ſpirit: and keep the reſt for uſe: the doſe may be from ten to forty drops.

Tinctura Reginæ.
The Royal Tincture.

Take muſk half a ſcruple; civet, five grains; balſam of Peru, twelve drops; oil of cloves, four drops; of rhodium, two drops; drop theſe upon half a drachm of ſalt of tartar, and mix them well together; then pour upon the maſs, rectified ſpirit of wine, two ounces; and let them ſtand in a heat equal to that of the ſun in a cloſe veſſel, many days; and afterwards pour off the clear ſpirit by decantation.

This is fit only to be kept in readineſs to flavour any cordial dram, where ſuch things are proper and required; and is as good for this purpoſe as can well be contrived; the leaſt drop is ſufficient

ſieient for many ounces of liquor. This is a preparation of Le Mort.

Tinctura Roris Solis. Tincture of Sun Dew.

Take of the *ros ſolis*, or ſun dew, four handfuls; cinnamon, nutmegs, mace, cloves, ginger, of each an ounce; muſk, four grains; ſpirit of wine, one cong. Digeſt all together twenty days, and then diſſolve in the ſtrained tincture, of loaf ſugar, one pound; and put it up in a cloſe veſſel for uſe.

This is a warm high cordial, and a good cephalic, eſpecially in cold conſtitutions.

Elixir Aſthmaticum.
Elixir againſt Aſthmas.

Take honey and liquorice root, of each four ounces; flowers of Benjamin and opium, of each one drachm; camphor, two ſcruples; oil of aniſeed, half a drachm; ſalt of tartar, one ounce; ſpirit of wine rectified two pounds. Digeſt all together for ſome weeks, ſhaking the veſſel often; then ſtrain and filter for uſe.

This is directed by Le Mort; the *elixir paregoricum* is an elegant reform of this.

Elixir Antivenereum.
An Elixir againſt the Pox.

Take balſ. capivi, one ounce; gum guaiacum two drachms; oil of ſaſſafras half a drachm; rectified ſpirit of wine five ounces. Digeſt together, with ſome ſmall mixture of ſalt of tartar, for two or three days; and pour off what is fine for uſe.

This is alſo from Le Mort. It has been greatly extolled as an antivenereal, but certainly ought not to be uſed while any infection remains, afterwards it may be uſeful.

Elixir Hypochondriacum.
An Elixir againſt Melancholy.

Take roots of valerian and caſſamunair, of each two ounces; black hellebore, four ounces. Digeſt for twenty-four days in two pounds of ſpirit of wine rectified; then ſtrain and preſs it out hard, and to it put extract of ſaffron, one ounce; ſalt of ſteel, half an ounce; with diſtilled vinegar, eight ounces. Digeſt theſe for ſome days together in a cloſe veſſel, and then pour off, and filter for uſe.

This is a moſt efficacious medicine in all melancholy hypochondriacal affections in either ſex. And there is hardly a caſe ſo obſtinate as to reſiſt it; if it be long continued. It keeps the body a little laxative, and opens by urine; and will in time ſcour the glands and moſt remote receſſes of the body, of thoſe adheſive ſlimy humours, which ſpoil the motions of the ſpirits, and lay a load upon the principal wheels of the animal machine; from whence ariſe thoſe perturbations of mind, and interruptions of reaſoning, as put a perſon into a ſtate little better than that of diſtraction. It may be given from ten to forty drops in any convenient vehicle.

SECT. V.

Of Conſerves, Sugars, &c.

THOSE things which are preſerved in ſubſtance by boiling in ſugar, and ſaid to be candied, are now become entirely foreign to the apothecary's buſineſs, being wholly managed by the confectioner; and the medicated ſugars under the next diviſion, are alſo fallen into the ſame hands; and moſt, or all of them, are ſo rarely uſed in medicine, that an enquiry about them ſeems needleſs. The *ſaccharum tabulatum compoſitum*, and the *confectio de thure*, are ſo little eſteemed in any reſpect, they are never to be met with ready made.

The conſerves make a conſiderable article in the furniture of an apothecary's ſhop; but although they are now much abridged by the college, they have yet retained more than are ever preſcribed or made; for reaſons already taken notice of, *viz.* either from their nauſeouſneſs or unfitneſs for this form. Of thoſe things which require to be gently boiled, are only the ſloes and barberries, becauſe without it their pulps are ſo thin as not to afford a due conſiſtence with ſugar; but much boiling is here to be avoided, for the reaſons before given concerning the acid ſyrups. All the other conſerves require nothing more than barely beating them in a mortar to a ſufficient fineneſs; but the labour required to do this makes moſt of them, at beſt, ſo coarſe, that they ought to be pulped before they are reduced into electaries; their aptneſs to candy likewiſe ſubjects them to the ſame neceſſity; the peculiar method of doing which will come more properly to be ſhewn in the direction about extemporaneous electaries.

There is a very conſiderable overſight in the liſt of ſimples reducible into conſerves, as it is printed in the laſt Diſpenſatory, both in relation to the method in which they ſtand, and the diſtinctions of the things themſelves; which it may be neceſſary to take ſome notice of here, to prevent being led into miſtakes thereby. The diſtinctions of *Summitates*, *Flores*, *Folia*, and *Fructus*, are not only intermixed, and conſequently repeated oftener than a good method requires, but alſo things are placed under theſe diſtinctions which do not belong to them. This under *Summitates*, are lavender and lilies of the valley, the fine picked flowers only of which are uſed in conſerve. Under the *Folia* likewiſe are violets, which are uſed only in flower; and elder, the leaves of which were never yet made into conſerve: the ſloes and barberries which ſtand here, belong to the diſtinction of fruits, and ſhould be placed with the hips. There are other inconveniencies not of ſuch conſequence, and which every reader can eaſily rectify.

This form of medicine is contrived to preſerve the flowers, herbs, roots, peels, or fruits of ſeveral ſimples, as near as poſſible to what they are when freſh gathered:

ed: but for this purpoſe there is ſo much ſugar made uſe of, that a doſe of the ſimple, to anſwer any intention of moment, is rendered very inconvenient to take. All the things which therefore come under this diviſion are to be regarded pretty much as ſyrups; more for the ſake of mixing and rendering palatable other things of great efficacy, than to anſwer any intention of cure themſelves. For what can be expected from a doſe of the moſt efficacious conſerve that is made in the ſhops (ſuppoſe one ounce, which is three fourths ſugar), when the herb of which it is made, might be eat by handfuls, or as common ſalleting, without any manifeſt alteration? In this form more or leſs ſugar is uſed, according to the texture and diſpoſition of the ſimple concerned. Thus to herbs, and flowers, there are put three parts of ſugar to one of the ſimple; for roots, and ſuch ſubſtances as will keep better, double the quantity of ſugar will do; and for ſome fruits and their pulps, yet leſs will ſerve. That part of this branch of pharmacy taken away by a diſtinct buſineſs, called Preſerving, does not much differ from this, but in the manner of mixture.

Conſerves are made by beating them in a marble mortar with three times their quantity of loaf ſugar, till the particles of the ſimples are perfectly blended with the ſugar. But according to the different ſucculency of their reſpective ſimples, they grow dry, or run as thin as ſyrup, with keeping; and turn ſour and ferment; in both of which caſes they ought to be put by as unfit for uſe, and good for nothing but to add to any fermenting liquor for diſtillation.

Conſerves of the peels of oranges, citrons, lemons, and the like, are only made with double their quantity of ſugar, becauſe their warmth helps to keep them. They require great labour to make them very fine; if therefore the chips, as they are ſhaved thin off the orange, &c. are put into an earthen pan for ſome weeks, with a ſufficient quantity of ſugar; they will mellow, or as it were ſo rot together, that it will require much leſs trouble to reduce them into a good conſerve.

The conſerves of any medicinal ſimple, that is not uſually kept ready made, may be made at any time when required, according to ſome of the foregoing methods, with a proportion of ſugar ſuitable to its texture and diſpoſition of parts.

L. *Conſerva foliorum Cochleariæ hortenſis.*

Conſerve of the leaves of garden Scurvygraſs.

This is the only form that ſcurvygraſs in ſubſtance can be kept in, without the total loſs of its virtues. The conſerve retains the taſte and virtue of the herb for a conſiderable time: it is taken in ſcorbutic habits, three or four times a day or oftener.

L. *Conſerva foliorum Lujulæ.*

Conſerve of the Leaves of Wood-ſorrel.

This is a very grateful conſerve: in taſte it is lightly acid. It is taken occaſionally, for quenching thirſt, and cooling the mouth and fauces in hot diſtempers.

L. *Conſerva foliorum Menthæ vulgaris.*

Conſerve of the Leaves of Spear-mint.

The conſerve of mint retains

the taſte and virtues of the herb. It is given in weakneſs of the ſtomach and reachings to vomit; and not unfrequently does ſervice in ſome caſes of this kind, where the warmer and more active preparations of mint would be leſs proper.

L. *Conſerva Foliorum Rutæ.*
Conſerve of the Leaves of Rue.

This conſerve is exhibited, from a drachm to half an ounce, in crudities of the *primæ viæ*, for promoting digeſtion, and in hyſteric diſorders. Some have had a great opinion of it, taken in a morning, for preventing contagious diſeaſes.

L. *Conſerva Summitatum Abſinthii maritimi.*
Conſerve of the Tops of Sea Wormwood.

The conſerve of wormwood has been celebrated in dropſies: Matthiolus relates, that ſeveral perſons were cured by it of that diſtemper, without the aſſiſtance of any other medicine. It is directed to be given in the doſe of half an ounce, before meals.

L. *Conſerva Florum Lavendulæ.*
Conſerve of Lavender Flowers.

This conſerve is not near ſo fragrant as the flowers themſelves. It is ſometimes given as a mild cordial, and in nervous complaints.

L. *Conſerva Florum Malvæ.*
Conſerve of the Flowers of Mallows.

This is looked upon as an emollient, and ſometimes made uſe of as ſuch in diſorders of the breaſt and urinary paſſages. It may be taken in any quantity that the ſtomach will bear.

L. E. *Conſerva Florum Roſarum rubrarum immaturarum.*
Conſerve of the Buds of red Roſes.

This is a very agreeable and uſeful conſerve. A drachm or two, diſſolved in warm milk, are frequently given as a light reſtringent, in weakneſs of the ſtomach, and likewiſe in coughs and phthiſical complaints.

L *Conſerva Florum Roriſmarini.*
Conſerve of Roſemary Flowers.

Roſemary flowers in great meaſure loſe their peculiar fragrance by beating. Some therefore make this conſerve from the leaves of the plant, or at leaſt add ſome of them to the flowers. The conſerve of roſemary is directed in weakneſs of the nerves, and as a light cordial.

L. E. *Conſerva flavedinis Corticum Aurantiorum Hiſpalenſium.*
Conſerve of the yellow Rind of Seville Orange Peel.

This conſerve is a very elegant one, containing all the virtues of the peel. It is a pleaſant, warm, ſtomachic bitter.

L. *Conſerva Fructus Cynoſbati.*
Conſerve of Hips.

Hips require leſs ſugar for reducing them into a conſerve than the ſubſtances above enumerated. Twelve ounces of the pulp of the ripe fruit are to be mixed with only twenty ounces of ſugar.

The conſerve of hips is of ſome eſteem, as a ſoft, cooling reſtringent; three or four drachms or more are given at a time, in bilious fluxes, ſharpneſs of urine, and hot indiſpoſitions of the ſtomach.

L. E.

L. E. *Conſerva Prunorum Sylveſtrium.*

Conſerve of Sloes.

Let the ſloes be put into water, and ſet over the fire till they grow ſoft, with care that they do not burſt. Then take the ſloes out of the water, preſs out their pulp, and mix it with thrice its weight of double refined ſugar.

This preparation is a gentle aſtringent, and may be given as ſuch in the doſe of four or five drachms. The degree of its aſtringency will vary according to the maturity of the ſloes, and the length of time that the conſerve has been kept.

L. D. *Radix Eryngii condita.*

Preſerved Eryngo-Root.

Boil the roots till the rind can be eaſily peeled off; then having freed them from it, let the roots be cut down the middle, and the pith being taken out, let them be waſhed three or four times in cold water; afterwards for each pound of the roots take two pounds of the fineſt ſugar, which place over the fire to melt; and upon the firſt appearance of boiling, throw in the roots, and boil them till they become tender.

In the ſame manner angelica-root may be candied.

L. D. *Cortex Aurantiorum conditus.*

Preſerved Orange-peel.

Steep freſh orange-peels in water, which muſt be often changed, till they loſe their bitterneſs; then boil them in the fineſt ſugar diſſolved in water, till they become tender and tranſparent.

In the ſame manner lemon-peels may be preſerved.

Thoſe who chuſe to have the preſerved peels retain their bitterneſs, in which all their medicinal virtue conſiſts, muſt omit the ſteeping them in water; but theſe, and all the common preſerves, are beſt prepared by the confectioners, whoſe proper buſineſs it is to make them.

Preſerves, Conſerves and Sugars of the former Edinburgh Diſpenſatory.

Radix Angelicæ condita.

Candied Angelica.

Slice any quantity of freſh Angelica roots, and throwing away the pith; ſteep the ligneous part, in ſeveral renewed quantities of water two days, afterwards boil them a little, then pour off the water, and put to the roots as much ſyrup of ſugar as will cover them to the height of two inches; after a day or two they may be again boiled gently, if there ſhould be occaſion, that the ſuperfluous moiſture may be evaporated, and the ſyrup become of a due conſiſtence.

In the ſame manner may be candied,

Radices Eryngii, Roots of Eryngo.—*Helenii*, Elecampane.—*Satyrii*, Satyrion.—*Cortices Aurantiorum*, the Peel of Oranges,—*Limonium* Lemons.

Nutmeg, citron and ginger are brought to us from India ready candied. All ſorts of fruits, flowers, and ſeeds, may likewiſe be preſerved either by adding ſyrup, or by cruſting them over with ſugar, but this rather belongs to the buſineſs of a confectioner than an apothecary.

Mars Saccharatus.

Sugared Steel.

Put any quantity of clean filings

of iron into a braſs kettle, ſuſpended over a very gentle fire. Add to them, by little and little, twice their weight of white ſugar, boiled to the conſiſtence of candy; add one drachm of powder of ſtarch for every pound of ſugar; agitating the kettle continually, that the filings may be cruſted over with the ſugar, and taking great care to prevent their running into lumps.

This is a very agreeable preparation of ſteel.

Tabellæ Diatragacanthi.
Lozenges of Gum Tragacanth.

Take of white ſugar one pound; roſe water, four ounces; which diſſolve over a ſlow fire: then add of the compound powder of gum tragacanth, three ounces; and having poured the mixture upon a marble, make it into lozenges.

Saccharum Tabulatum ſimplex & Perlatum.
Simple and Pearl Lozenge Sugar.

The firſt is made by pouring ſugar, which hath been ſufficiently boiled with half its quantity of damaſk-roſe-water, upon a marble; and the latter by adding to every pound of the former, towards the end of its boiling, half an ounce of prepared and levigated pearl, with eight or ten leaves of gold.

If good care is not taken to boil this to a juſt conſiſtence, it will be either too brittle to flow upon the ſtone ſufficiently for its being cut into tablets; or too ſoft to preſerve its form when ſo managed. But this is alſo a branch of pharmacy now principally left to the confectioner.

Saccharum Tabulatum compoſitum.
Compound Lozenge Sugar.

Take of fine rhubarb, four ſcruples; of the troches of agaric, of coralline, burnt hartſhorn, of the leaves of Cretan dittany, of wormſeed, of the ſeeds of purſlain and ſorrel, of each one ſcruple; of cinnamon, zedoary, cloves, and ſaffron, of each half a ſcruple; of the fineſt powdered ſugar, one pound; let the ſugar be diſſolved in five ounces of ſimple wormwood-water, and one ſpoonful of ſtrong cinnamon-water; and the fore mentioned ſpecies be mixed with it ſo as to make it into tablets, *ſ. a.*

Saccharum Hordeatum.
Barley Sugar.

It is made from ſugar boiled over a ſlow fire in a decoction of barley, briſkly beat up with the whites of eggs, and frequently ſcummed while upon the fire; it is then to be ſtrained through a flannel, and again ſet upon the fire, where it muſt boil ſlowly till it riſes in large bubbles; and upon trial found not to ſtick to the teeth. It is to be poured upon a marble ſtone, rubbed over with oil of almonds, as ſoon as the bubbles ſubſide; and its extremities, as it runs out, turned back again, till it grows of the conſiſtence of a thick turpentine; when it muſt be faſtened to ſomething, and nimbly drawn out by the hands, rubbed over with ſtarch, into thin or thick, long or ſhort threads at pleaſure, and laid upon a plate provided on purpoſe, till it hardens into lozenges.

This alſo is now ſolely prepared by the confectioners, and is very rarely preſcribed medicinally.

Sac-

Saccharum Roſatum Tabulatum.

Lozenge Sugar with Roſes.

Take of red-roſe leaves without the white heels, and haſtily dried in the ſun, one ounce; of the whiteſt ſugar, one pound; melt the ſugar over the fire in red-roſe-water, and the juice of red-roſes, of each two ounces; and after due evaporation, mix with it the roſes in fine powder; and pour it upon a marble ſo as to make it into lozenges, *ſ. a.*

This is alſo now made by the confectioners. Its colour is made more beautiful by adding a few drops of ſpirit of vitriol, before it cools.

SECT. VI.

Of Electaries, &c.

THE next officinal form for internal uſe, is that of an electary; and it is much the moſt extenſive of any, as it takes in almoſt the whole *materia medica*, in one intention or other; for though many ſimples have, from their texture, a natural unfitneſs for ſome forms, yet there are hardly any which are not reducible, one way or other, into this; and the whole ſkill of the compounder conſiſts in knowing that particular management which ſimples of different textures require to incorporate them thus together.

Beſides what is common, then, to all compoſitions, the chief conſiderations in preſcribing officinal electaries, are, that ſuch things only be put together, which will not by any oppoſite qualities deſtroy one another, or loſe their natural properties by lying long in this manner; and likewiſe that the whole be of a conſiſtence, that will hold ingredients of different gravities in equal mixtures. Thus in all electaries, where the teſtaceous powders are ordered, or any thing of an alkaline nature, no acids, or any thing that will turn acid, ought to be mixed, becauſe they will ferment; their weight likewiſe requires a thicker conſiſtence than can be well given by a ſyrup, to hold them in ſuſpenſion; and for offending in both theſe reſpects, the college formerly expunged the *confectio de hyacintho*, which conſiſted chiefly of teſtaceous and heavy ingredients, and was made up with ſyrup of lemons. Things which are moſt liable to grow worſe in this form, chiefly affect the aſtringent compoſitions, becauſe that roughneſs or aſperity in which their aſtringency conſiſts, by long lying in moiſture, grows ſofter, and conſequently leſs efficacious in any ſuch intentions. This change is very manifeſt in comparing old *diaſcordium*, or conſerve of red roſes, with new.

The ſubjects of this form may be moſt of thoſe medicinal ſimples which are proper to give in ſubſtance; and therefore it makes a great part of the officinal compoſitions. This form in the ſhops is a thicker conſiſtence than that which is uſed in extemporaneous practice, for the conveniency of keeping; otherwiſe the electaries are apt to ferment and ſpoil.

Gene-

General rules for making Electaries.

I. The rules already laid down for decoctions and powders in general, are likewiſe to be obſerved in making decoctions and powders for electaries.

II Gums, inſpiſſated juices, and ſuch other ſubſtances as are not pulverable, ſhould be diſſolved in the liquor preſcribed; then add the powders by little and little, and keep the whole briſkly ſtirring; ſo as to make an equable and uniform mixture. E.

III. Aſtringent electaries, and ſuch as have pulps of fruits in their compoſition, ſhould be prepared only in ſmall quantities at a time, and the ſuperfluous moiſture of pulps ſhould be evaporated over a gentle fire, before they are mixed with the ingredients. E.

IV. Electaries if they grow dry in keeping, are to be reduced to the due conſiſtence, with the addition of a little Canary wine; and not with ſyrup or honey: by this means, the doſe will be the leaſt uncertain; a circumſtance deſerving particular regard, in thoſe eſpecially which are made up with ſyrup, and contain a large quantity of opium, as the *confectio paulina*, and *philonium*. L. E.

L. *Electarium e Baccis Lauri.*
Electary of Bay Berries.

Take of rue leaves dried, carraway ſeeds, parſley ſeeds, bay berries, each one ounce; ſagapenum, half an ounce; black pepper, Ruſſia caſtor, each two drachms; clarified honey, thrice the weight of the powdered ſpecies. Mix the ſpecies with the honey, and make them into an electary.

This compoſition is principally uſed in carminative clyſters.

L. *Electarium e Caſſia.*
Electary of Caſſia.

Take of ſolutive ſyrup of roſes, pulp of caſſia, freſh extracted, each half a pound; manna, two ounces; pulp of tamarinds, one ounce. Grind the manna in a mortar, and with a gentle heat, diſſolve it in the ſyrup; then add the pulps, and continue the heat until the whole is reduced to a due conſiſtence.

E. *Electarium e Caſſia, vulgo Diacaſſia.*

Take of pulp of caſſia, ſix ounces; pulp of tamarinds, and Calabrian manna, of each one ounce and a half; ſyrup of pale roſes, ſix ounces. Rub the manna in a mortar, then with a gentle heat diſſolve it in the ſyrup; afterwards add the pulps, and continue the heat until it is reduced to a proper conſiſtence.

Theſe compoſitions are very convenient officinals, to ſerve as a baſis for purgative electaries and other like purpoſes. They are likewiſe uſefully taken by themſelves, in the quantity of two or three drachms occaſionally, for gently looſening the belly in coſtive habits.

L. *Electarium Lenitivum.*
Lenitive Electary.

Take of figs, one pound; ſena, eight ounces; pulp of tamarinds, caſſia, French prunes, each half a pound; coriander ſeeds, four ounces; liquorice, three ounces; double refined ſugar, two pounds and a half. Pulverize the ſena along with the coriander ſeeds, and ſift

out ten ounces of the powder: the remainder is to be boiled with the figs and liquorice, in four pints of water, to one half; then ſtrain and preſs out the liquor, and evaporate it to the weight of a pound and a half, or ſomewhat leſs: in this diſſolve the ſugar, ſo as to make it into a ſyrup, and add this ſyrup, by little and little to the pulps: laſtly, mix in the powder before ſeparated by the ſieve.

E. D. Take of the leaves of ſena, four ounces; of coriander ſeeds, two ounces; pulp of prunes, one pound. To the leaves and ſeeds in powder, add the pulps; and with ſyrup of damaſk roſes, make an electary.

Electarium Pectorale.
Pectoral Electary.

Take of rob of elder two ounces; ſpermaceti (diſſolved in the yolk of eggs), half an ounce; flowers of Benjamin, one drachm; ſyrup of balſam, enough to make the whole into an electary.

This is a good pectoral, and very uſeful in coughs.

Theſe electaries may be occaſionally taken to the quantity of a nutmeg or more, for looſening the belly in coſtive habits. They are frequently employed in clyſters.

This compoſition is intended for thoſe diſorders of the breaſt which proceed from a laxity and debility of the veſſels, and a thin acrimonious ſtate of the fluids. It is ſufficiently agreeable to the palate, and may be taken to the quantity of a nutmeg or more, ſeveral times a day.

L. *Electarium e Scammonio.*
Electary of Scammony.

Take of ſcammony, an ounce and a half; cloves, ginger, each ſix drachms; eſſential oil of caraways, half a drachm; honey, half a pound. Let the ſpices be ground together, and mixed with the honey; then add the powdered ſcammony, and afterwards the oil.

This electary is a warm, briſk purgative. It is a reform of the *electarium caryocoſtinum* of our preceding Diſpenſatories; a compoſition which was greatly complained of, as being inconvenient to take, on account of the largeneſs of its doſe. Thirty grains of this contain five grains of ſcammony.

L. *Electarium e Scordio.*
Electary of Scordium.

Take of the ſpecies of ſcordium with opium, any quantity; ſyrup of meconium, boiled to the conſiſtence of honey, thrice as much by weight. Mix the ſpecies with the ſyrup, ſo as to make an electary.

E. D. *Electarium Japonicum, vulgo Confectio Japonica.*
Confection of Japan Earth.

Take of Japan earth, four ounces; gum kino, three ounces; cinnamon and nutmeg, of each one ounce; opium (diſſolved in a ſufficient quantity of white wine), a drachm and half; ſyrup of dried roſes, (boiled to the conſiſtence of honey), thrice the weight of the whole ſpecies. Mix, and make an electary.

It is not neceſſary, for the purpoſes of the ſhops, to make the ſpecies into an electary at all; by keeping it in this form, the ingredients loſe greatly of their aromatic flavour and aſtringency. The London college have therefore very juſtly ordered them to be kept in powder as well as in an elec-

electary; and directed the powder both with and without opium, for different occaſions. See *Species e ſcordio*, and *Pulvis e bolo, cum* and *ſine opio*. Either of theſe powders may be made up extemporaneouſly into an electary, with any ſyrup that ſhall be judged proper.

Diaſcordium was intended by its author Fracaſtorius for an antipeſtilential. It is a moderately warm, glutinous aſtringent and opiate: and in this light only is conſidered by the preſent practice. One grain of opium is contained in nine ſcruples of the electary of the London Pharmacopœia, and in ten ſcruples of that of the Edinburgh. This laſt compoſition is a very proper reform of the ancient diaſcordium.

L. *Balſamum Lucatelli.*
Lucatellus's Balſam.

Take of oil of olive, one pint; Straſburgh turpentine, yellow wax, each half a pound; red ſanders, ſix drachms. Melt the wax over a gentle fire, with ſome part of the oil; then add the reſt of the oil, and the turpentine; afterwards mix in the ſanders, and keep them ſtirring together until the mixture is grown cold.

This balſam is uſed in internal bruiſes and hæmorrhages, eroſions of the inteſtines, ulcerations of the lungs, dyſenteries, and in ſome kinds of coughs and aſthmas: the doſe is from two ſcruples to two drachms; it may be commodiouſly exhibited along with about double its weight of conſerve of roſes. Some have likewiſe applied it externally, for deterging and incarnating recent wounds and ulcers.

Balſamum ad Apoplecticos.
Apoplectic Balſam.

Take of expreſſed oil of nutmegs, one ounce; diſtilled oil of cloves, of lavender, of roſemary, each half a drachm; of amber, half a ſcruple; balſam of Peru, one drachm. Liquefy the oil of nutmegs, and when taken from the fire mix into it the diſtilled oils and the balſam.

This medicine is recommended to be rubbed on the temples, and on paralytic limbs, for warming the part, and comforting the nerves: and to be ſmelt to, for refreſhing and enlivening the ſpirits. Some have alſo given it inwardly as a warm cordial, in languid caſes, and in debilities of the nervous ſyſtem.

L. D. *Confectio Cardiaca.*
Cordial Confection.

Take of roſemary tops, freſh, juniper berries, each one pound; leſſer cardamom ſeeds, huſked, zedoary, ſaffron, each half a pound. Extract a tincture from theſe ingredients with about a gallon and a half of proof ſpirit: let the tincture be ſtrained off, and reduced by a gentle heat to the weight of about two pounds and a half: then add the following ingredients very finely pulverized, and make the whole into an electary; compound powder of crabs claws, ſixteen ounces; cinnamon, nutmegs, each two ounces; cloves, one ounce; double refined ſugar, two pounds.

This preparation is a ſubſtitute for the laborious and very abſurd compoſition, called *Confectio Raleighana*; and is now called the cordial confection; though it is a compo-

compoſition which ſeems not in the leaſt to have any right to that name from the nature of the ingredients, except the ſaffron may be eſteemed a cordial ſimple. Were it not for the ſugar, the medicine might be reaſonably deemed a good carminative, ſince it conſiſts of alkaline earths, which may remove the aceſcence that produces flatulencies in the inteſtines, and a warm extract, of an aromatic and bitter nature, to encourage the periſtaltic motions, and aid their expulſive power. But the addition of ſugar is greatly repugnant to this intention, ſince after it has been ſome time, as here, in the ſtate of a ſyrup, it becomes the very kind of matter that produces thoſe diſorders in the inteſtines, for which this medicine is moſt properly the remedy; ſo that it certainly wants a reformation. There is likewiſe another capital error in regard to its form; if the extract be made of the quantity here directed, and the preſcribed proportion of ſugar and the powders be uſed, after a ſhort time, the electary becomes ſo thin, that the powders ſubſide, and the extract and ſugar will riſe above in the form of a very thin ſyrup. It is proper therefore to alter the proportion of the fluid to the ſugar, and that of the powders to both; which may be done by waſting the extract to one pound and a half, inſtead of the two pounds and a half, and adding a quarter of a pound more of the powders, which will make an electary of a much better form, without the leaſt impairing its medicinal virtue.

It is given in draughts, and in the form of a bolus, from ten grains to a ſcruple and upwards, as a warm cordial and corroborant.

E. D. *Electarium Cardiacum, vulgo Confectio Cardiaca.*
Cordial Confection.

Take of conſerve of orange peel, three ounces; of candied nutmeg, an ounce and a half; of candied ginger, ſix drachms; of cinnamon in powder, half an ounce; of ſyrup of orange peel, enough to make it into an electary.

This is preſented in the ſame intentions as the preceding, and is a more elegant compoſition.

L. *Confectio Paulina.*
The Confection called Paulina.

Take of coſtus, or in its ſtead zedoary, cinnamon, long pepper, black pepper, (ſtorax, galbanum, opium, ſtrained), Ruſſia caſtor, each two ounces; ſimple ſyrup, boiled to the conſiſtence of honey, thrice the weight of the other ingredients. Warm the ſyrup, and carefully mix with it the opium, firſt diſſolved in wine: gradually add this mixture, whilſt it continues warm, to the ſtorax and galbanum, previouſly melted together; and afterwards ſprinkle in the other ſpecies reduced into powder.

This is the *Confectio Arrhigenis* of our former Diſpenſatory, brought back to its firſt form and author. It is a warm opiate medicine, and as ſuch is ſometimes made uſe of in practice: thirty-two grains contain one grain of opium.

L. *Mithridatum, ſive Confectio Damocratis.*
Mithridate, or the Confection of Damocrates.

Take of cinnamon, fourteen drachms; myrrh, eleven drachms; agaric, Indian nard, ginger, ſaf-

fron, ſeeds of Mithridate muſtard, frankincenſe, Chio turpentine, each ten drachms; camels hay, coſtus, or, in its ſtead, zedoary, Indian leaf, or, in its ſtead, mace, ſtæchas, long pepper, hartwort ſeeds, hypociſtis, ſtorax ſtrained, opopanax, galbanum ſtrained, opobalſam, or in its ſtead, expreſſed oil of nutmegs, Ruſſia caſtor, each one ounce; poley mountain, ſcordium, carpobalſam, or, in its ſtead, cubebs, white pepper, Candy carrot ſeed, bdellium ſtrained, each ſeven drachms; Celtic nard, gentian root, dittany of Crete, red roſes, Macedonian parſley ſeed, leſſer cardamom ſeeds huſked, ſweet fennel ſeed, gum arabic, opium ſtrained, each five drachms; *calamus aromaticus*, wild valerian root, aniſeed, ſagapenum ſtrained, each three drachms; *meum athamanticum*, St. John's wort, *acacia*, or in its ſtead, *terra Japanica*, bellies of ſkinks, each two drachms and a half; clarified honey, thrice the weight of all the other ingredients.

Warm the honey, and mix with it the opium, diſſolved in wine; melt the ſtorax, galbanum, turpentine, and opobalſam, (or expreſſed oil of nutmegs) together in another veſſel, continually ſtirring them about, to prevent their burning; with theſe ſo melted, mix the hot honey at firſt by ſpoonfuls, and afterwards in larger quantities at a time; when the whole is grown almoſt cold, add, by degrees, the other ſpecies reduced into powder.

L. *Theriaca Andromachi.*
Venice Treacle.

Take of troches of ſquills, half a pound; long pepper, opium ſtrained, vipers dried, each three ounces; cinnamon, opobalſam, or in its ſtead, expreſſed oil of nutmegs, each two ounces; agaric, Florence orris root, ſcordium, red roſes, navew ſeeds, extract of liquorice, each an ounce and a half; Indian nard, ſaffron, ammonum, myrrh, coſtus, or, in its ſtead, zedoary, camels hay, each one ounce; cinquefoil root, rhubarb, ginger, Indian leaf, or, in its ſtead, mace, dittany of Crete, horehound leaves, calamint leaves, ſtæchas, black pepper, Macedonian parſley ſeed, olibanum, Chio turpentine, wild valerian root, each ſix drachms; gentian root, Celtic nard, ſpignel, (poley mountain, St. John's wort, ground-pine leaves,) germander tops with the ſeeds, carpobalſam, or, in its ſtead, cubebs, aniſeed, ſweet fennel ſeed, leſſer cardamom ſeeds huſked, (biſhops weed, hartwort, treacle, muſtard ſeeds) hypociſtis, acacia, or, in its ſtead, Japan earth, gum arabic, ſtorax ſtrained, ſagapenum ſtrained, *terra Lemnia*, or, in its ſtead, bole Armeniс, or French bole, green vitriol calcined, each half an ounce; ſmall (or, in its ſtead, the long) birthwort root, leſſer centaury tops, Candy carrot ſeed, oponanax, galbanum ſtrained, Ruſſia caſtor, Jews pitch, or, in its ſtead, white amber prepared, *calamus aromaticus*, each two drachms; clarified honey, thrice the weight of all the other ingredients.

Let theſe ingredients be mixed together, after the ſame manner as directed in making the Mithridate.

Theſe celebrated compoſitions are almoſt the only relicts of ancient ſuperſtition that now remain among us. The theriaca is a reform of Mithridate, made by Andromachus, phyſician to Nero: the Mithridate itſelf is ſaid to have been found in the cabinet of Mithridates, king of Pontus. The

firſt publiſhers of this pompous arcanum were very extravagant in their commendations of its virtues; the principal of which was made to conſiſt in its being a moſt powerful preſervative againſt all kinds of venom: whoever took a proper quantity, in a morning, was inſured from being poiſoned during that whole day: this was confirmed by the example of its ſuppoſed inventor, who, as Celſus informs us, was by its conſtant uſe ſo fortified againſt the commonly-reputed poiſons, that none of them would have any effect upon him when he wanted their aſſiſtance. But the notions of poiſons, which prevailed in thoſe ruder ages, were manifeſtly erroneous. Before experience had furniſhed mankind with a competent knowledge of the powers of ſimples, they were under perpetual alarms from an apprehenſion of poiſons, and buſied themſelves in contriving compoſitions which ſhould counteract their effects, accumulating together all thoſe ſubſtances which they imagined to be poſſeſſed of any degree of alexipharmic power. Hence proceed the voluminous antidotes which we meet with in the writings of the ancient phyſicians: yet it does not appear that they were acquainted with any real poiſon, except the *cicuta*, *aconitum*, and bites of venomous beaſts; and to theſe they knew of no antidote whatever. Theſe medicines, therefore, were originally intended againſt diſeaſes merely imaginary; nevertheleſs, as ſome of their ingredients are of the moſt powerful kind, ſucceeding ages applied them in real ones, and experienced good effects from them, as warm, diaphoretic opiates.

Theſe compoſitions might, without doubt, be lopt of numerous ſuperfluities, without any diminution of their virtues; yet as the effects of them, in their preſent form, are ſo well known, ſo much regard has been paid to ancient authority, as not to attempt a reformation of that kind. The London college have, however, thought proper to retrench, from forms originally complex, all ſubſequent additions that have crept into them. Neither the deſcription in verſe of the elder Andromachus, or the proſe explanation of the younger, make any mention of the white pepper, afterwards added to the theriaca; and the orris root in the Mithridate of our former pharmacopœias, is alſo a ſupernumerary ingredient, not warranted by the original: theſe therefore are rejected. Nor is the aſarum in Mithridate grounded on any good authority: the verſe it is taken from is mutilated and corrupt; and the word which ſome, upon conjecture only, ſuppoſe to have been aſarum, others, alſo upon conjecture, chuſe to read differently; till ſome emendation ſhall be better founded than merely upon critical gueſſes, this ſingle ſpecies may be ſafely paſſed over without any prejudice to the medicine. None of the ancient deſcriptions afford any other light in this particular, for they either omit this ingredient, and others alſo, or abound with additions.

One innovation in both theſe medicines, the college have allowed themſelves. In each of theſe compoſitions are found both cinnamon and *caſſia lignea*; and it is very evident, from ſeveral parts of Galen's works, that the latter was uſed by the ancients only upon account of the great difficulty of

procuring the other; ſo that to retain the caſſia, now that cinnamon is ſo common, is a blind following of theſe writers, without any attention to their meaning: the caſſia therefore is now rejected, and half the quantity of cinnamon put in its room, which is the proportion that Galen directs to be obſerved in ſubſtituting the one for the other. It is probable that the caſe is the ſame, with regard to the Celtic and Indian nard; that the firſt had a place in theſe compoſitions, on account of the difficulty of procuring the Indian; for Galen expreſsly prefers the latter.

There is a material error in regard to the theriaca, which has paſſed through all the editions of our Pharmacopœia, except the preſent; this is, the ſubſtituting Roman vitriol to the ancient chalcitis, now not certainly known, and in the catalogue of ſimples, deſcribing the Roman to be a blue vitriol; whereas the Italian writers are unanimous it is a green vitriol; and were it not, it would not anſwer to the effects of the chalcitis, which was certainly a chalybeate, and gives the medicine its black colour. What has chiefly occaſioned chalcitis to be ſuppoſed a cupreous vitriol, ſeems to be its name, derived from χάλκος, copper; but it is to be obſerved, that all vitriols were formerly imagined to proceed from copper, and were named accordingly; the green, or martial vitriols, are ſtill called by the Germans, *kutffer waſſer*, and by us copperas. It is probable that the ancient chalcitis was no other than a native martial vitriol, calcined, by the heat of thoſe warm climates, to a degree of yellowiſh red or coppery colour; and therefore the common green vitriol, thus calcined by art, very properly ſupplies its place.

The London college have likewiſe ſomewhat facilitated the preparation of theſe medicines, by omitting the *trochiſci cypheos* uſed in the Mithridate, and the *hedychroi* and *viperini* for the theriaca; and inſerting their ingredients, after Zwelffer's manner, in the compoſitions they are intended for. This is done in the theriaca very commodiouſly, the ingredients in theſe troches uniting with thoſe in the theriaca itſelf, into unbroken numbers. But to render the numbers equally ſimple in the Mithridate, it was neceſſary to retrench a few odd grains from ſome of the articles, and make a ſmall addition to ſome others: they adjuſted the proportions of the ingredients in the *trochiſci cypheos* from the original deſcription in Galen; the numbers in our former Pharmacopœia being very erroneous.

The college of Edinburgh have given an elegant reform of theſe compoſitions under the title of

E. D. *Electarium Thebaicum.*

Take of the aromatic ſpecies, ſix ounces; Virginian ſnake root in powder, three ounces; opium, (diſſolved in a ſufficient quantity of white wine) three drachms; clarified honey, thrice the weight of the whole ſpecies. Mix and make an electary.

N. B. It is a ſubſtitute for the *Theriaca Edinenſis.*

This compoſition conſiſts of very powerful ingredients, and is, doubtleſs, capable of anſwering every thing that can be reaſonably expected from the more voluminous theriaca of Andromachus. For internal uſe, none of the theriacas are at preſent ſo much regarded as they

they have been heretofore; practitioners having introduced, in their room, extemporaneous boluſes of Virginian ſnake-root, camphire, contrayerva, and the like, either with or without opium, as the caſe requires.

With regard to the quantity of opium in theſe compoſitions, one grain thereof is contained in four drachms of the Mithridate of the London Pharmacopœia, in three ſcruples, fifteen grains, of the Venice treacle; and in five ſcruples of the *Electarium Thebaicum*. The proportion of opium will vary a little, according to the time that they have been kept; their moiſture, by degrees, exhaling, ſo as to leave the remainder ſtronger of the opium than an equal weight was at firſt. A change of this kind is taken notice of by many writers, but falſely attributed to an imaginary fermentative quality of the ingredients, by which they were ſuppoſed, from their multiplicity and contrariety, to be continually exalting and improving the virtues of one another.

A good deal of care is requiſite in making theſe compoſitions, to prevent the waſte, which is apt to happen in the pounding, and which would render the proportion of opium to the other ingredients precarious The intention of diſſolving the opium in wine, for theſe and other electaries, is, that it may be more uniformly mingled with the reſt.

L. *Philonium Londinenſe.*
London Philonium.

Take of white pepper, ginger, caraway ſeeds, each two ounces; ſtrained opium, ſix drachms; ſyrup of meconium, boiled to the conſiſtence of honey, thrice the weight of the other ingredients. Heat the ſyrup, and carefully mix with it the opium, previouſly diſſolved in wine; then add the other ingredients, reduced into powder.

This is a reformation of the *philonium* deſcribed by Galen, and in our preceding Pharmacopœias diſtinguiſhed by the epithet *Romanum*. The additional articles, and ſome unneceſſary ones that were in the original, are here omitted, and the quantities of the others varied ſo as to preſerve the ſame proportion of opium to the whole, as in our laſt Pharmacopœia. Thirty-ſix grains of the compoſition contain one grain of opium.

The Mithridate, *theriaca*, *diaſcordium*, *confectio Paulina*, and *philonium*, are all medicines of great power, and as, on the one hand, they are applicable to excellent purpoſes; ſo, on the other, their imprudent uſe has often been productive of miſchievous conſequences. Diaſcordium has likewiſe been too unwarily given for reſtraining fluxes; whoſe ſuppreſſion was afterwards followed by more dangerous ſymptoms. The celebrated alexipharmics, Mithridate and theriaca, have oftentimes aggravated the diſorders they were intended to remedy, have converted a common cold into a high fever, have raiſed ſlight febrile complaints into a malignant fever. However ſtrongly, therefore, theſe kinds of medicines are recommended for eaſing pain, warming, promoting ſweat, expelling malignity, &c. the utmoſt caution is requiſite in the uſe of them: the caſes which demand their aſſiſtance are much leſs frequent than is generally ſuppoſed.

From the former London Diſpenſatory.

Confectio Alkermes.

Confection of Kermes.

Take of the beſt ſcented roſe water, two pounds; of the juice of kermes-berries, three pounds; of the whiteſt ſugar, one pound: boil them almoſt to the conſiſtence of honey, and then ſtir in the powders of cinnamon and aloes-wood, both the beſt in their kind, of each ſix drachms; and make the whole into a confection, *ſ. a.*

Diaſcordium.

A Compoſition of Scordium.

Take of cinnamon, and *caſſia lignea*, of each half an ounce; of true ſcordium, one ounce; of Cretan dittany, tormentil, biſtort, galbanum, and gum arabic, of each half an ounce; of ſtorax, four drachms and a half; of opium, and ſeeds of ſorrel, of each one drachm and a half; of gentian, half an ounce; of Armenian bole, one ounce and a half; of Lemnian, ſealed earth, half an ounce; of long pepper and ginger, of each two drachms; of clarified honey, two pounds and a half; of ſugar of roſes, one pound; of generous Canary, eight ounces; make it into an electary, *ſ. a.* It alſo may be prepared with diacodium, inſtead of the honey, and leaving out the ſugar of roſes.

This is originally the preſcription of *Hieronymus Fracaſtorius*, a celebrated Italian phyſician, given in his book *de Contagio, & Morbis contagioſis lib.* iii. *cap.* ". and for that reaſon it is commonly in extemporaneous preſcriptions called *Confectio Fracaſtorii.* The firſt of our college Diſpenſatories and the Auguſtan inſerted it alike; but in ſubſequent editions it hath been altered, though chiefly in the tranſpoſition of the ingredients. The preſent, however, is copied after the firſt form exactly, unleſs in the ſugar of roſes for conſerve. The emendation here likewiſe to be made at diſcretion, of diaſcordium for honey, is, on many accounts, greatly to be liked; and the reaſon for ſuch an alteration cannot but be obvious to every one acquainted with theſe matters. The ſcordium and dittany are to be finely picked from their ſtalks, and all powdered together, except the galbanum and opium, which muſt be ſtrained and firſt mixed with the honey, and then the ſpecies ſifted and ſtirred in; and after all, the wine put to it, as Zwelffer hath directed in his remark hereupon. Some alſo ſtrain the ſtorax; but it will paſs with the others into a powder; but then it muſt be the better ſeparated from the droſs, elſe the quantity will be defective. For the ſugar of roſes, one ounce of the flowers are powdered with the dry ingredients; and ſo much the more honey put inſtead of the ſugar. If for the *caſſia lignea*, cinnamon be uſed, it much betters the medicine; both as the latter is a much more aſtringent ſpice, and as the other in time gives a ſlimy quality to the compoſition, and ſpoils it. This medicine is valued for its colour, which it receives only from the bole, the moſt indifferent ingredient in it; but as it is a ſign of its freſhneſs, it is of uſe; for this medicine is much the worſe for age, and is known to be ſo by the red colour wearing off: but that likewiſe may be diſcovered by the faintneſs of its taſte; for the aromatics by time exhale, and the roughneſs of the ingredients, in which its aſtringency

gency conſiſts, by long continuance in a moiſt form, grow ſofter and ſmoother upon the palate; as has been already frequently obſerved of things of that nature. The colour is indeed renewable by a little freſh bole; but the deceit may be diſcovered by the taſte. Every one knows how much this is of uſe, and for what purpoſes; and indeed if the ſeveral ingredients be nicely ſelected, and the medicine freſh made, it is excellent in all fluxes whatſoever; and a great ſtrengthener both of the ſtomach and bowels. In its influence upon fluxes, the opium has no ſmall ſhare; as may be well conceived from the virtues of that drug. It is given to children from five grains to one ſcruple, and to grown perſons from one ſcruple to two drachms for a doſe. There is but one grain of opium in five drachms twelve grains. A very miſchievous way ſome nurſes have got, of giving their children this medicine to make them ſleep; more for their own eaſe than any thing elſe; which is frequently the foundation of many illneſſes, from its keeping them too coſtive, the worſt temper children can be in. Becauſe honey, which is certainly an opener, and a powerful detergent, and therefore contrary to the main deſign of this compoſition, is here in ſo large a quantity, the modern practice has very prudently ordered this medicine to be made without it; by uſing in its ſtead a ſufficient quantity of *Syrupus de Meconio*, boiled up to a due conſiſtence, which greatly improves the medicine: but the quantity for a doſe muſt then be proportionably leſſened, as the ſyrup adds to its narcotic property. Many keep the ingredients in the ſpecies only, and this is the beſt way of all to preſerve their virtues entire; which no moiſt form can do thoſe of an aſtringent nature. Of the ſpecies may be given for a doſe from five grains to one ſcruple.

Philonium Romanum.

Roman Philonium.

Take of white pepper, and white henbane ſeeds, of each five drachms; of opium, two drachms and a half; of caſſia bark, one drachm and a half; ſmallage-ſeed, one drachm; of the ſeeds of Macedonian parſley, fennel, and Cretic daucus, of each two ſcruples five grains; of ſaffron, one ſcruple and a half; of ſpikenard, pellitory of Spain, and zedoary, of each fifteen grains; of cinnamon, one drachm and a half; of myrrh and caſtor, of each one drachm; ſyrup of white poppies a ſufficient quantity to make the whole into an electary. The Philonium Londinenſe is a proper reform of this.

Confectio Archigenis.

Archigenis's Confection.

Take of the beſt caſtor, of long and black pepper, ſtorax, ſpikenard, coſtus, galbanum, and opium, of each half an ounce; of ſaffron, two drachms; of ſyrup of mugwort a ſufficient quantity to make the whole into a confection. This is now called *confectio Paulina*, and is a little altered from the original.

Theriaca Londinenſis.

London Treacle.

Take of the four greater and leſſer hot ſeeds, of each one ounce; of the roots of angelica, Virginia ſnake-root, tormentil, elecampane, zedoary, contrayerva, calamus aromaticus, and gentian, of each two

drachms; of the leaves of Cretic dittany, ſcordium, rue, bay-berries and juniper-berries, of each half an ounce; of nutmegs, mace, ſaffron, myrrh, and cloves, of each three drachms; of ginger and opium, of each two drachms; of ſyrup of white poppies, boiled to a higher conſiſtence than ordinary, three times as much as the weight of the reſt; and of Canary a ſufficient quantity to make the whole into an electary.

This hath hitherto been chiefly uſed by the ſurgeons, where warm cataplaſms are required.

Confectio Raleighana.

Sir Walter Raleigh's Confection.

Take of the ſhavings of hartſhorn, one pound; of vipers fleſh with their hearts and livers, ſix ounces; of the flowers of borage, roſemary, marigolds, *ros ſolis*, red-roſes, and elder, of each half a pound; of the leaves of ſcordium, carduus B. baum, Cretic dittany, mint, marjoram, betony, of each twelve handfuls; of the juice of kermes, of the greater cardamom ſeeds, and cubebs, of juniper-berries, mace, nutmegs, cloves, and ſaffron, of each two ounces; of the beſt cinnamon, ſaſſafras bark, and the yellow peel of citrons and oranges, of each three ounces; of aloes-wood and ſaſſafras-wood, of each ſix ounces; of the roots of angelica, wild valerian, fraxinella, or white dittany, Virginian ſnake-root, zedoary, tormentil, biſtort, long and round birthwort, gentian, and maſterwort, of each one ounce and a half. After all theſe are cut and groſly bruiſed, put them into a proper veſſel to draw out their tincture with rectified ſpirit of wine, *ſ. a.* Filter this tincture, and evaporate it into an extract by diſtillation in *balneo Mariæ*. Let the remains after preſſing, be burned, and a lixivium made of the aſhes, ſo as to procure a pure ſalt, *ſ. a.* which muſt be added to the aforeſaid extract; and afterwards to this extract add and ſtir in the following powder, and the other ingredients, *ſ. a.* Take of oriental and occidental bezoar, of each one ounce and a half; of oriental pearls, two ounces; or red coral, three ounces; of oriental bole, true ſealed earth, and calcined hartſhorn, of each one ounce; of ambergriſe, one ounce; of oriental muſk, one drachm and a half; of white ſugar-candy powdered, two pounds; and make a confection, *ſ. a.*

The college have ſubſtituted the *confectio cardiaca* for this; which ſee.

Electarium Caryocoſtinum.

The Clove and Coſtus Electary.

Take of cloves, white coſtus, or zedoary, ginger, and cummin ſeeds, of each two drachms; of hermodactyls cleared of their huſks, and of diagridium, of each half an ounce; of the honey of roſes, three times the quantity of the whole. Let them all be powdered together, except the diagrydium, and ſtirred into the honey of roſes with a wooden ſpatula; and at laſt put into the diagrydium, powdered by itſelf; and make them into an electary, *ſ. a.*

It works very briefly, and is found of great ſervice in rheumatiſms and athritic complaints. Its warmth alſo, and fitneſs to carry off watry cold humours, makes it very good in dropſies; and groſs habits. In apoplectic and paralytic caſes likewiſe, where the fibres want

to

to be ſtimulated and ſhook with briſkneſs, this is a proper medicine, if purging be required; but it is too ſmart for weakly people. Its doſe is from one to ſix drachms. There is in every half ounce of this, of diagridium and hermodactyls, of each fifteen grains.

SECT. VII.

Of Troches and Pills.

ONE of theſe forms is much leſs uſed in modern practice than anciently; for the old Diſpenſatories abound with troches; whereas of thoſe few that the college retain, half are not now in uſe, or ever made. The main deſign of this form ſeems to have been to preſerve in readineſs for preſent uſe, ſubſtances, which ſtood in need of ſome preparation; and took up time to reduce it into powder; and which by lying in a dry powder, would likewiſe be ſubject to decay ſooner than in this form. Many of theſe alſo are contrived for the ſake of taking them; which is by gradually diſſolving in the mouth; as moſt of the balſamic and pectoral kind; and few elſe are now in uſe, beſides thoſe commonly called lozenges.

The next form contrived to preſerve ſome parts of the *Materia Medica* in compoſition, is that of pills; and this is chiefly deſigned for ſuch things as are too nauſeous to be taken any other way, or are moſt readily fitted by their natural texture to this kind of management: Of the firſt kind are the aloes, colocynth, and the like, which are thus beſt concealed from the taſte; and of the latter are moſt gums, which with very little trouble are reduced into pills.

But this form being generally the moſt troubleſome to take, as few things ſhould be contrived into it as poſſible, that is, ſuch only as by their irkſomeneſs in going down any other way make it neceſſary to conceal them by this means. But this reaſon ought to extend only to thoſe things, which are of ſufficient efficacy, not to make above four or five ſmall pills for a doſe: thus the bark in powder, and all the lighter ſpecies, which are given in the quantity of half a drachm, or upwards, for a doſe; if, to avoid the irkſomeneſs of other forms, recourſe ſhould be had to this, a neceſſary quantity of moiſture to reduce them into it, would make one doſe into ten, twelve, or fifteen ordinary pills; which are more than any one can be imagined well to get down; for half a drachm in the maſs makes five middle-ſized pills, and half a drachm of dry powder will take up above double its quantity of ſyrup to bring it into a maſs of due conſiſtence. The gummy ſubſtances indeed are thus reducible by liquor, which will but little increaſe

creaſe their bulks; and for this reaſon alſo they have a peculiar fitneſs for this form.

But there are ſome things abſolutely unfit for pills, by reaſon of their natural texture and properties, except in ſmall quantities; and theſe are all the volatile ſalts, and moſt of the fixed ones. The firſt heave and ferment them into unreaſonable bulks, and the laſt render a maſs ſo brittle and crumbly, as make it almoſt impoſſible to be worked into pills; though both theſe inconveniencies may in ſome meaſure be avoided, by contriving to mix with either of theſe ſalts, other things which are very tenacious, as ſome of the extracts and gums; and this makes the *Pilulæ ecphracticæ*, now directed in the Diſpenſatory, at firſt of a tolerable conſiſtence.

One very material thing likewiſe to be conſidered in this form, whether officinal ot extemporaneous, is, that the liquor or moiſture wanted to give a conſiſtence, have the moſt convenient fitneſs to the thing requiring it. Thus dry light powders will not make up with any thing thinner than ſyrup, and ſome of the heavy ones, as cinnabar, and moſt of the mercurials, will hardly do with any moiſture of a lower conſiſtence than honey or conſerve: but the gummy ſubſtances, eſpecially thoſe which moſt approach to an oily or reſinous texture, as galbanum, opopanax, myrrh, and the like, will not ſo well make up with ſyrups or conſerves, not only on account of increaſing their bulks too much, but becauſe they will not ſo well incorporate with them, as with ſpirituous and more penetrating liquors. As this form, therefore, muſt have ſomewhat in it adheſive and tenacious, where it is not in the dry ſubſtances, it muſt be ſought for in a proper moiſture to hold them together; and where it is ſufficiently already in thoſe ſubſtances, as in the gums, the thinner liquors are beſt to give them a conſiſtence, or ſuch as are better ſuited to incorporate with them than aqueous moiſtures, as the terebinthinous balſams; for ſome fat ſubſtances will refuſe a ſyrup, at the ſame time that they will readily take in turpentine, or any thing of like diſpoſition.

Trochiſci et Tabello.
Troches and Lozenges.

General Rules for making Troches.

I. The rules laid down for making powders, are alſo to be obſerved in the powders for troches.

II. If the maſs proves ſo glutinous as to ſtick to the fingers in making up, the hands may be anointed with any convenient ſweet or aromatic oil; or elſe ſprinkled with powder of ſtarch, or with that of liquorice.

III. In order to thoroughly dry the troches, put them on an inverted ſieve, in a ſhady, airy place, and frequently turn them.

IV. Troches are to be kept in glaſs veſſels, or in earthen ones well glazed.

Trochiſci Albi Rhaſis, ſeu Sief Album.
The White Troches, or Dry Collyrium of Razi.

Take of ceruſe, three ounces; ſarcocolla, one ounce; gum tragacanth, three drachms; camphor, one drachm; roſe water, as much as is ſufficient. Make them into troches according to art.

The

The making theſe ingredients into troches is an unneceſſary trouble; ſince before they are uſed, they muſt be powdered again, for being mixed with roſe water or other liquors, for the purpoſes of a cooling, antacrid, and moderately aſtrictive collyrium, injection, &c. The London college have therefore judiciouſly directed them to be kept in the form of powder (under the title of *Pulvis e ceruſſa compoſitus)* found in the original of Razi.

Trochiſci Bechici Albi.

L. White Pectoral Troches.

Take of double refined ſugar, a pound and a half; ſtarch, an ounce and a half: liquorice, ſix drachms; Florence orris root, half an ounce.

Reduce theſe ingredients into powder, which is to be made up into troches with a proper quantity of mucilage of gum tragacanth.

E. Take of white ſugar, a pound; gum arabic, two ounces; ſtarch, one ounce; flowers of Benjamin, half a drachm. When the whole is reduced to a powder, make it into a maſs with roſe-water.

Theſe compoſitions are very agreeable pectorals, and may be uſed at pleaſure. They are calculated for ſoftening acrimonious humours, and allaying the tickling in the throat, which provokes coughing.

L. *Trochiſci Bechici Nigri.*

Black Pectoral Troches.

Take of extract of liquorice, double refined ſugar, each ten ounces; gum tragacanth, half a pound.

Drop upon theſe ingredients, ſo much water as will make the maſs ſoft enough to be formed into troches.

E. Take of extract of liquorice; gum arabic, each four ounces; water, a ſufficient quantity. Boil till they are diſſolved; to the ſtrained liquor add eight ounces of white ſugar, and evaporate.

Theſe compoſitions are calculated for the ſame purpoſes as the white pectoral troches above deſcribed.

E. *Trochiſci Bechici cum Opio.*

Take of opium, and balſam of Peru, each one drachm; pure ſugar, two drachms; the maſs of black bechic troches, ſeven ounces.

Rub the opium with the balſam and ſugar; afterwards by little add the maſs, previouſly ſoftened with a little warm water. The whole being well mixed, dry and make it into troches of five and ten grains weight.

Trochiſci Cypheos pro Mithridatio.

The Troches called Cyphi (Incenſe-cakes) for Mithridate.

Take of raiſins of the ſun, ſtoned, turpentine of Cyprus, each three ounces; myrrh, camels hay, each an ounce and a half; cinnamon, half an ounce; ſaffron, one drachm; bdellium, ſpikenard, caſſia lignea, cyprus roots, the round or long, juniper-berries, each three drachms; aſpalathus, or yellow ſanders, two drachms and a half; calamus aromaticus, nine drachms; clarified honey, as much as is ſufficient.

Grind the bdellium and myrrh with as much Canary wine as will reduce them to the conſiſtence of honey; then add thereto the pulp of the raiſins, the turpentine, and the honey, and laſtly the other ingredients reduced into a very ſubtile powder. Make the whole into troches according to art.

Trochiſci

Trochiſci dicti Magma Hedychroi, pro Theriaca Andromachi.

The Troches called Hedychroi (pleaſant-coloured) for Venice Treacle.

Take of marum leaves, marjoram leaves, aſpalathus, or yellow ſanders, aſarum roots, each two drachms; camels hay, calamus aromaticus, Pontic phu (or wild valerian root) xylobalſamum, (or agallochum) opobalſam, (or balſam of Peru) coſtus, (or zedoary) cinnamon, each three drachms; myrrh, malabathrum (or bay leaves), Indian nard, caſſia lignea, ſaffron, each ſix drachms; amomum (or cloves), an ounce and a half; maſtich, one drachm; Canary wine, as much as is ſufficient. Make them into troches according to art.

Theſe and the foregoing troches, as their titles import, are deſigned only as ingredients, one in the Mithridate, the other in the theriaca, though moſt of their articles are inſerted therein over again. The London college has rejected the needleſs trouble of making either of theſe troches; and in their ſtead, direct the ſeveral articles which they conſiſt of, to be united in thoſe compoſitions directly.

Trochiſci de Minio.

Red-Lead Troches.

Take of red-lead, half an ounce; corroſive mercury ſublimate, one ounce; crumb of the fineſt bread, four ounces. Make them up with roſe water into oblong troches.

Theſe troches are employed only for external purpoſes, as eſcharotics: they are powerfully ſuch, and require a good deal of caution in their uſe.

Trochiſci e Myrrha.

Troches of Myrrh.

Take of myrrh, an ounce and a half; lovage ſeeds, penny-royal leaves, Ruſſia caſtor, galbanum, each one ounce; eſſential oil of ſavin, half a drachm, elixir proprietatis, as much as is ſufficient.

Let the gums be ſoftened with the elixir into a maſs of the conſiſtence of honey; then add the oil and powder, and make the whole into troches according to art.

Theſe troches are very well contrived, in regard to efficacy: there ſeems to be no occaſion for making a medicine of this kind into troches, as it cannot be conveniently taken in that form; the London college have therefore exchanged their *Trochiſci e myrrha* for a *Pulvis e myrrha compoſitus*, which ſee. Both compoſitions are deſigned for antihyſterics and promoters of the uterine diſcharges: the doſe is from a ſcruple to a drachm.

L. & E. *Trochiſci e Nitro.*

Troches of Nitre.

Take of nitre purified, four ounces; double refined ſugar, one pound. Make them into troches with mucilage of gum tragacanth.

In reſpect of this preparation, it is neceſſary to caution thoſe, who, deluded by its neatneſs, and encouraged by the authority of its place in this Diſpenſatory, might be induced to give nitre in this form, that they ſhould conſider what may be the effects of taking freely, even any neutral ſalts in an undiſſolved ſtate, which, in caſe of a defect of fluid in the ſtomach, will have the power of ſlighter cauſtics. But this reaſon receives yet an additional force in reſpect to nitre, of which it is a known property, when given in larger

doſes,

doſes, to occaſion frequently very uneaſy, and ſometimes almoſt intolerable ſenſations in the ſtomach, if not very copiouſly diluted: though this is too often neglected in private practice, yet one muſt hope, the college did not overlook it, and intend theſe troches to be given as ſuch, but only directed the nitre to be kept in this form, that it might be the more readily diſſolved on any ſudden occaſion.

L. *Trochiſci e Scilla.*
Troches of Squills.

Take of baked ſquills, half a pound; wheat flour, four ounces. Beat them together, and form the maſs into troches, which are to be dried with a gentle heat.

Trochiſci Scillitici pro Theriaca Andromachi.
Troches of Squills for Venice Treacle.

Take a whole ſquill, after the leaves and ſtalks are withered. Having peeled off the outward ſkin, incloſe the ſquill in a paſte of wheat flour, and bake it in an oven until the paſte is dried into an hard cruſt.

Let three ounces of ſquills, thus baked tender, be beat in a mortar with two ounces of the meal of white vetch, or of common wheat flour, into a paſte, which form into troches, to be gently dried in the ſhade.

The ſquill itſelf, moderately dried, is juſtly preferred to theſe troches.

Theſe preparations are uſed only as ingredients in the theriaca. The deſign of baking the ſquill is to abate its acrimony, and making it afterwards into troches ſeems the moſt convenient way of drying it; common wheat flour is as fit for this purpoſe as any, though that of the white vetch has been generally directed.

L. *Trochiſci e Sulphure.*
Troches of Sulphur.

Take of flowers of ſulphur, waſhed, two ounces; double refined ſugar, four ounces; beat them together, and adding ſome mucilage of quince-ſeeds, form them into troches.

E. *Trochiſci e Sulphure ſive Diaſulphuris.*
Troches of Sulphur.

Take of flowers of ſulphur, one ounce; flowers of benzoine, ten grains; white ſugar, two ounces; factitious cinnabar, half a drachm; mucilage of gum tragacanth, as much as is ſufficient. Mix and make them into troches, according to art.

Theſe compoſitions are to be conſidered only as agreeable forms for the exhibition of ſulphur, no alteration or addition being here made to its virtue; unleſs that by the flowers of benzoine in the ſecond preſcription, the medicine is ſuppoſed to be rendered more efficacious as a pectoral.

L. *Trochiſci e Terra Japonica.*
Troches of Japan Earth.

Take of Japan earth, gum tragacanth, half an ounce; ſugar, one pound. Beat them together, and dropping in ſome water, make them into troches.

Take of Japan earth, two ounces; gum tragacanth, half an ounce; white ſugar, one pound; roſe water, a ſufficient quantity. Make them into troches.

A preparation of this kind, with the addition of ambergriſe and muſk,

muſk, which are here more prudently omitted, has long been in ſome eſteem as a mild reſtringent, &c. under the title of Catechu. Medicines of this claſs in general are excellently fitted for the form of troches: for when ſlowly and gradually received into the ſtomach, as this form occaſions them to be, they produce much better effects, than if an equal quantity was taken down at once. Japan earth is for this purpoſe one of the moſt proper of the reſtringents, as being totally ſoluble, mild in quality, and free from any ungrateful reliſh, which moſt of the others are accompanied with. The troches are ſufficiently palatable, and of conſiderable ſervice in ſome kinds of coughs, thin acrid defluxions, diarrhœas, and diſorders proceeding from a laxity of the inteſtines.

Trochiſci Viperini pro Theriaca Andromachi.

Viper Troches for Venice Treacle.

Take of vipers fleſh (firſt freed from the ſkin, inteſtines, fat, heads, and tails, then boiled in water, with a little dill and ſalt, till it has grown ſoft, and afterwards ſeparated from the back bone) eight ounces; biſcuit bread, pounded and paſſed through a ſieve, two ounces.

Beat them together, with a ſufficient quantity of the liquor wherein the vipers were boiled, into a maſs; which is to be formed into troches according to art.

Theſe troches are brought to us ready made from abroad; but the vipers fleſh itſelf dried, is juſtly preferred to them: and accordingly the London college have entirely omitted the troches, and ſupplied their place in the theriaca, with a ſuitable quantity of the dried fleſh of the animal. The troches brought from abroad are certainly very inſignificant, if genuine, which ſome ſuſpect they are not.

L. *Tabellæ Cardialgicæ.*

Cardialgic Lozenges.

Take of chalk prepared, four ounces; crabs claws prepared, two ounces; bole Armenic, or French bole, half an ounce; nutmegs, one ſcruple; double refined ſugar, three ounces: reduce theſe ingredients into powder, and make them into troches with water.

L. *Saccharum Roſaceum.*

Sugar of Roſes.

Take of red-roſe buds, freed from the heels, and haſtily dried, one ounce; double refined ſugar, one pound. Reduce them ſeparately into powder, then mix, and moiſten them with water, that they may be formed into troches, which are to be dried by a gentle heat.

Saccharum Roſarum Rubrum.

Red Sugar of Roſes.

Take of white ſugar, one pound; conſerve of roſes four ounces; if any liquid is wanted, take of the ſyrup of dried roſes, *a. ſ.*

Theſe preparations are chiefly valued for their agreeableneſs to the eye and palate. Some likewiſe eſteem them, medicinally, as light reſtringents; and look upon them, not undeſervedly, as an excellent addition to milk in pthiſical and hectic caſes.

Trochiſci de Benzoino.

Troches of Benjamin.

Take ſugar-candy, one pound, melt it in roſe-water; then taking

it

it from the fire, diſſolve in it ſtrained ſtorax, one ounce, which ſtir well together, and when almoſt cold, ſift in fine powder of Benjamin, ſix drachms; aloes wood, half an ounce; orris-root an ounce; muſk, one ſcruple; and with a ſufficient quantity, if any be wanting, of the tragacanth mucilage and roſe-water, make them into a paſte.

This is an admirable balſamic, and would be of great ſervice to ſuch who are ſubject to diſeaſes of the breaſt, and inclinable to conſumptions, if frequently taken. They give likewiſe a very agreeable ſweetneſs to the breath. They may be uſed at diſcretion. If the aloes wood was omitted, they would be never the worſe; but rather more grateful.

Trochiſci Balſamici.
Balſamic Lozenges.

Take balſam of Tolu, and orris-root, of each one ounce; gum tragacanth and arabic, of each half an ounce; flowers of Benjamin, two drachms; white ſugar-candy, one pound. When all are reduced to a fine powder, make them into a paſte, with mucilage of quince-ſeeds and roſe-water, for lozenges.

Theſe make a moſt grateful remedy in all kinds of coughs; and may be uſed at pleaſure.

Pilulæ. Pills.

General Rules for making Pills.

I. Let the rules, laid down for the making of powders, be carefully obſerved here.

II. Gums and inſpiſſated juices are to be firſt ſoftened with the liquid preſcribed; then add the powders by little and little, and beat the whole well together.

III. The maſſes for pills are beſt kept in bladders, which ſhould be moiſtened, now and then, with ſome of the ſame kind of liquid that the maſs was made up with.

E. *Pilulæ Æthiopicæ.*
Ethiopic Pills.

Take of quickſilver, ſix drachms: golden ſulphur of antimony, gum guaiacum and honey, each half an ounce.

Grind the quickſilver with the honey, in a glaſs mortar, until the mercurial globules entirely diſappear; then add the golden ſulphur, and the guaiacum, with as much mucilage of gum arabic, as is ſufficient to make the mixture into a maſs of the proper conſiſtence for forming pills.

Theſe pills, in their preſent form, reſemble Dr. Plummer's pills, deſcribed in the Edinburgh Eſſays, to which they are preferable in one reſpect, that they are leſs apt to run off by ſtool. The honey is added merely to promote their diſſolution in the ſtomach; for pills made up of reſins and ſubſtances not eaſily diſſoluble, frequently paſs through the body entire.

This medicine is an uſeful alterative both in cutaneous and venereal diſorders. One fourth part of the quantity above preſcribed may be made into ſixty pills; of which, from one to four may be taken every night and morning, the patient keeping moderately warm during the whole time that this courſe is continued.

L. *Pilulæ Aromaticæ.*
Aromatic Pills.

Take of Succotrine aloes, an ounce and a half; gum guaiacum, one ounce; aromatic ſpecies, balſam of Peru, each half an ounce. Reduce the aloes and gum guaiacum

cum ſeparately into powder, then mix them with the reſt, and make the whole into a maſs with ſyrup of orange peel.

It is ſomewhat difficult to unite theſe ingredients into a maſs fit for making pills of. The beſt way is, to firſt rub the aromatic ſpecies with the balſam, then to add the powdered aloes, and afterwards the guaiacum; when theſe are well mixed together, drop in the ſyrup by little and little at a time.

Theſe pills are contrived to ſupply the place of the *Pilulæ Diambræ* of our former Pharmacopœia. They are far more elegant as well as ſimple, truly uniform in their ingredients, and excellently adapted to the purpoſes they ſeem deſigned for. Taken in ſmall doſes, as half a ſcruple, or a little more, and occaſionally repeated, they warm the ſtomach, and by degrees the whole habit, promote perſpiration, and all the natural ſecretions: hence, in cold phlegmatic temperaments, ſluggiſh indiſpoſitions, and obſtructions of the viſcera, or remoter glands, proceeding from theſe cauſes, this ſtimulating warm medicine proves eminently ſerviceable. If the doſe is conſiderable, it operates gently by ſtool: and if continued for ſome time in ſmaller doſes, it proves at length purgative, or introduces a ſalutary looſeneſs.

L. *Pilulæ ex Colocynthide Simpliciores.*

The more ſimple Colocynth Pills.

Take of pith of colocynth, ſcammony, each two ounces; oil of cloves two drachms. Pulverize the dry ſpecies by themſelves, then mix in the oil, and make the whole into a maſs, with ſyrup of buckthorn.

E. D. *Pilulæ Aloeticæ.*

Aloetic Pills.

Take of Succotrine aloes and extract of gentian, of each two ounces; and ſal polychreſt, half an ounce; ſyrup, a ſufficient quantity to make a maſs.

E. *Pilulæ Cæruleæ.*

The Blue Pills.

Take the ammoniac copper, ſixteen grains; bread crumbs, four ſcruples; ſpirit of ſal ammoniac, enough to make a maſs; to be divided into thirty-two pills.

L. *Pilulæ ex Colocynthide cum Aloe.*

Colocynth Pills with Aloes.

Sake of Succotrine aloes, ſcammony, each two ounces; pith of colocynth, one ounce; oil of cloves, two drachms. Let the dry ſpecies be ſeparately reduced into powder; then mix in the oil, and make the whole into a maſs with ſyrup of buckthorn.

E. *Pilulæ ex Colocynthide cum Aloe, vulgo Pilulæ Cocciæ.*

The Pills called Cocciæ.

Take of Succotrine aloes and ſcammony, of each two ounces; ſal polychreſt, two drams; pulp of bitter apple powdered, one ounce; oil of cloves, two drachms. Rub the aloes and ſcammony with the ſalt into a powder, then add the bitter apple and the oil; laſtly, with the mucilage of gum arabic make a maſs.

Theſe pills are ſtrong cathartics. They are commonly made uſe of where briſk purgatives are neceſſary, in doſes of a ſcruple, or half a drachm, and ſometimes two ſcruples. Half a drachm of thoſe of the London Pharmacopœia contains nearly of colocynth, four grains; aloes and ſcammony, of each

each eight grains. The ſame quantity of thoſe of the Edinburgh contains very nearly the ſame proportions.

E. D. *Pilulæ de Jalappa.*
Jalap Pills.

Take of extract of jalap, two ounces; aromatic ſpecies half an ounce; ſimple ſyrup, enough to make them into a maſs for pills.

L. *Pilulæ Ecphracticæ.*
Deobſtruent Pills.

Take of the aromatic pills, three ounces; rhubarb, extract of gentian, ſalt of ſteel, each one ounce; ſalt of wormwood, half an ounce; beat them together into a maſs, with ſolutive ſyrup of roſes.

It is difficult to bring this maſs into the due conſiſtence, the two ſalts acting upon one another, ſo as to make it ſwell and crumble. Notwithſtanding the alkaline ſalt employed, the pill does not prove at all alcaline; for the acid of the ſalt of ſteel forſakes its metal, and unites with the alkali, into a vitriolated tartar: whence ſome have propoſed uſing, inſtead of the two ſalts here directed, an ounce of vitriolated tartar already made, and half an ounce of any of the calces of iron: this they obſerve prevents the inconveniency above mentioned, without making any apparent alteration in the quality of the medicine.

Theſe pills are very properly called chalybeat; the ſalt of ſteel, which is one of the moſt active preparations of the metal, and are very well calculated for anſwering the intention expreſſed in the title. A drachm of the maſs may be made into twelve pills, and three of theſe taken every night, in chlorotic and other caſes, where warm, aperient, or deobſtruent medicines are proper.

Pilulæ Ecphracticæ Purgantes.
Purgative Deobſtruent Pills.

Take of Succotrine aloes, extract of black hellebore, ſcammony, each one ounce; gum ammoniacum, refin of guaiacum, each half an ounce; vitriolated tartar, two drachms; eſſential oil of juniper berries, one drachm. Beat them into a maſs, with a ſufficient quantity of ſyrup of buckthorn.

This medicine may be given as an alterant and deobſtruent, in doſes of eight or ten grains: a ſcruple or half a drachm generally proves purgative.

L. *Pilulæ Gummoſæ.* Gum Pills.

Take of galbanum, opopanax, myrrh, ſagapenum, each one ounce; aſa fœtida, half an ounce; make them into a maſs with ſyrup of ſaffron.

E. Take of aſa fœtida, galbanum, and myrrh, of each one ounce; and rectified oil of amber, one drachm; ſimple ſyrup, enough to make a maſs.

All theſe pills are deſigned for antihyſterics and emmenagogues, and are very well calculated for anſwering thoſe intentions; half a ſcruple, a ſcruple, or more, may be taken every night or oftener.

L. *Pilulæ Mercuriales.*
Mercurial Pills.

Take of quickſilver, five drachms; Straſburgh turpentine, two drachms; cathartic extract, four ſcruples; rhubarb powdered, one drachm.

Grind the quickſilver with the turpentine, until they are perfectly incorporated; then let the other

ingredients be beat up with this mixture into a maſs. If the turpentine happens to be too thick, ſoften it with a little oil olive.

E. *Pilulæ Mercuriales.*
Mercurial Pills.

Take of pure quickſilver and honey, of each one ounce; crumbs of bread, two ounces; rub the quickſilver with the honey in a glaſs mortar, uutil the globules diſappear, and as required, add a little of the ſimple ſyrup; then add the crumb of bread, and with water make up a maſs, to be made immediately into four hundred and eighty pills.

All theſe mercurial pills are capable of doing good ſervice in ſundry chronical diſorders. They may be given as alteratives in doſes of eight or ten grains. The London mercurial pills are purgative mercurials; and in this intention the doſe may be increaſed to half a drachm, or farther. Belloſte's pills, if the analyſis, that has been made of them be juſt, are ſomewhat ſimilar to theſe: they are ſuppoſed to be made up of crude quickſilver, reſin of guaiacum, a chemical oil, and extract of rhubarb.

E. *Pilulæ Thebaicæ, vulgo Pacificæ.*
The Pacific Pills.

Take of opium, half an ounce; extract of liquorice, two ounces; Spaniſh ſoap, an ounce and half; Jamaica pepper, one ounce. The opium and extract ſoften ſeparately with water, and beat them into a pulp; then add them to the ſoap and the pepper, all which muſt be well beat into a maſs.

Theſe pills were contrived by a chemical empyric, Starky, and communicated by him to Mathews, under whoſe name they were, ſome time ago, greatly celebrated. None of the ingredients are of much conſequence, except the opium; their quantity being too inconſiderable to anſwer any uſeful purpoſe. Eight grains of the compoſition contain nearly one of opium.

E. *Pilulæ Plumeri.*
Plummer's Pills.

Take of ſweet mercury, and the precipitated ſulphur of antimony, of each ſix drachms; extract of liquorice, half an ounce. Rub the mercury with the ſulphur ſo as intimately to mix them; then add the extract, and enough of the mucilage of gum Arabic, to make a maſs.

L. *Pilulæ Ruſi.* Rufus's Pills.

Take of Succotrine aloes, two ounces; myrrh, ſaffron, each one ounce. Make them into a maſs with ſyrup of ſaffron.

L. *Pilulæ Saponaceæ.*
Saponaceous Pills.

Take of almond ſoap, four ounces; ſtrained opium, half an ounce; eſſence of lemons, one drachm. Soften the opium with a little wine, and then beat it with the reſt, until they are perfectly mixed.

This pill is introduced in the room of Mathews's. The ſoap promotes the ſolution of the opium in the ſtomach, and thus occaſions it to act the more quickly; which is the only intention that the more laborious ſoap of tartar can anſwer. The eſſence of lemons gives an agreeable flavour, makes the medicine ſit eaſy on the ſtomach, and prevents a nauſea which it would

would otherwiſe be apt to occaſion. Ten grains of the pill contain nearly one grain of opium.

Pilulæ Scilliticæ.
Scillitic Pills.

Take of gum ammoniacum, of cardamom ſeeds in powder, and of freſh ſquills, of each half an ounce. Beat the ſquills and ammoniacum together, then add the cardamom ſeeds. If the maſs is too ſtiff, ſoften it with balſam copaiba.

Theſe pills are very efficacious in promoting urine and expectoration, and in general for attenuating the viſcidity of the fluids. A ſcruple of the compoſition above directed contains nearly eight grains of freſh ſquills.

Pilulæ Stomachicæ.
Stomachic Pills.

Take of rhubarb, one ounce; Succotrine aloes, ſix drachms; myrrh, half an ounce; vitriolated tartar, one drachm; eſſential oil of mint, half a drachm; ſyrup of orange peel, as much as is ſufficient to make the other ingredients into a maſs.

This pill is intended for moderately warming and ſtrengthening the ſtomach, and evacuating crude viſcid humours. It may be taken, as an alterant, in doſes of ten, fifteen, or twenty grains.

L. *Pilulæ e Styrace.*
Storax Pills.

Take of ſtrained ſtorax, two ounces; ſaffron, one ounce; ſtrained opium, five drachms. Beat them together till perfectly united.

This compoſition is contrived for diſſolving more ſlowly in the ſtomach than the ſaponaceous or Mathews's pills, and conſequently producing more gradual and laſting effects. One grain of opium is contained in five grains and four fifths of a grain of the ſtorax pills.

Paſtilli Cathartici.
Purging Sugar-Plumbs.

Take reſin of ſcammony, two drachms; fine loaf ſugar, one pound. Mix them together after the reſin is rubbed into a very fine powder; and with a very little mucilage, make a paſte, which work up into ſmall pills.

This is contrived chiefly for young children, who will not be prevailed with to take a cathartic in any other form; but may be cheated with this, the quantity of reſin not giving a diſcernible difference to the ſugar. But this is rough phyſic for tender children; though with many it does a great deal of good, by purging off that ſlime from their bowels, which breeds worms, and occaſions fevers, and a ſtinking breath. One or two of theſe is a ſufficient doſe. Thoſe which are ſo frequently in public advertiſements, are no other; whatſoever their venders may pretend to.

Pilulæ de Ammoniaco Magiſtrales.
Magiſterial Pills of Ammoniacum.

Take of gum ammoniacum, prepared with the vinegar of ſquills, two ounces; of Succotrine aloes, one ounce and half; of myrrh, maſtich, and Benjamin, of each half an ounce; of ſaffron, and ſalt of wormwood, of each two drachms; of ſyrup of wormwood a ſufficient quantity, to make them into a maſs for pills.

This ſeems to be taken from the Auguſtan Diſpenſatory, where they are aſcribed to Quercetan, as their author. The variation

here from that is very little. Zwelffer orders ſo much vinegar to be uſed in the diſſolution of the gums, as not to want any ſyrup to give a due conſiſtence. He alſo greatly blames the lixival ſalt in this compoſition; not only as foreign to the intention of the whole, but becauſe it ſpoils its due conſiſtence for pills, by taking away its tenacity, and making it crumble, as all ſuch ſalts will do to adheſive ſubſtances. This compoſition is given by Schroder, much in the ſame manner as it is continued here.

Pilulæ Cochiæ majores.

The greater Pills Cochiæ.

Take of hiera picra, ten drachms; of the troches of alhandal, three drachms and half; of diagrydium, two drachms and a half; of the moſt reſinous turpeth, five drachms; and make them into a conſiſtence fit for pills, with a ſufficient quantity of ſyrup of buckthorn, *ſ. a.*

Pilulæ Ruffi, ſive communes.

Ruffus's, or the common Pills.

Take of the beſt aloes, two ounces; of choice myrrh, an ounce; of ſaffron, half an ounce; and make them altogether into a maſs, of a conſiſtence fit for pills, with a ſufficient quantity of the ſimple ſyrup.

Theſe are generally aſcribed to Ruffus, a noted and very ancient phyſician; though Zwelffer will have it that he borrowed them from Paulus Ægineta, lib. ii. cap. 26. but with a difference from either of them, as they put an equal quantity of gum ammoniacum with the aloes, and no ſaffron. The ingredients are much the beſt reduced into powder ſeparately; becauſe they are ſo different in texture from one another, that they will not do in a mortar well together. This medicine was deſigned by its firſt preſcribers, to be diſſolved for potions; but its extreme bitterneſs making that intolerable, the moderns have very juſtly retained it in pills for their extemporaneous practice. Felix Platerius hath a preſcription, under the title of *Pilulæ peſtilentiales*, which hath all the ingredients of this, but joined with many others, which ſeem rather to clog than improve it. Schroder alſo gives one by the name of *Pilulæ Peſtilentiales compoſitæ*, not different but in the addition of things that rather ſpoil than mend it. This is accounted a good ſtomach purge, and with good reaſon, for it greatly warms and ſtrengthens it, and but very gently purges. It is peculiarly good in cold conſtitutions and indigeſtions; and will many times, without any other help, cure a green-ſickneſs; in which caſe it greatly promotes the menſtrual diſcharges, and opens uterine obſtructions. It may be given from fifteen grains to a drachm; but this is not ſo fit for a cathartic as an alterative, and therefore ought rather to be given in moderate doſes, and be long continued.

Pilulæ Barbaroſæ.

Take the fineſt Turkey rhubarb, two ounces; diagrydium, one drachm; quickſilver, half an ounce; muſk, ten grains; make them into a maſs, with a ſufficient quantity of flour.

Theſe are alſo called *Cæruleæ*. The mercury muſt be incorporated firſt with turpentine; after which, if the powders will not make it ſufficiently ſtiff for pills, add enough liquor-

liquorice-powder, inſtead of what is here ordered. Theſe have been a mighty ſecret with many in venereal caſes; and in leproſies and cutaneous foulneſſes. It is certainly a very good medicine for ſuch purpoſes; and, with continued uſe, will break through all the glandular obſtructions, and force away thoſe acrimonious humours which corrode, ulcerate, and deform the capillary veſſels; eſpecially upon the ſurface, where the external cold helps to detain them, until they cover the ſkin with blotches. This is likewiſe to be depended upon in moſt chronic diſtempers, eſpecially thoſe which are ſcrophulous.

SECT. VIII.

Of Powders, and Species.

HAVING gone through thoſe officinal forms, wherein the virtues of ſimples are drawn out by liquors, or the things themſelves preſerved with ſugar; the next diviſion gives us compoſitions of them in ſubſtance, with no other alteration made by art, than reducing them to powder; a procedure ſo very ſimple in itſelf, that it requires no other ſkill than having thoſe things which come under its management ſufficiently dry, in order to be ſo divided.

In judging then of the fitneſs of materials for this treatment, only theſe two conſiderations neceſſarily require our attention. The firſt is, whether the things themſelves are thus reducible, without any previous management that may hurt their medicinal virtues? And next, whether their virtues are conveniently preſerved in this form when reduced into it?

Under the firſt of theſe it naturally occurs, that viſcid and oily ſubſtances cannot be thus managed without firſt reducing them to ſome brittleneſs, which cannot be done without drying. If ſuch things therefore cannot be ſufficiently dried for triture, without exhaling their better parts, or deſtroying that particular quality for which the ſimple is valued in medicine, as it happens with many ſeeds and gums, they are much fitter for ſome other forms than for this; though theſe inconveniencies may be avoided where ſuch things bear ſo ſmall a proportion to thoſe which are very dry and brittle, that they are ſo loſt, and as it were abſorbed by them in triture, that all paſs the ſieve well enough together. But this, however, ſhould make the preſcriber wary of crouding into any compoſition under this form too many gums or ſeeds; and the preparer careful in giving them a requiſite brittleneſs by drying; which latter may, in ſome meaſure, be known by the compoſitions preſerving the ſcent or particular qualities of the ingredients ſuſpected.

The other requiſite in this form, relating to the preſervation of things reduced into it, directs us not to preſcribe materials therein which are volatile, or will any

other way change in the open air; thus the finer aromatics will decay, and every thing very volatile. Alcalous ſalts likewiſe are not to come in this form, becauſe they will diſſolve in air. Theſe latter inconveniencies may indeed be, in ſome meaſure, avoided, by keeping ſuch compoſitions as have in them theſe exceptionable ingredients, in veſſels ſtopped cloſe from the air; but the neceſſity of frequently opening them in the ſhops for common occaſions, will ſubmit them more to ſuch decay than is conſiſtent with keeping them any long time good.

What hath been already taken notice of as neceſſary to be regarded in the officinal preſcriptions of this form, ſhould alſo be equally attended to in extemporaneous practice; that is, not to direct any thing in a powder which will waſte by its volatility, or which is not reducible into it, without ſuch previous management as will hurt its medicinal virtues. All volatile ſalts, in particular, ought to be avoided in theſe preſcriptions, as that of hartſhorn, ſal ammoniac, and the like; though in the *ſal ſuccini* there is ſomewhat ſo fixed that it will remain a conſiderable time in this form without any diſcernible loſs. Some regard alſo in common practice is to be had to the vehicle, with which ſome things have, and others have not, a peculiar fitneſs for mixture. Thus the Æthiops, and every thing that takes in ſulphur, when preſcribed in powders, ſhould be ordered to be taken in a ſyrup, or ſome pulp, becauſe it is very troubleſome to mix with any thing thinner; its offenſive black colour is alſo beſt diſguiſed with prunes, or any thing of like kind. Every powder likewiſe that takes in crude antimony, any of the mercurials, or things of like weight, muſt not be truſted in thin vehicles, becauſe they will immediately ſettle, and, by reaſon of the ſmall quantities, be liable to be left at the bottom of what they are given in. Powders likewiſe which take in any reſinous ſubſtances, as ſcammony, reſin of jalap, or any thing of like texture, ſhould be directed in vehicles of ſome conſiſtence, and be carefully mixed, becauſe in thin ones they are apt to run into clots, which are not eaſily again diſſolvable.

The doſes of moſt powders ought ſeldom to exceed half a drachm, becauſe of their difficulty to take; and rather than to put things together which have not ſufficient efficacy in that quality, it is more eligible to have recourſe to things of like intention in ſome other form.

In acute caſes, where the ſtomach hath been dried with much heat, too many of theſe, eſpecially of the warmer alexipharmics, as the contrayerva and ſnake-root, are not uſually judged ſo proper as the liquid forms, and the virtues of the ſame things drawn out by infuſion.

All reſinous ſubſtances, which come under this management, require the mortar to be a little greaſed, elſe they will not powder, but form into lumps at every ſtroke; and they ſhould be rather rubbed than beat. The aromatics, which waſte much by flying away, ought to be ſprinkled with ſpirit enough to keep them down, but not ſo as to make them clog the ſieve, by ſticking in their paſſage.

In all theſe compoſitions the herbs are expected to be picked clean from the ſtalks, and all decayed

cayed leaves; the flowers as freſh as can be dried, and clean picked; and every other ingredient in the greateſt perfection, in every reſpect, becauſe the whole here goes into the ſtomach; whereas in tinctures, diſtillations, and the like, the groſs is left behind; and is not therefore much regarded.

L. *Pulvis Ari compoſitus.*

Compound Powder of Arum.

Take of arum-root, freſh dried, two ounces; yellow water-flag roots, burnet, ſaxifrage roots, each one ounce; crab's eyes prepared, cinnamon, each half an ounce; ſalt of wormwood, two drachms. Beat them into a powder, which is to be kept in a cloſe veſſel.

This compoſition was originally intended for a ſtomachic; and in cold ſluggiſh temperaments, where viſcid phlegm and crude acid juices abound in the firſt paſſages, it proves a very ſerviceable one, diſſolving and promoting the expulſion of the noxious humours, exciting appetite, and opening obſtructions, not only of the viſcera, but likewiſe of the remoter glands, whence it becomes uſeful in ſcorbutic caſes alſo: the doſe is from one ſcruple to two. It is beſt when freſh made: in keeping, it is apt to grow mouldy, and loſe of its efficacy; the arum root, in particular, ſoon loſes the pungency in which its virtue reſides. The roots ſhould be taken up when the leaves begin to decay, for then they retain their pungency for many months.

L. D. & E. D. *Pulvis Antilyſſus.*

Powder againſt the Bite of a mad Dog.

Take of aſh-coloured ground liverwort, two ounces; black pepper, one ounce. Beat them together into a powder.

The virtue which this medicine has been celebrated for, is expreſſed in its title: the doſe is a drachm and a half, to be taken in the morning faſting, in half a pint of cows milk warm, for four mornings together. Before the uſe of the powder, the patient is to be blooded; and after it, to be dipt in cold water every morning faſting for a month.

Pulvis ad Epileptices de gutteta dictus.

Powder againſt Epilepſies.

Take of wild valerian root, piony root, each equal parts. Mix and make them into a powder.

The compoſition that formerly went by this name, was crouded with uſeleſs and inſignificant ingredients; all that is effectual is to be found in this, and perhaps the valerian alone would be ſtill better. The doſe is from a ſcruple to a drachm.

L. *Pulvis e Bolo compoſitus ſine Opio.*

Compound Powder of Bole without Opium.

Take of bole Armenic, or French bole, half a pound; cinnamon, four ounces; tormentil-root, gum arabic, each three ounces; long pepper, half an ounce. Reduce theſe ingredients into powder.

L. *Pulvis e Bolo compoſitus cum Opio.*

Compound Powder of Bole with Opium.

Take of opium ſtrained, three drachms. Dry it a little, ſo as to render it eaſily pulverable; and add it to the foregoing ſpecies, that they may all beat into a powder together.

This powder, with opium, is an

elegant reform of the ſpecies of Fracaſtorius's confection, commonly called *diaſcordium*; conſiſting only of ſuch of the ingredients of that compoſition as are moſt conducive to the intention for which it is at preſent preſcribed. Forty five grains of the powder contain one of opium.

It is a warm, glutinous aſtringent; and in fluxes, or other diſorders, where medicines of this claſs are proper, generally does good ſervice. It may be given in doſes of a ſcruple, or half a drachm, and occaſionally repeated.

L. *Pulvis e Ceruſſa compoſitus.*
Compound Powder of Ceruſe.

Take of ceruſe, five ounces; ſarcocolla, one ounce and a half; gum tragacanth, half an ounce.

This compoſition is the *trochiſci albi* of Razi, brought back to its original ſimplicity, with regard to the ingredients, and without the needleſs trouble of making it into troches. It is employed for external purpoſes; as in collyria, lotions, and injections, for repelling hot acrimonious humours; and in inflammations.

L. *Pulvis e Chelis Cancrorum compoſitus.*
Compound Powder of Crabs Claws.

Take of the tips of crabs claws prepared, one pound; pearls prepared, red coral prepared, each three ounces; mix them together.

Take of red coral, one ounce; black tips of crabs claws prepared, two ounces. Mix, and make them into a powder.

Theſe powders have loſt ſeveral of their ingredients, without any injury to their virtues; and poſſibly they would ſtill bear a farther reduction; for both the crabs eyes and claws are by themſelves more effectual than any compoſition of them with pearls and coral.

The only virtues of theſe powders is to abſorb acidities in the firſt paſſages; if no acid juices are contained there, they prove injurious rather than beneficial. Infants at the breaſt are frequently thrown into febrile diſtempers, from a redundancy of acrid humours; and in theſe caſes, the abſorbent powders are undoubtedly of uſe; but in the fevers of adults, it ſcarce ever happens that they can be of any ſervice.

L. *Pulvis Bezoardicus.*
Bezoardic Powder.

Take of compound powder of crabs claws, one pound; oriental bezoar prepared, one ounce: mix them together.

Bezoar has hitherto been an ingredient in the foregoing compoſition; though, notwithſtanding the addition it made to the price, it added nothing to the virtue of the medicine. The college of London have therefore very prudently directed an abſorbent powder, without this coſtly article; and compoſed another, diſtinguiſhed by its name, for the uſe of thoſe who expect any particular virtues from it. The Edinburgh college have entirely expunged this unneceſſary drug.

L. *Pulvis Contrayervæ compoſitus.*
Compound Powder of Contrayerva.

Take of compound powder of crabs claws, a pound and a half; contrayerva root, five ounces. Make them into a powder.

This

This powder was formerly directed to be made up into balls with water, and then called *Lapis Contrayervæ*, a piece of trouble now laid aſide as needleſs.

This medicine hath a much better claim to the title of an alexipharmic and ſudorific, than the two foregoing compoſitions.

E. *Pulvis Cretaceus.*

Take of prepared white chalk, four ounces; nutmegs and cloves, of each half a drachm; mix and make them into a powder.

N. B. This powder is a ſubſtitute for the troches againſt the heartburn.

E. *Pulvis e Jalappa compoſitus.*
Compound Powder of Jalap.

Take of powdered jalap root, an ounce; of powdered cream of tartar, two ounces; mix.

L. *Pulvis e Myrrha compoſitus.*
Compound Powder of Myrrh.

Take of rue leaves, dried, dittany of Crete, myrrh, each an ounce and a half; aſa fœtida, ſagapenum, Ruſſia caſtor, opopanax, each one ounce. Beat them together into a powder.

This is a reform of the *trochiſci e myrrha*, a compoſition contrived by Razi againſt uterine obſtructions. The powder may be taken from a ſcruple to a drachm or more, two or three times a day.

L. *Pulvis e Scammonio compoſitus.*
Compound Powder of Scammony.

Take of ſcammony, four ounces; calcined hartſhorn prepared, three ounces. Grind them diligently together into a powder.

Here the ſcammony is divided by the earthy calx, and thus rendered ſomewhat more ſoluble, and leſs adheſive; hence its purgative quality is promoted, at the ſame time that it becomes leſs griping. The doſe is from fifteen grains to half a drachm.

This powder has been uſually prepared with diaphoretic antimony and cryſtals of tartar (inſtead of the calcined hartſhorn above directed), and called, from its firſt publiſher, *Pulvis Cornachini.*

E. D. Take of cream of tartar and ſcammony, each equal parts. Make them into a powder.

This may be given to the quantity of a drachm or more. It appears probable, that neither the antimony nor tartar are of any farther uſe than as they divide the texture of the ſcammony; though Cornachini propoſes notable advantage from ſome deobſtruent quality in the tartar; and from the preparation of antimony, though it have no ſenſible operations, he expects ſome ſhare of the ſame ſucceſs which ſometimes attends the rougher preparations of that mineral.

L. *Pulvis e Sena compoſitus.*
Compound Powder of Sena.

Take of ſena, cryſtals of tartar, each two ounces, ſcammony, half an ounce; cloves, cinnamon, ginger, each two drachms. Powder the ſcammony by itſelf; and all the other ingredients together; then mix them.

L. *Pulvis Sternutatorius.*
Sternutatory Powder.

Take of aſarum, marjoram, marum Syriacum, leaves dried, lavender flowers, dried, each equal weights. Rub them all together into a powder.

E. *Pul-*

E. *Pulvis Sternutatorius ſive Cephalicus.*

Cephalic Powder.

Take of the leaves of aſarum, three parts; and of marjoram, one part; mix and make a powder.

The titles of theſe powders ſufficiently expreſs their intention. They are both agreeable and efficacious errhines, and ſuperior to moſt of thoſe uſually ſold under the name of herb ſnuffs.

E. *Pulvis Stypticus.*

Styptic Powder.

Take of alum, an ounce and half; and of the gum kino, three drachms; mix and make into a fine powder.

L. *Pulvis e Succino compoſitus.*

Compound Powder of Amber.

Take of amber prepared, gum arabic, each ten drachms; juice of hypociſtis, balauſtines, Japan earth, each five drachms; olibanum, half an ounce; ſtrained opium, one drachm. Reduce them all together into a powder.

This powder is compoſed of the more unexceptionable ingredients of the *Trochiſci e Carabe* of our former Pharmacopœia. The medicine, as now reformed, may be looked upon as an uſeful, and tolerably elegant aſtringent; though poſſibly the ingredient, which it receives name from, contributes little to its virtue. Two ſcruples of the compoſition contain one grain of opium.

E. *Pulvis Sudorificus, ſive Doveri.*

Sudorific, or Dover's Powder.

Take of vitriolated tartar, four ounces and a half; opium, and ipecacuhanha powdered, of each half an ounce. Mix, and make them into a very fine powder.

L. *Pulvis e Tragacantha compoſitus.*

Compound Powder of Gum Tragacanth.

Take of gum tragacanth, gum arabic, marſhmallow root, each an ounce and a half: ſtarch, liquorice, each half an ounce; double refined ſugar, three ounces; grind them into a powder.

Pulvis Diatragacanthi.

Take of gum tragacanth, half an ounce; liquorice, ſtarch, marſhmallow roots, each half an ounce. Beat them altogether into a powder.

Both theſe powders are mild, emollient, glutinous medicines, and hence become ſerviceable in hectic caſes, tickling coughs, ſtrangury, heat of urine, ſome kinds of alvine fluxes, and other diſorders proceeding from a thin acrimonious ſtate of the humors, or an abraſion of the natural mucus of the inteſtines; they ſoften, and give a greater degree of conſiſtency to the former, and defend the latter from being irritated or excoriated by them. The doſe is from half a drachm to two or three drachms, which may be frequently repeated.

L. *Hiera Picra.*

i. e. The Holy Bitter.

Take of the gum extracted from Succotrine aloes, one pound; *canella alba*, three ounces. Beat them ſeparately into powder, and then mix them together.

This powder, in our former Pharmacopœia, beſides the capital ingredient aloes, contained cinnamon, zedoary, aſarum, cardamom ſeeds, ſaffron, and cochineal. The article here introduced in the room of theſe, was found, upon trial of a great many others, moſt effectually to cover the ill flavour of the aloes;

aloes; at the ſame time, that the quantity ſufficient to effect this, communicates to the medicine the ſame degree of ſpicy warmth, as the aromatics in the old form. It ſhould nevertheleſs ſeem, that the alteration made in this preparation may occaſion ſome ſmall change in its medical virtues: the ſingular qualities of the aſarum, point out the intention of the contriver to have been not entirely to alleviate the intenſe bitterneſs and diſagreeable ſmell of the aloes, or barely to warm the medicine with aromatics, but by the addition of pungent, penetrating ſubſtances, to promote and extend its action to farther purpoſes than the aloes alone was capable of anſwering. In this light, the modern practice conſiders this medicine, and preſcribes it not ſimply as a purgative, but as a ſtimulus. In the following formula, the aſarum is likewiſe rejected; but another pungent drug introduced in its ſtead.

L. *Species Aromaticæ.*
Aromatic Species.

Take of cinnamon, two ounces; leſſer cardamom ſeeds, huſked, ginger, long pepper, each one ounce. Beat them together into a powder.

E. *Pulvis Diaromaton ſive Species Aromaticæ.*
Aromatic Powder.

Take of nutmegs, leſſer cardamom ſeeds, ginger, each equal parts. Beat them all together into a powder.

Both theſe compoſitions are agreeable, hot, ſpicy medicines; and as ſuch, may be uſefully exhibited in cold phlegmatic habits and decayed conſtitutions, for warming the ſtomach, promoting digeſtion, exciting the *vis vitæ*, and ſtrengthening the tone of the viſcera in general. The doſe is from ten grains to a ſcruple and upwards. The firſt proves conſiderably the warmeſt.

L. *Species e Scordio ſine Opio.*
Species of Scordium without Opium.

Take of bole Armenic, or French bole, four ounces; ſcordium, two ounces; cinnamon, one ounce and a half; ſtorax ſtrained, tormentil root, biſtort root, gentian, dittany of Crete, galbanum ſtrained, gum arabic, red roſes, each one ounce; long pepper, ginger, each half an ounce. Reduce them into powder.

L. *Species e Scordio cum Opio.*
Species of Scordium with Opium.

Take of ſtrained opium, three drachms. Dry it a little that it may eaſily pulverize; and add it to the foregoing ſpecies in the beating, that they may be all reduced into a powder together.

This is the ſpecies of Fracaſtorius's confection of diaſcordium, which has been hitherto kept in the ſhops in the form of an electary only, but is now judiciouſly directed in that of a powder alſo, both with and without the opium: when made into an electary, the medicine, in keeping, loſes conſiderably of its aſtringency, in which conſiſts great part of its medicinal virtue.

As this compoſition has in common practice been looked upon as a medicine of great conſequence, and its effects determined by long experience, the college have made no farther alteration in its ingredients, than ſubſtituting red roſes themſelves to the ſugar of roſes, omitting ſorrel ſeeds, which are cer-

certainly inſignificant, and ſupplying the Lemnian earth, which with us is ſcarce ever met with genuine, by a proper increaſe of the bole. They have nevertheleſs given an elegant reform of it, in the *pulvis e bolo, cum et ſine opio.*

General rules for making Powders.

I. Strict care ſhould be taken, that no injured or impure parts of the ingredients be ſuffered to go into the powders; and that the plants ſhould be firſt freed from all their ſtalks and decayed parts.

II. When the dry ſpecies are to be powdered, they ſhould be ſprinkled with a few drops of ſome proper water.

III. The moiſter aromatics ſhould be dried with a very gentle heat, before they are powdered.

IV. Gums and other ingredients, whoſe texture unfits them to be ground alone, ſhould be mixed with the drier ſubſtances, that they may paſs the ſieve together.

V. It is beſt to make powders in ſmall quantities; and they ought to be kept in well-cloſed phials.

From the former London Diſpenſatory, and others.

Aromaticus Roſatum.

Roſe Spice.

Take of exungulated red roſes, fifteen drachms; of liquorice ſliced, ſeven drachms; of aloes-wood, and yellow ſanders, of each three drachms; of the beſt cinnamon, five drachms; of cloves and mace, of each two drachms and a half; gum arabic, and tragacanth, of each eight ſcruples; of nutmegs, the greater cardamoms and galangal, of each one drachm; of Indian ſpikenard, one ſcruple; and let them all be reduced into a powder to be kept for uſe.

This differs from the firſt Diſpenſatory of the college only in changing the leſſer for the greater cardamoms, and is the firſt time that the muſk and ambergriſe have been quite rejected, though it was uſually made without them before; as being generally ſo directed in common preſcription, becauſe of their offenſiveneſs to many perſons. Zwelffer gives this compoſition a very great character in his Auguſtan Diſpenſatory.

Pulvis Cornachini.

Cornachini's Powder.

Take of ſulphurated diagrydium, ten drachms; of diaphoretic antimony, ſix drachms; of cream of tartar, two ounces and a half. Make them together into a powder.

Schroder, who alſo gives this preſcription, tells us its author was ſo fond of it, as to write a whole treatiſe about it; wherein he recommends it almoſt in all caſes that require purging. Its doſe is from eight grains to one drachm.

Species Diambræ, cum Odoratis.

Species of Diambra, with Perfumes.

This is made by an addition to the aromatic ſpecies, of ambergriſe, one drachm and half; and of muſk, one drachm and half.

Pulvis ad Guttetam.

Powder againſt an Epilepſy.

Take of white dittany, miſletoe of the oak, contrayerva, Virginia ſnake-root, and male piony-roots, of the male piony-ſeeds, of burnt hartſhorn, and elk's-hoof, of each

two

two drachms; of wild valerian-root, an ounce; of red coral, and human ſkull, of each three drachms; of jacinth-ſtone, a drachm; of occidental bezoar, a drachm and a half; of the oriental, a ſcruple; mix them into a powder; to which may be added at pleaſure, of muſk five grains, and of the leaves of beaten gold N°. 30.

This hath its name from the French word *Goutte*, which ſignifies a convulſion, and in ſuch caſes it is given both to children and grown perſons; from ten grains to half a drachm for children, and to a drachm to grown perſons.

Pulvis Hali. Powder of Haly.

Take of white poppy ſeeds, ten drachms; of ſtarch, gum arabic, and tragacanth, of each three drachms; of the ſeeds of purſlain, marſhmallows, and mallows, of each four drachms: of cucumber, melon, gourd, citruls, and quince ſeeds cleanſed, of each ſeven drachms; of liquorice, three drachms; of white amber, two drachms; of ſugar candy, the weight of the whole; and make them into a powder.

A general caution is given by all not to make too much at a time of this compoſition, becauſe ſome of its ingredients render it liable to grow rancid. It is much better brought into a paſte, and kept in lozenges. It is intended for an emollient, and to ſoften and heal any internal injuries; for which purpoſe it is preſcribed in diſtempers of the breaſt, in ſpitting of blood, bruiſes, and diſorders of the reins. It cools the heat of urine, ſoftens its paſſages, and helps in gonorrhœas and ſtranguries. It may be given from half a drachm to two drachms.

Pulvis Comitis Warvicenſis.
Earl of Warwick's Powder.

Take of ſcammony prepared with the fumes of ſulphur, two ounces; of diaphoretic antimony, an ounce; of the cryſtals of tartar, half an ounce; make them all together into a powder.

It is directed to be made different ways both by Schroder and Zwelffer; but this is much the readieſt, and what the ſhops are now accuſtomed to uſe. It is now become common in extemporaneous preſcriptions, eſpecially as a purge for children, to whom it is convenient to give, becauſe of the ſmallneſs of the quantity requiſite for a doſe. It is a ſmart purge, and frequently given to children againſt worms from five to fifteen grains, and to grown perſons from fifteen grains to half a drachm.

Pulvis Anticardialgicus.
A Powder againſt the Heart-burn.

Take white chalk, ſix ounces; crabs eyes and claws, of each an ounce and half; ſugar candy, half an ounce; oil of nutmegs, ſix drops; make them into a fine powder. Some put to it ſix drachms of bole.

About a drachm of this in a draught of cold water is an infallible temporary cure of the complaint its title expreſſes; and its frequent uſe, if often wanted, cannot be attended with any harm.

Pulvis Athriticus, Ducis Portlandi.
The Duke of Portland's Gout Powder.

Take the roots of round birthwort and gentian, the herbs leſſer centaury, groundpine and germander of each equal quantities; mix and make them into a fine powder.

Of this powder, a drachm is to be

be given every morning faſting in a cup of wine and water, broth, or tea, and the patient muſt faſt an hour and a half after taking each doſe. Thus continue it for three months, without interruption: then diminiſh the doſe one fourth for three months longer: after which give half a drachm for ſeven months more. After the firſt year, half a drachm is to be taken only every other morning.

As it operates inſenſibly, the patient will be about two years before he perceives any conſiderable advantage. It is ſaid to work ſure, though ſlowly. The patient need not confine himſelf to any particular diet; ſobriety, an abſtinence from ſpirituous liquors and high ſauces are all that are required.

This is a warm medicine, proper only in a cold, phlegmatic, relaxed, and emaciated habit, with impoveriſhed juices. To continue it in caſes where it has reſtored health, or to give it to thoſe who are ſtrong, will produce giddyneſs, apoplexy, &c.

Pulvis Arthriticus Turneri.
Turner's Gout Powder.

Take turpeth, hermodactyls, ſena, ſcammony, and dwarf-elder ſeeds, of each equal parts; powder and mix them, *ſ. a.*

This is a good ſmart purge, and its repetition at a proper diſtance, (ſuppoſe a month,) will go a great way to prevent the gout, by keeping the joints and extreme parts clear from ſuch lodgments of humours, which in proceſs of time occaſion a fit. The doſe is from fifteen grains to two ſcruples.

Pulvis Baſilicus.
The Royal Powder.

Take diagrydium, ceruſe of antimony, cream of tartar, and *mercurius dulcis*, of each equal parts; powder theſe ſeparately and mix them, *ſ. a.*

This is one of the beſt purges for groſs-bodied children, that are apt to breed worms, and have large bellies; for though the ingredients are efficacious, its operation will be mild and ſafe enough. It wonderfully clears the bowels of ſlime, and fetches out thoſe viſcid humours which obſtruct the meſenteriac glands, and in a great meaſure the lacteals themſelves; which is often the caſe in children, and is attended with a hard belly, ſtinking breath, frequent fevers, and a decay of ſtrength in the lower parts. Thoſe ſlight intermittents which ſuch are ſubject to, will much ſooner be cured by ſuch a purge than by the bark; for the purge actually reaches and wears away the cauſe, but the bark pens it up; and, by curing only while ſuch reſtriction continues, gives room for a return with much greater aggravation. It may be given to children from ſix to fifteen grains, and to grown perſons from fifteen grains to two ſcruples, in a bole, or mixed with ſome ſyrup; for the weight of the mercury will ſink it ſo ſoon in a thin vehicle, as to ſubject it to be loſt, eſpecially as its bulk is hardly diſcernible at the bottom of a cup or glaſs.

Pulvis Cantianus.
The Counteſs of Kent's Powder.

Take the black tips of crabs claws, and contrayerva root, of each two ounces; pearls, red and white coral, crabs eyes, all levigated with juice of lemons, of each an ounce; white amber and cryſtals levigated with roſe-water,

of

of each an ounce; hartſhorn burnt to the utmoſt whiteneſs, and levigated with citron-juice, ſharpened with ſpirit of vitriol, an ounce; occidental bezoar and earth of Lemnos, of each half an ounce; ceruſe of antimony, two ounces; ambergriſe, a drachm and a half: muſk, half a ſcruple; let all be well mixed together and made up into a paſte with the jelly of vipers ſkins, tinged with ſaffron, and form it into little balls, which dry and keep for uſe.

The levigation of ſome of the alkaline ingredients with acids is what is very unuſual, but, for the intention of a ſudorific, may with good reaſon be deſigned, becauſe the points of the acid may ſtick in ſuch manner in the alkaline body, as has been deſcribed in the preceding part concerning ſublimate and *mercurius dulcis*, ſo that when they come into the ſmall veſſels they give them gentle vellications, and at the ſame time divide and make thinner the viſcid parts of the juices, which are both the neceſſary requiſites to raiſe a ſweat. And that acids joined to alkalies may make a *tertium quid* to this purpoſe, will not at all appear ſtrange to one who conſiders the ſenſible qualities of ſuch a mixture, and not only how they differ from what appeared before in either ſeparately, but with what a peculiar pungency the mixed parts affect the tongue. But let the rationale of this ſtand how it will, this is vaſtly a better compoſition than that of the Gaſcoign's powder for the purpoſe of a diaphoretic; this will in reality promote ſweating. The uſual doſe is from half a ſcruple to half a drachm, in any convenient vehicle.

Pulvis febrifugus certus.

The ſure Febrifuge Powder.

Take Virginia ſnake-root two drachms; contrayerva, gentian, zedoary, carduus, and citron ſeeds, occidental bezoar, of each a drachm; Peruvian bark, four ounces; make all together into a fine powder, *ſ. a.*

In ſome caſes where the bark wants ſuch warm aſſiſtants, this makes a good medicine, though the three laſt ingredients may be as well left out. A drachm of this is directed for a doſe, and to be repeated every four hours, between the fits, until they quite diſappear.

Pulvis Martialis compoſitus.

Compound Powder of Steel.

Take ſteel prepared ſix drachms; aloes-wood, nutmegs, of each half an ounce; cloves and mace, of each two drachms; ſugar, two ounces; powder and mix, *ſ. a.*

This ſtands greatly commended for a good medicine in all cachexies both in men and women, but particularly in thoſe from uterine diſorders. It cleanſes the womb, promotes the menſes, warms the blood, and wonderfully reſtores decayed and diſtempered conſtitutions; to be taken every morning in a glaſs of white-wine, from one to two drachms. If a little ſaffron be added it makes it better, and eſpecially for girls from ſix years of age to the firſt eruption of the menſes; who are pale, and have all the marks of what is called the green-ſickneſs; for ſo young does it many times appear.

Pulvis purpureus.

The purple Powder.

Take burnt hartſhorn, white amber,

amber, red coral, pearl, of each an ounce; crabs eyes and claws, of each two ounces; ſaffron, half a ſcruple; cochineal, two ſcruples; make all into a paſte, after they are finely levigated, with jelly of hartſhorn; and form it into little balls, which dry for uſe.

This is better than the Gaſcoign's powder, and ſome preſcribe it in its ſtead.

Pulvis Sternutatorius.
Sneezing Powder.

Take marjoram, roſemary-flowers, betony, and flowers of lilies of the valley, of each three drachms; nutmegs, two drachms; volatile ſal ammoniac, a drachm; powder, and keep cloſe ſtopt.

This is recommended in the head-ach, giddineſs, deafneſs, and many other diſorders, as palſies, lethargies, and the like. It may be taken at any time at pleaſure, but it is beſt at night, and ſoon after firſt riſing.

Pulvis Vermifugus.
A Powder againſt Worms.

Take hartſhorn, rhubarb, coralline and worm-ſeed, of each equal parts: mix and powder, *ſ. a.*

What the hartſhorn has to do here cannot well be imagined, but the other ingredients are good to the purpoſe ſignified by the title. It is a proper medicine for children, and may be given from ten grains to half a drachm, to be continued once a day for ſome time.

Pulvis ſolutivus. A ſolutive Powder.

Take tartar of vitriol cryſtalized, an ounce; cream of tartar, half an ounce; reſin of jalap, two drachms; root of jalap, half an ounce; mace, a drachm. Mix, *ſ. a.*

The reſin ought to be rubbed very fine, before it be mixed with the reſt, in a mortar a little greaſed at the bottom. The whole is a very good purge, and will not only well cleanſe the firſt paſſages, but ſtimulate enough to fetch out many peccant humours from the adjacent glands and viſcera, and aſſiſt the diſcharge by urine; and therefore do ſervice in dropſies and diſorders from corpulency. Its doſe is from a ſcruple to a drachm.

Pulvis Hydragogus.
A Powder to purge Water.

Take cream of tartar, an ounce; jalap, ſix drachms; dwarf elder ſeeds, half an ounce; gamboge, a drachm and a half; nutmegs, two drachms. Mix them into a powder.

This is an admirable good medicine for the purpoſe its title expreſſes. It brings down the ſwellings in dropſies and cachectic conſtitutions; and it is alſo a good purge in the jaundice, or any obſtructions of the viſcera which require forcible means to diſlodge them. This may be given from a ſcruple to a drachm in white wine.

Pulvis catharticus contra Vermes.
A purging Powder againſt Worms.

Take worm-ſeed, an ounce; coraline, and Mechoacan, of each two drachms; *mercurius dulcis*, two drachms and a half; reſin of jalap, a drachm; aniſeeds, a drachm and a half; ſugar half an ounce. Mix all into a fine powder, *ſ. a.*

The *mercurius dulcis* ought to be rubbed fine by itſelf, and likewiſe the reſin; and when the others are reduced to fine powder, all to be mixed together. It is an admirable purge for children that are

ſuſpected

ſuſpected to have worms, and it will cleanſe away that ſlime in the bowels which breeds them, hardens the belly, produces putrefaction, and gives a ſtinking ſcent to the breath. The doſe is from fifteen grains to a drachm.

Pulvis Epilepticus.

Powder againſt the Epilepſy.

Take wild valerian, and piony roots, of each an ounce; ſeeds of rue, myrrh, caſtor, white amber, of each half an ounce; native cinnabar, two ounces. Mix, *ſ. a.*

This is an efficacious compoſition for what its title promiſes. In taking it caution muſt be uſed that the cinnabar be not loſt, as it may eaſily be in a thin vehicle, becauſe its weight ſoon carries it to the bottom; it is therefore beſt in the form of a bole, or electary, or in a thick ſyrup. It is alſo much to be depended on in children's convulſions, together with purging, from what cauſe ſoever they proceed; but eſpecially from any hereditary impreſſion or diſtemper of the head: to them it may be given from ten grains to a ſcruple, and to grown perſons from a ſcruple to a drachm at a doſe.

Pulvis Vermifugus.

Powder againſt Worms.

Take tin reduced to a powder, as directed in the foregoing part, coralline, and worm ſeed, of each an ounce; ſavin and ſaffron, of each a drachm. Mix, *ſ. a.*

This is almoſt an infallible remedy againſt worms. This compoſition does not purge, and therefore may be given almoſt in any circumſtance, without prejudice, from a ſcruple to two drachms every night, in any convenient vehicle.

Pulvis catharticus pro Pueris.

A purging Powder for Children.

Take rhubarb, reſin of jalap, and calomel, of each equal parts; loaf-ſugar, the weight of the whole.

Theſe ought all to be powdered ſeparately, and very fine. The ſugar is a ſufficient corrector; and the whole makes not only a pleaſant, but an efficacious and ſafe purge for all children, for they are always more or leſs ſubject to ſlimy humours, and from thence proceed worms in the belly, which this cleanſes away, and deſtroys. It may be given from ten grains to a ſcruple. To grown perſons likewiſe, in many caſes, it is a good cathartic, and may be increaſed from one to two ſcruples in a bole, or mixed with a ſyrup.

Pulvis Dentrificus.

A Powder to cleanſe the Teeth.

Take pumice-ſtone, cuttle-fiſh bone, of each an ounce; tartar of vitriol, two drachms; muſk, a ſcruple; oil of rhodium, three drops. Mix all into a fine powder, *ſ. a.*

This makes a very good dentrifice.

SECT. IX.

Of Balſams and Oils.

THE remaining part of the officinal Pharmacy conſiſts of ſuch things as are uſed only externally, being chiefly oils, ointments, and plaſters; amongſt the firſt of theſe there are ſome made by expreſſion, uſed alſo internally, as the oil of ſweet almonds, and ſome others.

The oils drawn by expreſſion are from nuts and ſeeds; and thoſe for internal uſe are to be drawn cold, becauſe the fire, or any warmth, which facilitates the oily parts to flow out in greater quantities, is ſuppoſed to communicate ſomewhat to ſuch oils that damages their virtues, conſidered as ſoftners, and likewiſe forces out ſomewhat that gives them much fouler ſcents than when drawn cold.

The common way of preſcribing theſe oils for internal uſes hath been alone, or in linctuſes; but a much neater way is in emulſion. But although the college direct theſe to be drawn from many materials, yet they are none of them in uſe, beſides that of ſweet almonds, that called caſtor, and linſeeds, internally; and the *oleum macis*, *laurinum*, and *palmæ*, externally; though the laſt is not taken notice of in Diſpenſatories, but brought much into practice by thoſe travellers who have learned its uſe in the countries where it is made.

Theſe expreſſed oils, are not in their common ſtate, miſcible either with vinous ſpirit, or with water; but by means of certain intermedia, they will unite with either. Thus, by the intervention of volatile alkaline ſpirits, gum, or mucilage, they unite with water into a milky fluid: by means of fixed alkaline ſalts, they are changed into a ſoap, which is miſcible either with water, or ſpirituous liquors.

If expreſſed oils become rancid, they loſe their ſoft, lubricating, and relaxing quality, and are changed into a ſharp acrimonious one, and in this ſtate, inſtead of allaying, they occaſion irritation, inſtead of obtunding corroſive humours, they corrode and inflame.

The next claſs of oils are ſuch as are made by infuſion or decoction, wherein ſome herb or flower hath its virtues drawn out by the oil. Of thoſe in uſe are the *oleum roſaceum*, *chamæmelinum*, *hyperici*, *liliorum*, and *ſambucinum*; and theſe require a different method in their making, upon the ſcore of ſome different qualities in the things themſelves; as the ſcented flowers, particularly the roſes, do better by long inſolation, only in ſuch a warmth as the ſun will give, becauſe much boiling would exhale their more fragrant parts; but oils impregnated with green herbs, as chamomile and elder, require long boiling before they receive that green colour which is deſired in them. And it is to be obſerved concerning thoſe things which require boiling, that no oils will bear ſuch management without turning black, any longer than

there remains ſome aqueous humidity, which is herein ſupplied from the juice of the herbs; when therefore they grow criſp, for want of farther moiſture, the proceſs is finiſhed.

There are likewiſe directed in the Diſpenſatory many compound oils, to be made after the ſame manner, by infuſion or decoction; and the like rules are to be obſerved in them as in the ſimple ones. But ſo few of theſe are made or preſcribed, that there is hardly any thing in this diviſion worth our notice, but the Lucatellus's balſam, with ſome others under the ſame title, which happen to be placed amongſt them.

A balſam, or what is uſually called ſo, is ſomewhat thicker than a common oil; and ſometimes the name is alſo applied to ſuch ſubſtances as are of the conſiſtence of an unguent, as Lucatellus's balſam.

L. D. *Balſamum Guaiacinum.*
Balſam of Guaiacum.

Take of gum guaiacum, one pound; balſam of Peru, three drachms; rectified ſpirit of wine, two pints and a half; diſſolve the gum, and then filter.

This is a very commodious way of exhibiting gum guaiacum. The doſe is from twenty to forty drops, three or four times a day.

Balſamum Polychreſtum.
A Balſam of many Virtues.

Take two pounds and a half of ſpirit of wine; infuſe in it with a gentle heat, and often ſtirring, twelve ounces of gum guaiacum; and laſtly, add a ſpoonful of Peruvian balſam, ſo that the whole may mix together into a balſam.

This is an efficacious medicine for many good purpoſes, but particularly in rheumatiſms. The college have named it *Balſamum Guaiacinum*, (which ſee.) It will likewiſe anſwer all the ends that are aimed at by the wood diet-drinks; it dries up or diſſipates, by inſenſible tranſpiration, all ſuperfluous moiſtures, is good in all venereal and ſcrophulous caſes, and very certainly wears off an old gleet, where the virulence has been previouſly removed. It will change an aqueous vehicle milky, but may conveniently enough be given in any liquor; and it is uſually taken from twenty to thirty drops, two or three times in a day.

Balſamum viride.
The green Balſam.

Take of linſeed-oil, half a pound; gum elemi, two ounces; of verdegriſe in powder, two drachms. Mix and boil together over a gentle heat, ſo as to make them into a balſam, *ſ. a.*

From Bates.
Balſamum Anodynum.
The Anodyne Balſam.

Take Caſtile ſoap, one ounce; opium, half an ounce; camphor, ſix drachms; ſaffron, one drachm; ſpirit of wine rectified, eighteen ounces. Digeſt in a ſand-heat ten days, ſhaking it between whiles till the laſt day or two; then pour it off clear for uſe.

It is a moſt excellent medicine, not only for procuring eaſe in the moſt racking extremities of pain, but for aſſiſting likewiſe in the diſcharge of ſuch humours as occaſion thoſe pains. In nervous colics it is of great ſervice; and it cleanſes all the viſcera and glandular parts. It is good even in the jaundice, and ſuch diſtempers of the urinary

paſſages as proceed from the obſtruction of gravel, or ſlimy humours. But its greateſt excellency is in allaying the tortures of the gout, promoting the tranſpiration of the peccant irritating matter, and carrying off the fit; inſomuch that, with a few proper helps, this diſtemper is hardly ſo obſtinate in any perſon ſoever, but he may hence meet with great relief, if not a thorough riddance from it. Inwardly, it may be given from twenty drops to fifty at a doſe; and being outwardly applied to the pained part, it does ſervice, a rag being dipped in it, and laid thereon.

Balſamum Apoplecticum.
Apoplectic Balſam.

Take the diſtilled oil of cinnamon, cloves, lavender, lemons, marjoram, mint, rue, roſemary, ſage, rhodium, and wormwood, of each twelve drops; of amber, ſix drops; bitumen Judaicum, two drachms; oil of nutmegs by expreſſion, one ounce; balſam of Peru, as much as is ſufficient to make all together into a ſmooth balſam.

This warms and enlivens the nerves, being either ſmelled to, or rubbed upon the temples, or any other convenient part: it does much good alſo to paralytic limbs, by rubbing them well with it. It has been in faſhion to wear in little ivory boxes and cane-heads; but it has, in ſuch reſpects, given place to more modiſh contrivances. In diſtempers of the head and nerves, it is likewiſe directed to be given inwardly, from three to ſix drops in a bole, or electary.

Balſamum Succini.
Balſam of Amber.

Take white amber, two ounces in fine powder; oil of turpentine, ſix ounces; let them ſtand in warm digeſtion till the amber is wholly incorporated.

This is commended as an excellent nervous medicine, and is ſaid to be of ſervice in vertigoes, epilepſies, palſies, and alſo in hyſterical affections, given upon ſugar, or any proper vehicle, from five to fifteen drops; but its greateſt uſe is as a detergent and vulnerary.

Balſamum Sulphuris Knœphelii.
Knœphelius's Balſam of Sulphur.

Take liver of ſulphur, four parts; linſeed oil, three parts; let them ſimmer together till the ſulphur is diſſolved; then leiſurely draw it over in a retort, mixing the oil with half the quantity of colcothar of vitriol, and drawing it over again in another retort; and the oil, which ariſes the ſecond time, mix with half the quantity of oil of aniſeed for uſe.

Balſamum Sulphuris Rulandi.
Rulandus's Balſam of Sulphur.

Take flowers of ſulphur, one ounce; oil of nuts, ſix ounces; ſtrong wine, two ounces; digeſt for eight hours, ſometimes ſhaking the veſſel; then ſimmer it over a gentle heat till the wine is evaporated, and pour off the clear oil for uſe.

This very little differs from the common balſam of ſulphur, deſcribed in the foregoing part amongſt the preparations, though it comes to us as a celebrated anodyne.

L. D. Oils by Expreſſion.

Ol. Ricini. Oil of the common Palma Chriſti ſeeds, commonly called Caſtor Oil.

This oil is prepared by decoc-

tion,

tion, and by expreſſion: the firſt affords moſt of the oil, but the latter, the moſt agreeable.

To prepare it by decoction, bruiſe the decorticated ſeeds, in a marble mortar, and tie them in a linen cloth; put this packet into a proper veſſel, with ſeven or eight times as much water, and ſet them over the fire to boil; thus the oil will be ſeparated, and float on the ſurface of the water, ſkim it carefully off, and continue to boil untill no more oil appears.

To prepare it by expreſſion; pound the decorticated ſeeds well in a marble mortar, tie up the maſs in a new ſtrong canvas bag, then wrap the parcel in a clean hair cloth, and put the whole into a preſs between two iron plates; and thus force out as much of the oil as you are able.

This oil is mild, and inſipid almoſt, yet a ſlight ſtimulus is perceived in the throat on ſwallowing it. It is called Alkerva by the Arabians, Oleum Ricini by the Latins, Ol. Palmæ Chriſti by the French, and Oil of Caſtor by the Engliſh. The Hebrews and Greeks called it the Oil of Kik.

Between the years 1750 and 1760, this oil was introduced into England and obtained in practice. It is an excellent medicine in bilious complaints, in which it effectually purges without ſenſibly irritating; in obſtinate conſtipations of the bowels, this oil is moſt happily effectual, hence of ſingular ſervice in all colicky complaints which require purging; in the beginning of moſt nephritic diſorders it ſhould not be omitted; few caſes occur in warm and bilious conſtitutions, which require purging, in which this oil will not prove uſeful. It is efficacious either by the mouth, or glyſterwiſe, alſo if rubbed on the bellies of infants. It lubricates the bowels at the ſame time that it ſolicits them to diſcharge their contents. In leucophlegmatic habits it is not adviſeable, as it is very cooling: but, for removing the meconium from the inteſtines of infants; ſafely purging in colicky complaints; cooling, and eaſing the bowels, in fevers; correcting, and carrying off bilious acrimonies; relieving in the thruſh, cramps, tetanus, benign and venereal gonorrhoeas, fluor albus, gout, &c. it is eminently uſeful.

The doſe to an infant may be a tea-ſpoonful, to an adult from one to three table-ſpoonfuls, as required. It is commodiouſly taken with a little peppermint water; or for children, mixed with ſugar or honey.

Ol. Amygdalinum. Oil of Almonds.

Let freſh almonds, either bitter or ſweet, be pounded in a ſtone mortar; then let the oil be forced out of them by a preſs, which muſt not be made hot.

In the ſame manner the oil muſt be expreſſed from linſeed and muſtard-ſeed.

Oleum Chryſomelinum.

This is made by the expreſſion of apricot kernels; after which manner likewiſe is procured oil from the kernels of cherries, peaches, pine-nuts, piſtachio nuts, and plums: as alſo from the ſeeds of oranges, hemp, baſtard ſaffron, called *cnicus*, citrons, cucumbers, gourd, citruls, dwarf-elder, henbane, lettuce, linſeed, melons, poppies, parſley, horſe-radiſh, rape, the greater cataputia, ricinus (call-

ed *Oleum Cicinum*, *Ricinum*, and *de Kerva*), ſeſamum, called *Seſaminum*, muſtard, and grape-ſtones.

Notwithſtanding the officinal Diſpenſatories, eſpecially the moſt ancient, abound with oils of this kind, and the preſent college Diſpenſatory, in conformity thereto, retains ſome notices of them, yet they are ſcarce any of them made, beſides the oil of almonds, caſtor, and linſeed, or hardly any of them ever met with in preſcription; an oil indeed from muſtard-ſeed hath of late been extolled by ſome particular perſons, but without foundation.

Oleum Laurinum. Oil of Bays.

Take of bay-berries ripe, and gathered not many days, any quantity; after bruiſing them, boil them in a ſufficient quantity of water, and force out their oil with a preſs; beat again the remaining fæces, and pour hot water upon them as before, and again preſs out all that you can; then ſeparate the oil that ſwims upon the water for uſe, *ſ. a.*

Oxyrrhodium.

This is made of four or five parts of oil of roſes, and one of vinegar.

The former of theſe two is a very common medicine in the ſhops, but the latter never made but on extemporaneous preſcription, as it may very ſoon and eaſily be.

E. D. *Oleum Amygdalarum.*
Oil of ſweet Almonds.

Take any quantity of ſweet almonds newly dried and blanched; having bruiſed them in a marble mortar incloſe them in a canvas bag, and gradually force out the oil by means of a preſs, without the aſſiſtance of fire.

This is called the oil of ſweet almonds improperly; for this name ſeems to imply a diſtinction betwixt the oil of ſweet and bitter almonds; whereas there is no apparent difference, and they are, in practice, uſed promiſcuouſly, unleſs that from the difference of their price the bitter is choſen. The more proper name is ſweet oil of almonds, which may comprehend both. The blanching of the almonds previouſly to their being preſſed, is unneceſſary, their peel not affording any ſubſtance to deprave the oil by this treatment.

Oleum Semin. Lini. Oil of Linſeed.
Oleum Sinapi. Oil of Muſtard-ſeed.

Theſe oils are obtained in the ſame manner as that from ſweet almonds, only with theſe the iron plates of the preſs are to be moderately heated.

Oleum Olivarum.
Oil of Olives.
Oleum Laurinum. Oil of Bays.
Oleum Macis. Oil of Mace.

Theſe oils are imported from abroad.

E. D. *Oleum Camphoratum.*
Camphorated Oil.

Takes of oil of olives two ounces; camphor, half an ounce. Diſſolve them.

Oils by Infuſion and Decoction.

L. *Oleum Hyperici.*
Oil of St. John's Wort.

Take of the flowers of St. John's wort, full blown, freſh gathered, and carefully freed from the cups, four

four ounces; oil olive, two pints. Pour the oil upon the flowers, and let them ſtand together, till the oil is ſufficiently coloured. After the ſame manner are prepared,

Oleum Abſinthites.
Oil of Wormwood Tops.
Oleum Anethinum.
Oil of Dill Leaves.
Oleum Chamæmelinum.
Oil of Chamomile Flowers.
Oleum Liliorum Alborum.
Oil of White Lily Flowers.
Oleum Roſarum Rubrarum.
Oil of Red Roſes.
Oleum Rutaceum.
Oil of Rue Leaves.

L. *Oleum e Mucilaginibus.*
Oil of Mucilages.

Take of marſhmallow root, freſh, half a pound; linſeed, fenugreek ſeed, each three ounces; water, two pints; oil olive, four pints. Bruiſe the roots and ſeeds, and gently boil them in the water for half an hour: then add the oil, and continue the boiling till all the water is waſted; afterwards let the oil be carefully poured off for uſe.

Expreſſed oils do not act upon, or unite with the gummy and mucilaginous parts of vegetables; hence this oil contains nothing of the mucilage with which the ingredients abound.

L. *Oleum Sambucinum.*
Oil of Elder.

Take of elder flowers, 1 pound; oil olive, two pints. Boil the flowers in the oil, till they are almoſt criſp; then preſs out the oil, and ſet it by till the faces have ſubſided.

L. *Oleum Viride.*
Green Oil.

Take of bay, rue, marjoram, ſea wormwood, chamomile leaves, freſh, each three ounces; oil olive, two pints. Bruiſe the herbs, and gently boil them in the oil till they are almoſt criſp; then preſs out the oil, let it ſtand to ſettle, and afterwards pour it off from the ſediment.

All the foregoing oils are deſigned for external applications. Their general virtues are to ſoften and relax; by which qualities, they prove ſerviceable in tenſion, rigidity, contractions, and inflammations of particular parts; and in pains proceeding from theſe cauſes. As ſeveral of them contain thoſe parts of the ingredients in which their virtues principally reſide, they are hence ſuppoſed capable in ſome degree of exerting thoſe virtues when externally applied: thus, the oil of wormwood, rubbed on the ſtomach and umbilical region, is ſaid to excite appetite, ſtrengthen the viſcera, and kill worms; that of chamomile flowers, to be a warm diſcutient and reſolvent; thoſe of St. John's wort flowers and dill leaves, to be peculiarly grateful to the nerves, to give great relief in all kinds of pains and wearineſs, to reſolve tumors, and heal wounds and ulcers; the oil of mucilages, to be ſofter and more emollient than common oil; but in this inſtance, general opinion is not true; that of rue, to be of ſingular efficacy againſt ſchirrous ſwellings, and hardneſs of the ſpleen, &c. It is preſumed, however, that at preſent there are few who expect much more from theſe preparations than from common oil itſelf, which has the advantage of being leſs offenſive: the reſinous parts of vegetables, however active when taken inter-

nally in a proper form, can ſcarce be ſuppoſed, when combined with a large quantity of oil, to have any conſiderable effect in external applications.

Oleum Roſaceum. Oil of Roſes.

Take of the exungulated red roſes, not quite blown, and bruiſed in a marble mortar with a wooden peſtle, four ounces; of clean oil of olives a pound; expoſe them to the mid-day ſun in a glaſs veſſel, well ſtopt, for a whole week, and ſhake them together every day; then gently ſimmer in a bath-heat, and preſs out the oil: put in freſh roſes, which manage after the ſame manner, and repeat the proceſs a third time, and then let them ſtand together for forty days, at the expiration of which ſet by the oil for uſe, without preſſing out the roſes.

Oleum Cheirinum, ſive Keirinum. Oil of Wall Flowers.

This is made of the flowers and oil, in the ſame manner as that of dill.

Oleum ſive Balſamum ſimplex Hyperici. Simple Oil or Balſam of St. John's Wort.

This is made from the oil of the St. John's wort ſeeds, ground in a mill and preſſed out, with the addition of St. John's wort flowers, duly macerated together in the ſun.

Oleum Lumbricorum. Oil of Worms.

Take of earth-worms, half a pound; firſt waſh them in ſeveral waters, and then in white-wine, wherein let them ſtand a hour; then pouring off the wine put them into a double veſſel, and add to them two pounds of oil, and of white-wine half a pound; boil to the conſumption of all the wine, and ſtrain the oil through a linen cloth for uſe.

Oleum Nicotianæ. Oil of Tobacco.

Take of tobacco juice, and common oil, each equal parts, and boil them in a bath heat, *ſ. a.*

Oleum Papaveris. Oil of Poppies.

This is made of the flowers, heads, and leaves of garden poppies, and oil of olives, in the ſame manner as the oil of dill.

Oleum Rutaceum. Oil of Rue,

Is made of the bruiſed herb, and olive oil, as the oil of roſes.

Oleum Sabinæ. Oil of Savin,

Is made after the ſame manner.

Oleum Sambucinum. Oil of Elder,

Is made from the flowers and oil, as the oil of roſes.

There are many more ſimple oils directed to be made, much after the ſame manner, in ſome of the old Diſpenſatories, which are here neglected as things quite out of uſe; ſome alſo here retained are ſeldom to be met with, either in preſcription or the ſhops; particularly the *cheirinum*, *euphorbii*, *nardinum*, *nicotianæ*, and *papaveris*. The double veſſel made uſe of, as directed in theſe operations, is the veſſel containing the medicine, ſet in another full of water and receiving its heat from that, and not immediately from the fire, which much ſoftens it. The ſame contrivance is likewiſe to be underſtood, wherever a bath heat, or that of *balneo Mariæ*, is ordered.

Com-

Compound Oils, by Infuſion and Decoction.

Oleum Exceſtrenſe. Exeter Oil.

Take of wormwood, the leſſer centaury, eupatorium, fennel, hyſſop, bays, marjoram, ſavin, ſage, and thyme, of each four ounces; of ſouthernwood, betony, ground-pine, and lavendar, of each ſix ounces: of roſemary, one pound; of chamomile and broom flowers, of cummin and funugreek ſeeds, of black and white hellebore-root, and of lemon peels, of each four ounces; of euphorbium, muſtard, caſtor, and pellitory, of each one ounce; of oil, ſixteen pounds; and of wine three pounds. Let the herbs, flowers, ſeeds, and euphorbium be bruiſed; the roots, peels, and caſtor ſliced, and macerated together twelve hours, in a bath heat, with the wine and oil: then after a gentle boiling, till the wine is all conſumed by evaporation, let the oil be ſtrained out and kept for uſe.

Oleum Mandragoræ.

Oil of Mandrake.

Take common oil, two pounds; of the juice of mandrake apples, or, in their defect, of its leaves, four ounces: of the juice of white henbane, two ounces; of the juice of black poppy heads, three ounces; of the juices of violets and young hemlock, of each one ounce; of opium and ſtorax, of each half an ounce. Let the juices, with the oil, be expoſed to the ſun; and after ten days ſtanding, boil them leiſurely to the conſumption of the juices; then ſprinkle in the opium finely powdered; and work in the ſtorax firſt diſſolved in a ſufficient quantity of turpentine, *ſ. a.*

It is intended againſt inflammations, to procure ſleep, and eaſe pains in the head, by waſhing the temples and noſtrils with it; but it is rarely preſcribed; and hardly to be met with ready made.

Empyreumatic Oils.

L. *Oleum Buxi.*

Oil of Box.

Diſtil pieces of box wood, in a retort, with a ſand heat gradually increaſed: the oil will come over, along with an acid ſpirit, which is to be ſeparated by a funnel.

Oleum Guaiaci.

Oil of Guaiacum.

Put any quantity of chips of guaiacum, into an earthern long neck or a glaſs retort, and diſtil either in a ſand bath or an open fire, increaſing the heat by degrees. At firſt an acid liquor will come over, afterwards in a light red oil, and at length, in the utmoſt degree of fire, a thin black oil, which ſinks through the other liquors to the bottom of the receiver.

Oils may be obtained after the ſame manner from every kind of wood.

The oils obtained by this treatment from different woods and plants, are nearly of the ſame qualities: they have all a very diſagreeable acrid taſte, and a burnt ſtinking ſmell; without any thing of the peculiar flavour, taſte, or virtues of the ſubject which afforded them. By rediſtilling them a number of times along with water, they become leſs and leſs diſagreeable; and in this ſtate have been given from ten to twenty drops, as anodynes and diaphoretics. Some have entertained a very high opinion of them in epilepſies, in hyſteric and ſpaſmodic diſorders:

in

in theſe caſes they may poſſibly be of ſome ſervice, though their real merit falls far ſhort of what is promiſed of them. The preſent practice rarely employs theſe oils any otherwiſe than for external purpoſes, as the cleanſing of foul bones, for the tooth-ach, againſt ſome kinds of cutaneous eruptions, old pains and aches, and the like; and for theſe, not very often.

L. *Oleum Lateritium.*
Oil of Bricks.

Heat bricks red hot, and quench them in oil olive, till they have ſoaked up all the oil: then break them into pieces ſmall enough to be conveniently put into a retort; and diſtil with a ſand heat gradually increaſed: an oil will ariſe, together with a ſpirit, which is to be ſeparated from it as in the foregoing proceſs.

This preparation has had a place in moſt Diſpenſatories, under the pompous names of *oleum philoſophorum*, *ſanctum*, *divinum*, *benedictum*, and others, as improper as that under which it ſtands above. It is really oil olive, rendered ſtrongly empyreumatic by heat: the ſpirit, ſo called, is no more than phlegm, or water, tainted with the burnt flavour of the oil. It has been celebrated for ſundry external purpoſes, particularly againſt gouty and rheumatic pains, deafneſs and tingling of the ears, &c. and ſometimes likewiſe given inwardly. But common practice ſeems to have now entire rejected this loathſome remedy.

L. *Oleum Petrolei Barbadenſis.*
Oil of Barbadoes Tar.

Diſtil Barbadoes tar with a ſand heat; and an oil will ariſe, together with a ſpirit which is to be ſeparated from it.

This oil is intended for the ſame purpoſes as the foregoing ones. It is ſomewhat leſs diſagreeable, tho' very acrid and ſtimulating.

L. *Oleum Terebinthinæ Æthereum; & Empyreumaticum ſive Balſamum.*
The Ethereal Oil of Turpentine, and the Empyreumatic Oil or Balſam.

Diſtil the eſſential oil of turpentine in a retort, with a very gentle fire, until what remains has acquired the conſiſtence of a balſam.

Balſam of turpentine may likewiſe be obtained from the yellow reſin left after the diſtillation of the eſſential oil: upon diſtilling this in a retort, at firſt a portion of thin oil ariſes, which is to be kept by itſelf, and afterwards a thick balſam: there remains in the retort a blackiſh reſin, called colophony.

The oil here called etherial does not conſiderably differ in ſpecific gravity, ſmell, taſte, or medical qualities, from the cheaper one obtained by the addition of water in the common ſtill; nor are the empyreumatic thin oil and balſam of any great eſteem in practice.

L. *Oleum Copaivæ compoſitum.*
Compound Oil of Balſam of Copaiva.

Take two pounds of balſam of Copaiva, and four ounces of gum guaiacum. Diſtil them in a retort, continuing the operation till a pint of oil is come over.

This mixture, undiſtilled, proves, a medicine of conſiderable efficacy in rheumatic caſes, &c. In diſtillation, the guaiacum gives over little, ſerving chiefly for the ſame purpoſe

purpoſe that bricks do in the *oleum lateritium*.

Balſamum Anodynum, vulgo Guidonis.

The anodyne, commonly called Guido's Balſam.

Take of tacamahaca, Venice turpentine, each equal parts. Put them into a retort, whereof they may fill two thirds, and diſtil with a fire gradually increaſed. Separate, according to art, the red oil or balſam, from the liquor that ſwims above it.

SECT. X.

Emplaſtra, Unguenta, Cerata, Epithemata.

Plaſters, Ointments, Cerates, Epithems.

General rules for making Plaſters, &c.

I. SUCH plants as are employed in theſe compoſitions, ought to be freſh, juicy, and well bruiſed; unleſs they are ordered otherwiſe.

II. Boil the herbs till they are almoſt criſp, taking care to prevent the matter from contracting a black colour: afterwards ſtrain off the liquid, and ſet it on the fire again, that all the aqueous moiſture may exhale.

III. Metallic powders are to be boiled firſt with the oils and unctuous ingredients, till duly united. Such gums as are readily ſoluble, powders, and alſo turpentine, are to be added towards the end of the operation.

IV. Plaſters require the addition of water, till they have acquired a due conſiſtence.

The uſe of the water is, to keep the plaſter from burning and growing black. Such water, as it may be neceſſary to add during the boiling, muſt be previouſly made hot: cold liquor would not only prolong the proceſs, but likewiſe occaſion the matter to explode and be thrown about with violence, to the great danger of the operator: this accident will equally happen upon the addition of hot wine, if the plaſter is extremely hot.

Plaſters.

Emplaſtrum Anodynum.

Anodyne Plaſter.

Take of white reſin, eight ounces: tacamahaca in powder, galbanum, each four ounces; cummin ſeeds, powdered, three ounces; black ſoap, four ounces. Melt the reſin and the gums together; then add the ſeeds and the ſoap, and make the whole into a plaſter, according to art.

This plaſter ſometimes gives eaſe in ſlight gouty and rheumatic pains, which it is ſuppoſed to effect by preventing the afflux of humors to the part, and putting in motion and repelling ſuch as already ſtagnate there.

E. *Emplaſtrum Anti-Hyſtericum.*
Antihyſteric Plaſter.

Take of ſtrained galbanum, twelve ounces; aſſa fœtida and yellow wax, each ſix ounces; white reſin, three ounces. Mix and make them into a plaſter, according to art.

This plaſter is applied to the umbilical region, or over the whole abdomen, in hyſteric caſes; and ſometimes with good effect.

L. *Emplaſtrum Attrahens.*
Drawing Plaſter.

Take of yellow reſin, yellow wax, each three pounds; tried mutton ſuet, one pound. Melt them together, and whilſt the maſs remains fluid, paſs it through a ſtrainer.

E. D. *Emplaſtrum Cereum ſive Attrahens.*
Waxen Plaſter.

Take of yellow wax, two pounds; of white reſin half a pound; hogs lard a pound. Melt them on a gentle fire, then continually ſtir it until it is cold.

This and the above is calculated to ſupply the place of melilot plaſter; whoſe great irritation, when employed for the dreſſing of bliſters has been continually complained of. Indeed plaſters of any kind are not very proper for this purpoſe: their conſiſtence makes them ſit uneaſy, and their adheſiveneſs renders the taking them off painful. Cerates, which are ſofter and leſs adheſive, appear much more eligible.

L. *Emplaſtrum Cephalicum.*
Cephalic Plaſter.

Take of Burgundy pitch, two pounds; ſoft labdanum, one pound; yellow reſin, yellow wax, each four ounces; the expreſſed oil, called oil of mace, one ounce. Melt the pitch, reſin, and wax together; then add, firſt the labdanum, and afterwards the oil of mace.

Take of yellow wax, tacamahaca, each four ounces; Venice turpentine, four ounces; eſſential oil of lavender, two drachms; oil of amber, one drachm. Add the oils to the other ingredients, previouſly made into a plaſter and grown almoſt cold.

Theſe plaſters are applied in weakneſs or pains of the head, to the temples, forehead, &c. and ſometimes likewiſe to the feet.

Emplaſtrum de Cicuta cum Ammoniaco.
Plaſter of Hemlock with Ammoniacum.

Take of hemlock juice four ounces; gum ammoniacum, eight ounces; vinegar of ſquills, as much as is ſufficient to diſſolve the gum. Add the juice to this ſolution, and having ſtrained the mixture, boil it to the conſiſtence of a plaſter.

This is ſuppoſed to be a powerful cooler and diſcutient, and particularly ſerviceable againſt ſwellings of the ſpleen and diſtenſions of the hypochondres.

L. *Emplaſtrum Commune.*
Common Plaſter.

Take of oil of olive, one gallon; litharge, ground into a moſt ſubtile powder, five pounds. Boil them over a gentle fire, with about two pints of water, keeping them continually ſtirring, till the oil and litharge unite, and acquire the conſiſtence of a plaſter. If all the water ſhould be conſumed before this

this happens, add ſome more water, previouſly made hot.

E. D. Take of litharge five pounds; oil of olive, a gallon; boil as in the preceding. This is inſtead of the *Diachylon ſimplex*, & *Diapalma*.

Theſe plaſters are the common application in excoriations of the ſkin, ſlight freſh wounds, and the like. They keep the part ſoft, and ſomewhat warm, and defend it from the air, which is all that can be expected in theſe caſes from any plaſter.

L. *Emplaſtrum communi Adhæſivum.*
Common Sticking Plaſter.

Take of common plaſter, three pounds; yellow reſin, half a pound. Melt the common plaſter over a very gentle fire; then add the reſin, firſt reduced into powder that it may melt the ſooner; and mix them all together.

E. *Emplaſtrum Adhæſivum ſive commune Adhæſivum.*
Sticking Plaſter.

Take of common plaſter, two pounds; white reſin, five ounces. Melt them together, ſo as to make a plaſter.

Theſe plaſters are uſed chiefly as adheſives, for keeping on other dreſſings, &c.

L. *Emplaſtrum commune cum Gummi.*
Common Plaſter with Gums.

Take of common plaſter, three pounds; galbanum ſtrained, eight ounces; common turpentine, frankincenſe, each three ounces. Melt the galbanum with the turpentine, over a gentle fire, and ſprinkle in the frankincenſe, reduced to powder: then gradually mix with theſe the common plaſter, previouſly liquefied by a very gentle heat. Or, inſtead of the common plaſter already made, you may take the oil and litharge boiled together: as ſoon as theſe unite, before they have acquired the conſiſtence of a plaſter, the other ingredients are to be added.

E. *Emplaſtrum Gummoſum, ſive Emplaſtrum commune cum Gummi.*
Diachylon Plaſter with Gums.

Take of common plaſter, two pounds; gum ammoniacum ſtrained, galbanum ſtrained, and yellow wax, of each three ounces. Melt them with a gentle heat, and make them into a plaſter.

Theſe plaſters are uſed as digeſtives and ſuppuratives; particularly in abſceſſes, after a part of the matter has been maturated and diſcharged, for ſuppurating or diſcuſſing the remaining hard part.

L. *Emplaſtrum e Cymino.*
Cummin Plaſter.

Take of Burgundy pitch, three pounds; yellow wax, cummin ſeeds, caraway ſeeds, bay berries, each three ounces. Melt the pitch with the wax; then ſprinkle in the other ingredients, firſt reduced into a powder, and mix the whole well together.

This plaſter ſtands recommended as a moderately warm diſcutient; and directed to be applied to the hypogaſtric region, for ſtrengthening the viſcera, and expelling flatulencies.

E. *Emplaſtrum Defenſivum ſive roborans.*
Defenſive Plaſter.

Take of common plaſter, two pounds; yellow wax and white reſin, of each three ounces; colcothar of vitriol, four ounces; olive

olive oil, two ounces. Rub the colcothar with the oil, then mix it with the reſt after melting them over a gentle fire.

This plaſter is laid round the lips of wounds and ulcers, for defending them from inflammation, and other ill ſymptoms; which it is ſuppoſed to effect, by ſomewhat conſtringing the veſſels, and thus preventing the afflux of humors to the part.

L. *Emplaſtrum ex Ammoniaco cum Mercurio.*

Plaſter of Ammoniacum with Mercury.

Take of gum ammoniacum, ſtrained, one pound; quickſilver, three ounces; ſimple balſam of ſulphur, one drachm. Grind the quickſilver with the balſam of ſulphur, till it ceaſes to appear; then having melted the ammoniacum, add it gradually a little before it cools, to this mixture: and let the whole be perfectly mingled together.

This is a very well contrived mercurial plaſter: if in ſome caſes, it ſhould not prove adheſive enough, the addition of a ſmall quantity of turpentine will readily make it ſo.

L. *Emplaſtrum commune cum Mercurio.*

Common Plaſter with Mercury.

Take of common plaſter, one pound; quickſilver, three ounces; ſimple balſam of ſulphur, one drachm. Make them into a plaſter, after the ſame manner as the foregoing.

E. *Emplaſtrum Mercuriale ſive commune cum Mercurio.*

Mercurial Plaſter.

Take of quickſilver, eight ounces; Venice turpentine, two ounces and a half; common plaſter, a pound and a half. Rub the quickſilver in a mortar with the turpentine until the globules diſappear; then by little and little add the plaſter, previouſly melted by a gentle heat.

Theſe mercurial plaſters are looked on as powerful reſolvents and diſcutients, acting with much greater certainty in theſe intentions, than any compoſition of vegetable ſubſtances alone; the mercury exerting itſelf in a conſiderable degree, though it is rarely introduced into the habit, in ſuch quantity as ſenſibly to affect the mouth. Pains in the joints and limbs from a venereal cauſe, nodes, tophs, beginning ſchirroſities, and indurations of the glands, ſometimes yield to them.

L. *Emplaſtrum e Minio.*

Red Lead Plaſter.

Take of oil olive, four pints; red lead, reduced to a moſt ſubtile powder, two pounds and a half: make them into a plaſter, after the manner directed for preparing the common plaſter: but more water is here required, and greater care is neceſſary to prevent the compoſition from burning and growing black.

Emplaſtrum Croceum, vulgo Oxycroceum.

The Plaſter called Oxycroceum.

Take of yellow wax, Burgundy pitch, each, one pound; galbanum, half a pound; tar, half a pound; ſaffron, two ounces; mix and make them into a plaſter, according to art.

This plaſter is ſaid to ſtrengthen the parts to which it is applied, eſpecially the tendinous ones; to warm in a great degree, and to ſolve and diſcuſs cold tumors.

L. *Em-*

L. *Emplaſtrum e Mucilaginibus.*
Plaſter of Mucilages.

Take of yellow wax, forty ounces; oil of mucilages, half a pint; gum ammoniacum ſtrained, half a pound; common turpentine, two ounces. Melt the ammoniacum with the turpentine; and having, in another veſſel liquefied the wax with the oil, add this latter mixture to the other.

L. *Emplaſtrum roborans.*
Strengthening Plaſter.

Take of common plaſter, two pounds; frankincenſe, half a pound; dragons blood, three ounces. Melt the common plaſter, and add to it the other ingredients reduced into powder.

This is a reformation of the laborious and injudicious compoſition deſcribed in our preceding Pharmacopœias, under the title of *Emplaſtrum ad Herniam*; and though far the moſt elegant and ſimple, is as effectual for that purpoſe, as any of the medicines of this kind. If conſtantly worn, with a proper bandage, it will, in children, frequently do ſervice; though not ſo much from any ſtrengthening quality of the ingredients, as from its being a ſoft, cloſe, and adhefive covering. It has been ſuppoſed, that plaſters compoſed of ſtyptic medicines, conſtringe and ſtrengthen the part to which they are applied, but on no very juſt foundation; for plaſters in general relax rather than aſtringe, the unctuous ingredients neceſſary in their compoſition, counteracting and deſtroying the effect of the others.

L. *Emplaſtrum e Sapone.*
Soap Plaſter.

Take of common plaſter, three pounds; hard ſoap, half a pound. Having melted the common plaſter, mix with it the ſoap, and boil them to the conſiſtence of a plaſter. Take care not to let it grow too cold before you form it into rolls; otherwiſe it will prove too brittle.

E. *Emplaſtrum Saponaceum, ſive e Sapone.*

Take of common plaſter, two pounds; common plaſter with gums, one pound; white Spaniſh ſoap, nine ounces. To the plaſters melted, add the ſoap finely ſhaved; then boil them gently to make it into a p aſter.

L. *Emplaſtrum Stomachicum.*
Stomach Plaſter.

Take of ſoft labdanum, three ounces; frankincenſe, one ounce; cinnamon, the expreſſed oil called oil of mace, each half an ounce; eſſential oil of mint, one drachm. Having melted the frankincenſe add to it, firſt the labdanum ſoftened by heat, and then the oil of mace; afterwards mix theſe with the cinnamon and oil of mint; and beat them together in a warm mortar into a maſs, which is to be kept in a cloſe veſſel.

This is a very elegant ſtomach plaſter.

Take of yellow wax, eight ounces; tacamahaca in powder, four ounces; palm oil, ſix ounces; powder of clove July-flowers, two ounces; expreſſed oil of mace, an ounce and a half; eſſential oil of mint, two drachms. Melt the wax and tacamahaca together, then add the other ingredients, and make them into a plaſter, according to art.

Theſe plaſters are applied to the pit of the ſtomach, in weakneſs of that viſcus, in vomitings, the diſ-

order

order improperly called the heart-burn, &c. and ſometimes with good ſucceſs.

L. *Emplaſtrum Veſicatorium.*
Bliſtering Plaſter.

Take of drawing plaſter, two pounds; cantharides, one pound; vinegar, half a pint. Melt the drawing plaſter, and a little before it grows ſtiff, mix in the cantharides, reduced into a moſt ſubtile powder; then add the vinegar, and work them well together.

E. *Emplaſtrum Veſicatorium vulgo Emplaſtrum Epiſpaſticum.*
Bliſtering Plaſter.

Take of yellow wax, two pounds; white reſin and hogs lard, of each one pound; olive oil, eight ounces, and powdered cantharides, a pound and a half. Mix the powdered flies with the oil, then gradually add the mixture to the other ingredients previouſly melted, but removed from the fire.

Emplaſtrum volatile.
Volatile Plaſter.

Take of Venice turpentine, ſpirit of ſal ammoniac, each one ounce; beat the turpentine in a mortar, pouring on it, by little and little, the ſpirit of ſal ammoniac.

This is a very acrid compoſition, and as ſuch is ſometimes applied in rheumatic and iſchiadic pains.

Ointments, Liniments, and Cerates.

L. *Unguentum Album.*
White Ointment.

Take of oil olive, one pint; white wax, four ounces; ſperma ceti, three ounces. Liquefy them by a gentle fire, and keep them conſtantly and briſkly ſtirring till grown thoroughly cold.

E. *Unguentum e Ceruſſa, vulgo Album.*

Take of oil olive, three pints: ceruſe and white wax, of each nine ounces. Mix and make them into an ointment, according to art.

Theſe are uſeful, cooling, emollient ointments, of good ſervice in excoriations, and other like frettings of the ſkin. The ceruſe is omitted in the firſt preſcription, on a ſuſpicion that it might produce ſome ill effects, when applied, as theſe unguents frequently are, to the tender bodies of children.

L. *Unguentum Album Camphoratum.*
Camphorated White Ointment.

This is made by adding to the white ointment a drachm and a half of camphor, previouſly ground with ſome drops of oil of almonds.

This ointment is ſuppoſed to be more diſcutient than the foregoing, and ſerviceable againſt cutaneous heats, itching, and ſerpiginous eruptions. It ſhould be kept in cloſe veſſels, otherwiſe the camphor will ſoon exhale: its ſmelling ſtrong of this ingredient is the beſt mark of its goodneſs.

L. *Unguentum ex Althæa.*
Ointment of Marſhmallows.

Take of oil of mucilages, three pints; yellow wax, one pound; yellow reſin, half a pound; common turpentine, two ounces. Melt the reſin and wax with the oil; then, having taken them from the fire,

fire, add the turpentine, and while the mixture remains hot, ſtrain it. This ointment does not receive any advantage from the ingredient to which it owes its name. See *Ol. E. Mucilage.*

L. *Unguentum Baſilicum Flavum.*
Yellow Baſilicum Ointment.

Take of oil olive, one pint; yellow wax, yellow reſin, Burgundy pitch, each one pound; common turpentine, three ounces. Melt the wax, reſin, and pitch, along with the oil over a gentle fire; then take them from the fire, add the turpentine, and whilſt the mixture remains hot, ſtrain it.

E. *Unguentum Baſilicum Flavum.*
Yellow Baſilicum Ointment.

Take of yellow wax and white reſin, of each two ounces; hogs lard and olive oil, of each one pound. Melt them gently over the fire, then remove them therefrom, and continually ſtir them until they mix into an ointment.

Theſe are commonly employed in dreſſings, for digeſting, cleanſing, and incarnating wounds and ulcers. They differ very little, if at all, in their effects, from the *linimentum Arcæi.*

L. *Unguentum Baſilicum Nigrum vel Tetrapharmacum.*
Black Baſilicum Ointment, or Ointment of Four Ingredients.

Take of oil olive, one pint; yellow wax, yellow reſin, dry pitch, each nine ounces. Melt them all together, and whilſt the mixture is hot, ſtrain it off.

This ointment was formerly of conſiderable eſteem for healing and incarnating wounds, &c. but is ſaid to have an inconvenience of being apt to render them foul, and produce fungous fleſh: at preſent it is rarely made uſe of: the yellow baſilicum, and the liniment of Arcæus being in general preferred.

L. *Unguentum Baſilicum Viride.*
Green Baſilicum Ointment.

Take of yellow baſilicum, eight ounces; oil olives, three ounces by meaſure; verdigriſe prepared, one ounce. Mix and make them into an ointment.

Our hoſpitals have been accuſtomed to prepare an ointment greatly reſembling this, under the title of *unguentum viride detergens.*

E. *Unguentum Cereum, ſive Album.*

Take of olive oil, one pint; white wax, four ounces; ſperma ceti, three ounces. Mix them by melting them over a gentle fire, then ſtirring them together until they become cool.

Unguentum Citrinum.
Yellow Ointment.

Take of quickſilver, one ounce; ſpirit of nitre, two ounces; hogs lard, tried, one pound. Diſſolve the quickſilver in the ſpirit of nitre, by letting them ſtand together a few minutes, then mix the ſolution with the lard, by ſtirring them well together. After a few hours it becomes of a yellow colour, and in two or three days it acquires a conſiderable hardneſs.

It is uſed in ſeveral kinds of eruptions on the ſkin; it is highly extolled as an efficacious remedy againſt the itch; and, as a gentle eſcharotic, it is frequently uſed in our hoſpitals.

L. *Unguentum Cæruleum fortius.*
The Stronger Blue Ointment.

Take of hogs lard, tried, two

pounds; quickſilver, one pound; ſimple balſam of ſulphur, half an ounce. Grind the quickſilver with the balſam of ſulphur till they are perfectly incorporated; then gradually add the lard heated, and mix them carefully together.

L. *Unguentum Cæruleum mitius.*
The Milder Blue Ointment.

Take of hogs lard, tried, four pounds; quickſilver, one pound; common turpentine, one ounce. Grind the quickſilver with the turpentine, in a mortar, till it ceaſes to appear; then gradually add the lard warmed, and carefully mix them together.

Mercurial unguents have in many caſes the ſame effects with the preparations of this mineral taken internally; and are at preſent frequently employed, not only againſt cutaneous diſorders, as alterants; but likewiſe in venereal and other obſtinate caſes, for raiſing a ſalivation. The ptyaliſm excited by unction is ſaid to be attended with the feweſt inconveniencies, and to perform the moſt complete cure.

E. D. *Unguentum Emolliens.*

Take of palm oil, four pints; freſh linſeed oil, three pints; yellow wax, one pound; white reſin, three ounces. Melt them together over a gentle fire, then ſtirring them together until cold. This is to ſupply the place of the *unguentum dialthæ.*

L. *Unguentum e Gummi Elemi.*
Ointment of Gum Elemi.

Take of mutton ſuet, freſh and tried, two pounds; gum elemi, one pound; common turpentine, ten ounces. Melt the gum with the ſuet, and having taken them from the fire, immediately mix in the turpentine; then whilſt the maſs remains fluid, ſtrain it off.

E. *Unguentum Mercuriale.*
Mercurial Ointment.

Take of hogs lard and mutton ſuet, of each one ounce; quickſilver, one ounce. Beat them diligently together, till the quickſilver diſappears. It may likewiſe be made with two, three, or more times the quantity of quickſilver.

This is the moſt ſimple of the mercurial ointments, though poſſibly as efficacious as any. It requires indeed a great deal more labour to extinguiſh the mercury in the lard alone, than when turpentine, or other like ſubſtances are joined: but, in recompence, the compoſition with lard is free from an inconvenience which the others are accompanied with, viz. being apt, by frequent rubbing, to fret tender ſkins. Some chuſe to ſtiffen this ointment with a fourth part of ſuet (proportionably diminiſhing the lard) which gives it a better conſiſtence for uſe.

L. *Unguentum e Mercurio Præcipitato.*
Ointment of Mercury Precipitate.

Take of ſimple ointment, an ounce and a half; precipitate ſulphur, two drachms; white mercury precipitate, two ſcruples. Mix them well together, and moiſten them with ley of tartar, that they may be made into an ointment.

This is a very elegant mercurial ointment, and frequently made uſe of againſt cutaneous diſorders. The preparations of mercury and ſulphur here directed, are choſen on account of their colour.

Un-

Unguentum Nervinum.
Ointment for the Nerves.

Take of mutton ſuet, two pounds; melt it over a gentle fire and make it into an ointment with a pint of chamomile oil; take it from the fire, and ſtir into it a pint and a half of laurel oil, and two ounces of the diſtilled oil of origanum or roſemary. This ointment is ſuppoſed to warm and ſtrengthen the nerves, to remove numbneſſes, and to be ſerviceable in palſies.

Unguentum Nutritum.
The Ointment called Nutritum.

Take of litharge, vinegar, each two ounces; oil olive, ſix ounces. Rub them in a mortar, adding the oil and vinegar alternately by little and little at a time, till the vinegar ceaſes to appear, and the ointment becomes uniform and white.

This ointment is troubleſome to make, and does not keep well, the vinegar exhaling, ſo as to leave the compound too ſtiff. It is ſuppoſed to be a good cooler and deſiccative; and is occaſionally uſed in excoriations, ſlight ſerpiginous eruptions, and for anointing the lips of wounds or ulcers that itch much, or tend to inflammation.

L. E. *Unguentum e Pice.*
Ointment of Tar.

Take of mutton ſuet tried, tar, each equal weights. Melt them together, and ſtrain the mixture whilſt hot.

This compoſition, with the addition of half its weight of reſin, has long been uſed in the ſhops as a cheap ſubſtitute to the black baſilicum.

L. *Unguentum Sambucinum.*
Ointment of Elder.

Take of elder flowers, full blown, four pounds; mutton ſuet tried, three pounds; oil olive, one pint. Melt the ſuet with the oil, and in this mixture boil the flowers till they are almoſt criſp; then ſtrain and preſs out the ointment.

Take of the inner bark of the elder tree, the leaves of elder, freſh, each four ounces; linſeed oil, two pints; white wax, ſix ounces. Let the bark and leaves be well bruiſed, and boiled in the oil till the humidity is conſumed; then preſs out the oil through a ſtrainer, and melt in it the wax, ſo as to make an ointment.

Theſe ointments do not ſeem ſuperior to ſome others which are much neater, and parable at leſs expence. They can ſcarce be ſuppoſed to receive any conſiderable virtue from the ingredients which they take their name from.

L. *Unguentum Saturninum.*
Saturnine Ointment.

Take of oil olive, half a pint; white wax, an ounce and a half; ſugar of lead, two drachms. Let the ſugar of lead, reduced into a very ſubtile powder, be ground with ſome part of the oil, and the wax melted with the reſt of the oil: mix both together, and keep them ſtirring till the ointment is grown cold.

E. *Unguentum Saturninum.*
Saturnine Ointment.

Take of ſugar of lead, half an ounce; white wax, three ounces; oil olive, one pint. Liquefy the oil and wax together, and gradually add the ſugar of lead, firſt well mixt with a little of the oil, continually ſtirring them till growing cold they unite into an ointment.

This is an excellent cooler and deſiccative; much ſuperior, both in elegancy and efficacy to the *nutritum* or *tripharmacum*.

L. *Unguentum ſimplex.*
The Simple Ointment.

Take of hog's lard, tried, two pounds; roſe water, three ounces by meaſure. Beat the lard with the roſe water, till they are well mixed; then melt them over a very gentle fire, and ſet them by for ſome time, that the water may ſubſide: pour the lard off from the water, and keep inceſſantly ſtirring and beating it about till it grows cold, ſo as to reduce it into a light incoherent maſs: laſtly add ſo much eſſence of lemons as will be ſufficient to give a grateful odour.

Unguentum Roſaceum, vulgo Pomatum.
The Roſe Ointment, commonly called Pomatum.

On any quantity of hog's lard, cut into ſmall pieces, and placed in a glazed earthen veſſel, pour as much water as will riſe above it ſome inches; and digeſt them together for ten days, renewing the water every day. Then liquefy the lard with a very gentle heat, and pour it into a proper quantity of roſe water: work them well together; and afterwards, pouring off the water, add to the lard ſome drops of oil of rhodium.

Theſe ointments are in common uſe, for ſoftening and ſmoothing the ſkin, and healing chaps.

L. *Unguentum e Sulphure.*
Ointment of Sulphur.

Take of the ſimple ointment, half a pound; flowers of ſulphur, unwaſhed, two ounces; eſſence of lemons, one ſcruple. Mix them together.

This is deſigned for the itch and cutaneous diſorders.

L. *Unguentum Tripharmacum.*
Ointment of Three Ingredients.

Take of common plaſter, four ounces; oil olive, two ounces by meaſure; vinegar, one ounce by meaſure. Boil them together over a gentle fire, keeping them continually ſtirring till they are reduced to the conſiſtence of an ointment.

This is a new method of preparing the *unguentum nutritum*, much leſs troubleſome than the one already deſcribed under that title. The compoſition proves likewiſe more ſmooth and uniform, and not ſo liable to grow dry in keeping. This ointment is nevertheleſs inferior, both in reſpect of elegancy and efficacy, to the *unguentum ſaturninum*.

L. *Unguentum Tutiæ.*
Ointment of Tutty.

Let any quantity of prepared tutty be mixed with as much purified vipers fat as is ſufficient to reduce it into the conſiſtence of a ſoft ointment.

This ointment is deſigned for an ophthalmic.

E. Take of hog's lard, four ounces; white wax, two drachms; tutty an ounce. Liquefy the wax with the lard, over a gentle fire; then gradually ſprinkle in the tutty, continually ſtirring them, till the ointment grows cold.

The ointment of tutty made with butter turns ſo ſoon rancid, as to be improper for an officinal.

Unguentum Tutiæ Camphoratum.
Ointment of Tutty with Camphor.

This is made by adding to the former

former two drachms of camphor. It is likewiſe made with double the quantity of camphor.

L. *Unguentum ad Veſicatoria.*
Unguentum Epiſpaſticum.
Ointment for Bliſters.

Take of hog's lard, tried, bliſtering plaſter, each equal weights. Melt them together over a very gentle fire, and keep them conſtantly ſtirring till grown cold.

E. Take of olive oil, one pound; yellow wax, four ounces; white reſin, two ounces; cantharides, one ounce and a half. On a gentle fire, melt the wax and the reſin with the oil; then remove them from the fire, and add by little and little the flies in powder, diligently ſtirring until the mixture becomes cold.

Theſe ointments are added in the dreſſings for bliſters, intended to be made perpetual as they are called, or to be kept running for a conſiderable time.

E. D. *Unguentum Epiſpaſticum mitius.*
The Milder Ointment for Bliſters.

Take of cantharides one ounce, infuſe them in four ounces of boiling water in a well corked bottle, for one night; ſtrain off the liquor, preſſing the bag very hard: boil the ſtrained liquor with two ounces of hog's lard till all the moiſture is waſted; then add of white reſin, and yellow wax, each one ounce; of Venice turpentine, two ounces.

This ointment is much better contrived than any of the preceding; and keeps a bliſter diſcharging without cauſing the ſtrangury, or ſo much pain as either of the former.

L. *Unguentum Viride.*
Green Ointment.

Take of the green oil, three pints; yellow wax, ten ounces; melt them together over a gentle fire, and keep the mixture continually ſtirring until it is grown cold.

This ointment does not ſeem to receive any particular virtue from the ingredients to which its colour is owing.

L. *Linimentum Album.*
White Liniment.

Take of oil olive, three ounces by meaſure; ſperma ceti, ſix drachms; white wax, two drachms. Melt them together over a gentle fire, and keep them conſtantly and briſkly ſtirring, till grown cold.

This differs only in conſiſtence from the *unguentum album.*

E. *Linimentum Cereum.*
The Wax Liniment.

Take of olive oil, three ounces; ſperma ceti, three drachms; white wax, two drachms. Melt them together on a gentle fire, then ſtir them continually until cold.

L. *Linimentum Saponaceum.*
Saponaceous Liniment.

Take of ſpirit of roſemary, one pint; hard Spaniſh ſoap, three ounces; camphor, one ounce. Digeſt the ſoap in the ſpirit of roſemary, until it is diſſolved: then add the camphor.

E. *Balſamum Saponaceum, vulgo Opodeldoch.*
Saponaceous Balſam, commonly called Opodeildoc

Take of Spaniſh ſoap, ten ounces;

ces; camphor, four ounces; eſſential oil of roſemary, an ounce; rectified ſpirit of wine, four pints. Digeſt the ſoap in the ſpirit of wine, with a gentle heat till it is diſſolved; then add the camphor and the oil, and ſhake the whole well together, that they may be perfectly mixed.

E. *Balſamum Anodynum.*
Anodyne Balſam.

This is made by occaſionally adding two ounces of opium to the foregoing ſaponaceous balſam.

This medicine ſtands highly commended for allaying gouty pains: it is ſaid to procure eaſe in the greateſt extremities of torture, to promote the tranſpiration of the irritating matter, and entirely to carry off the fit; a cloth, dipt in it, being laid on the part. It is likewiſe directed to be taken inwardly, from twenty to fifty drops, in the ſame diſorder, as alſo in nervous colics, the jaundice, and for deterging and cleanſing the viſcera.

Balſamum Viride.
Green Balſam.

Take of linſeed oil, oil of turpentine, each one pound; verdegriſe, in powder, three drachms. Boil and ſtir them well together till the verdegriſe is diſſolved.

A balſam, ſimilar to this, is ſaid to have been greatly valued by our ſurgeons as a detergent.

L. *Linimentum Tripharmacum.*
Liniment of Three Ingredients.

Take of common plaſter, four ounces; oil olive, a quarter of a pint; vinegar, one ounce by meaſure. Boil them over a gentle fire, continually ſtirring them until they acquire the conſiſtence of a liniment.

This is the ſame with the unguentum tripharmacum, except that the quantity of oil is here increaſed to give the compound the ſofter conſiſtence of a liniment.

L. *Linimentum Volatile.*
Volatile Liniment.

Take of oil of almonds, one ounce by meaſure; ſpirit of ſal ammoniac, two drachms by weight. Stir them together in a wide mouthed phial, until they perfectly unite.

Linimentum Volatile.
Volatile Liniment.

Take of oil of hartſhorn, and of ſpirit of hartſhorn of each equal parts, mix them together.

Dr. Pringle ſays, that in the inflammatory quinſey a piece of flannel, moiſtened with this mixture and applied to the throat, to be renewed every four or five hours is one of the moſt efficacious remedies. By means of this application, the neck, and ſometimes the whole body, is put into a ſweat, which, after bleeding, either carries off, or leſſens the inflammation. Where the ſkin cannot bear the acrimony of this mixture, the volatile liniment of the London Diſpenſatory as above may be uſed.

L. *Ceratum Album.*
White Cerate.

Take of oil olive, a quarter of a pint; white wax, four ounces; ſperma ceti, half an ounce. Liquefy them all together, and keep them ſtirring till the cerate is grown quite cold.

This differs from the white ointment and liniment only in being of a thicker conſiſtence.

L. *Ceratum Citrinum.*
Yellow Cerate.

Take of yellow baſilicum ointment,

ment, half a pound; yellow wax, one ounce; melt them together.

This is no otherwiſe different from the yellow baſilicum, than being of a ſtiffer conſiſtence, which renders it for ſome purpoſes more commodious.

L. *Ceratum Epuloticum.*
Epulotic Cerate.

Take of oil olive, one pint; yellow wax, calamine prepared, each half a pound. Liquefy the wax with the oil, and as ſoon as the mixture begins to grow ſtiff, ſprinkle in the calamine; keeping them conſtantly ſtirring together, till the cerate is grown quite cold.

E. *Unguentum e Lapide Calaminari.*
Ointment of Calamine.

Take of yellow wax, twelve ounces; oil olive, two pints; calamine prepared, nine ounces. Melt the wax with the oil, and gradually add the calamine, previouſly mixed with a little of the oil, and ſtir them well together till grown cold.

Theſe compoſitions are formed upon the cerate, which Turner ſtrongly recommends in cutaneous ulcerations and excoriations, and which has been uſually diſtinguiſhed by his name. They appear from experience to be excellent epulotics, and as ſuch are frequently made uſe of in practice.

L. *Ceratum Mercuriale.*
Mercurial Cerate.

Take of yellow wax, hog's lard, tried, each half a pound; quickſilver, three ounces; ſimple balſam of ſulphur, one drachm. Melt the wax with the lard, then gradually add this mixture to the quickſilver and balſam of ſulphur, previouſly ground together.

Epithems.

L. *Epithema Veſicatorium.*
Bliſtering Epithem.

Take of cantharides, reduced into a moſt ſubtile powder wheat flour, each equal weights. Make them into paſte with vinegar.

This compoſition is of a ſofter conſiſtence than the bliſtering plaſters, and for this reaſon is in ſome caſes preferred. Practitioners differ with regard to the degree of conſiſtence and adheſiveneſs moſt proper for applications of this kind, and ſometimes vary them occaſionally.

L. *Epithema Volatile.*
Volatile Epithem.

Take of common turpentine, ſpirit of ſal ammoniac, each equal weights. Stir the turpentine in a mortar, gradually dropping in the ſpirit, until they unite into a white maſs.

This is the *emplaſtrum volatile* of the Edinburgh Pharmacopœia.

L. *Cataplaſma e Cymino.*
Cataplaſm of Cummin.

Take of cummin ſeeds, half a pound; bay berries, ſcordium leaves dried, Virginian ſnake-root, each three ounces; cloves one ounce; honey, thrice the weight of the powdered ſpecies. Make them into a cataplaſm.

This is a reformation of the *Theriaca Londinenſis*, which for ſome time paſt has been ſcarce otherwiſe made uſe of than as a warm cataplaſm: only ſuch of its ingredients are retained as contribute moſt to this intention.

Cataplaſma Diſcutiens.
Diſcutient Cataplaſm.

Take of briony root, three ounces; elder flowers, one ounce;

gum ammoniacum, half an ounce; ſal ammoniac, crude, two drachms; camphorated ſpirit of wine, one ounce. Boil the root and flowers in a ſufficient quantity of water, till they become tender; and having bruiſed the magma, add to it the gum ammoniacum, diſſolved in a ſufficient quantity of vinegar, and likewiſe the ſal ammoniac and ſpirit: mix the whole together, ſo as to make them into a cataplaſm.

This compoſition is as good a diſcutient as any thing that can well be contrived in this form of a cataplaſm. In ſome caſes, however, it will contradict its title, and inſtead of diſcuſſing, promote ſuppuration.

L. *Cataplaſma Maturans.*
Ripening Cataplaſm.

Take of figs, four ounces; yellow baſilicum ointment, one ounce; galbanum, ſtrained, half an ounce. Beat the figs thoroughly in a mortar, occaſionally dropping in ſome ſpirit of wine or ſtrong ale; then carefully mix with them the ointment firſt liquefied along with the galbanum.

Cataplaſma Suppurans.
Suppurating Cataplaſm.

Take of white lily (or marſhmallow) roots, four ounces; fat figs, one ounce; raw onions, bruiſed, ſix drachms; galbanum, half an ounce; yellow baſilicum ointment, oil of chamomile by infuſion, each one ounce; meal, as much as is ſufficient. Let the lily (or marſhmallow) roots be boiled along with the figs, in a ſufficient quantity of water, till they become tender; then bruiſe, and add to them the other ingredients, and make the whole into a cataplaſm, according to art. The galbanum muſt be previouſly diſſolved in the yolk of an egg.

Both theſe compoſitions are good ſuppurants, or ripeners: though their effects probably depend more on their keeping the part ſoft, moiſt, and warm, than on any particular qualities of the ingredients.

Cataplaſma Aromaticum.
Aromatic Cataplaſm.

Take of long birthwort root, bay berries, each four ounces; ſweet fennel ſeed, leaves of mint, each three ounces; Jamaica pepper, myrrh, each two ounces; honey, three times the weight of the ingredients. Make the whole into a cataplaſm. This is intended for external application in thoſe caſes where the theriaca is uſed to be ordered.

Sinapiſmus. Sinapiſm.

Take of muſtard ſeed, in powder, crumb of bread, each equal parts; ſtrong vinegar, as much as is ſufficient. Mix them together.

This compoſition is employed only as a ſtimulant: it often inflames the part to which it is applied, and raiſes bliſters, but not ſo perfectly as cantharides. It has been cuſtomary to employ theſe kinds of acrid medicines in applications to the feet, with a view to make a derivation or revulſion from the head; but the ſervice which theſe irritating applications are of, in acute diſorders where the head already is, or is diſpoſed to be affected, can ariſe only from their impreſſing a ſtimulus, which is at firſt partial, and by degrees becomes univerſal.

L. *Coagulum Aluminoſum.*
Alum Curd.

Take any quantity of the white

of

of eggs; agitate it with a ſufficient large lump of alum, in a tin diſh, until it is coagulated.

This preparation is taken from Riverius. It is an uſeful aſtringent epithem for ſore moiſt eyes, and excellently cools and repreſſes thin defluxions. It may be applied upon a little tow, or the like, at bed time.

Unguenta, &c.

Ointments, &c. from the former London Diſpenſatory and others.

Unguentum Ægyptiacum.

The Egyptian Ointment.

Take of verdegriſe, or of the green ruſt of braſs, finely powdered, five parts; of honey fourteen parts; of the ſharpeſt vinegar, ſeven parts; boil them all together to a due conſiſtence, and a duſky red colour. The ſcum of this ointment is called *Mel Ægyptiacum*, Egyptian Honey.

Fabricius Hildanus, in a diſcourſe concerning a gangrene and a mortification, gives this medicine an extraordinary commendation, for eating off rotten fleſh and cleanſing old ulcers. In venereal ulcerations likewiſe about the throat and tonſils it does great ſervice.

Unguentum Ægyptiacum magis compoſitum.

A more compounded Egyptian Ointment.

Take of verdegriſe four ounces; of the ſharpeſt vinegar ſix ounces; of honey a pound; let them all boil over a gentle fire to a duſky colour, adding towards the latter end, roch alum and ſal ammoniac, of each half an ounce; and make them into an ointment, *ſ. a.*

E. *Unguentum ex Ærugine.*

Ointment of Verdegriſe.

Take of white wax and white reſin, of each two ounces; olive oil, a pint; verdegriſe, finely powdered, half an ounce. Mix the wax reſin and oil, by melting them over a gentle fire; then remove them therefrom, and by degrees add the verdegriſe, previouſly rubbed well with a little of the oil, then continually ſtir them until the ointment is cool.

N. B. It is alſo made with double the quantity of verdegriſe.

Unguentum e Gummi Elemi, ſive Linimentum Arcæi.

Ointment of Gum Elemi, or Arcæus's Liniment.

Take of gum elemi and turpentine of fir, of each an ounce and a half; of old and depurated mutton ſuet two ounces; of old and depurated hog's lard an ounce; mix them, and make an ointment, *ſ. a.*

This moſt commonly goes by the name of *Linimentum Arcæi*, from Arcæus its inventor, who, in a treatiſe, *De recta Vulnerum Curatione*, lib. i. cap. 4. greatly extols this balſam, as he calls it, particularly in wounds of the head; it digeſts and incarns much better than the baſilicon, which is apt to foul a wound, and generate fungous fleſh.

Unguentum Aureum.

The Golden Ointment.

Take of yellow wax, half a pound; of common oil, two pounds; of turpentine, two ounces; of the pine-tree reſin, and colophony, of each an ounce and a half; of frankincenſe and maſtich, of each an ounce; of ſaffron, a drachm; firſt of all melt the wax in the oil, then

then put in the turpentine, and give them a boil together; after they have ſtood to cool a little, ſift in all the reſt, finely powdered; but add the ſaffron laſt of all, and ſtir them about with a wooden ſpatula till they become an ointment, *ſ. a.*

Unguentum è Nicotiana, ſeu Peto.
Ointment of Tobacco.

Take of the depurated juice of tobacco, of freſh hog's lard diligently waſhed, of each one pound, and boil them together to the conſumption of the juice; then add of Venice turpentine, four ounces: and of round birthwort in powder, two ounces; and make them into an ointment, *ſ. a.*

This is originally taken from a Diſpenſatory of Laurentius Jobertus. Its firſt preſcriber gives it an extraordinary character for diſſipating ſcrophulous tumours, and healing green wounds; but the modern practice directs it chiefly in cutaneous foulneſſes: though it is ſo uncleanly a medicine at beſt, as to be offenſive to nice perſons.

Unguentum Nutritum.
An Ointment by Mixture.

Take of litharge of gold in fine powder, half a pound; of wine vinegar, five ounces; of oil of roſes, one pound. Let the litharge be ſtired about in a mortar, by turns pouring in oil and vinegar, in little parcels, until the vinegar ceaſes to be viſible, and the whole becomes a white ointment.

It is very drying; and even in keeping will grow ſo brittle as to want freſh oil to make it fit for uſe. But it is not greatly in eſteem.

Unguentum ex Oxylapatho.
Ointment of ſharp-pointed Dock.

Take of ſharp-pointed dock root boiled in water, and drove through a ſieve, and ſulphur vivum, of each one ounce and a half; of hog's lard, boiled in the juice of ſcabious, to the conſumption of all the juice, half a pound; of the *unguentum populneum*, boiled in the juice of elecampane, half an ounce; ſome drops of oil of rhodium; and let them all be reduced by the mortar into an ointment, *ſ. a.*

It is deſigned for the itch, and cutaneous diſtempers; but is ſo troubleſome to make, and ſo uncleanly at beſt, that it is ſeldom uſed or made.

Unguentum Pomatum.
Ointment of Apples.

Take of freſh hog's lard, three pounds; of freſh ſheep's ſuet, nine ounces; of the apples commonly called pome waters, pared and ſliced, one pound nine ounces; of the moſt fragrant roſe-water, ſix ounces; of Florentine orris root groſly powdered, ſix drachms. Let theſe boil together in *balneo Mariæ* till the apples are diſſolved; then ſtrain without expreſſion, and keep it for uſe. Juſt warm it again, and waſh the whole with roſe-water.

Almoſt all the officinal Diſpenſatories abound with preſcriptions for this ointment. The common practice of the ſhops has of late been to buy it of perſons who make it their ſole buſineſs; and who do nothing but beat up freſh hog's lard with roſe-water into a kind of a curd, and ſcent it with any of the aromatic oils, moſt ſuitable to the liking of their cuſtomers.

Unguentum

Unguentum Rubrum Deſiccativum.
Red drying Ointment.

Take of common oil, two pounds; of yellow wax, twelve ounces; of Armenian bole, and the *caput mortuum* of vitriol, of each ſix drachms: of calamine levigated, four ounces; of litharge of gold and ceruſe, of each ſix ounces and a half; of camphor, half an ounce; and boil over a gentle fire to the conſiſtence of an ointment.

The wax and oil only are to be kept over the fire together; and, as ſoon as they are melted, all the reſt are to be ſtirred in, finely powdered: and the camphor muſt be firſt reduced, by itſelf, in a mortar rubbed with oil of almonds.

Unguentum Sambucinum.
Ointment of Elder.

Take of elder leaves gathered in May, ten handfuls; of the young ſhoots growing about the bottom of the tree, two pounds; of the inner bark of the ſame, one pound. After theſe are all cut ſmall, boil them in twelve pounds of freſh butter, over a ſlow fire, continually ſtirring them all the while. Preſs out the butter and ſtrain it: put to it the ſame quantity of freſh leaves, ſhoots, and bark; and repeat the proceſs as before; then preſs it out again with leſs force, ſo that it may be an ointment, *ſ. a.*

The meaſure of boiling is, until the leaves, &c. grow criſp.

Valentia Scabioſæ.
Powers of Scabious.

Take of the juice of green ſcabious, preſſed out and ſtrained through a cloth, and of hog's lard cleared of its membranes, each as much as you pleaſe. Let the lard be beat in a ſtone mortar, and the juice poured in by little at a time, for the convenience of mixture, and giving its tincture: then put them together into a proper veſſel, to be expoſed to the ſun; and ſo that the juice may cover the lard; after nine days, put them again into the mortar as before, and throw away that thin and diſcoloured humidity, which ſeparates upon beating, without rubbing them together; and again put it into its veſſel for five days. Afterwards beat it again; and, by a little at a time, mix it with freſh juice of ſcabious; and after a freſh inſolation of fifteen days, in its proper veſſel, in the ſun, let it be cleared, as before, of its watery humidity. Let it then ſtand again in the ſame manner, for fifteen days longer, with freſh juice; and after a little beating, let it be kept for uſe, in a glaſs or earthen veſſel.

This we are told by the firſt compilers of the college Diſpenſatory, was the contrivance of John Arden, an experienced ſurgeon at Newark, in Nottinghamſhire, who lived in the reign of Edward III. The powers, and honey of mullen, were from the ſame author; and almoſt three hundred years ago in great eſteem among the ſurgeons of our own country; though they have now been long in diſuſe.

Unguentum Martiatum.
The Soldiers Ointment.

Take of freſh bay leaves, three pounds; of garden rue, two pounds and a half; of marjoram, two pounds; of mint, one pound; of ſage, wormwood, coſtomary, and baſil, of each half a pound; of oil olive, twenty pounds; of yellow wax, four pounds; of Malaga wine, half a pound; and

make

make them all into an ointment, by bruiſing, macerating, boiling, and expreſſion, as required, *ſ. a.*

This is ſaid to have been the contrivance of one Martian, for the ſoldiers to preſerve their limbs with from the injuries they were liable to do in long encampments, and by ſuſtaining cold.

Unguentum Populneum.
Ointment of Poplar.

Take of the freſh black poplar buds a pound and a half; of the leaves of violets and navel-wort of the wall, of each three ounces; of freſh unſalted hog's lard, cleared from its membranes, and waſhed, four pounds; bruiſe, mix, and macerate theſe together; and then add the tender tops of the bramble, leaves of black poppies, mandrake, henbane, nightſhade, lettuce, the greater houſleek, and the greater burdock, of each three ounces; bruiſe again, and mix all together very well; and then after ten days ſtanding pour on them a pound of roſe-water; after which boil over a gentle fire, continually ſtirring with a ſpatula, until all the ſuperfluous humidity is evaporated; then ſtrain and ſqueeze out with a preſs ſo as to obtain an ointment, *ſ. a.*

Plaſters from the former London Diſpenſatories; and others.

Emplaſtrum è Cicutacum Ammoniaco.
Plaſter of Hemlock with Ammoniacum.

Take of the juice of hemlock leaves four ounces; vinegar of ſquills and gum ammoniacum, of each eight ounces; diſſolve the gum in the juice and vinegar, and after due ſtanding together, ſtrain and reduce them to the conſiſtence of a plaſter, *ſ. a.*

It is uſed with ſucceſs to diſcuſs flatulencies, eſpecially thoſe of the hypochondria.

Diachylon compoſitum, ſive Emplaſtrum è Mucilaginibus;

Compound Diachylon, or the Mucilage Plaſter.

Take of the mucilage of the middle bark of elm, of marſhmallow-root, fenugreek, and linſeed, of each four ounces and a half; of the oils of chamomile, lilies, and dill, of each one ounce and a half; of ammoniacum, galbanum, ſagapenum, and opopanax, of each half an ounce; of yellow wax, twenty ounces; of turpentine, two ounces; of ſaffron, two drachms. Let the mucilages, extracted with water, be boiled over a gentle heat with the oils, to a conſumption of their aqueous humidity; and the wax, cut into ſmall pieces, be melted in them, and ſtirred in with a ſpatula; when they are taken from the fire, and while hot, add by degrees, the gums diſſolved in turpentine; and ſtir them well about; laſtly, put in the ſaffron finely powdered; ſo as that the whole may be made into a maſs, of the conſiſtence fit for a plaſter.

This is a compoſition of Meſue.

Emplaſtrum Epiſpaſticum.
Bliſtering Paſte.

Take of Burgundy pitch, twelve ounces; of Venice turpentine, 4 ounces; of the powder of cantharides, ſix ounces. Mix, and make them into a plaſter, *ſ. a.*

Paſta Epiſpaſtica.
The Bliſtering Paſte.

Take of cantharides in powder, and wheat-flour, each as much as you

you pleaſe; and of ſtrong vinegar a ſufficient quantity to make them into a paſte.

None of theſe are exactly the ſame in any former Diſpenſatory; and indeed moſt vary ſo much in their opinions concerning the conſiſtence or adheſion neceſſary or beſt in compoſitions of this intention, that it is not like to have any particular ſtandard, from which ſome or other in their private practice will not be apt to deviate.

Emplaſtrum a Noſtratibus, Flos Unguentorum dictum.

A Plaſter, called in our Country, the Flower of Ointments.

Take of common reſin, reſin of the pine-tree, yellow wax, ſheep's ſuet, of each half an ounce; of olibanum, four ounces; of turpentine, two ounces and a half; of myrrh and maſtich, of each one ounce; of camphor, two drachms; of white-wine, half a pound: boil them together in a plaſter.

Emplaſtrum de Gummi Elemi.

Plaſter of Gum Elemi.

Take of gum elemi, four ounces; reſin of the pine-tree, fine wax, and gum ammoniacum, of each two ounces; of turpentine, three ounces and a half; of Malaga wine a ſufficient quantity: boil till the wine is evaporated, then put in the ammoniacum, firſt diſſolved in vinegar.

It is very rarely uſed or made.

Emplaſtrum de Meliloto ſimplex.

Simple Melilot Plaſter.

Take of fine reſin, eight pounds; of yellow wax, four pounds; of ſheep's ſuet, two pounds; after theſe are melted together, put in five pounds of green melilot cut ſmall; and make them into a plaſter, *ſ. a.*

Emplaſtrum Mercuriale.

The Mercury Plaſter.

Take of quickſilver which hath been ſtrained thro' leather, eight ounces; of liquid ſtorax, one ounce and a half; of Venice turpentine, one ounce. Let the whole be worked together in a mortar, to an entire incorporation of the mercury; then take of the *diachalcitis* plaſter, one pound; of gum ammoniacum, half a pound. Melt them and put them into a mortar, and work them about until cold, and become a plaſter.

Emplaſtrum Opoldeldoc.

Opodeldoc Plaſter.

Take of bdellium, ammoniacum, galbanum, ſagapenum, and opopanax, of each two ounces; melt theſe together, and add to them half a pound of Straſburgh turpentine, four ounces of oil of bays, two ounces of amber; and ſtir them together over a gentle fire. Take of litharge, one pound; calamine, one pound and a half; of oil of olives, two pounds; of linſeed oil, one pound; boil theſe likewiſe over a gentle fire, ſtirring all the while with a ſpatula: and when they are all mixed, add yellow wax and colophony, of each one pound; and after theſe are melted and mixed with the preceding, boil again to the conſiſtence of a plaſter.

Emplaſtrum Opiatum.

An Anodyne Plaſter.

Take the greater diachylon, four ounces; quickſilver, two ounces; opium, an ounce; mix, *ſ. a.*

This is beſt made by a freſh compoſition of the diachylon, and then incorporating the quickſilver with

with the due quantity of turpentine; and the opium is beſt dried, and reduced to a fine powder, which is troubleſome enough, and requires time; for it is almoſt impoſſible to make it incorporate with any acqueous humidity in it, as it will have in extract, and by ſtraining. This is calculated to give eaſe in arthritic pains, and all ſuch as ariſe from acrimonious humours vellicating the fibres, whether from venereal or common ſcorbutic cauſes.

Emplaſtrum Podagricum.
A Plaſter againſt the Gout.

Take opium and Venice ſoap, of each two ounces: *diachalcitis*, eight ounces: make all into an emplaſter, *ſ. a.*

The common diachylon may be uſed for *diachalcitis*. It differs from the foregoing only in the ſoap. Wherever the gout fixes, and begins to ſwell, lay a plaſter of this pretty thick and broad upon it; and though it may not immediately abate the pain, yet it will gradually waſte the matter which occaſions it, and render the fibres leſs ſenſible of its vellications till the fit is over. In all tumors likewiſe, attended with ſharp pain, this is an uſeful application.

Emplaſtrum ad Strumas.
A Plaſter againſt the Evil.

Take hemlock plaſter, with ammoniacum, four ounces; of gum elemi half an ounce; of corroſive ſublimate, ten drachms: mix, *ſ. a.*

This is contrived as efficacious for the purpoſe as the operation of any thing of the kind can be bore with, for it is almoſt ſo corroſive as to make an eſchar. If the glands are ever ſo much indurated by matter of any ſort whatever, this will either looſen and diſlodge it, or fetch off the ſubſtance itſelf, if long enough applied; but great caution ought to be had in regard to the nature and texture of the part to which it is uſed, becauſe near large veſſels or tendons it may do a great deal of miſchief. It may alſo impart ſo much of the ſublimate, if applied to parts which are very lax and glandulous, as to raiſe a ſalivation.

Emplaſtrum Vermifugum.
Plaſter againſt Worms.

Take powder of aloes, an ounce; colocynth and myrrh, of each three drachms; leaves of ſavin, rue, common wormwood, tanſy, walnuts, and bryony root, of each two drachms; yellow wax and reſin, of each four ounces; oil of rue, two ounces; mix all into a maſs for an emplaſter, *ſ. a.*

This is ordered to be ſpread thick upon leather, and laid broad upon the belly; and to children it will this way ſometimes prove cathartic, and aſſiſt in diſlodging that ſlime which breeds worms, and the worms themſelves if bred.

Emplaſtrum Arthriticum.
Gout Plaſter.

Take of the greater diachylon ſix ounces; *oxycroceum* and *diachalcitis*, of each two ounces; bear's greaſe and deer's-marrow, of each an ounce and a half; tacamahac, two ounces, diſſolved in wine-vinegar; mix all together into an emplaſter, *ſ. a.*

This is called the Frankfort gout-plaſter, being firſt contrived by a conſultation of phyſicians of that city.

Emplaſtrum Arthriticum alterum.

Another Gout Plaſter.

Take oil of poppies, two pounds; wax, a pound; Venice ſoap, eight ounces; turpentine, inſpiſſated juice of henbane and nightſhade, opium, red lead, of each ſix ounces; henbane ſeeds, in fine powder, four ounces; mix all theſe into an emplaſter, according to art.

Let the juices and the opium be diſſolved in vinegar, in which has firſt been boiled for ſome time the red lead; next put in the oil, and afterwards the wax and ſoap ſliced thin, and then with the turpentine boil all up to a due conſiſtence.

BOOK V.

Of Extemporaneous Compoſitions.

SECT. I.

Of Diet-Drinks, &c.

UNDER this diviſion we intend to include all the medicated wines, ales, meads, and wheys, which are preſcriptions to be met with only in chronic caſes; and require a continuance, to anſwer any intention of moment. In all acute caſes therefore the preſcriber is never to turn his eye this way; but while the diſorder of a conſtitution is gradually to be gained upon, much help may be had from this quarter.

Cephalics.

Vinum Arthriticum.

Wine againſt the Gout.

Take ſarſaparilla, and guaiacum, of each an ounce; germander, ground-pine, and ſage dried, of each three ounces; cowſlip flowers, flowers of roſemary, of each half an ounce; St. John's-wort, ſix drachms; white wine, ten pounds.

Theſe are ordered to ſtand in maceration three or four days, and then the wine to be ſtrained for uſe; and two ounces drank twice a day for forty days together. Its title denotes its chief intention to be againſt the gout; beſides which it is alſo recommended for all nervous weakneſſes, and decays from cold pituitous humours, and the rheums of age.

Vinum Arthriticum alterum.

Another Wine againſt the Gout.

Take of guaiacum, two ounces; yellow ſanders, one ounce; cinnamon, Spaniſh angelica-root, *calamus aromaticus*, of each two drachms; the outer peels of oranges dried, one ounce; flowers of roſemary, lavender, the tops of marjoram, of each half an ounce; germander,

germander, ſage, and ground-pine, picked from all the ſtalks and dried, of each two ounces; the leſſer cardamoms, two drachms. Bruiſe all into a groſs powder, and infuſe in three cong. of mountain wine for two or three weeks: and then ſtrain, and bottle cloſe for uſe.

This is an admirable warm reſtorative, and of great ſervice in hydropic caſes and all diſorders from weakneſs. The doſe is two ounces, or a wine glaſs two or three times a day.

Vinum Hippocraticum.
Hippocratic Wine.

Take cloves and ginger, of each one ounce; cinnamon and nutmegs, of each two ounces; groſly beat them together, and infuſe in twelve pounds of canary, with three pounds and a half of fine ſugar; after ſome time put to it two pounds and a half of new milk, one lemon, and a few ſlips of roſemary, and ſtrain it through a thick flannel till it is fine.

This comes to us recommended for a great cordial, and ſuch undoubtedly it is. By conſtant uſe, with a little diluting, it is very good in paralytic and apoplectic diſpoſitions. For thoſe to whom it is not diſagreeable, it may be made much more cordial by the addition of ſome grains of muſk: but that with many is offenſive. This wine, with a much larger quantity of milk, or four ounces of it to two pounds, with a little lemon, would make a very pleaſant whey in fevers; where the ſpirits are almoſt conquered by a long conflict, and want ſome ſuitable recruits.

Vinum mirabile.
The wonderful Wine.

Take cloves, mace, nutmegs, cubebs, cardamoms, galangal, cochineal, ſaffron, of each one drachm, infuſe in Canary, two pounds, and ſpirit of cinnamon four ounces; for fourteen days, then ſtrain for uſe.

This makes a better cordial than the *aqua mirabilis*, which will be yet much higher, if ambergriſe or muſk be added. A drachm of it now and then, in moiſt cold conſtitutions, is of good ſervice; for its warms and prevents the blood from running into thoſe rheums and pituitous juices, which are the frequent attendants upon a declining age. But in choleric and ſanguine conſtitutions, ſuch cordials as theſe are highly to be condemned.

Vinum Chalybeatum.
Steel Wine.

Take filings of iron, eight ounces; roots of eryngo, elecampane, of each one ounce and a half; cloves, mace, cinnamon, ginger, of each three drachms; ceterach, flowers of roſemary, of broom, epithymum, of each two pugils: white wine, ſix pounds. Digeſt all together ſix or eight days, and then filter for uſe.

Compoſitions with ſteel are always preſcribed as reſtoratives, detergents, or hyſterics; and they very properly belong to any one of thoſe intentions, according as the ingredients are ſelected with which they are joined: and therefore, though it may be known from our explanation of the operation of chalybeats, how this main ingredient may, by different circumſtances and management, be turned either of thoſe ways; yet when brought into compoſition, care ought to be taken that what is joined with it falls into the intention that particular compoſition

is

is deſigned for. And this regard gives a place to compound chalybeates under different claſſes.

Vinum Chalybeatum alterum.
Another Steel Wine.

Take filings of ſteel, four ounces; rue, penny-royal, of each two handfuls; piony and caſſamunair roots, of each one ounce; ſaffron, two drachms. Infuſe in four pounds of ſherry for fourteen days; then filter for uſe.

This medicine promotes the menſtrual diſcharges; for which reaſon many kinds of fits and convulſions are removed by it; and after a continued uſe of it ſome time, it is ſaid to diſpoſe to conception. The quantity of two or three ounces twice every day is ſufficient, if continued ſome weeks.

Stomachics.

Vinum Stomachicum.
Stomach Wine.

Take the roots of Virginia ſnake-weed, and gentian, of each three drachms; galangal, cloves, cubebs, mace, nutmegs, ſaffron, of each a drachm; cochineal, half a drachm; Canary, three pounds; infuſe for ſome days, and then ſtrain for uſe.

This is a warm compoſition, and may be of ſervice to cold ſtomachs, and ſuch as are troubled with wind and flatulencies; but it is too hot for many, wherefore we prefer the following.

Vinum Stomachicum alterum.
Another Stomach Wine.

Take gentian root, half an ounce; galangal, *calamus aromaticus*, Spaniſh angelica-root, of each two drachms; centaury-tops, an ounce; the outer peel of Seville oranges with their juice, N° 3; ſaffron a drachm: infuſe in four pounds of ſherry for fourteen days, ſhaking the veſſel often; then ſtrain and filter for uſe.

This is a moſt grateful ſtomachic, and greatly mends a bad appetite; it is a wonderful help in cold conſtitutions, and ſuch as are inclining to dropſies and cachexies from corpulency; the acid juice of the oranges mightily takes off both the heat and taſte of the bitters. It may be drank twice or thrice a day; when the ſtomach is moſt empty.

Creviſia Stomachica amara.
The Bitter Stomachic Ale.

Take centaury-tops, and of Roman wormwood, of each four handfuls; gentian-root, two ounces; Seville orange-peels, the outer yellow part, N° 6; Spaniſh angelica-root groſly powdered, and Winter's bark, of each an ounce: put all into cong. ſix or eight.

This is a pleaſant bitter, and very cordial and ſtrengthening to the ſtomach: the cuſtom of taking it is a glaſs every morning faſting, or about an hour before dinner.

Vinum amarum pro OEnopolis.
Bitter Wine for Vintners.

Take tops of centaury, twelve handfuls; gentian root ſliced, a pound; juniper-berries, a pound and half; Seville oranges, the outer peels, and their juice, N° 12; lemon-peels, and juice, N° 6; ſteep for fourteen or twenty days in white port wine cong. 20; Canary cong. four.

Our common taverns do not make a bitter by much ſo good as this, and nothing can be more grateful, wholeſome, or eaſier made: but this is to be ſaid in ge-

neral againſt whetting, as it is uſually called, in a morning, which ſome accuſtom themſelves to; that though one glaſs, when the ſtomach has by debauch, or any other accident from diſtemper, been palled, or weakened, is of ſervice by warming its fibres, and giving them a due tenſity, in which chiefly conſiſts a good appetite and digeſtion; yet when the ſtomach is perhaps already too warm from a high diet and frequent tippling, this practice will in proceſs of time diſable it from doing its proper office.

Detergents.

Vinum Scelotyrbicum.

Wine againſt the Scurvy.

Take ſorrel, brooklime, watercreſſes, and garden ſcurvy-graſs, of each three handfuls; roots of elecampane, horſe-radiſh, of each an ounce and half; ſeeds of ſcurvy-graſs, an ounce; white-wine, four pounds; let all digeſt two days together, then preſs out hard for ſettling and uſe.

This is much of the ſame uſe as the *ſucci ſcorbutici*; but for a cold ſtomach is ſomewhat better; a wine-glaſs may be drank of it twice a day for ſome weeks together, and will do good in any ſcorbutic diſpoſition.

Vinum Enulatum.

Elecampane Wine.

Take green elecampane-root, white ſugar, and currants cut ſmall, of each four ounces; infuſe them fourteen days cold in four pounds of white port.

This is an eaſy liquor both to make and take, and will do ſervice in ſuch who have weak lungs, that are often apt to be ſtuffed with phlegm, which it deterges, prevents ulcerations, and ſuch injuries as would bring on a conſumption; all aſthmatic perſons therefore would do well to uſe this in plenty, eſpecially in the winter-time.

Vinum Pectorale.

Pectoral Wine.

Take juice of liquorice, an ounce; ſaffron, a ſcruple; ſeeds of coriander, caraway, aniſe, of each two drachms; ſalt of tartar, half an ounce; penny-royal water, eight ounces; Canary two pounds; let them all digeſt cold for ſome days, then ſtrain for uſe.

This aſſiſts in expectoration, and helps to deterge and cleanſe the glands of the bronchia and neighbouring parts. It may be drank warm two or three times in a day, or almoſt at pleaſure.

Vinum Scorbuticum.

Wine againſt the Scurvy.

Take garden ſcurvy-graſs gathered dry and unbruiſed, one handful; horſe-radiſh root ſcraped, half an ounce; Winter's bark, groſly powdered, two drachms; arum-water and white wine, of each one pound. Infuſe them cold for three days.

The arum-water is not kept made by any; it muſt therefore be made on purpoſe, when the plant is green, or elſe the root may be put in, freſh gathered, with the horſe-radiſh. The whole makes a warm biting medicine, and a good antiſcorbutic. It helps to diſſolve ſizy and viſcid humours. It quickens the motions of the fluids, and promotes the thinner ſecretions; whence in dropſies and all cachexies from ſluggiſh watery humors, it may be of good ſervice. It may be drank at diſcretion.

Serum

Serum Scorbuticum.

A Whey againſt the Scurvy.

Take leaves of ſuccory and ſorrel, of each twelve handfuls; fir-tops, ſcurvy-graſs, and water-creſſes, of each four ounces; coriander-ſeeds, one ounce. When bruiſed, add to them juice of oranges, four ounces; common whey, four pounds. After a little ſtanding, preſs out hard, and ſweeten with a little fine ſugar, and clarify for uſe.

This is a cooling cleanſing liquor; but cannot extend its efficacy much beyond the *primæ viæ*, and the urinary paſſages. It will not keep long, and therefore muſt be made almoſt daily. Two or three pints in a day is the uſual quantity ordered to be taken.

Diuretics.

Vinum Hydropicum.

Wine againſt the Dropſy.

Take blue flower-de-luce root, one ounce; elecampane and ſquills prepared, of each half an ounce; horehound, one handful; bark of elder roots and dwarf-elder, of each one ounce; ſena, one ounce and a half; agaric, two drachms; ginger, one drachm; white wine, four pounds. Infuſe all for fourteen days, and then ſtrain for uſe.

Or Thus. Take aſhes of broom, and juniper, of each one ounce; Rheniſh wine, three pounds. Mix and make a lixivium; to which add blue flower-de-luce roots, one ounce and a half; the inner bark of elder-root, and dwarf-elder, of each one ounce; bark of bitter-ſweet, half an ounce; rhubarb, two drachms; mechoacan, half an ounce; ſena, one ounce; caraway-ſeeds, ſix drachms; bark of ſaſſafras and Winter's cinnamon, of each four ſcruples. Infuſe warm for twelve hours; then add white ſugar, five ounces; damaſk-roſe leaves, two handfuls; after due infuſion, ſtrain for uſe.

The latter of theſe is the better; if the ſena be left out, it is a better diuretic; for the leſs it goes off by ſtool, the more it will get into the blood, and diſcharge its ſerous parts by urine. It is therefore deſigned for hydropic conſtitutions; and will do ſervice where there is a tendency that way, if begun within time, and cloſely followed. The uſual doſe is three ounces every morning faſting. This is from Bates; and Fuller gives the ſame with little alteration.

Vinum Icthericum.

Wine againſt the Jaundice.

Take turmeric in groſs powder, two ounces; ſaffron, two ſcruples; cochineal, four ſcruples; millepedes, Nº 320; Canary, two pounds; infuſe all ſix or ſeven days, then ſtrain for uſe.

This is eaſily made, and not unpleaſant to drink; but white port ſeems a fitter wine for this purpoſe than Canary. It is very good for what its title expreſſes; and may be drank, two ounces, three or four times in a day: but the following we recommend as the moſt efficacious.

Vinum Millepedum.

Hog-Lice Wine.

Take hog-lice, half a pound; put them alive into two pounds of white port wine; and after ſome days infuſion, ſtrain and preſs out very hard: then put in ſaffron, two drachms; ſalt of ſteel, one drachm; and ſalt of amber, two ſcruples; and after three or four days, ſtrain and filter for uſe.

This is an admirable medicine

againſt the jaundice, dropſy, or any cachectic habit. It greatly deterges all the viſcera; and throws off a great deal of ſuperfluous humours by urine. It may be given twice a day, two ounces at a time.

Cerevisia Hydropica.
A Drink for the Dropſy.

Take broom-aſhes, half a pound; roots of horſe-radiſh, four ounces; orris, *calamus aromaticus*, elecampane, of each two ounces; guaiacum, ſaſſafras, juniper-berries, daucus-ſeed, of each one ounce; muſtard-ſeed, two ounces. Hang all in a bag in four cong. of ale while it is working.

The laſt mentioned author gives us this alſo, with high commendations for hydropic caſes. The doſe is one pound every morning faſting.

Cerevisia Juniperina.
Juniper Ale.

Take juniper-berries well bruiſed, four ounces; raiſins of the ſun, half a pound; hang them in four cong. of ale.

This is grateful both to the ſtomach and palate; breaks off wind, cleanſeth the kidneys, and waſhes off gravel and ſand; to be drank of two or three times a day.

Cerevisia Junipera altera.
Another Juniper Ale.

Take juniper-berries well bruiſed, one pound; raiſins of the ſun ſtoned, half a pound; pine-tops, St. John's wort, agrimony, centaury, of each four handfuls; gentian-root ſliced, *calamus aromaticus*, Spaniſh angelica-root, and Winter's bark, of each one ounce. Put all together into a bag for nine cong. of ale.

This is good for all the intentions of the former; and is a better ſtomachic Some public-houſes now make and ſell this under the ſame title.

Serum Sinapinum. Muſtard-Whey.

Take milk, two pounds; boil it and turn it with three ſpoonfuls of muſtard-ſeed; take off the curd, and keep the whey for uſe.

This does but little differ from the muſtard-ale before deſcribed; only it may be better than that in ſome caſes, where malt liquors are not convenient.

Hydromel. Mead, or Metheglin.

Take of the beſt honey, ten pounds; common water, three cong. boil them together till an egg will ſwim upon it when cold: then let it ſettle in a clean veſſel, and decant the clear into a barrel, and to every five pounds put two ounces of true French brandy, and ſtop it up.

This will ferment without any other help; and if it be kept ſome time, it will make an agreeable liquor. Some put herbs to this, according to their ſeveral intentions; and thereby render it more or leſs detergent, diuretic, balſamic, or the like, according to the virtues of ſuch ingredients.

Cathartics.

Serum Catharticum.
Purging Whey.

Take freſh damaſk-roſe buds picked, an ounce; put them into two pounds of whey over night, and ſtrain out, and drink it the next morning.

This is a mighty purge with ſome of our country people; it will work very kindly and thoroughly, and is therefore good to cleanſe the firſt paſſages; the quantity

tity of roſe-buds may be varied, as a perſon would have it in ſtrength.

We have been ſomewhat larger under this diviſion than our room here will allow under any other, becauſe this ſeems to be moſt for the ſervice of common people, who are not willing, or cannot well have recourſe to the ſhops for every doſe of phyſic they take; and we have alſo for ſuch reaſons been fuller in explaining their virtues and manner of operation.

SECT. II.

Of Decoctions, Infuſions, and Emulſions.

UNDER the firſt of theſe is included all that part of extemporaneous Pharmacy which is employed in drawing out the medicinal virtues of ſimples by boiling; and theſe in common preſcriptions are alſo frequently called apozems. The next is different in this only, that the ingredients are ſteeped in hot liquors, in the manner that tea is commonly made. And the latter is drawing out the oily or milky part of ſeeds or kernels by contuſion, with proper liquors. Moſt things concerned herein are balſamics, detergents, and cathartics; for decoction is not ſo proper for cephalics. &c. becauſe it exhales the more volatile parts, in which the virtues of all of thoſe ingredients conſiſt. The harder bodies, as woods, dried roots, &c. require moſt boiling; but herbs and ſeeds need only be ſcalded, which makes it neceſſary that, in many compoſitions of this kind, ſome of the ingredients ſhould not be put in till the other have boiled ſome time, ſooner or later, according to their texture, which muſt always be directed by the judgment of the compounder. Reſtringent decoctions, and moſt of the cathartics may, for greater elegance and pleaſantneſs to take, be clarified; but all ſuch as are emollient, are by no means to be ſo managed; emulſions, if carefully made, are a very neat form; but a very ſmall part of the *Materia Medica* is reducible thereinto, or only thoſe ſeeds which yield a ſoft milky juice; and therefore the only intention which this form can properly be preſcribed for, is that of an emollient, though indeed we have given ſome few for other purpoſes, but they are not ſo ſuitable. Oils likewiſe may, by the help of an egg, and a little of any of the turpentine balſams, be reduced under this head; and, well managed, will make an elegant medicine, as we ſhall find in ſome following inſtances.

Cephalics.

Decoctum Chamæpityos.

Decoction of Ground-Pine.

Take ground-pine dried, two handfuls; flowers of ſtœchas, two drachms; male piony roots an ounce: boil in three pounds, to two pounds; ſtrain, and add ſpirit

of ſcurvy-graſs and lavender, of each an ounce; mix.

This is recommended to be drank conſtantly for ſome time, viz. a quarter of a pint three times a day, with twenty drops of ſpirit of ſal ammoniac, to prevent the gout, and diſtempers of the head and joints.

Emulſio Pæoniata.

Piony-Emulſion.

Take piony-ſeeds huſked, an ounce; diſtilled waters of rue, black cherries, and compound piony-water, of each ſix ounces; and with pearl-ſugar, an ounce and half, make an emulſion, *ſ. a.*

This preſcription ſtands in Bates marked for one of thoſe much uſed in his own practice; and a phyſician of great note, hardly ever omitted it as an auxiliary in all nervous caſes, and ſuch as affected the head with apoplexies, epilepſies, and the like; but it is not alone to be truſted: it may be drank at pleaſure.

Emulſio Pæoniata Fulleri.

Dr. Fuller's Piony-Emulſion.

Take piony and white poppy-ſeeds, and blanched almonds, of each half an ounce; fine loaf-ſugar, an ounce; oil of nutmegs, two drops; beat them well together, and with two pounds of black-cherry-water, make an emulſion, to which put compound piony-water, an ounce.

Its author adviſes it in epilepſies, and all convulſive diſeaſes, and ſays it is of egregious uſe in fevers with the head-ach, frightful dreams, and ſnatching of the tendons; its doſe is from two to four ounces every ſix hours.

Emulſio Analeptica.

The reſtorative Emulſion.

Take barley-water, four pounds; cubebs, pippins, and leaves of colt's-foot, of each four ounces: boil to the conſumption of half; which ſtrain, and make an emulſion with ſweet almonds blanched, half an ounce; melon ſeeds, and piſtachio nuts, of each an ounce; candied eryngo, an ounce and a half; and to it, when finiſhed, put damaſk roſe-water, two ounces.

This is a ſoftening, emollient, reſtorative medicine, and will nouriſh and preſerve the nerves againſt ſuch irritations as draw them into ſpaſms and convulſions; it may be drank at diſcretion.

Infuſio Paralytica.

The paralytic Infuſion.

Take horſe-raddiſh root ſliced thin, and muſtard ſeed not bruiſed, of each four ounces; infuſe them in four pounds of boiling water for twenty-four hours, cloſe covered.

This is very pungent, ſpirituous, and well fitted to warm and ſtimulate the fibres which have loſt their tone: it is alſo ſucceſsfully preſcribed for ſome rheumatiſms that ſwell the limbs with great pain; to be drank four ounces two or three times a day.

Hyſterics.

Decoctum Emmenagogum.

An Apozem to promote the Menſes.

Take roots of ſmallage, two ounces; *calamus aromaticus*, bay-berries, of each two drachms; zedoary, cubebs, of each a drachm and a half; mace, two ſcruples; galangal, grains of paradiſe, of each half a ſcruple; dittany of Crete, penny-royal, of each a handful; boil in two pounds of water and a pound of white-wine, to twenty-

twenty-eight ounces; and when it is ſtrained, add tincture of ſaffron, an ounce; and mix for uſe.

This warms and invigorates the blood, by which its motion in the uterine arteries is increaſed, ſo as to break open their extremities; the operation is promoted by purging before hand, and keeping warm: to be taken from four ounces to half a pound, twice a day, uſing moderate exerciſe with it.

Decoctum hyſtericum.

An hyſteric Apozem.

Take rue, penny-royal, mugwort, and ſtinking orach, of each a handful; roots of caſſamunair, long birthwort, of each an ounce; Seville orange peels dried, two drachms; ſaffron, a drachm: boil all in two pounds of water, to one pound four ounces; which ſtrain and clarify, and add to it of bryony water compound, four ounces; ſyrup of ſaffron, an ounce; and put up for uſe.

This is very readily made, and is a good vehicle to ſubjoin to any other forms of hyſterics, for it is not greatly to be depended upon alone; its doſe is four ounces twice or three times a day.

Emulſio hyſterica.

An hyſteric Emulſion.

Take aſa fœtida, two drachms; diſſolve cold in a mortar, with a pound and a half of penny-royal water, and ſtrain for uſe.

This is tolerable, for its ſtinking ſcent, but to few; yet where it can be got down, it is very prevalent in checking the inordinate orgaſm of the ſpirits, and preventing thoſe convulſions and frenzies of mind which ariſe therefrom; it may be drank in the quantity of two ounces, according to the urgency of ſymptoms.

Strengtheners, Reſtoratives, &c.

Decoctum Album.

The White Drink.

Take powder of burnt hartſhorn, two ounces; ſpring-water, three pounds: boil to the conſumption of half, with a cruſt of bread in it, and a piece of cinnamon; then ſtrain, and ſweeten it with fine loaf-ſugar.

Bates orders it with ſyrup of lemons inſtead of ſugar; but it is more conſtantly made this way, and beſt approved of: it is become the common drink in all acute diſeaſes, attended with, or inclining to a looſeneſs: it is agreeable in the ſmall-pox and meaſles in the like circumſtance.

Decoctum rubicundum.

The red Drink.

This is the ſame with the former, only tinged with cochineal; or if the diarrhœa is urgent, with two or three drachms of tormentil-root. To every two pounds alſo are added four ounces of barley cinnamon-water, or plague-water, according to the ſtate and ſymptoms of the fever.

Decoctum contra Diarrhœam.

A Drink to ſtop a Looſeneſs.

Take bole Armeniac, an ounce; ſoft white chalk, three ounces: boil in three pounds of ſpring-water to twenty-ſix ounces; ſtrain, and let it ſubſide, and to the clear poured off, add diaſcordium, half an ounce; cinnamon-water, ſyrups of quinces and of dried roſes, of each two ounces.

This is much more efficacious

than either of the former, and muſt be had recourſe to when the ſymptoms are urgent, about four ounces given at a time, ſhaking the bottle; and there are very few diarrhœas that will not yield to it.

Decoctum Fracaſtorii.

Fracaſtorius's Decoction.

Take diaſcordium, ſix drachms; alexiterial milk-water, ten ounces: boil to eight ounces; ſtrain, and add mint-water, half an ounce; ſtrong cinnamon-water, two ounces; ſyrup of diacodium, an ounce and a half.

This bears the name of the author of the Diaſcordium, a famous Italian phyſician; and Dr. Fuller ſays, it has even divine virtues againſt a diarrhœa; for it moſt potently, and almoſt beyond any thing elſe, ſtops ſick fits, and gripings of the bowels, and is of great uſe in fevers attended with a ſymptomatic flux of the belly; three or four ſpoonfuls are ordered every two or three hours, or after every ſtool. There is alſo another by the title of Fracaſtorius's ſmaller decoction; but it differs from this in nothing material, beſides not having the diacodium, whence it is not ſo effectually reſtringent.

Decoctum Maſtiches.

The Maſtich Decoction.

Take maſtich, an ounce; mace, a drachm; and the bottom of a well-baked white loaf: boil all in the decoction of burnt hartſhorn, ſettled and clear, three pounds to two; when ſtrained, add four ounces of conſerve of red roſes, which infuſe hot for four hours; then ſtrain through a flannel, and put to it ſtrong cinnamon-water, two ounces.

This has much of the virtues of the foregoing, and is to be uſed for the ſame purpoſes, in equal doſes; as is alſo the following.

Decoctum reſtringens.

A binding Decoction.

Take green oak-bark, peeled from the ſmall branches, four ounces; boil it in the white drink, cleared by ſubſidence, four pounds, to two; pour it boiling hot upon powder of cinnamon, two drachms; nutmeg, a drachm; mace and cloves, of each half a drachm; and when cold, ſtrain out, and ſweeten it with ſyrup of quinces.

In all the foregoing apozems, under this diviſion, there is choice, from the gentleſt to the moſt efficacious reſtringent; the practitioner, therefore, may uſe what beſt fits the urgency of ſymptoms.

Decoctum Dyſentericum.

A Decoction againſt the bloody Flux.

Take the under cruſt of three loaves of wheaten bread, and boil it in ſpring water, ſix pounds to one; and at laſt put in cloves, two drachms; ſtrain, and add claret, a pound, and fine loaf-ſugar, a ſufficient quantity.

This is a good kitchen remedy, where recourſe cannot be conveniently had to the ſhops, and is uſeful in all kinds of fluxes, as well as in what its title expreſſes. Of the ſame kind is likewiſe the following.

Decoctum Catechu.

A Decoction of Japan Earth.

Take Japan earth, two drachms; boil in a pound of ſpring-water to twelve

twelve ounces: let it ſtand to ſubſide; and having poured off the clear, add ſtrong cinnamon-water, and ſyrup of quinces, of each two ounces.

Decoctum Catechu comp.

A compound Decoction of Japan Earth.

Take guaiacum and ſaſſafras, of each three drachms; yellow and red ſanders, of each two drachms; powder of Japan earth, half a drachm; liquorice, an ounce; dried ſage, a handful: boil in barley-water, three pounds to thirty ounces; ſtrain, and, when ſettled, add to it diacodium, two ounces.

This is not only fitted to ſtop the drain of humours falling too faſt upon the bowels, but alſo to aſſiſt their diſcharge by tranſpiration; and is good in all ſuch kind of fluxes, and tickling catarrhs, as occaſion coughs, diſorders of the breaſt, and ſometimes reach even to the joints, and cauſe arthritic and rheumatic pains; it is directed to be given from two to four ounces, three times in a day.

Decoctum Catarrhale.

A Decoction againſt Catarrhs.

Take yellow and red ſanders, of each two drachms; guaiacum, ſaſſafras, of each half an ounce; liquorice, an ounce and half; raiſins, an ounce: boil in barley-water, three pounds and a half to two pounds; adding, at laſt, juice of hounds-tongue, four ounces; and ſtrain for uſe.

This is not ſo good as the foregoing, although purpoſely calculated for this intention; four ounces of it are ordered three times a day.

Decoctum ad Rachitidem.

An Apozem againſt the Rickets.

Take roots of polypody of the oak, of ſmallage and fennel, of each an ounce; liquorice and aniſeeds, of each half an ounce; hart's-tongue, maidenhair, dodder, betony, celandine, and tamariſk, of each a handful; blue currants, four ounces; barley-water, four pounds: boil to the conſumption of half; and then ſtrain for uſe.

This is to be given three or four ſpoonfuls, as many times in a day, according to the age of the child.

Decoctum Cannibinum.

A Decoction of Hemp-Seed.

Take hemp-ſeed bruiſed, three ounces; agrimony, ſhepherd's-pouch, plaintain, knotgraſs, of each a handful and a half: boil in ſix pounds of water, to four; and ſweeten the ſtrained liquor with fine loaf ſugar.

This is with ſome a ſecret, and a ſpecific for involuntary piſſing of blood; the doſe is from four ounces to half a pound, twice in a day.

Decoctum incraſſans.

An incraſſating Decoction.

Take gum arabic, groſly powdered, three ounces; boil in water (carefully ſtirring it, that it burn not to the bottom) from two pounds to twenty-eight ounces, and ſweeten it with ſyrup of marſhmallows, four ounces.

This mightily thickens acid, thin humours, and, as, it were, ſheathes up the ſharp points of their ſalts; it is a very good remedy, and eaſily procured, againſt ſcalding of urine; it helps in a diabetes, and tickling coughs.

Decoctum Liberans.

A Decoction called Liberans.

Take ſarſaparilla, ſix ounces; currants cut ſmall, eight ounces; infuſe according to art, and boil in water, twelve pounds to ſix; when it is cold, caſt into it half a pound of unſlacked lime: let it ſubſide, and pour off the clear, and keep it in bottles for uſe.

We are told this gives great relief in defluxions, ſtrumas, the diabetes, and in running ulcers: it is, without queſtion, a good ſweetener, as may be gathered from the virtues of the quick-lime and the ſarſa.

Decoctum edulcorans.

A ſweetening Decoction.

Take ſarſaparilla and China roots, of each three ounces; yellow and red ſanders, of each ſix drachms; infuſe, and boil in twelve pounds of water, to the conſumption of half, which ſtrain for uſe.

This may be ſweetened with ſugar, for thoſe who want it more palatable; and it ought to be made the common drink in all ill habits, as dropſies, leproſies, and venereal infections, and ſuch as proceed from too much moiſture, or from fluids too ſharp and ſaline. Decoctions of this kind, conſiſting of hard ingredients, ſhould ſtand ſome hours to ſteep before they are ſet upon the fire, that they may ſoak through, and the better yield their virtues.

Decoctum ſanctum.

The holy Decoction.

Take guaiacum, an ounce: boil it in four pounds of water to two; adding, when it is half boiled, raiſins, an ounce; juice of Spaniſh liquorice, two drachms; and ſtrain it for uſe.

If this be deſired more reſtringent, two drachms of Japan earth may be added; and inſtead of liquorice and raiſins, conſerve of red roſes may be put; it is a good ſweetener, and may be uſed as common drink for all the purpoſes mentioned under the foregoing.

Decoctum Sarſaparillæ.

Decoction of Sarſaparilla.

Take ſarſaparilla, three ounces; boil in four pounds of water to two; and ſtrain.

One grain of corroſive ſublimate diſſolved in an ounce of brandy, and added to this decoction, renders it a very powerful medicine for every ſtage of the venereal complaint.

Decoctum ſypticum.

A ſtyptic Decoction.

Take roots of nettles and comfrey, of each an ounce and half; the herbs yarrow and plantane, of each a handful; pomegranate-peel and gum arabic, of each two drachms; ſeeds of white poppy, and henbane, of each three drachms; boil in three pounds of water to twenty-eight ounces; ſtrain, and add ſugar of lead, a ſcruple; aſtringent ſaffron of iron, four ſcruples; ſyrup of dried roſes, four ounces; mix.

The ſaffron of iron is ill added, becauſe it will not diſſolve ſo in it, but make it thick and irkſome to take; if that is therefore to be depended upon, it is much better given in a bole, or ſome ſuch form; the ſugar of lead will indeed diſſolve: this is ſaid to cool and thicken a hot ſharp blood, and to ſtrengthen and corrugate the fibres, ſo as to cloſe up the mouths of the blood-veſſels, and ſtop involuntary fluxes

fluxes of blood; four ounces may be given twice a day.

Decoctum Pectorale.
A Pectoral Decoction.

Take sarsaparilla and China, of each half an ounce; dried white poppy-heads (cut and beat with the seeds), Malaga raisins stoned, of each an ounce; liquorice, half an ounce; Japan earth, two drachms: boil all in strong ale-wort, four pounds to thirty ounces; adding, towards the latter end, balsam of Tolu, three drachms; and at last seeds of caraway, and sweet fennel, of each two drachms; when cold, strain out the liquor for use.

Dr. Fuller orders oil of aniseeds, and many other things very unsuitable for this form, and what may, with much more convenience be taken otherwise, if required at the same time; this is made a common drink, or used two or three times in a day, for most distempers of the breast, and even in some consumptions, for which it is a good remedy.

Decoctum Limacum.
A Decoction of Snails.

Take garden snails cleansed from their shells, N° 12; new red-cow's milk two pounds; boil to a pound; and add rose-water an ounce; sugar-candy half an ounce.

It will be very difficult to boil this so long as to waste one half, because it will be apt both to run over and burn to the bottom, and therefore must be stirred all the while: this quantity is ordered to be drank every morning, and it is a noble restorative in consumptions, especially for younger people, who have not fallen into that state through intemperance.

Decoctum Antiphthisicum.
A Decoction against Consumptions.

Take ox-eye daisy flowers dried, a handful; snails washed clean, Numb. 3; candied eryngo root, half an ounce; pearl barley, two ounces; boil in spring-water from a pound to half a pound; and then strain for use.

This brings in a supply of such soft and inoffensive nourishment, as gives no trouble to a weak constitution, and therefore is of service in consumptions, hectic fevers, night sweats, &c. the patient must drink four ounces of this warm, with an equal quantity of milk, twice a day.

Decoctum Balsamicum.
A balsamic Decoction.

Take Malaga raisins stoned and sliced, two ounces; roots of China, sarsa, liquorice, of each half an ounce; shavings of hartshorn and ivory, of each two drachms; tops of St. John's wort, a handful; boil in clear barley-water three pounds to thirty ounces; adding, when it is half boiled, balsam of Tolu, three drachms; when it is cold, strain, and add syrup of rasp-berries, two ounces; and mix for use.

This is also recommended in consumptions, as the former, to be drank two or three times in a day, a little warm, with milk.

Emulsio Cretacea.
The Chalk Emulsion.

Take white chalk in fine powder, three ounces; barley-water, three pounds; boil to two; when cold, make it into an emulsion with the four greater cold seeds, of each two drachms; sweet almonds, N° 8; then add chalk in fine powder, three drachms; pearl-

sugar,

ſugar, an ounce, or enough to make it palatable.

This makes a pleaſant remedy in a diarrhœa; but in Bates there is diacodium ordered very injudicioufly, becauſe it deforms the medicine; that therefore, if wanted, may be given in ſome other vehicle; but this is an error moſt fall into for want of better acquaintance with officinal management; this ought to be ſhook as often as taken, which may be two or three times a day, about four ounces at once; it is alſo infallible in removing the heart-burn almoſt inſtantly.

Emulſio cum C. C. C.

An Emulſion with burnt Hartſhorn.

Take of the white drink two pounds; ſweet almonds blanched, white poppy ſeeds, of each half an ounce; make an emulſion; to which, when ſtrained, add two ounces of ſtrong cinnamon water, and of fine loaf-ſugar an ounce, or what is ſufficient.

This has the virtues of the white drink, but is more emollient, and therefore preferable, where the humors are very ſharp.

Emulſio ſtyptica.

A ſtyptic Emulſion.

Take comfrey root cut ſmall, four ounces; boil it in three pounds of water to two; ſtrain out the liquor, with which, and ſweet almonds blanched, white poppy and hen-bane ſeeds, of each half an ounce; and white ſugar what is ſufficient, make an emulſion, wherein diſſolve *ſal prunel.* a drachm, and ſugar of lead a ſcruple, *ſ. a.*

It cools and thickens the blood, cloſes up the mouths of the veſſels, and is of ſervice in bleeding at the noſe, ſpitting of blood, the hæmorrhoids, and overflowing of the menſes; the doſe is four ounces two or three times in a day, as ſymptoms require.

Emulſio edulcorans.

An edulcorating Emulſion.

Take barley-water two pounds; diſſolve in it gum arabic three ounces; and put thereto crabs eyes finely levigated, an ounce and half; fine ſugar a ſufficient quantity.

This infallibly cures the heart-burn; thickens and ſweetens the blood; is good in ſtranguries and gonorrhœas; and of ſervice in all complaints from ſharp humors.

Emulſio balſamica.

A balſamic Emulſion.

Take balſam of Tolu, ſix drachms; boil it in fine barley-water, three pounds to two; when cold ſtrain, and with ſweet almonds blanched ſix drachms, balm of Gilead ſixteen drops, white ſugar a ſufficient quantity, make an emulſion, *ſ. a.*

This is a noble balſamic; but the decoction of the Tolu balſam ought to be made in a circulatory heat, with ſo much water only as is required, elſe its beſt volatile parts will be loſt. This is good in all diſtempers of the breaſt, in all inward decays and ulcerations, in conſumptions, and is excelled by nothing in a gonorrhœa; to be drank at pleaſure.

Infuſio Antiphthiſica.

An Infuſion againſt Conſumptions.

Take leaves of the great comfrey, Solomon's ſeal, plantane, and burnet, of each four handfuls; liquorice-root, two ounces; infuſe them

them cold for twelve days in two gallons of lime-water.

This is chiefly for ſuch conſumptions as proceed from a ſharp thin blood, eſpecially in thoſe who have been infected with a venereal taint, or are inclined to ſcrophulous and leprous humours, and have by them been worn into a hectic; it may be uſed as a common drink.

Infuſio Liberans.

Take of the ſhavings of ſaſſafras, two ounces; guaiacum, an ounce; liquorice, three ounces; coriander-ſeed bruiſed, ſix drachms; infuſe them cold in cong. i. of lime-water for two or three days.

This is more drying than the former, to be uſed in the ſame manner, and the like caſes; theſe are both publiſhed as medicines uſed in our public hoſpitals.

Infuſio Urticarum.

Infuſion of Nettles.

Take nettle-roots freſh gathered four ounces; of the herb two ounces; and of the ſeeds, with thoſe of daucus, aniſe, cummin, of each half an ounce; lime water, four pounds; ſet them into a warm oven to infuſe (cloſe ſtopt up) twelve hours; decant the clear liquor, and in twenty-eight ounces of it diſſolve gum arabic, two ounces; crude alum, thirty-two grains; diacodium, four ounces.

In a diabetes, and for bloody urine, or ulcers of the urinary paſſages, give four ounces for a doſe: and repeat it as ſymptoms are urgent.

Infuſio Roſarum comp.

Compound Infuſion of red Roſes.

Take red roſe leaves, and balauſtines, of each two drachms; oak-bark, half an ounce; ſpring-water, two pounds; give a warm infuſion for twelve hours, then ſtrain, and add barley-cinnamon-water, four ounces; white ſugar, as much as is ſufficient.

This powerfully aſtringes, and muſt be uſed with caution.

Succus ad Hæmorrhoides.

A Juice to ſtop the bleeding of the Piles.

Take juice of yarrow depurated, one pound; ſugar two drachms. Mix for uſe.

Dr. Fuller ſpeaks largely in commendation of this, and digreſſes ſomewhat to an information concerning juice of apples, which we ſhall take leave to tranſcribe. When the flux of the hæmorrhoids is reaſonable and moderate, this purgeth the body of feculent groſs blood, and preſerves from and cures many ill diſtempers, ſuch as the pleuriſy, ſcurvy, leproſy, cancer, melancholy, hypochondriaſm, madneſs, ſchirrous tumors of the viſcera, &c. But if by loſs of ſtrength, pain in the back and thighs, failing of appetite, ſqualid habit of body, greeniſh or duſky colour, and deadneſs of look, it appears that the flux is too great, and ought to be moderated; then this (eaſily procured) ſtyptic may bring good aſſiſtance; and was the great ſecret of a certain great phyſician. And Riverius ſaith, the decoction of yarrow, uſed as common drink for three days together, happily takes off the pain of the piles. The doſe is three or four ounces twice in a day.

Of all juices, I account that of apples beyond compare the beſt, becauſe nature hath wrought it up to a much higher degree of generoſity and maturity, than that of crude traſhy herbs, which afford nothing

nothing of that delicate dulco-acid, aromatic, and odoriferous liquor iſſuing from ſome of our fine ſorts of apples, ſuch as Kentiſh, golden pippins, &c. And what Simon Pauli hath ſaid againſt them, I take to be from a miſtaken prejudice. They are not fit for medicinal uſe, till they have been gathered a while, and ſweat in a heap. The beſt way is not to drink their juice (as in cyder) becauſe that will gripe and purge ſome people; but to eat them raw, or ſcoop out, and eat the pulp for a long courſe of time every morning. Thus have they given more help to ſcorbutic and ſplenetic patients, (eſpecially ſuch as were of a hot and dry conſtitution, and apt to be coſtive) than any thing elſe the ſhops or fields could furniſh out. I knew one who uſed to eat thirty every day for his breakfaſt. And Dr. Baynard highly cries them up as a moſt noble pectoral having twice cured himſelf of a confirmed conſumption by their uſe.

Emollients, Vulneraries, &c.

Decoctum Malvæ.

The Mallow Decoction.

Take whole mallow-leaves, eight handfuls; boil them in eight pounds of water, to fix pounds. Let the liquor run through a ſieve of itſelf, without ſqueezing: put into it more mallows, about four handfuls; boil again to four pounds; ſtrain again, let it ſtand to ſettle, and then pour off the clear, and put into it marſhmallow-roots, four ounces; liquorice, raiſins, of each one ounce; gum arabic, half an ounce; ſal prunel. two drachms; boil to thirty ounces; and after it is ſtrained, ſweeten it with ſyrup of marſh-mallows, two ounces, for uſe.

This is a moſt excellent emollient diuretic. It likewiſe ſheathes all ſaline particles, blunts the acrimony of the humours, thickens tickling rheums, and lubricates the paſſages.

Decoctum Pectorale.

A pectoral Decoction.

Take pearl-barley, raiſins of the ſun ſtoned, of each one ounce; figs, dates, of each N° 8; liquorice, half an ounce; aniſeeds, to be added at laſt, two drachms; boil in three pounds to two pounds of water, and ſtrain.

This does not ſeem to deſerve quite ſo much as is ſaid in its commendation: however it is a good auxiliary remedy in any diſorders of the breaſt, and ſharp defluxions; and is eaſily made.

Decoctum Roſarum.

A Decoction of Roſes.

Take conſerve of red roſes, two ounces; Malaga raiſins ſtoned, one ounce; liquorice, melon ſeeds, of each half an ounce; barley-water, three pounds; boil to two pounds, and ſtrain through a flannel.

Dr. Fuller ſays this is a proper preſcription, when muriatic ſalts and acrid ſerum ouzing out of the glands, and irritating the *aſpera arteria*, bronchia, and veſicles, excite a moſt vehement tearing cough; and yet being too thin to be taken hold of, and pumped up, lies fretting and exulcerating the lungs, until it brings on a conſumption.

L. *Emulſio Communis.*

Common Emulſion.

Take of ſweet almonds blanched, one

one ounce; gum arabic, half an ounce; fineſt ſugar, ſix drachms; barley-water, two pints: diſſolve the gum in the barley-water made warm, and when the water is almoſt cold, pour it on the almonds, bruiſed along with the ſugar; then grind them together till they become milky, and afterwards ſtrain off the emulſion.

Emulſio de Sarſa.

The Sarſa Emulſion.

Take ſarſa, three ounces; lily-root, one ounce and an half; raſpings of ivory, three drachms; infuſe in water, three pounds for eight hours; then put in raiſins ſtoned, four ounces, and boil to two pounds; of the ſtrained liquor, and with the ſeeds of pumkin, one ounce; lettuce and hemp-ſeed, of each ſix drachms; ſweet almonds, No 8; the white of eggs firſt beat up with roſe-water, N° 2; and ſugar-candy, two ounces; make an emulſion, *ſ. a.*

Detergents.

Decoctum potenter expectorans.

An Apozem that powerfully expectorates.

Take of the pectoral decoction, one pound (ordered by the College); compound ſyrup of ſcabious, oxymel of ſquills, of each two ounces; water of walnuts comp. one ounce and a half; infuſion of *crocus metallorum*, one ounce. Mix them together.

This will not only deterge and expectorate, but, with moſt, even puke them. It is a good remedy to clean the glands, in thoſe who are apt to reach and ſtrain much in a morning; and ought to be taken every morning early for a week together, or more; but then its uſe is to be followed with temperance, and what is proper to reſtore the tone of thoſe glands; elſe they will be expoſed to larger drains of ſuch viſcid humors than before. The doſe is four ounces, warm.

Decoctum Alii.

The Garlic Decoction.

Take chips of *lignum vitæ*, three ounces; roots of zedoary, one ounce and a half; boil them in ſpring-water, twelve pounds to ſix pounds; towards the end adding roots of garlic, three ounces; ſeeds of aniſe, daucus, and cummin, of each one ounce; and to the ſtrained liquor put ſpirit of ſcurvy-graſs, half an ounce.

This is both abſorbent and diuretic; and therefore a good remedy in all errors of conſtitution from ſuperfluous humidity, particularly dropſies; and the garlic makes it alſo a powerful expectorant: for which purpoſe there is hardly a more efficacious ſimple; though it alſo prodigiouſly cleanſes the urinary paſſages: ſix ounces may be taken of this twice a day. The broth which ſome make ſtrong with this ſimple, is alſo efficacious to the ſame purpoſe; and according as it is fated with nutritive juices from fleſh, not only helps to cleanſe away a load of bad humors, but to increaſe good ones in their room.

Decoctum Ictericum.

Decoction againſt the Jaundice.

Take barberry rind, and turmeric, of each half an ounce; celandine, four handfuls; boil in water, two pounds and a half to one pound and a half; towards the end adding white wine, half a pound; ſaffron, two ſcruples

This will do good ſervice in the jaundice

jaundice, and any cachectic habit of body: to be drank as the former.

Decoctum Ictericum alterum.

Another Decoction againſt the Jaundice.

Take roots of turmeric and madder, of each one ounce; celandine roots and leaves, of each two handfuls; earth-worms ſlit, opened and waſhed clean, N° 50; boil in water and Rheniſh wine, of each one pound and a half to eight and twenty ounces. To the ſtrained liquor add tincture of ſaffron, one ounce; ſyrup of the five opening roots, three ounces; and mix for uſe.

This is a well contrived compoſition for the intention its title beſpeaks.

Decoctum Ulmi.

A Decoction of Elm-Bark.

Take the freſh inner bark of the elm-tree, four ounces; ſpring-water, three pounds. Boil to the conſumption of a pint.

Beſides its uſefulneſs as a gargle in many inſtances, it powerfully relieves various eruptions on the ſkin, particularly the ſcurfy and leprous kinds; to this end, from a pint to a pint and a half, ſhould be daily drank for ſome weeks in the ſpring and autumn. If with this decoction, the extract of elm-bark is given, the advantages are conſiderably increaſed.

Emulſio cum Ammoniaco, ſeu Lac Ammoniacum.

The Ammoniacum Emulſion or Milk.

Take fine gum ammoniacum, three drachms; diſſolve it in diſtilled vinegar, half an ounce; Rheniſh wine, two ounces; and penny-royal water, four ounces; ſtrain it for uſe.

The doſe of this is a ſpoonful three or four times a day, according to the exigency of ſymptoms. It not only expectorates and relieves the breath that way, but is alſo good in the *aſthma ſiccum*, or ſpaſmodic aſthma, where common pectorals avail nothing; for it has peculiar influencies upon the nerves themſelves; as explained in the ſurvey of the *Materia Medica*.

L. *Lac Ammoniacum.*

Take of gum ammoniac, two drachms; penny-royal water, half a pint; grind the gum in a mortar with the water, until it is diſſolved.

Emulſio Vulneraria.

A Vulnerary Emulſion.

Take balm of Gilead, two drachms; the yolk of an egg; mix them well together, and add linſeed oil cold drawn, one ounce; and then, by a little at a time, barley-water, one pound and a half; Canary, half a pound, *ſ. a.*

This is an admirable medicine, and eaſy to take, even for ſuch as would loath ſome of the ingredients ſeparately. In all diſtempers of the breaſt, inward exulcerations, eſpecially of the urinary paſſages, and for a gonorrhœa, there can be nothing better contrived. The doſe is two or three ounces twice a day; or oftener upon preſſing ſymptoms.

Emulſio Balſamica.

A balſamic Emulſion.

Take balſam of Tolu, two drachms; mix it well with the yolk of an egg, and make it up, *ſ. a.* with barley-water, two pounds.

This

This is highly balſamic and healing, and extremely grateful to take. Its doſe is from two ounces to four, two or three times a day. After the ſame manner may be contrived pectoral decoctions into emulſions, with any of the turpentine balſams; but ſuch as preſerve them of a white colour are the neateſt; the whole then looking and going down like milk.

Emulſio Spermatis Ceti.

Emulſion of Sperma Ceti.

Take equal parts of ſperma ceti and of mucilage of gum arabic, rub them together in a mortar until they are well incorporated, and dilute it at pleaſure with water enough to make an emulſion.

Emulſions, mixtures, and draughts of ſperma ceti are better prepared by this method than with yolks of eggs, and the emulſions, &c. ſo prepared have theſe advantages, that they are leſs diſagreeable to the taſte and leſs ſubject to become rancid. See Gum arabic.

Succus Cochleariæ Vinoſus.

A Vinous Juice of Scurvy-graſs.

Take a large quantity of garden ſcurvy-graſs, gathered in a dry ſeaſon, and juice it; which put into a veſſel, and ferment it with yeaſt like ale. After it has done working, bung it up, and keep it half a year in a cool cellar.

It is good in a pituitous and cold ſcurvy, and all approaches towards a dropſy; and may be drank, three or four ounces, two or three times a day; and is much pleaſanter than moſt drinks medicated with ſuch like ingredients.

Decoctum Amarum Aromaticum.

An Aromatic Bitter Decoction.

Take roots of *calamus aromaticus* and gentian, of each two drachms; galangals, four ſcruples; centaury-tops and dried wormwood, flowers of camomile and ſtœchas, of each one drachm. Boil in water, three pounds to two; adding, at the laſt, caraway-ſeeds bruiſed, half an ounce; and ſtrain. Or,

Take gentian root, two drachms; *calamus aromaticus*, Spaniſh angelica root, of each one drachm; tops of centaury, Roman wormwood, of each two pugils; coriander ſeeds, half a drachm. Juſt ſimmer all together in one pound of ſpring-water; and to the ſtrained liquor add of compound gentian water, four ounces.

This is the moſt common bitter decoction, or rather infuſion, now in uſe; and is generally ordered for four doſes, to be drank faſting, and again about five o'clock in the afternoon; not eating till about an hour after.

Decoctum Corallinum.

The Coralline Decoction.

Take quickſilver, two ounces; dittany of Crete, one ounce; coralline in powder, half an ounce. Boil in water from one pound and a half to fourteen ounces; when ſtrained, take away the mercury, and ſweeten the liquor with ſyrup of lemons, two ounces.

This, with ſome, is a great ſecret for deſtroying worms in young children, and is ordered, two ounces twice a day for four days together.

Infuſio Amara Chalybea.

Chalybeate Bitter Infuſion.

Take gentian root, two drachms; Seville orange peels dried, half an ounce; winter's bark and Spaniſh angelica root, of each one drachm;

ſaffron, half a drachm; tops of centaury and Roman wormwood, of each half a handful; filings of ſteel, one ounce. Infuſe cold in compound gentian water, and ſtrong white wine, of each one pound, for eight days, often ſhaking the veſſel, and then ſtrain it out, and filter for uſe.

Difference of conſtitutions and circumſtances may make ſome little variations in all theſe preſcriptions neceſſary; but theſe are ſufficient to form others by. They are generally given about a moderate wine glaſsful twice in a day; and will greatly reſtore the tone of the ſtomach and blood, after decays from intemperance, or acute diſeaſes. In women alſo they much conduce to regulate the menſtrual diſcharges, by giving a briſker motion to the blood.

Diuretics.

E. D. *Decoctum Altheæ.*

The Marſhmallow Decoction.

Take roots of marſhmallows, moderately dried, ſix ounces; raiſins ſtoned, two ounces; water, ſix pints; boil them to the conſumptions of two pints; then ſtrain off the liquor, which, after its feculence hath duly ſettled, pour off the clear for uſe.

It promotes urine, and cleanſes away gravel; at the ſame time obtunds acrimony, and eaſes pain.

Decoctum Diureticum.

A Diuretic Decoction.

Take roots of fennel and aſparagus, of each two ounces; winter cherries N° 12; golden-rod, two handfuls. Boil in water and white wine, (the latter being added towards the end) of each eight ounces. To twenty-two of the ſtrained liquor add of comp. horſeradiſh water two ounces; juice of parſley depurated, ſyrup of marſhmallows, of each four ounces: millepedes (tied up in a rag, bruiſed alive, and waſhed out into it) N° 300; *ſal prunel.* two ounces.

This is a powerful diuretic, and particularly of ſervice, where the urinary paſſages are obſtructed with gravel, or any gritty matter.

Decoctum Nephriticum.

A Decoction againſt the Stone.

Take roots of marſhmallows, one ounce and a half: liquorice, half an ounce; golden-rod, two handfuls; pellitory of the wall and marſhmallows, of each one handful; figs, N° 4; juniper berries, ſeeds of Macedonian parſley, burdock, gromwel (to be added about the middle of the decoction), of each one drachm. Boil in poſſet-drink, turned with white wine, three pounds to twenty-eight ounces. Strain, and ſweeten with ſyrup of marſhmallows, four ounces.

This is more forcing than the former; and where gravel ſeems to be working through the paſſages, it ought to be drank in great plenty, or to the quantity of three pounds, or four pounds in a day.

Decoctum Juniperinum ſimplex.

Simple Decoction of Juniper.

Take juniper berries, four ounces; bruiſe and boil them in Canary, three pounds to two; then ſtrain for uſe.

It is carminative, diuretic, and good againſt the colic and ſpleen. The doſe is four ounces, two or three times a-day.

Decoctum Juniperi comp.

Compound Decoction of Juniper.

Take juniper berries well bruiſed,

ed, four ounces, boil them in water, three pounds to two pounds; then having put in the ſeeds of aniſe, caraways, ſweet fennel, and coriander bruiſed, of each two drachms; and ſalt of wormwood, one drachm: cover all cloſe, and ſet by till cold; then ſtrain without ſqueezing, and put to it, fine ſugar, two ounces; ſpirit of ſcurvy-graſs, and ſpirit of ſal ammoniac, of each four ſcruples.

This is ſaid to diſſipate flatuſes, eaſe the colic, alleviate hypochondriacal affections, cleanſe the reins, and promote the menſes. It may be given four ounces, three or four times a day.

Decoctum Aperiens.

An Opening Decoction.

Take parſley and fennel roots, of each one ounce; barks of capers and tamariſk, of each half an ounce; herbs of ceterach, hart's tongue, agrimony, and liverwort, of each one handful. Boil theſe in water, and white wine added towards the laſt, of each one pound and a half, to eighteen ounces. When it is ſtrained, put to it ſimple oxymel, and ſyrup of the five opening roots, of each two ounces; and mix for uſe.

This is equal to moſt of the detergents, and in many caſes preferable. Its doſe is four ounces, two or three times a day.

Decoctum Scarleticum.

The Scarlet Decoction.

Take nitre in cryſtals, one ounce; white ſugar, one ounce; cochineal, one ſcruple. Powder all together, and put them into boiling water, two pounds; continue it boiling long enough to ſcum it: then let it cool, and decant the clear for uſe.

This is the moſt pleaſant way of giving the *ſal prunel.* and makes a beautiful tincture; which is very conveniently divided into draughts of about two ounces and a half; which is the doſe to be given once or twice in a day to promote urine, and cool its paſſages, eſpecially in gonorrhœas; where it is of mighty ſervice, as alſo to cool the blood after a debauch. If it be given in too large doſes, it chills the ſtomach too much, and will thereby prove emetic, as Dr. Fuller has obſerved.

Emulſio Aſthmatica.

An Aſthmatic Emulſion.

Take millepedes alive, N° 120; bruiſe them in a marble mortar, pouring on them, by little and little, penny-royal water, ſix ounces; and in the liquor ſtrongly expreſſed, diſſolve gum ammoniac, three drachms; and ſtrain it.

This is more diuretic than the plain *ſal ammoniacum* before given; and therefore, where there is a corpulent habit, and a *ſaburra humorum*, this is a better medicine. The doſe is a ſpoonful, in a draught of pectoral decoction, or any other convenient vehicle, two or three times in a day.

Emulſio Diuretica.

A Diuretic Emulſion.

Take freſh gathered nettle roots, four ounces; boil them in ſpring-water, three pounds to two pounds and a half. To the ſtrained liquor add the ſeeds of nettles, half an ounce; of parſley, one ounce; aniſe and muſtard, of each two drachms. Infuſe hot for four hours, and ſtrain without ſqueezing; with twenty-eight ounces of it, and ſweet almonds, melon, gromwel, and white poppy ſeeds, of each half an ounce;

white ſugar as much as ſufficient; make an emulſion, *ſ. a.* to which add comp. horſe-radiſh water, four ounces, and egg-ſhells finely levigated, half an ounce. Mix all together for uſe.

This is a good diuretic, both for forcing the current, and lubricating the paſſages at the ſame time. Its doſe is four ounces, three or four times a day.

Infuſio Diuretica.

A Diuretic Infuſion.

Take ſharp-pointed dock root, two ounces; of dandelion, one ounce; flowers of elder one handful; tops of fir, garden ſcurvy-graſs, brooklime, water-creſſes, of each half a handful; horſe-radiſh root, two drachms; muſtard ſeed, one drachm. Infuſe all in white wine, two pounds, warm and cloſe ſtopped for four hours; then ſtrain for uſe.

This was a celebrated detergent and diuretic with Dr. Lower; and, with ſome ſmall variations, occurred frequently in his practice. The doſe is a wine glaſsful, two or three times a day.

Succi ad Hydropem.

Juices againſt a Dropſy.

Take green plantane leaves, four handfuls; liverwort and brooklime, of each two handfuls. After bruiſing them in a mortar, add, compound horſe-radiſh water, half a pound; and preſs it out hard through a flannel bag.

This was a common preſcription with Dr. Willis; and is much recommended for a good drainer of watery humors; whereby perſons are not only cured, but ſecured from dropſies. Half a pound of it may be drank every morning faſting for a month.

Alexipharmics.

Decoctum Sacrum.

The Holy or Sacred Decoction.

Take Virginia ſnake-root in powder, ſix drachms; boil it in water, one pound to half a pound; ſtrain and reſerve the liquor by itſelf; boil the remainder in one pound more of freſh water half away as before, adding at the latter end cochineal, ten grains. Strain it, and having mixed the liquors together, diſſolve therein Venice treacle, half an ounce; honey, one ounce; and then ſtrain for uſe.

Dr. Fuller commends this much for an alexipharmic; and makes a very juſt diſtinction between inflammatory and depreſſing fevers; in the latter of which only ſuch warm things are proper. In ſuch fevers as the doctor calls depreſſing, that is, where the complexion is pale, and there is a low tickling pulſe, and ſometimes a clammy ſkin, this is a moſt uſeful medicine, and may be given two or three ſpoonfuls every hour, or ſeldomer, as the ſtate of the fever requires.

Decoctum Febrifugum.

A Febrifuge Decoction.

Take dried chamomile flowers, two ounces; cochineal, one ſcruple; boil them in water, three pounds to two. In the ſtrained liquor diſſolve ſalt of wormwood, two drachms.

In a viſcid ſtate of blood, and when the bark has been repeated often, without putting away intermitters for longer than about fourteen days, this ſometimes will anſwer, if uſed plentifully; and with the addition of volatiles, four ounces three or four times a-day.

Decoctum Corticis Balsamicum.

A Balsamic Decoction of the Bark.

Take Peruvian bark, two ounces, in powder; make three or four boilings in a sufficient quantity of water that all together may make one pound. To the last, which should boil but little, add storax and Benjamin of each one drachm and a half; and the roughest red wine, four ounces. Put all together, strained, for use.

The gums are better to be put into the several liquors mixed, and last of all the claret. This is fittest for hectic persons, and such as are troubled with night sweats, if the fever be not remarkable. The whole to be given in six draughts in two days, viz. morning, noon, and night, before the fever comes on. And if it comes at other times, give one draught every three hours between the paroxysms.

Decoctum Corticis cum Acidis.

A Decoction of the Bark with Acids.

Take powder of the bark, two ounces; spirit of sulphur by the bell, forty drops; boil in three pounds to twenty ounces, dividing the water, and making two or three boilings as before; and to the last put tormentil root, half an ounce; and galangal, two drachms.

This is the most effectual, where nothing else is in view but removing the fits, in constitutions otherwise well; and falls but very little short of the bark in substance. The tormentil prevents its going off by stool, which it is sometimes apt to do; and if this is not sufficient, add to each draught from five to eight drops of laudanum; or put twenty alone into the night-dose. This must be followed, giving about three ounces every three hours between the fits, till they disappear, for grown persons; but for children, a third of the quantity will suffice.

Decoctum Corticis cum Chalybe.

A Decoction of the Bark with Steel.

Boil the bark, as in the last, with one ounce of steel filings, and double the quantity of the spirit of sulphur.

In a chlorosis, where the menstrual discharges have been defective, especially in constitutions languid, cold, and leucophlegmatic, this is the best preparation; to be given as the other; observing to desist, if the menses flow, till they are over.

Decoctum Corticis cum Helleboro.

A Decoction of the Bark with Hellebore.

Take the bark in powder, one ounce and a half; boiling as before to one pound; with black hellobere, one ounce, in the last decoction; and four ounces of white wine.

Divide and give this as the former, where a person naturally sanguine, from a sudden diminution of perspiration, or, as it is commonly called, catching cold, falls into an intermittent, joined with an obstruction of the menses: this will infallibly remove both the ails at once. But, to prevent the hellebore carrying it away by stool, a proper quantity of laudanum is to be added, as before directed.

Emulsio Variolosa.

An Emulsion for the Small Pox.

Take sweet almonds blanched, seeds of melons, cucumber, white poppy, of each two drachms; double-refined sugar, half an ounce. When all are sufficiently beat in a

marble mortar, pour on, by degrees, jelly of hartſhorn (made without juice of lemons) four ounces; alexiterial milk-water, twelve ounces; ſtrain and preſs out; then add epidemic water, and that of cinnamon, of each one ounce; diaphoretic antimony newly and well made, two drachms. Mix for uſe.

This is recommended to be drank of frequently in the meaſles and ſmall pox, according to the ſtrength of the patient.

Emulſio Alexipharmica.

An Alexipharmic Emulſion.

Take ſweet almonds blanched one ounce; cucumber ſeeds, and of white poppies, of each ſix drachms; barley-water, (in which has been boiled two ounces of ſcorzonera root) one pound and a half; alexiterial milk-water and plague-water, of each four ounces; ſyrup of lemons, three ounces. Make an emulſion, *ſ. a.*

This is a very pleaſant drink in fevers, and aſſiſts to dilute and promote a diaphoreſis, and cool the urine, eſpecially where bliſters are raiſed. It may be drank at pleaſure.

Infuſio Zedoariæ.

An Infuſion of Zedoary.

Take roots of zedoary, and aromatic reed, of each half an ounce; ſeeds of caraway, ſweet fennel, of each two drachms; nutmeg, cardamoms, and ſaffron, of each one drachm; cloves, and grains of paradiſe, of each half a drachm; alexiterial milk-water, one pound; of mint-water half a pound; of cinnamon, four ounces; of gentian and wormwood comp. of each two ounces; macerate cloſe, and moderately warm, for twelve hours: then ſtrain, and add ſpirit of lavender, comp. and ſpirit of ſal ammoniac, of each two drachms; and mix for uſe.

This is recommended in the gout and rheumatic pains attended with a fever; to ſip a little of often hot; for it helps a diaphoreſis, and keeps the gouty matter in the extreme parts.

Infuſio Alexipharmica.

An Alexipharmic Infuſion.

Take ſcordium dried and picked, two drachms; Venice treacle, three drachms; plague-water, four ounces; milk water alex. twelve ounces: a whole lemon ſliced. Steep all together cloſe for three or four hours; then ſtrain and ſweeten, if deſired, for uſe.

This is much more efficacious than any alexipharmic julep; and divers of this kind may be contrived, where the patient will not, or cannot ſubmit to more forms at once, as the different ſymptoms require them to be varied. This drank three or four ſpoonfuls at a time, and repeated every hour or two, with proper warmth and diluters, cannot fail of raiſing a ſweat, and being of ſervice in moſt fevers.

Cathartics.

Decoctum Polychreſtum.

A Decoction of many Virtues.

Take roots of polypody of the oak, three ounces; ſuccory, two ounces; monk's rhubarb, ſix ounces; ſena, two ounces; ſweet fennel-ſeed, liquorice, of each one ounce; raiſins of the ſun ſtoned, four ounces; boil in a ſufficient quantity of ſpring-water to ſtrain to two pounds and a half. To the liquor put juice of ſea ſcurvy-graſs, eight ounces; manna, two ounces;

ounces; and clarify with the whites of eggs.

This is an uſual ſpring purge with ſmall variations, as circumſtances may differ. Its doſe is from two ounces to five ounces. There muſt not be much more water put in, than is required in the ſtrained liquor; becauſe the ingredients need but juſt boil.

Infuſio Cathartica.
A Purging Infuſion.

Take ſena, one ounce, white tartar powdered, half an ounce; elder-flower water and white wine, of each half a pound; infuſe warm and cloſe for twelve hours; take twelve ounces of the liquor clear ſtrained; add to it ſyrup of ſuccory with rhubarb, four ounces. Mix for uſe.

The doſe of this to grown perſons is ordered from three ounces to five ounces; and proportioned accordingly to children. This makes a good purge enough for the firſt paſſages.

Infuſio Rhabarbari.
An Infuſion of Rhubarb.

Take rhubarb thin ſliced, two drachms; yellow mirobolans, one drachm; ſalt of wormwood, ſixteen grains; common and cinnamon-water, of each two ounces; infuſe, cloſe and warm all night; ſtrain off, and add ſyrup of roſes, half an ounce, or ſix drachms; drink the whole the next morning at one doſe.

This is good in an over-abundance of bile, and when perſons puke or belch bitter, or ſour in a morning, and are ſubject to diarrhœas.

Infuſio cathartica communis.
The common Purging Infuſion.

Take ſena, three drachms; rhubarb, half a drachm; coriander ſeed, liquorice, of each one ſcruple; ſalt of tartar, ten grains; infuſe in a ſufficient quantity of water, to ſtrain off, three ounces; to which put *elixir ſalutis*, two drachms; ſyrup of damaſk roſes, half an ounce; take it at one doſe.

Altera. Another.

Take ſena and rhubarb, of each two drachms; liquorice and coriander ſeeds, of each half a drachm; Epſom ſalt, two drachms; infuſe in water enough for three ounces: and add ſyrup of buckthorn, three drachms. Mix for one doſe.

This is ſtronger than the former, and will infallibly operate with the moſt robuſt conſtitutions. In the ſame manner purging draughts may be prepared by infuſion, with ſuch variations as different conſtitutions and circumſtances require, of any ſtrength and quantity.

Coolers and Narcotics.

Decoctum Pacificum.
The Pacific Decoction.

Take ſalt of tartar made with nitre, three ounces; flowers of poppies, juniper berries, and roots of black hellebore, of each eight ounces; lime water, thirteen pounds. Boil, with a gentle fire, for twenty-four hours, and when cool, ſtrain through a thick flannel.

This may be uſed to many good purpoſes, for it greatly breaks viſcid and ſizy humors, and deterges thoſe paſſages where they are moſt apt to be obſtructed; and it diſcharges them both by urine and tranſpiration; ſo that it is a good medicine in ſcorbutic rheumatiſms, and will procure eaſe where the pains are violent. And to this laſt purpoſe ſome add two or three

drachms of opium; which make yet a greater ſudorific, of ſervice in the tortures of the gout. The doſe is to be proportioned according to the ſtrength and exigency of the patient; and to be given chiefly every night going to bed.

Decoctum refrigerans.
A Cooling Decoction.

Take ſpring-water, twenty-ſix ounces; make it boil, and then put in juice of lemons and fine ſugar, of each two ounces; cochineal, one ſcruple; let it continue boiling till the ſcum be taken off; and put to it of damaſk roſe-water, four ounces.

This is a moſt pleaſant drink in parching fevers, and may be ſipped of at pleaſure. It greatly cools the ſtomach, and helps to waſh off by urine.

Decoctum refrigerans alterum.
Another Cooling Decoction.

Take ſorrel roots and raiſins of the ſun cut ſmall, of each two ounces; liquorice and pearl-barley, of each half an ounce. Boil in ſpring-water from three pounds to two; and ſweeten with ſyrup of lemons, two ounces.

This has much the ſame qualities as the former, but is not quite ſo grateful either to ſight or taſte. It may be drank at pleaſure.

Decoctum Scorzoneræ.
A Decoction of Scorzonera.

Take pearl-barley, half an ounce; roots of ſcorzonera, two ounces; roots of ſorrel, one ounce; leaves of wood ſorrel, one handful; parings of pippings, N° 2. Boil in water, three pounds to twenty-eight ounces; ſtrain and ſweeten with ſyrup of lemons and raſpberries, of each two ounces; and mix for uſe.

This may be drank at diſcretion in fevers as a diluter; and ſome imagine the ſcorzonera gives it an alexipharmic quality and makes it promote ſweat.

Emulſio Pacifica.
A Pacific Emulſion.

Take white poppy ſeeds, two ounces; ſweet almonds blanched, half an ounce; red poppy-water, one pound and a half. Make an emulſion, *ſ. a.* which ſweeten with diacodium, three ounces.

It greatly ſooths a delirium, and ſteals the patient into ſleep much better than the warm opiates. It may be given three or four ounces at a time, till it anſwers the end. It may be of great ſervice in the ſmall-pox, and will keep the perſon much leſs ſenſible of ſoreneſs, and more eaſy.

Succus Attemperans.
The Cooling Juice.

Take as much dandelion as you pleaſe; put it into a glazed pipkin with a cover, which ſtop cloſe with paſte, ſet it in an oven after the bread is drawn; and let i ſtand ſix hours, then pour the liquor through a hair ſieve, without ſqueezing, for uſe.

Dr. Fuller approves this way of obtaining the juices from herbs becauſe they agree better with the ſtomach than thoſe which are expreſſed raw. This ſimple medicine, he ſays, dilutes the blood and humors, corrects their acrid ſalt; and is a principal thing in a hot ſcurvy, and cutaneous affections. He has known where it has done good, even in a *Lepra Græcorum*, ſo far as to keep it from itching, heating, and ſpreading, and make it tolerable, though it could not cure it: four ounces of it are to be drank thrice a day.

SECT.

SECT. III.

Of Juleps, Draughts, and Mixtures.

THE firſt of theſe forms is ſo much altered in the preſent practice, that the lateſt Diſpenſatory writers cannot be of any ſervice to us herein. Under this title uſed to be included a great deal made by infuſion, and received from the expreſſed juices of herbs, fruits, &c. and Dr. Fuller, the lateſt of all, has ſcarce a julep in his whole book, which would not be thought a very odd preſcription now in any apothecary's ſhop; for he often adds powders and chemical oils, which deform this kind of medicine; and are much more conveniently exhibited in boles, powders, and electaries. The preſent practice is not only extraordinary in the neatneſs and elegance of extemporaneous medicines, by which it has rejected out of juleps all but tranſparent liquors, unleſs in pearl juleps; but alſo regards them only as diluters; and therefore orders what the main dependance is upon, in ſome other form. And even the quantities herein are ſo exactly kept up to, from eight ounces to about ten ounces for the largeſt juleps, that the ſhops are only furniſhed with phials of thoſe ſizes to contain them. The ſame alteration likewiſe is made in draughts; they being now little elſe than a leſs proportion of the ſame things as are ordered in juleps, for one doſe, to waſh down or dilute a bole, or a medicine in a more ſolid form. In no intention, therefore, are they truſted to, unleſs as narcotics and cathartics; many of thoſe medicines being conveniently enough exhibited in a draught for one doſe: and a potion ſeems to differ from this no otherwiſe than as it is a more medicinal term; and therefore generally applied to cathartics. A mixture is properly a julep with ſolid ingredients diſſolved in it; or when oils are added to draughts without incorporation; (for by incorporation they become linctuſes or emulſions.) The former is out of practice, being deemed an unſightly and ſlovenly way of compoſition; and the latter never occurs but amongſt emollients; and therefore of theſe we ſhall meet with but few. As the preſent practice then is to be almoſt our only guide in theſe forms, we ſhall give a few examples of each, under all thoſe intentions they are beſt fitted for, in the method which was taken in the diſtribution of the medicinal ſimples in the ſecond part. As theſe likewiſe were uſed to be ſweetened with as much as is ſufficient, of ſome appropriate ſyrup, they are now generally dulcified only with plain ſugar: but as this alteration can be of no great importance, it may be eligible to retain, in ſome meaſure at leaſt, the old way; becauſe a patient's expectation, which is no trifling regard, is much more raiſed with a well-coloured cordial, than by what is clear: for they are apt to ſlight the latter as no better than ſimple waters; which they have no opinion of.

Cephalics.

Cephalics and Cardiacs.

(1.) Take black cherry-water and baum-water, of each three ounces; piony-water compound, four ounces; ſyrup of cloves, ſix drachms. Make them into a julep.

Or, (2.) Take roſemary and black-cherry-water, of each four ounces; compound piony-water, two ounces; ſpirit of lavender, two drachms; ſyrup of cloves, ſix drachms. Make them into a julep.

Or, (3.) Take baum and black-cherry-water, of each three ounces and a half; *aqua mirabilis*, two ounces; ſpirit of lavender, half an ounce; of the royal tincture, twelve drops; fine ſugar, half an ounce. Make them into a julep.

Or, (4.) Take black-cherry water, ſix ounces; Dr. Stephen's-water, two ounces, *aqua Mariæ*, one ounce; confectio alkermes, two drachms; ſugar, half an ounce. Make them into a julep.

Or, (5.) Take black-cherry-water and white wine, of each three ounces and a half; *aqua cæleſtis*, two ounces and a half; ſyrup of piony one ounce. Mix them into a julep.

Or, (6.) Take white wine, eight ounces; *aqua cæleſtis* and *aqua Mariæ*, of each one ounce; ſyrup of piony, half an ounce; confection of alkermes, three drachms. Make them into a julep.

Or, (7.) Take white wine and damaſk-roſe-water, of each three ounces and a half; piony-water comp. two ounces; ſpirit of lavender, three drachms; caſtor, tied up in a piece of ſcarlet or white ſilk, one ſcruple; muſk, three grains; which put into the phial, and make into a julep.

And with little variation, as they are deſired to be ſtronger or ſmaller, to be fitted for nervous diſtempers, or to be purely cordial, and as the ſweets agree or not, may a thouſand more be contrived; but all of them of no great moment, farther than to dilute and waſh down other dry forms: to be taken five or ſix ſpoonfuls at a time. In ſome ſlight caſes indeed they may be truſted to; with the help of ſome drops of ſal volatile oleoſum, which, coloured with ſpirit of lavender, is called the cephalic tincture or ſpirit, to be uſed in each doſe, which ought to be repeated every three, four, or ſix hours, as occaſion requires; one drachm, or thereabouts in any one of theſe juleps, of levigated pearl, and ſweetened with fine loaf-ſugar, inſtead of any ſyrup, makes it a pearl cordial.

Draughts under the ſame claſs may be ordered of about a third part of the quantity of a julep, and ſuited accordingly.

Carminatives.

(1.) Take the laſt runnings of *aqua mirabilis* and chamomile-water, of each three ounces and a half; ſpirit of juniper, two ounces; ſyrup of cloves, ſix drachms. Make them into a julep.

Or, (2.) Take the laſt runnings of Dr. Stephens's water, four ounces; dill-water, and compound angelica-water, of each two ounces and a half: ſyrup of clove-July-flowers, half an ounce; confection of alkermes two drachms. Make them into a julep.

Or, (3.) Take chamomile flower-water, ſix ounces; ſpirit of caraway, an ounce; *aqua mirabilis*, two ounces;

ces; ſyrup of cloves an ounce. Make them into a julep.

Or, (4.) Take the laſt runnings of compound angelica-water and fennel-water, of each four ounces; *aqua cæleſtis* two ounces; ſpirit of lavender, three drachms; leaf-gold, two leaves; *tinctura regalis*, ſix drops; ſyrup of clove-July-flowers, ſix drachms. Make them into a julep.

Or, (5.) Take elder flower, and chamomile-water, of each three ounces and a half; *aqua mirabilis*, two ounces; ſpirit of angelica an ounce; fine loaf-ſugar, half an ounce; and confection of alkermes, two drachms. Make them into a julep.

In colic pains ſome drops of *laudanum liquidum*, might be added to any of theſe, and would make them more ſure in abating them, and procuring preſent eaſe. For children, who often want them, they muſt be made with a leſs quantity of the compound waters, and given in proportionate doſes. Draughts alſo are to be made for the ſame intention with about a third of the quantity.

Hyſterics.

(1.) Take penny-royal water, four ounces; black-cherry and bryony-water compound, of each three ounces; ſyrup of ſtinking orrache, an ounce; tincture of caſtor, a drachm. Mix them into a julep.

Or, (2.) Take rue, penny-royal, and compound bryony-water, of each three ounces; ſyrup of compound piony, an ounce; caſtor tied up in a nodule of ſilk, a ſcruple; aſa fœtida five grains. Mix them into a julep.

Or, (3.) Take rue and black-cherry-water, of each three ounces; compound bryony-water two ounces; ſpirit of caſtor, two drachms; ſpirit of ſal ammoniac, a drachm; ſugar, a ſufficient quantity. Make them into a julep, in which put aſa fœtida ten grains, in a nodule of red ſilk.

Or, (4.) Take chamomile and rue-water, of each three ounces; compound piony water, two ounces; ſpirit of ſal ammoniac, a drachm; pearl, prepared, a drachm; fine loaf ſugar, half an ounce. Make them into a julep.

Or, (5.) Take camphor, two drachms; ſet it on fire, and immediately quench it in a pound of ſpring-water; repeat the ſame till the camphor is conſumed, and then ſweeten the water for a julep.

Or, (6.). Take black-cherry and penny-royal-water, of each four ounces; compound bryony-water, two ounces; quench two drachms of camphor in them till conſumed, and ſweeten with ſugar ſufficient for a julep.

With the ſame ingredients, and ſuch variations as preſent circumſtances indicate, may be compounded many more; but thoſe with the camphor are much the moſt efficacious, and will frequently be of ſervice, without any other help.

Strengtheners.

(1.) Take mint, and ſmall cinnamon-water, of each four ounces; ſpirit of cinnamon, two ounces; ſyrup of quinces, an ounce. Make them into a julep.

Or, (2.) Take barley-cinnamon-water, ſix ounces; ſpirit of mint, and of clary, of each an ounce and a half; ſyrup of mint, an ounce. Make them into a julep.

Or, (3.) Take red-roſe-water, barley-cinnamon-water, of each four

four ounces; ſpirit of cinnamon, two ounces; pearl prepared a drachm; fine loaf-ſugar, ſix drachms. Make them into a julep, to be intitled, *The pearl cordial.*

There are many other waters in the ſhops, called for in the ſame intention, but we have proved them unfit to anſwer any ſuch ends; and theſe are ſufficient, ſo far as can be expected from this form. Where cinnamon-waters are not in readineſs, and the oil of it can be had, theſe may be made by dropping a ſufficient quantity, which is a very little, upon ſugar, and diſſolving it in any water; for it is the reſtringent warmth of that which fits it for this intention.

Draughts may be made of a third of either of theſe: but as they are ſeldom ordered to this purpoſe but with ſome mixtures of opiates, we ſhall meet with them under that claſs.

Balſamics.

(1.) Take barley-cinnamon and magiſterial ſnail-water, of each four ounces; roſe-water, two ounces; ſyrup of balſam, ſix drachms. Make them into a julep.

Or, (2.) Take roſe-water, four ounces; magiſterial ſnail-water, ſix ounces; fine loaf-ſugar, ſix drachms; pearl prepared a drachm; make them into a pearl cordial.

Or, (3.) Take new milk, four ounces; boil in it balſam of Tolu, half a drachm; flowers of Benjamin, five grains; after ſtraining, put thereto magiſterial ſnail-water, four ounces; roſe-water, two ounces; pearl, a drachm; fine loaf-ſugar, half an ounce; and make them into a julep, which may be entitled, *The pearl cordial.*

There is likewiſe very little of this claſs ſuitable for this form, or of the ſubdiviſions under it; the following therefore may paſs for vulnerary or detergent.

(4.) Take parſley-water, elder flower-water, and magiſterial worm-water, of each three ounces; ſpirit of juniper, half an ounce; ſyrup of the five roots, ſix drachms. Make them into a julep.

Or, (5.) Take elder-flower-water, ſix ounces; magiſterial worm-water, four ounces; ſyrup of the five roots, an ounce. Make them into a julep.

Or, (6.) Take Caſtile ſoap, ſliced thin, a ſcruple; boil it in milk, four ounces, and as much elder-flower-water; when diſſolved and ſtrained, add of magiſterial worm-water, two ounces; ſpirit of juniper, half an ounce; pearl, a drachm; fine ſugar, ſix drachms. Mix, and intitle it, *The pearl julep.*

Draughts may be made of a third of any of theſe, and where any other form is more irkſome to the patient, the latter, with ſomewhat a larger proportion of ſoap, may be truſted to in the jaundice, and any kind of cachexy, if repeated often, and continued long enough.

Diuretics.

(1.) Take parſley-water, white wine, and compound horſe-radiſh-water, of each three ounces; ſyrup of marſhmallows, half an ounce; make them into a julep.

Or, (2.) Take parſley-water, and compound horſe-radiſh-water, of each five ounces; ſyrup of marſhmallows, ſix drachms. Make them into a julep.

Or, (3.) Take white wine, ſix ounces; compound horſe-radiſh-water, four ounces; ſyrup of marſhmallows, an ounce. Make them into a julep.

Or,

Or, (4.) Take parſley-water, four ounces; white wine, ſix ounces; oil of tartar *per deliquium*, two drachms; ſyrup of marſhmallows, an ounce. Make them into a julep.

Or, (5.) Take white wine, eight ounces; compound horſe-radiſh-water, two ounces; ſpirit of nitre dulcified, two drachms; ſyrup of marſhmallows, an ounce. Make them into a julep.

Of either of theſe, a third part may be deſcribed in a draught; but becauſe ſome things under this intention are of ſuch efficacy as to deſerve their exact doſes to be aſſigned, it may be convenient to give ſome examples of them in draughts and mixtures for one doſe.

(1.) Take white wine, two ounces; ſpirit of juniper, three drachms; oil of tartar *per deliquium*, a drachm; ſyrup of marſhmallows, two drachms. Make them into a draught.

Or, (2.) Take ſmall cinnamon-water, vinegar of ſquills, and ſyrup of marſhmallows, of each an ounce: make them into a draught.

Or, (3.) Take white wine, and vinegar of ſquills, of each an ounce; ſpirit of cinnamon, two drachms; ſyrup of white poppies, half an ounce. Make them into a draught.

Theſe two latter are greatly recommended, by the beſt authorities, in the preſent practice, and are much depended upon in dropſies, and the worſt of cachexies, eſpecially if attended with an aſthma. The cinnamon-water, though of itſelf of a contrary intention, yet here it contributes to this, by guarding the ſtomach and firſt paſſages againſt ſuch ſolicitations from the ſquills, as will make the medicine be rejected by vomit or ſtool, and ſo ſerves only as a means to convey it into the blood, where it acts as a powerful alterative. The diacodium alſo helps to the ſame end, as opiates may, in many inſtances, change cathartics into alteratives, by obtunding or rendering unheeded their irritations in the firſt paſſages: and giving them an opportunity of exertion upon the blood and juices in more remote parts. But as diuretics are alſo ſometimes guarded and aſſiſted by ſuch things as relax and ſmooth the paſſages, the following mixtures are proper to ſuch a purpoſe.

(1.) Take compound horſe-radiſh-water, and white wine, of each an ounce; oil of ſweet almonds, and ſyrup of marſhmallows, of each half an ounce. Mix for one doſe.

Or, (2.) Take white wine, two ounces; oil of tartar *per deliquium*, two drachms; ſyrup of white poppies, and oil of ſweet almonds, of each three drachms. Mix for one doſe.

Or, (3.) Take oil of walnuts, and ſyrup of marſhmallows, of each an ounce; oil of tartar *per deliquium*, two drachms; white wine, half an ounce. Mix for one doſe.

Or, (4.) Take white wine, an ounce and half; ſpirit of nitre dulcified, forty drops; oil of ſweet almonds, and ſyrup of white poppies, of each half an ounce. Mix for one doſe.

Theſe latter are chiefly of uſe where violent pains are occaſioned by the ſtone and gravel; and, at the ſame time, that they help forwards what is obſtructed in the urinary paſſages, they alſo lubricate and widen them, whereby that is carried through, which forcing

forcing medicines only might wedge in the harder, and lay as a foundation for inſuperable obſtructions. Theſe are to be repeated as the urgency of ſymptoms indicates.

Diaphoretics.

(1.) Take treacle and plague-water, of each an ounce and half; alexiterial milk-water, and rue-water, of each three ounces; ſyrup of red poppies, half an ounce. Make them into a julep.

Or, (2.) Take treacle-water, three ounces; alexiterial milk-water, ſix ounces; ſyrup of red poppies, ſix drachms. Make them into a julep.

Or, (3.) Take compound ſcordium-water, three ounces; plague-water, two ounces; alexiterial milk-water, four ounces; ſyrup of red poppies, half an ounce. Make them into a julep.

Or, (4.) Take treacle and compound ſcordium-water, of each two ounces; milk-water, five ounces; tincture of ſaffron, two drachms; ſpirit of ſal ammoniac, a drachm; fine loaf-ſugar, two drachms. Make them into a julep.

Or, (5.) Take new Rheniſh wine, ſix ounces; plague-water, and treacle-water, of each an ounce and half; ſyrup of poppies, ſix drachms. Make them into a julep.

Or, (6.) Take alexiterial milk-water, ſix ounces; plague-water, three ounces; diſtilled vinegar, half an ounce; dulcified ſpirit of nitre, fifty drops; ſyrup of red poppies, ſix drachms. Make them into a julep.

Or, (7.) Take *aqua protheriacalis*, alexiterial milk-water, and plague-water, of each three ounces; tincture of ſaffron, half an ounce; ſyrup of red poppies, ſix drachms. Make them into a julep.

Or, (8.) Take plague-water, black-cherry-water, and alexiterial milk-water, of each three ounces; pearl prepared, a drachm and a half; fine loaf-ſugar, half an ounce. Mix, and intitle it, *The pearl julep.*

Emetics.

The name of julep is a ſtranger under this title, and therefore we have nothing more here beſides potions or mixtures. As,

(1.) Take oxymel of ſquills, two ounces; baum-water, an ounce; oil of almonds, half an ounce. Mix for one doſe.

Or, (2.) Take vinegar of ſquills, an ounce and half; oil of almonds, an ounce. Mix for one doſe. Or, for ſtronger perſons,

(3.) Take *vinum benedictum*, an ounce; milk-water, two ounces. Mix for one doſe.

Or, (4.) Take powder of ipecacuanha, half a drachm; ſyrup of violets, an ounce; milk-water, two ounces. Mix for one doſe.

Or, (5.) Take emetic tartar, ſix grains; oxymel of ſquills, an ounce; milk-water, two drachms. Mix for one doſe.

Or, (6.) Take of the juice of the herb aſarabaca, ſix drachms, or an ounce; oxymel of ſquils, half an ounce; carduus-water, two ounces. Mix for a draught.

This laſt is preſcribed chiefly to hypocondriacal and maniacal patients, and is a very ſtrong emetic; ſuch people requiring much larger doſes than others.

(7.) Take *mel helleboratum*, an ounce; vinegar of ſquills, half an ounce; milk-water, an ounce. Mix for one doſe. Or, for children,

(8.) Take

(8.) Take oxymel of ſquills, half an ounce; milk-water, an ounce. Mix for one doſe.

Or, (9.) Take vinegar of ſquills, two drachms; ſyrup of peach bloſſom, three drachms. Mix for one doſe.

Or, (10.) Take ſyrup of peach-bloſſoms, three drachms; emetic ſalt of vitriol, eight grains; milk-water, half an ounce. Mix for one doſe.

In all theſe the ſtrength and circumſtances of the patient, and the diſtemper, are to be the main guide, and therefore there can be no ſet forms determined for univerſal uſe: theſe take in what the preſent practice relies on; but the milder are moſt uſed.

Milder Cathartics.

(1.) Take ſyrup of damaſk roſes, an ounce and half; *aqua mirabilis*, two drachms. Mix for one doſe.

Or, (2.) Take ſyrup of rhubarb, two ounces; chamomile-water, an ounce and half. Mix for one doſe.

Or, (3.) Take ſyrup of rhubarb, an ounce; *elixir ſalutis*, half an ounce; chamomile-water, an ounce and half. Mix for one doſe.

Cathartics rougher.

(1.) Take ſyrup of buckthorn, an ounce and half; chamomile-water an ounce, and half; *aqua mirabilis*, two drachms. Mix for one doſe.

Or, (2.) Take ſyrup of damaſk roſes, an ounce and half; *elixir ſalutis*, half an ounce; chamomile-water, an ounce. Mix for one doſe.

But becauſe ſyrups, in ſuch large quantities, are loathſome to many in taking, the general practice is to preſcribe extemporaneous draughts by infuſion, many of which may be made from ſuch a portion of ſome cathartic, before given under that form, as is alloted for a doſe; but becauſe this is not ſo much uſed, we ſhall here ſubjoin a few examples of potions thus made.

(1.) Take ſena, three drachms; liquorice-root, half a drachm; coriander-ſeeds, and ſalt of tartar, of each ten grains; infuſe in a ſufficient quantity of hot water, to ſtrain three ounces; to which add *elixir ſalutis*, two drachms, and ſyrup of damaſk roſes, half an ounce. Make a potion for one doſe.

Or, (2.) Take ſena, two drachms; rhubarb-root, a drachm; liquorice, half a drachm; ſalt of tartar, ten grains; infuſe in enough boiling water, to ſtrain three ounces; to it put ſyrup of buckthorn, three drachms; *aqua mirabilis*, two drachms: make them into a potion for one doſe.

Or, (3.) Take ſena, three drachms; rhubarb, a drachm; liquorice, two ſcruples; ſalt of tartar, ten grains: infuſe in enough boiling-water, to ſtrain three ounces; and add ſyrup of damaſk roſes, half an ounce. Make them into a potion.

Or, (4.) Take ſena, half an ounce; liquorice, a drachm; ſalt of Epſom-water, two drachms: infuſe in enough boiling-water, to ſtrain three ounces; and add ſyrup of buckthorn, half an ounce, for one potion.

The doſes here are for grown perſons, and for children they may be proportionably varied to their ages; as, likewiſe, be made ſtronger or weaker, according to the ſtrength and circumſtances of the patient: though indeed the ſtronger cathartics, ſuch as ſome conſtitutions and diſorders require, come not conveniently into this form, as many re-

ſinous ſubſtances and preparations in the chemical pharmacy; the reader may, therefore, expect to meet with them amongſt the boles and powders of this claſs.

Narcotics.

Reaſons have already been given, why theſe ought not to be truſted in any forms but ſuch as are moſt proper for one doſe; and therefore juleps are hence excluded, and nothing elſe but draughts are proper under this diviſion: a few examples take as follow.

(1.) Take plague-water and milk-water, of each an ounce and half; ſyrup of white poppies, ſix drachms. Make them into a draught.

Or, (2.) Take plague-water and barley-cinnamon-water, of each an ounce and half; liquid laudanum, fifteen drops; ſyrup of red poppies, three drachms: mix.

Or, (3.) Take Dr. Stephens's water, an ounce; barley-cinnamon-water, two ounces; ſolid London laudanum, a grain and a half; ſyrup of cloves, three drachms: mix.

Or, (4.) Take *aqua mirabilis*, an ounce; chamomile-water, two ounces; ſyrup of white poppies, ſix drachms: mix for one draught.

When the intention is only to procure ſleep, or to ſtop defluxions of rheum, which all opiates more or leſs do, it is no great matter what is the vehicle, provided the opiate be well adjuſted in its doſe; but in fevers, colics, and other diſtempers, which have ſome other indications beſides that of giving ſleep, the vehicle muſt be choſe out of ſuch as are moſt proper to the intention pointed at, whether alexipharmic, carminative, reſtringent, or any other. There is a hazard in aſcertaining the doſe of liquid laudanum from the number of drops, which few are apprized of; and that is, the ſhape of the bottle from whence it is dropt will make the quantity more or leſs, becauſe the drops will form larger or ſmaller, according to the faſhion of the phial; it may be demonſtrated from experiment, by weighing ſuch a number of drops from phials of different forms and magnitudes; for this reaſon many phyſicians now chooſe the ſolid laudanum, which may be aſcertained by weight; and if it be well diſſolved, its ſmall quantity is hardly diſcernible, ſo as to make a draught thick or foul. But although opiates are beſt preſcribed in ſingle doſes, to grown people, yet to children, where they are neceſſary, becauſe the quantity of one doſe is ſo ſmall as not eaſily to be computed by weight or meaſure, the beſt way is to give them in mixtures for many doſes, and directing a ſpoonful, at a time, to be repeated, at ſeveral diſtances, till the end aimed at is obtained: in the gripes, therefore, and ungovernable looſeneſſes, the following may be of uſe.

(1.) Take chamomile-water, four ounces; *aqua mirabilis*, two drachms; ſyrup of white poppies, an ounce: for a mixture, to be given at diſcretion.

Or, (2.) Take mint-water and fennel-water, of each two ounces; ſyrup of clove-July-flowers, an ounce; liquid laudanum, twenty drops: mix, and give a ſpoonful every half hour, till it procures eaſe.

Coolers.

Very little is preſcribed in the ſhops under this intention, becauſe the kitchen ſo much better ſupplies

all

all of this kind, and furniſhes the common diluters, of which ſage-tea, lemonade with a little wine, and wine and water, are much the beſt; however, where other forms are little uſed, juleps, after the following examples, may be preſcribed.

(1.) Take of ſimple alexiterial water, eight ounces; treacle-water, two ounces; ſyrup of lemons, or of Seville oranges, an ounce. Make them into a julep.

Or, (2.) Take of ſimple alexiterial water, eight ounces; *aqua protheriacalis*, two ounces; ſyrup of raſpberries, an ounce. Make them into a julep.

Or, (3.) Take new Rheniſh wine, half a pound; ſyrup of lemons, an ounce. Make them into a julep.

Or, (4.) Take Rheniſh wine, and damaſk-roſe-water, of each four ounces; ſpirituous alexiterial water, two ounces; ſyrup of Seville oranges, an ounce. Make them into a julep.

L. *Julepum è Camphora.*

Julep of Camphor.

Take of camphor one dram; the fineſt ſugar, half an ounce; boiling water, one pint; grind the camphor firſt with a little rectified ſpirit of wine, till it becomes ſoft, and then with the ſugar till it be perfectly mixed; afterwards add the water by degrees, and filter in a cloſe veſſel.

If the compoſition is rubbed with twice its weight of gum arabic, it mixes well with the water.

L. *Julepum è Creta.*

Julep of Chalk.

Take of chalk perfectly purified, an ounce; the fineſt ſugar, ſix drachms; gum arabic, two drachms; water, two pints; mix them.

The gum arabic is intended to render the water viſcid, and by that means prevent the chalk from ſubſiding ſo quickly: the quantity preſcribed is much too ſmall to anſwer the end, and much more muſt be added to ſuſpend the chalk longer than water alone. The Edinburgh college hath been leſs wanting in this reſpect.

E. *Potio Cretacea.*

The Chalky Potion.

Take of prepared chalk, and powdered gum arabic, of each an ounce; of pure ſugar, half an ounce; pure water, two pints; and ſpirituous nutmeg-water, two ounces: mix.

L. *Julepum è Moſcho.*

Muſk Julep.

Take of damaſk roſe-water, ſix ounces; muſk, twelve grains; the fineſt ſugar, one dram; pound the ſugar with the muſk, and then gradually add the roſe-water.

The muſk would be better diſſolved and ſuſpended in this julep, if it was firſt rubbed well with two or three drams of the mucilage of gum arabic, before the addition of any thing elſe to it; volatile ſpirits are uſefully added alſo for dividing muſk, for which account from a dram to two drams of the volatile aromatic ſpirit may be added to the above julep.

SECT. IV.

Of Linctuſes, Lambatives, &c.

THE ancient practice greatly abounded with preſcriptions in theſe forms, which the preſcriber, at pleaſure, entitles either Linctuſes, Lambatives, Lohochs, or Syrups; but they are much neglected by the preſent. The ſweetneſs and adheſion of theſe medicines make them not only tireſome in taking, but clogging, and injurious to ſome ſtomachs; ſo that while by them it is endeavoured to deterge the lungs of phlegm, the digeſtion is ſo much hindered, that a greater ſupply is made, which renders ſuch efforts in vain, if not worſe for the patient. In ſhort, there are very few of theſe of any other ſervice than to promote and eaſe thoſe coughs in old age, which are neceſſary to keep open the breaſt, and break away ſuch infarctions as are occaſioned by a diminution of tranſpiration, (*i. e.* what is commonly called taking of cold), or weakened concoction, that give riſe to pleuriſies, aſthmas, coughs, and the like. It is not unfrequent to meet with many under this denomination, intended to reſtringe and agglutinate; but they are juſtly rejected, becauſe ſugars are oppoſite to all ſuch deſigns, as has been already ſufficiently urged in many places. Where oil is to be mixed in theſe forms, it is firſt to be done very intimately, with a little ſugar, or what powders elſe are ordered; and then the ſyrups to be dropt in gradually at firſt, till there is an entire incorporation, tho' oil and ſyrup may be mixed without; but it is with a great deal of trouble.

Emollients.

(1.) Take black pectoral troches, finely powdered, two drachms; ſyrup of liquorice and hyſſop, of each one ounce; oil of almonds, half an ounce. Mix, *ſ. a.*

(2.) Take white pectoral lozenges, three drachms; ſyrup of marſhmallows, and oil of ſweet almonds, of each one ounce and a half. Mix, *ſ. a.*

(3.) Take powder of haly, freſh made, half an ounce; diacodium and ſyrup of liquorice, of each an ounce and a half; oil of ſweet almonds, one ounce: mix, *ſ. a.*

(4.) Take ſpermaceti, two drachms; white ſugar, half an ounce; ſyrup of balſam, three ounces: mix, *ſ. a.*

(5.) Take powder of marſhmallow-roots, three drachms; flower of ſulphur, one drachm; gum arabic, half a drachm; white of egg beat up, one ounce; ſyrup of marſhmallows, as much as is ſufficient: mix, *ſ. a.*

(6.) Take ſeeds of fleabane and quinces, of each one drachm; make them into a mucilage with as much as is ſufficient of roſe-water, to four ounces; which being ſtrained, add one white of an egg beaten, and white ſugar powdered, five drachms.

This is fitter for a ſore mouth than any other medicinal purpoſe, and

and is very cooling and pleaſant. It ought to be retained as long as poſſible, without ſwallowing.

(7.) Take white ſugar-candy, ſix drachms; oil of ſweet almonds, and ſyrup of marſhmallows, of each an ounce and a half: mix, *f. a.*

(8.) Take ſyrup of red poppies and linſeed oil, of each two ounces; oil of aniſeed, two drops; ſugar, two drachms: mix, *f. a.*

(9.) Take conſerve of hips, half an ounce; diacodium and oil of ſweet almonds, of each an ounce and a half: mix, *f. a.*

(10.) Take white lozenges and ſpermaceti, of each one drachm and half; oil of ſweet almonds, and ſyrup of balſam, of each one ounce and a half: mix, *f. a.*

Take powder of liquorice, three drachms; ſyrup of maiden-hair, and oil of ſweet almonds, of each one ounce: mix, *f. a.*

Many more examples might be given; but theſe are ſufficient. They are to be taken by a ſpoonful at a time, and repeated two, three, or four times a day, according to the urgency of ſymptoms. The oily lambatives are moſtly ordered in aſthmas and pleuriſies, and to heal excoriations and abſceſſes, and ſoften and relax the criſpy tone of the fibres, that ſtraitens the capacities of the veſſels. Thoſe which promote expectoration, are of the following kind.

Detergent.

(1.) Take ſyrup of hyſſop, two ounces and a half; oil of ſweet almonds, one ounce; oil of aniſeeds, two drops; tincture of myrrh, one drachm; powder of orris-root, four ſcruples; flowers of Benjamin, half a ſcruple; tobacco, four grains: mix, *f. a.*

(2.) Take ſyrup of ground-ivy, and hore-hound, of each one ounce and a half; oxymel ſimple, one ounce; powder of arum compound, of orris and gum ammoniac (diſſolved in cinnamon-water, and ſtrained), of each one drachm; *elixir proprietatis*, prepared with oil of ſulphur by the bell, half a drachm; flowers of Benjamin, twelve grains: mix, *f. a.*

(3.) Take balſam of Tolu, two drachms; rub it very fine and ſmooth with the yolk of an egg; then put to it ſyrup of liquorice, one ounce and a half; and balſam of Peru, four drops: mix, *f. a.*

(4.) Take ſyrup of vinegar and liquorice, of each one ounce; gum ammoniac diſſolved in white-wine, and ſtrained, one drachm; powder of arum compound, and myrrh, of each half a drachm: mix, *f. a.*

This latter is ſomewhat untoothſome, from the bitterneſs of the myrrh; but where the veſſels are greatly ſtuffed, it will do good ſervice; as alſo in nervous aſthmas, which give not way to ordinary means.

(5.) Take ſyrup of the five roots, two ounces; candied garlic, half an ounce; gum ammoniacum diſſolved in vinegar, and ſtrained, half a drachm; oil of linſeed, one ounce: mix, *f. a.*

(6.) Take fine Venice ſoap ſliced thin, half an ounce; oil of ſweet almonds, and ſyrup of violets, of each an ounce: mix, *f. a.*

This is of an unſeemly colour, becauſe the ſoap changes the ſyrup green; but it powerfully expectorates, and is alſo a good detergent in foulneſſes of other viſcera beſides the lungs.

(7.) Take ſpermaceti, half an ounce; white ſugar-candy, one ounce; ſyrup of the balſam of

Tolu, one ounce and a half: mix them ſmooth. *ſ. a.*

This ſtands greatly recommended for hoarſeneſs; and if one ounce of linſeed-oil was added, it would mend it for that purpoſe.

(8.) Take linſeed-oil newly drawn, white ſugar-candy finely powdered, and ſyrup of ground-ivy, of each one ounce; powder of orris, one drachm; flower of ſulphur, half a drachm; tincture of gum ammoniac, twelve drops; oil of aniſeeds, four drops; ſalt of hartſhorn, ſix grains; mix, *ſ. a.*

(9.) Take balſam capivi, two drachms; rub it ſmooth with the yolk of an egg; then add fine ſugar-candy in powder, three drachms; linſeed-oil, one ounce and a half; and ſyrup of marſh-mallows, two ounces and a half: mix, *ſ. a.*

(10.) Take oxymel of ſquills, ſyrup of ſaffron and linſeed-oil, of each one ounce; fine ſugar-candy in powder, half an ounce: mix, *ſ. a.*

(11.) Take balſam of Lucatellus, half an ounce; of Gilead, one drachm and a half. Mix them well with the yolk of an egg, then add ſyrup of red poppies, two ounces; oil of ſweet almonds, one ounce; ſpirit of ſulphur by the bell, twelve drops: mix, *ſ. a.*

SECT. V.

Of Electaries.

INTO this form, there are ſome things reducible almoſt for all intentions: and as they convey moſt medicinal ſimples in ſubſtance, they are generally to be depended on in caſes of importance and difficulty. The only things not convenient to be managed hereby, are ſuch as are extremely bitter and nauſeous, or of ſuch efficacy, that their doſes cannot be exactly enough adjuſted: theſe being aſſigned generally by gueſs, in the quantity of a nutmeg, or the like; and for this reaſon will be found, under this diviſion, none of the bitter ſtomachics, nor of the ſtrong cathartics, or narcotics: the firſt, becauſe they cannot well be got down in this form; and the two latter, becauſe their doſes ought to be weighed with the utmoſt exactneſs, and are therefore proper only for boles. The quantities of dry and liquid ingredients are here to be proportioned ſo as to make the conſiſtence ſomewhat thinner than that of the officinal electaries; and where there are much powders, they ought to be mixed very thin, becauſe they quickly ſtiffen with a few hours ſtanding, as when made with the powder of the Peruvian bark, and ſuch like dry ſubſtances. Regard ought to be had that ſuch things be not herein put together as will ferment, or not lie quiet in the compoſitions; for volatiles, ſuch as ſal ammoniac, hartſhorn, and the like, will always be rarifying the maſs until they eſcape. Teſta-

ceous

ceous powders, with ſyrups, or conſerves of any manner of acidity, will ferment and ſpoil the whole; as, likewiſe, will all the preparations of ſteel, the ſalt excepted, that lying quiet in moſt mixtures. For want of attention to this in preſcription, many things are ordered together, which, by that time they come to the patient, cannot be contained in their veſſels; and give a great deal of diſlike, upon ſuſpicion of a fault in the materials, or the apothecary, whereas it is really in the preſcriber. But with the utmoſt care, many ſyrups and conſerves, in hot weather, will be apt to ferment; and therefore theſe ought to be calculated in ſuch quantities, as may be taken within two or three days; for when they ferment, they ſpoil, and ought to be rejected.

Cephalics.

Electarium Cariophyllatum.

Electary of Clove-July-flowers.

Take conſerves of clove-July-flowers, one ounce; and of red roſes, one ounce and a half; ſyrup of citron peel, as much as is ſufficient to pulp them through a ſieve; add of the ſpecies of *aromaticum roſatum*, one drachm and a half; ambergriſe, five grains: and make them into an electary.

This is a good warm medicine in all nervous diſeaſes, and raiſes the ſpirits. In all diſorders therefore, from thoſe defects, it is commended to be taken two or three times in a day, with a glaſs of wine, or any uſual drink, after it: the quantity of a nutmeg is enough for an ordinary doſe.

Electarium Ducis Sabaudiæ.

The Duke of Savoy's Electary.

Take ſarſaparilla and ſeeds of dwarf-elder, of each three drachms; ſeeds of St. John's-wort, leaves of germander and ground-pine, of each two drachms; angelica-root, round birthwort, cinnamon, of each one drachm and a half; cloves, a ſcruple; ſaffron, ſixteen grains; reduce all into a fine powder, and make it into an electary, with triple the quantity of clarified honey.

This is indeed fit for an officinal medicine, and is as eaſily made in a large quantity as a ſmall one, and will keep. It is contrived on purpoſe againſt the gout, and ought to be continued a long time, to anſwer expectation. It greatly warms and ſtrengthens the fibres; and therefore not only contributes to a regular digeſtion and concoction of the juices, but prevents any foreign matters lodging by the way: eſpecially in the joints, where it moſt commonly fixes, and ſpoils their offices, and gives arthritic and rheumatic pains The doſe is the quantity of a nutmeg twice a-day, with a glaſs of ſtrong wine.

Electarium Paralyticum.

An Electary againſt the Palſy.

Take muſtard ſeed beat with water, one ounce; pulp it through a ſieve, that all the huſk may be left behind; to it add conſerve of roſemary-flowers, one ounce; ſpirit of lavender, two drachms. And make them into an electary, *ſ. a.*

This is an excellent medicine for the uſe its title expreſſes; and in the decays of age, when the ſolids grow criſp and dry, and ſubject the limbs to tremors, it will do great ſervice, and ought to be taken twice a-day at leaſt; eſpecially in a morning, the quantity of a large nutmeg; drinking after it a glaſs of rich wine, or a draught of ſome

julep or diet-drink of the ſame intention; to which the reader may turn.

Electarium Cardiacum.
A Cardiac Electary.

Take conſerve of clove-July-flowers, and of the yellow of Seville orange peels, of each an ounce; candied citron peel, green ginger, electary of ſaſſafras, juice of kermes ſtrained, of each two drachms; oil of cinnamon, ſix drops. Make them into an electary, with as much as is ſufficient of ſyrup of cloves.

This is very warm and ſtrengthening of all the nervous parts, eſpecially the ſtomach; where it expels wind, helps belchings, and flatulencies from indigeſtion. The quantity of a large nutmeg is to be taken two or three times a-day; drinking after it a glaſs of ſome liquor of the ſame intention.

Electarium è Cinnabari.
The Cinnabar Electary.

Take native cinnabar, half an ounce; let it be rubbed very fine in a marble mortar, and then mix with it fine ſugar one ounce and a half; and make them into an electary with a ſufficient quantity of juice of kermes.

This truſts altogether to the cinnabar, and is given with ſucceſs in moſt convulſive diſorders; but there is an exception againſt this excellent medicine, viz. that it be not too liberally adminiſtered to thoſe who have weak nerves, becauſe its force is reckoned ſo powerful, as to ſhock ſuch even in their natural textures, and whereby may diſpoſe to tremors, and paralytic ſhakings. The doſe of it is the quantity of an ordinary nutmeg twice in a day.

Electarium Cardiacum magnum.
The great Cordial Electary.

Take conſerve of clove-July-flowers, of the yellow peel of oranges and lemons, of each half an ounce; candied citron, candied nutmeg, candied ginger, electary of ſaſſafras, juice of kermes ſtrained, and compound ſpirit of lavender, of each two drachms; oil of cloves, cinnamon, and mint, of each two drops; ſyrup of raſpberries, a ſufficient quantity to make them into an electary.

This is a very grateful medicine, and very warm and comforting to the ſtomach, and all the parts that are affected therefrom by conſent of the nerves, and particularly the head: it may be taken about the quantity of a nutmeg at any time, upon weakneſs, faintneſs, ſickneſs, or any diſorder at the ſtomach, with a glaſs of good wine.

Electarium de Veſco Quercino.
Electary of Miſleto.

Take of powder of miſleto, one ounce; native cinnabar finely levigated, half an ounce; compound ſpirit of lavender, two drachms; oil of roſemary, ſix drops; juice of kermes, a ſufficient quantity to make them into an electary.

This is nearly what Dr. Fuller gives under the ſame title; but the quantity of ſpirit of lavender he orders, and the ſyrup to make it up with, unleſs it be of a conſiſtence almoſt hard, will let the cinnabar fall to the bottom; yet this is an error very frequently met with in extemporaneous preſcription, for want of a better acquaintance with the ſhops. This is alſo calculated againſt diſtempers of the head and nerves; the quantity ought to be that of a nutmeg, two or three times a-day, with a draught

of

of ſome medicated wine of the ſame intention.

Electarium de Sinapi.
The Muſtard Electary.

Take powder of muſtard-ſeed, half an ounce; conſerve of rue, two ounces; ſyrup of ſtœchas, a ſufficient quantity; oil of roſemary and lavender, of each four drops.

This is from Dr. Fuller; but the muſtard ſeeds will not powder if good, becauſe of their great oilineſs; and therefore they are much better beat in a maſh with a ſufficient quantity of ſyrup, and forced thro' a pulping ſieve. This makes an excellent medicine, which will wonderfully quicken the ſenſe and motion of the fibres in conſtitutions overflowed with cold rheums and defluxions. It is alſo a good preſervative againſt fevers of the worſt kind; which ſeizes the ſpirits, and diſcover their malignities in the principal parts of the animal frame. It ought to be taken every morning and evening, with ſome medicated drink, or julep of the ſame intention.

Electarium Stomachicum.
A Stomach Electary.

Take conſerve of red roſes and Roman wormwood, of each one ounce; of yellow orange-peels and green ginger, of each half an ounce; long pepper in powder, one ſcruple; oil of cinnamon, four drops; ſyrup of quinces, a ſufficient quantity, mix.

Electarium Stomachicum alterum.
Another Stomach Electary.

Take conſerve of Roman wormwood, an ounce and a half; conſerve of Seville orange-peels, and candied ginger, of each half an ounce; powder of ſaffron, half a drachm; ſpirit of ſulphur by the bell, ten drops; ſyrup of quinces, a ſufficient quantity. Make them into an electary. Or,

Take the conſerves of red roſes, two ounces; of hips, half an ounce; candied ginger, three drachms; ſaffron, one ſcruple; ſpirit of ſulphur by the bell, twelve drops; ſyrup of red poppies, or juice of kermes, a ſufficient quantity to make them into an electary, and paſs it through a pulping ſieve. Or,

Take conſerve of red roſes, two ounces; acidulate with a ſufficient quantity of ſpirit of ſulphur by the bell, and pulp through a ſieve, with a ſufficient quantity of the juice of kermes for an electary.

All that of this form could be intitled ſtomachics, we have ſubjoined to this diviſion, becauſe they are all of the aromatic kind, and hereby claim equally to be cephalics. The latter which we have given, extend their influences to the head and whole nervous ſyſtem, at the ſame time that they warm, comfort, and ſtrengthen the fibres of the ſtomach, and diſſipate flatulencies, corrugate the membranes, and promote digeſtion: the laſt eſpecially is a moſt elegant medicine, delightful to take, and highly conducive to theſe good ends. The doſe is as much as a large nutmeg, two or three times a-day, with a glaſs of good ſtomach-wine afterwards.

Carminatives.

All under the foregoing claſs have ſome claim to this title: becauſe all aromatics are carminatives, and diſcuſs vapours and flatuſes pent up in the ſtomach and bowels;

bowels; there is therefore the leſs need of many examples under this head, ſo that the few following may ſuffice.

Electarium Juniperinum.
The Juniper Electary.

Take juniper-berries, one ounce; beat them in a mortar with a ſufficient quantity of ſyrup of green ginger, til they are almoſt in a ſmooth mixture; then paſs them through a pulping ſieve; and mix therewith conſerve of roſemary-flowers, one ounce; electary of bay-berries, three drachms; oil of caraway, ſix drops. Make them into an electary, with a ſufficient quantity of ſyrup of clove-July-flowers, or of candied ginger.

This greatly warms the viſcera, and diſſipates wind; but if the juniper-berries be thought too troubleſome to manage in this manner, a due proportion of the chemical oil drawn from them may be put in, though that is not thought ſo good. This may be taken the bigneſs of a nutmeg, three or four times in a day.

Electarium è Baccis Lauri extemporaneum.
The extemporaneous Bay-berry Electary.

Take of conſerve of clove-July-flowers and of roſemary-flowers, of each an ounce; powder of bay-berries, two drachms; oil of chamomile chemical, ſix drops; ſyrup of cloves, a ſufficient quantity for an electary.

Electarium ex Angelica.
Electary of Angelica.

Take angelica-root green, waſhed and cleaned from all that is not good, one ounce; beat it with a ſufficient quantity of ſyrup of green ginger to a paſte; which force through a pulping ſieve, and to it put conſerve of clove-July-flowers, one ounce; oil of caraway, ſix drops; and with a ſufficient quantity of ſpirit of juniper, make an electary.

Either of theſe taken two or three times a day, as much as a nutmeg, will greatly break away wind from the ſtomach; and are good in all hypochondriacal flatulencies, as well as the following.

Hyſterics and Hypochondriacs.

Electarium Hyſtericum.
An Hyſteric Electary.

Take conſerve of rue, one ounce; electary of bay-berries, half an ounce; gum ammoniac, two drachms; diſſolved in a ſufficient quantity of tincture of caſtor; powder of myrrh, one drachm; ſaffron, half a drachm; ſyrup of ſtinking orrach, a ſufficient quantity: mix.

This is good againſt all kinds of fits and convulſions that ariſe from uterine diſorders; and too high an orgaſm of ſpirits. It alſo helps to deterge the glandular contortions, and make clear paſſage for the nervous fluids in the minuteſt fibres. Give as much as a nutmeg, two or three times a day.

Electarium Emmenagogum.
An Electary to promote the Menſes.

Take conſerve of Roman wormwood, and wood-ſorrel, of each one ounce; electary of bay-berries, half an ounce; troches of myrrh in fine powder, two drachms; ſaffron, one ſcruple; ſyrup of mugwort, a ſufficient quantity for an electary.

This is an excellent cleanſer for women after childbed, and greatly deterges

deterges the uterine glands, ſo as to fit all thoſe parts again not only for their natural ſecretion, but for freſh impregnation: but it muſt not be uſed after conception, for fear of abortion. It may be taken twice a-day, as much as a nutmeg.

Electarium Emmenagogum cum Chalybe.

A Steel Electary for the Green-Sickneſs.

Take conſerve of Roman wormwood and damaſk roſes, of each one ounce and a half; ſalt of ſteel, two drachms; ſaffron, half a drachm; powder of cardamoms, one ſcruple; ſyrup of ſteel, or of rhubarb, a ſufficient quantity to make them into an electary.

This is adapted to thoſe who labour under obſtructions of the menſes; and ought to be taken to the quantity of a large nutmeg twice in a day; uſing exerciſe with it. It is moſt proper for ſuch as are pale, and of thin habits; but for the contrary conſtitutions, the following is beſt.

Electarium Emmenagogum cum Helleboro.

An Electary to promote the Menſes with Hellebore.

Take conſerve of Roman wormwood, two ounces; black hellebore in powder, three drachms; ſalt of tartar, two drachms; aſa fœtida diſſolved in a ſufficient quantity of tincture of caſtor, one ſcruple; ſyrup of rhubarb, as much as is ſufficient for an electary.

This agrees admirably with ſanguine conſtitutions, who, by ſome accident, labour under uterine obſtructions; for it very powerfully breaks through them, without giving that heat and force to the blood which chalybeats ſometimes do, and occaſion that peculiar furor which is difficult to allay: for this rather damps the ſpirits, and checks their exorbitant ſallies. Its doſe is as the former.

Electarium Chalybeatum.

A Steel Electary.

Take conſerve of roſemary flowers, Roman wormwood and ſcurvygraſs, of each ſix drachms; *ſpecies diambræ* and Winter's bark in powder, of each one drachm; ſalt of amber, one ſcruple; ſteel prepared with ſulphur, three drachms; ſyrup of candied nutmegs, a ſufficient quantity to make them into an electary.

It gives relief in the ſpleen, and all complaints thence ariſing. Briſk exerciſe is of great advantage in the uſe of it. It ought to be taken twice or three times a-day, with a glaſs of white wine, or ſome medicated drink of the ſame intention.

Electarium Splanchnicum.

A Splanchnic Electary.

Take conſerve of roſemary-flowers, one ounce; of Roman wormword, half an ounce; electary of bay-berries, two drachms; powder of black hellebore and pellitory of Spain, of each two drachms; ſalt of amber, one drachm; ſaffron, two ſcruples; gum ammoniac, two drachms, diſſolved in a ſufficient quantity of tincture of caſtor; and ſyrup of the five roots, a ſufficient quantity to make them into an electary.

The whole *Materia Medica* cannot furniſh out a more effectual remedy againſt all thoſe diſorders, which paſs under the names of hypo, ſpleen, and vapours. Its continued uſe, for ſome time, will not

not only render the blood, and all the animal juices, duly fluid; but ſo deterge and ſcour all the receſſes and ſecret meanders of the body, that the mind, or director of the animal actions, may meet with no impediments. It may be taken two or three times a-day to the quantity of a nutmeg: and will prevail even in maniacs, if duly followed.

Strengtheners.

To prevent the trouble of too many diviſions, we ſhall include under this head all the ſubordinate claſſes it ſtands divided into, in the ſecond part concerning Simples; and take in even ſome that might more ſtrictly be ranked with ſtomachics.

Electarium Aſtringens.

The Aſtringent Electary.

Take conſerve of roſes, four ounces; Japan earth, one ounce; alum, and elixir of vitriol, of each two drachms; ſyrup of quinces, a ſufficient quantity to make an electary.

This is very aſtringent, and is to be directed only in obſtinate fluxes, and to ſtrong people. It is much uſed in ſome of the hoſpitals.

Electarium Incraſſans.

An Incraſſating Electary.

Take freſh comfrey-roots, two ounces; marſhmallow-root, and that of white lilies, of each one ounce; beat them into a pulp, which force through a ſieve: then put to them two ounces of fine ſugar, half an ounce of *ſpecies diatragacanth. frigid.* and with a ſufficient quantity of ſyrup of marſhmallows, make them into an electary.

This is ſomewhat troubleſome to make, and will not keep long. It ought to be taken in the quantity of a cheſnut, two or three times a-day, whilſt a milk diet is uſed. It is good to check the heat and motion of the blood in hectic conſtitutions; and to give it a ſofter and more balſamic conſiſtence; it is of ſervice, therefore, to ſtop bleeding at the noſe, ſpitting of blood, or hæmorrhages in any other parts. Malt liquors, and too much exerciſe, agree not with courſes of this intention; nor a high ſpirituous diet. This alſo allays the heat of urine, and is good in gonorrhœas, and that weakneſs in women called the whites.

Electarium de Symphyto.

The Comfrey Electary.

Take pulp of freſh comfrey-root, and fine ſugar, of each an ounce; conſerve of red roſes, half an ounce; powder of maſtich, a drachm; ſyrup of quinces, enough to make it into an electary; to which may be added juice of kermes, two drachms; oil of cinnamon, four drops.

This is good againſt fluxes of all kinds; it very much ſtrengthens the reins, and is therefore particularly of ſervice in old gleets and the whites; in all coughs from catarrhs and defluxions of tickling rheums, this will much avail, and take away thoſe irritations which are continually fretting and wearing the lungs; the doſe is the quantity of a nutmeg three or four times in a day.

Electarium Analepticum.

A Reſtorative Electary.

Take powder of chocolate, and ſweet almonds blanched, of each

an

an ounce; fine ſugar, and conſerve of red roſes, of each an ounce and half; paſs all through the pulping ſieve, after beating them in a mortar with a ſufficient quantity of the juice of kermes, and add to them balm of Gilead, two ſcruples, and ſyrup of balſam, an ounce. Make them into an electary.

This is an extraordinary compoſition, to be conſtantly uſed for ſome months together by hectic and conſumptive perſons, whom it much nouriſhes, and ſoftens the ſharp hot humours, which, in ſuch perſons, abrade and wear away the ſubſtances of the muſcles; it is to be taken three or four times a-day at diſcretion.

Electarium Analepticum cordiale.

A Cordial Reſtorative Electary.

Take powdered chocolate, two ounces; juice of kermes, half an ounce; ambergriſe rubbed with a little fine loaf-ſugar, eight grains; oil of cinnamon, three drops; ſyrup of balſam, an ounce, or what is ſufficient.

This is like the foregoing, but ſomewhat warmer and more cordial, and cannot therefore be indulged in ſuch large quantities; as much as a cheſnut may be taken three or four times a-day. Theſe are both very excellent recipes, and rather ſuited to the cloſets than the ſhops; for which reaſon we never, or very rarely, meet with ſuch amongſt medicinal preſcriptions, and becauſe the good women delight to be their own apothecaries as far as they can.

Electarium reſtorativum cum Chalybe.

A Reſtorative Electary with Steel.

Take conſerve of Roman wormwood, and candied nutmeg, of each an ounce; ginger candied, half an ounce; ſteel prepared with ſulphur, two drachms; oil of cinnamon, two drops. Make them into an electary with a ſufficient quantity of ſyrup of the five opening roots.

This will much help to warm and reſtore a decayed conſumptive blood, and give new vigour and colour to the whole œconomy; it may be taken two or three times a-day with the Spaw-waters, or drinking afterwards any other proper liquor.

Electarium contra Catarrhum.

An Electary againſt Catarrhs.

Take conſerve of red roſes, two ounces; pulp of Malaga raiſins, an ounce; powder of fine maſtich, two drachms; nutmeg, half a drachm; ſyrup of white poppies, enough to make all into a thin, ſmooth electary.

This is a good medicine againſt all tickling coughs, and covers the larynx with what guards it from the extillations of thin rheums; it may be taken two or three times a-day, but particularly at going to bed, as much as a nutmeg for a doſe.

Electarium ad Hernias.

An Electary againſt Ruptures.

Take pulp of comfrey-root, half an ounce; conſerve of red roſes, an ounce; powder of blood-ſtone, finely levigated, two drachms; dragon's blood, a drachm; ſugar of lead, and balſam of Peru, of each half a drachm; oil of cinnamon, ſix drops; ſyrup of coral, enough to make all into a ſmooth electary.

This is a great ſtrengthener, and therefore may ſo draw up and harden the ſolids, as to reduce ruptures, and very much prevent them; it

it alſo may be uſed as a reſtringent againſt hæmorrhages, and all kind of fluxes; to be taken two or three times in a-day to the quantity of a nutmeg, with any proper liquor.

Electarium contra Dyſenteriam.
An Electary againſt the bloody Flux.

Take conſerve of red roſes, an ounce and a half; ſperma ceti, two drachms; yellow wax, three drachms; oil of ſweet almonds, half an ounce; ſyrup of mint, enough to make them into an electary.

The wax, &c. muſt be melted together, and then put to the conſerve after it is pulped; it is of great ſervice in lining the bowels with that mucus which defends them againſt the irritations of ſharp humours, and which a flux has carried off, and opened even the mouths of the blood veſſels. I have known ſome inſtances, where ingredients of this kind, either in this form or pills, have prevailed in fluxes of long ſtanding, and that have been brought from both the Indies, after all the help that could be had from the uſual means, which are generally reſtringents, but they will not ſucceed ſo well as thoſe ſofter balſamic ſubſtances, which, as it were, afreſh plaſter over the bowels, and by their yielding adhefive qualities ſtop up the mouths of the veſſels, and ſheathe the acrimonious humors.

Electarium Stomachicum.
A Stomach Electary.

Take conſerve of Roman wormwood, and of Seville orange peels, of each an ounce; powder of mint, two drachms; oil of cinnamon, ſix drops; ſyrup of quinces, enough to make an electary.

This ſtrengthens a weak ſtomach, that is apt to reject and loath food, and ought to be taken about an hour before meals, as much as a nutmeg, ſucking afterwards the juice of half a lemon; it will alſo do good in habitual diarrhœas, and by degrees ſo fortify the ſolids of the whole body, as to remove all kinds of fluxes.

Electarium reſtringens.
A reſtringent Electary.

Take conſerve of red roſes, two ounces; diaſcordium, half an ounce; bole in fine powder, two drachms; dragon's blood, a drachm and half; balauſtines, half a drachm; oil of cinnamon, four drops; ſyrup of dried roſes, a quantity ſufficient to make an electary.

Some calculate this on purpoſe againſt a diarrhœa, and it is to be taken the quantity of a nutmeg three or four times a-day, or after every ſtool, refraining, at the ſame time, from all malt liquors, which in diarrhœas will work as powerfully as cathartics, and ſuffer nothing to take place while they are uſed: but this note is to be made herein, that no diarrhœa ought to be ſtopped if it does not ſicken and diminiſh the ſtrength of a perſon; for ſometimes the conſtitution finds means, by this way, to get rid of an ill burden, and therefore ſuch diſcharge is then to be rather encouraged than hindered; but when the patient is thirſty, feveriſh, and weak, theſe helps are to be called in.

Electarium de Cinnamomo.
Electary of Cinnamon.

Take the fineſt cinnamon, in pow-

powder, ſix drachms; oil of nutmegs, by expreſſion, two drachms; ſaffron, half a drachm; balauſtines, cochineal, of each a ſcruple; flowers of Benjamin, half a ſcruple; juice of kermes, enough to make an electary.

This is chiefly contrived for breeding women; it is a good ſtrengthener, and will help to prevent abortion; it is likewiſe a good aſtringent in many other caſes, and may be taken the quantity of a nutmeg as often as ſymptoms require it to be repeated; the proportion of dry powder is here ſo great, that it will be apt to grow too dry, and ſtand in need of moiſtening with freſh juice or ſyrup.

Electarium contra Hæmoptoën.
An Electary againſt ſpitting of Blood.

Take white poppy and henbane-ſeed, powdered, of each half an ounce; conſerve of red roſes, an ounce; ſyrup of corn-poppies, ſufficient to make them into a ſmooth ſoft electary.

This is an electary greatly recommended by Mr. Boyle for the purpoſes its title expreſſes; it cools and thickens the blood, and repreſſes its too great motion, and is therefore good in all hectics; it is to be taken at diſcretion, according as ſymptoms are urgent.

Electarium Poterii.
Poterius's Electary.

Take the anti-hectic of Poterius, half an ounce; Haly's powder, freſh made, an ounce and half; ſyrup of jubebs, enough to make an electary.

Dr. Fuller gives this; but it may be made with any pectoral ſyrup, or that of marſhmallows, becauſe the ſyrup of jubebs is ſeldom or never made: he ſays it deſtroys all manner of exotic corruptive ſharpneſs and aſperities of the blood and juices, and induces a balſamic, ſoft, and oleous diſpoſition; that it is ſecond to none in a hectic fever, and may be taken two or three times a-day, with a draught of aſſes milk, as much as the bigneſs of an ordinary nutmeg.

Balſamics.

Electarium Pectorale.
A Pectoral Electary.

Take raiſins and conſerve of red roſes, of each an ounce, pulped; with a ſufficient quantity of ſyrup of maidenhair, ſugar-candy in fine powder, and *ſpecies diatragacanthi frigid.* of each half an ounce; ſpirit of ſulphur by the bell, fifteen drops: make an electary with enough of the ſame ſyrup.

Electarium Dialthææ.
Electary of Marſhmallows.

Take pulp of the root of marſhmallows (boiled in barley-water and drove through a ſieve), two ounces; of raiſins an ounce and half; *ſpecies diatragacanthi frigid.* half an ounce; ſyrup of marſhmallows a ſufficient quantity; make an electary.

Electarium de Spermate Ceti.
Electary of Sperma Ceti.

Take conſerve of hips and archangel-flowers, of each an ounce; ſweet almonds blanched, half an ounce; ſperma ceti two drachms: beat all, with a ſufficient quantity of ſyrup of marſhmallows, ſo that they may be pulped through a ſieve; then add of the *ſpecies diatragacanthi frigid.* half an ounce; and with enough of the ſame ſyrup make all into a ſmooth electary.

Theſe

Theſe are all emollients, and will ſoften and lubricate all the paſſages, and ſmooth acrimonious humors, hence they are of great ſervice in all catarrhs and defluxions of ſharp rheums from the head and glands of the throat, and will give relief in obſtinate hoarſeneſſes; they are likewiſe very friendly to the kidneys, and defend thoſe paſſages from the irritations of ſandy matter that often waſhes through them; they cool the heat of urine, heal gonorrhœas, and allay all pains from ſtimuli: but care muſt be had, while all theſe laudable intentions are in view, that they do not relax and pall the ſtomach too much, which they are too apt to do; for which reaſons they are ſometimes acidulated with ſpirit of ſulphur, or ſuch things which help to keep the membranes of the ſtomach in their due tenſions. Theſe are to be given two or three times a-day, or oftener, if ſymptoms are urgent, to the quantity of a cheſnut for a doſe, ſome ſoftening broths or emulſions being drank afterwards.

Electarium Hæmorrhoidale.

An Electary for the Piles.

Take lenitive electary, an ounce and half; flowers of ſulphur, three drachms; ſyrup of violets, enough to make an electary.

This is very good for what its title expreſſes, eſpecially where perſons are ſubject to be coſtive; it is to be taken at diſcretion.

Electarium reſtaurans.

A Reſtorative Electary.

Take conſerve of hips, two ounces; chocolate in powder, orris-root, of each two drachms; extract of colts-foot (made from a ſtrong decoction evaporated), half an ounce; ſyrup of colts-foot, enough to make an electary.

Electarium Conditorum.

An Electary of Preſerves.

Take candied ſatyrion-root, candied eryngo-root, nutmegs and ginger candied, of each half an ounce; chocolate in powder, half an ounce; juice of kermes, enough to make an electary.

Electarium ad Phthiſin.

An Electary againſt a Conſumption.

Take conſerve of red roſes, an ounce and half; candied eryngo-roots an ounce; ſweet almonds blanched, half an ounce; maſtich in powder, a drachm; ſpirit of ſulphur by the bell, fifteen drops; ſyrup of red poppies, a quantity ſufficient to make an electary.

Electarium ad Phthiſin alterum.

Another Electary againſt Conſumptions.

Take conſerve of hips, an ounce; candied nutmegs and eryngo-root, of each half an ounce: viper's fleſh dried and powdered, two drachms; ambergriſe, half a ſcruple; muſk, five grains; ſyrup of balſam, or juice of kermes, a quantity ſufficient to make an electary.

Electarium. —— Another. ——

Take extract of colts-foot, and of new unhopped ale, of each half an ounce; candied nutmegs and eryngo root, of each two drachms; flowers of Benjamin, a ſcruple; ambergriſe and muſk, of each five grains; juice of kermes, enough to make an electary.

Electarium. —— Another. ——

Take extract of Bohea-tea, half an ounce; ſatyrion-root boiled in Ca-

Canary, and pulped through a ſieve, an ounce; chocolate and viper's fleſh powdered, of each two drachms; ambergriſe and muſk, of each five grains. Make all into an electary with a ſufficient quantity of viper jelly.

In all languid, waſting conſtitutions, either from age, acute diſtempers, or too large evacuations, according to the exigency and indication of particular ſymptoms, may either of theſe be uſed, or others of the ſame kind contrived, to reſtore a due elaſticity to the ſolids, and give that generous warmth and conſiſtence again to the juices, as may enable them to depoſite proper ſupplies to the abraded parts, as they circulate through them. And in all intentions of this nature, regard is chiefly to be had to the temperament: where the blood is hot and quick, it muſt have a load laid upon it by agglutinants, and ſuch ingredients as give a mucilaginous and adheſive property to any fluids they are mixed with; but where the blood is low, and the ſkin pale and clammy, it muſt be inſpired with warm aromatic compoſitions, which, at the ſame time, carry along with them what is adheſive and nouriſhing, as the candied ſpices and balſamic glutinous ſubſtances of the extracts and jellies; and a ſuitable diet and way of living muſt be complied with in all reſpects, or elſe they can avail but little. Another uſe likewiſe this claſs may be applied to with great ſucceſs, and that is in caſes of impotency, from a cold chilly blood; for they not only afford due matter to fill the parts of generation with proper juices, but will alſo warm and ſtimulate them to coition. Theſe, as moſt others of this form, are to be taken two or three times a day, to the quantity of a nutmeg for a doſe, drinking ſome convenient liquor after each.

Electarium vulnerarium.

A vulnerary Electary.

Take conſerve of red roſes, two ounces; new unſalted butter, half an ounce; yolk of an egg, powder of balſam of Tolu, a ſcruple and half; balm of Gilead, two ſcruples; make all into an electary, *ſ. a.*

The balſams, butter, and egg, muſt be well incorporated firſt, and then the conſerve added in a ſmooth pulp. To be taken the quantity of a large nutmeg or cheſnut two or three times a-day.

Electarium.——Another.——

Take conſerve of red roſes, two ounces; conſerve of hips, an ounce; Lucatellus's balſam, half an ounce; ſyrup of balſam, enough to make an electary.

Electarium.——Another.——

Take balſam of Tolu in fine powder, and rubbed with the yolk of an egg, half an ounce; balſam capivi, two ſcruples; pulp of the conſerve of red roſes, two ounces; and with a ſufficient quantity of balſamic ſyrup make all into a ſmooth electary.

Electarium.——Another.——

Take pulp of caſſia, an ounce and half; Venice turpentine, and that of Cyprus, boiled to brittleneſs, and powdered, of each two drachms; rhubarb, half a drachm; gum arabic and *ſpecies diatragacanthi frigid.* each a drachm; ſyrup of marſhmallows, ſufficient to make an electary.

Theſe

Theſe have not only that adhe-ſive quality of the foregoing, but alſo ſomewhat that is, though in a low degree, deterſive; whereby they take place in all ulcerations and tubercles of the viſcera, but particularly of the lungs and uri-nary paſſages; for which reaſons they, or ſuch as are nearly of this kind, are conſtantly met with in practice for aſthmas, and all in-farctions of the breaſt; and alſo in foulneſſes of the kidneys, which appear by conſtant pains and a purulent urine; and in the worſt of gleets, for they will deterge and heal a gonorrhœa with ſafety when the infection is off, though no other means are uſed; and the whole bulk of medicine can hardly ſupply a better remedy than the laſt of theſe in any ſuch caſes: for the common practice, by violent ca-thartics and mercurials, is too rough; inſomuch that, under a pre-tence of eradicating a malignity, they ſo weaken the parts, that it becomes difficult to reſtore them to their proper tone again.

Electarium de Guaiaco.
Electary of Guaiacum.

Take eryngo-root candied, two ounces; with a ſufficient quantity of balſamic ſyrup, pulp it through a ſieve, and to it add extract of guaiacum, an ounce; ceruſe of an-timony, two drachms; and make an electary with what is ſufficient of the ſame ſyrup.

This is reckoned much to pro-mote natural tranſpiration, and to be therefore of ſervice in all cuta-neous eruptions from a foul vitiated blood, as alſo in venereal caſes; it is to be taken twice in a day, with a draught of ſome liquor, ſuitably medicated, after each doſe.

Electarium Æthiopicum.
The Æthiops Electary.

Take æthiops mineral, an ounce; viper's fleſh in powder, half an ounce; gum guaiacum, two drachms; conſerve of red roſes (pulped with a ſufficient quantity of ſyrup of clove-July-flowers) an ounce; and with enough of the ſame ſyrup make an electary.

This is a moſt efficacious pre-ſcription in all foulneſs of blood whatſoever that erodes and ulce-rates the inner parts, or deforms the ſurface, by breaking out upon the ſkin; and is infallible in the itch, leproſy, and all tartarous eruptions; it may be taken twice a-day, the quantity of an ordinary nutmeg, drinking a glaſs of any ſuitable medicated liquor after each doſe.

Electarium Aſthmaticum.
An aſthmatic Electary.

Take flowers of ſulphur, an ounce; ginger, half an ounce; saf-fron, a drachm; muſk, five grains; honey, two ounces; and make an electary with what is ſufficient of ſyrup of ſaffron, or common ſugar moloſſes.

This, with a little alteration, is a very common preſcription in aſthmatic coughs and infarctions of the breaſt, and it is reckoned to deterge the bronchia powerfully from viſcous adheſions; but it is not ſo elegant a medicine by much as the following for the ſame pur-poſe.

Take extract of Engliſh liquor-ice, half an ounce; ſperma ceti and balm of Gilead, of each a drachm, rubbed with a little yolk of eggs; conſerve of wood-ſorrel and roſemary-flowers, of each an ounce; paſs all together through a pulp-

a pulping ſieve with a ſufficient quantity of ſyrup of red poppies, and then add ſaffron in fine powder, half a drachm; muſk, five grains; and make an electary.

This makes a good medicine enough, and will do great ſervice in all ſhortneſs of breath, and coughs thence ariſing; it may be taken as much as a large nutmeg at a time, twice or thrice a-day, as ſymptoms are more or leſs urgent.

Electarium ad Strumas.

An Electary for the King's Evil.

Take æthiops mineral and cinnabar of antimony, of each ſix drachms; earth-worms prepared and powdered, two drachms; ſalt of amber, tartar of vitriol, and cream of tartar, of each a drachm and half; powder of arum-root, two drachms; of ſteel prepared with ſulphur, three drachms; ſyrup of the five opening roots enough to make all into a ſmooth electary.

This is from the preſcription of a phyſician now in great note, for a very obſtinate hereditary ill habit, which was continually knotting the glands, and ſhifting ugly ſwellings from one part to another, and which would ſometimes ulcerate, and be very troubleſome; and with the help of the bath it procured a very tolerable conſtitution; it was ordered the quantity of a nutmeg twice a day, and was continued near three months, but for want of a little conſerve, which would only require the doſe to be but a little larger, the weight of the heavy powders carry them to the bottom, and will not let them continue equally mixed.

Diuretics.

Electarium Lithontripticum.

An Electary againſt the Stone.

Take Venice turpentine, an ounce; mix it very well with the yolk of an egg, and then put to it burdock-ſeeds and gromwell-ſeeds powdered, of each half an ounce; winter-cherries, two drachms: and with a ſufficient quantity of ſyrup of marſhmallows make all together into a ſmooth electary.

This will aſſiſt in cleanſing the urinary paſſages, and forcing away any obſtructed gravel or gritty matter; it may be taken the quantity of a nutmeg, as ſymptoms require, drinking a glaſs of white-wine or marſhmallow-tea after each doſe.

Electarium Nephriticum.

A Nephritic Electary.

Take of lenitive electuary, four ounces; Venice turpentine, an ounce; cream of tartar, two drachms. Mix them into an electary.

This is ſaid to be uſed in ſome of the hoſpitals, in obſtructions and foulneſſes of the urinary paſſages.

Electarium Terebinthinatum.

A Turpentine Electary.

Take powder of jalap, an ounce; ſcammony and liquorice, of each half an ounce; reſin of jalap, a drachm; ſalt of tartar, half a drachm; Venice turpentine, enough to make an electary.

This is a good purge in a gonorrhœa, eſpecially in groſs conſtitutions, and ought to be repeated every two or three days, about a drachm for a doſe, till the matter is well conditioned. It is alſo uſed in the hoſpitals.

Electarium Ictericum.

An Electary againſt the Jaundice.

Take green ginger, ſix drachms; Venice treacle, two drachms; powder of turmeric, two drachms; powder of ſaffron, a drachm; *ſpecies diambræ*, two ſcruples; oil of juniper, ten drops. Mix into an electary with a ſufficient quantity of ſyrup of marſhmallows.

Electarium Splanchnicum.

A Splanchnic Electary.

Take conſerve of ſcurvy-graſs, two ounces; candied elecampane-root, half an ounce; powder of arum-root, two drachms; ſalt of wormwood, half a drachm; and with a ſufficient quantity of ſyrup of fumitory, or the five roots, make an electary.

Electarium Diureticum.

A Diuretic Electary.

Take parſley and fennel roots, of each two ounces; leaves of marſhmallows, a handful; make a ſtrong decoction, which evaporate to an extract, and to it put conſerve of ſcurvy-graſs, an ounce; powder of hog-lice, two drachms; ſalt of amber and ſaffron, of each half a drachm; and with a ſufficient quantity of ſyrup of marſhmallows, or of the five roots, make an electary. Or,

Take pulp of a baked or roaſted ſquill, forced through a ſieve, an ounce; powder of marſhmallow-roots, two drachms; powder of cinnamon, a drachm; *ſal prunellæ* and ſaffron, of each half a drachm; conſerve of ſcurvy-graſs, an ounce; ſyrup of marſhmallows, enough to make an electary.

All theſe are very detergent, and will wear off thoſe beginning lodgments of foreign matter upon the bowels which obſtruct and diſorder their offices, and precipitate it chiefly by urine; therefore in the jaundice, ſpleen, hypochondriacal affections, gravel, and dropſies, they will do ſervice; in thoſe full conſtitutions which ariſe from too frequent tippling, and too little exerciſe, which is the caſe of many who keep public houſes, and haſten to dropſies, they are much better than the ſtrong cathartics which are uſually given, and the ſervice they do will be much more laſting; for ſtrong cathartics only force off a great deal by ſtool, which, though it may be at preſent pleaſing to the deluded patient, yet they ſo much overſtrain the ſprings of the ſolids, that by loſing their tone they ſoon fill again; whereas medicines of this kind gradually break and divide the groſs and viſcid juices, and fit them for the ſmaller diſcharges; but, becauſe they make no force upon the conſtitution, they are not much attended to; and alſo by degrees they abrade ſuch adheſions as had almoſt plugged up ſome of the viſcera, and ſcour the minuteſt veſſels in ſuch manner, that the neceſſary fluids meet with no hinderance in their circuit, and the body has not an overload to ſuſtain. According to the difference of circumſtances, and aggravations of ſymptoms, theſe may be varied; and, to anſwer any end of moment, ought to be given for ſome time, becauſe ſuch habitual illneſſes as they are deſigned to remove, will not give way very ſoon: they may alſo be aſſiſted by ſuitable medicated drinks.

Alexi-

Alexipharmics.

Ingredients of the moſt efficacy under this denomination are hardly to be truſted in this form, becauſe the quantity to be taken at a doſe cannot be ſo well adjuſted, and therefore they ſhall be reſerved for the next ſection of boles, which will much ſhorten this part.

Electarium Ante-epidemicum.

An Electary againſt the Plague.

Take roots of contrayerva, three ounces; of valerian, of maſterwort, and zedoary, of each an ounce and half; ſeeds of angelica hulled, dittany of Crete, and myrrh, of each a drachm; Virginia ſnake-root, half an ounce; ſaffron, three drachms; opium, two drachms; pulp of juniper-berries extracted with Malaga wine, a ſufficient quantity, and with enough of the ſame wine to diſſolve the myrrh and opium, make all into an electary with the *ſyrupus epidemicus*.

This ſyrup may be ſupplied with that of red poppies, ſaffron, or any of the like kind, by thoſe who have a mind to make the medicine, which is well enough contrived to anſwer the intention expreſſed by its title, and may very properly be reſerved as a family medicine in any ſuch apprehenſions, by way of preſervative, to be taken in the quantity of a nutmeg every night going to bed, and in infuſion, as the aggravations of ſymptoms indicate.

Electarium Camphoratum.

The Camphor Electary.

Take conſerve of rue, two ounces; Venice treacle, half an ounce; camphor, a ſcruple; ſyrup of red poppies, enough to make into an electary.

This is alſo a convenient medicine to be kept by way of preſervative againſt peſtilential contagions, and may be taken every night going to bed, and in a morning faſting, drinking a glaſs of generous wine afterwards. But theſe are ſeldom wanted in our country, and therefore are moſt likely to be of uſe to ſuch as travel into countries frequently alarmed with ſuch kind of infections.

Electarium cum Cortice Peruviano.

The Peruvian Electary.

Take the Peruvian bark in fine powder, an ounce; make it into an electary, with a ſufficient quantity of ſyrup of red roſes.

This is infallible in all intermittents, and is to be given the quantity of a cheſnut every three or four hours betwixt the fits

Electarium.——Another.——

Take the bark in fine powder, half an ounce; powder of ſnake-root, a drachm; Mithridate, two drachms; ſyrup of red poppies, enough to make an electary.

This is fitted for thoſe agues where the intervals are not very diſtinct, but there remains ſome indiſpoſition after the fit is off: it is warmer than the former and aſſiſts tranſpiration, to the diminution of which ſuch diſorders chiefly owe their riſe, and for which purpoſes alſo the following may be yet more proper in ſome conſtitutions.

Electarium.——Another.——

Take fine powder of the bark, half an ounce; Mithridate, two drachms; camphor, half a drachm, rubbed fine with a little oil of ſweet almonds; and make all into an electary, with a ſufficient quantity of ſyrup of cloves.

Electarium.—— Another.——

Take bark in fine powder, ſix drachms; oil of cinnamon, ſix drops; ſpirit of ſulphur by the bell, twenty drops; ſyrup of raſpberries, a ſufficient quantity. Make an electary.

This is propereſt where there is a diarrhœa, or grounds to expect one; the acid alſo renders the medicine rougher, and helps more to corrugate and ſtraiten the fibres, in which the operation of theſe conſiſts; without the oil of cinnamon, this latter preſcription is likewiſe very good to ſtop any hæmorrhages, either of the noſe, womb, or any other part.

Electarium.—— Another.——

Take bark in fine powder, ſix drachms; ſteel prepared with ſulphur, two drachms; powder of ſaffron, half a drachm; ſyrup of ſteel, enough to make an electary.

This is ſuitable for women where the menſes are obſtructed, which is often their caſe in agues; or where there is any danger of their being ſo from the bark; it will alſo help to warm and raiſe the blood to that ſtate as ſecures againſt a return of the diſtemper.

Electarium.—— Another.——

Take bark in fine powder, ſix drachms; æthiops mineral, two drachms; ſyrup of white poppies, enough for an electary.

In robuſt conſtitutions, and where the glands are foul and ſchirrous, this may with ſucceſs be uſed.

Mild Cathartics.

Electarium ſolutivum.

An opening Electary.

(1.) Take lenitive electary, an ounce; pulp of caſſia, half an ounce; rhubarb in fine powder, a drachm; ginger, a ſcruple: make an electary, with a ſufficient quantity of ſyrup of violets. Or,

(2.) Take pulp of ſtewed prunes, two ounces; tamarinds and caſſia, of each half an ounce; powder of rhubarb, two drachms; ſyrup of violets, as much as is ſufficient. Or,

(3.) Take pulp of ſtewed prunes, an ounce and half; cream of tartar, two drachms; powder of rhubarb, a drachm; oil of aniſeeds, three drops; ſyrup of damaſk roſes, enough to make an electary.

After the ſame manner may be contrived any ſolutive electaries, which are convenient for ſuch who are apt to be coſtive, as many lean people, and moſt claret-drinkers, are; the quantity of a nutmeg may be taken at any time, without any obſervation of what is uſual in the ſtronger purges.

Coolers.

Electarium Refrigerans.

A Refrigerating Electary.

(1.) Take pulp of tamarinds, and of the conſerve of barberries, of each an ounce and half; *ſpecies diatragacanth. frigid.* half an ounce; ſpirit of ſulphur by the bell, twenty drops; ſyrup of lemons, a ſufficient quantity. Make an electary. Or,

(2.) Take pulp of tamarinds and ſloes, of each an ounce and half; pulp of ſweet almonds blanched, with a ſufficient quantity of ſyrup of raſpberries, make an electary. Or,

(3.) Take the conſerves of barberries, two ounces; and of red roſes, half an ounce; ſpirit of ſulphur by the bell, fifteen drops; ſyrup

ſyrup of cloves, enough for an electary. Or,

(4.) Take pulp of tamarinds, and marmalade of quinces, of each an ounce and half; *ſpecies diatragacanth. frigid. ſal prunellæ*, of each two ounces; ſyrup of oranges, enough to make an electary. And,

Electarium acidum.

The ſour Electary.

Take conſerve of wood-ſorrel, four ounces; cream of tartar, ſix drachms; tartar of vitriol, two drachms; ſyrup of wood ſorrel, ſufficient to make an electary.

Theſe are chiefly of uſe in fevers, to cool the mouth, by holding a bit therein till it diſſolves away; and alſo to abate heat of urine, and promote its diſcharge; but there are ſo many fruits and preſerves for ſuch purpoſes, which are generally ſo much more agreeable to the patient, that there is not often occaſion for preſcriptions of this nature; the laſt indeed is ſometimes preſcribed in the jaundice, and in redundances of choler.

SECT. VII.

Of Boles.

THE preſent practice very much uſes this form, and it is indeed the moſt convenient of any for mixing things, eſpecially thoſe of ſuch efficacy, that their doſes require to be exactly adjuſted; as the ſtronger alexipharmics, cathartics, and opiates. When the preſcriber has a mind to give alternatives in the ſame form, for many patients will elſe fail of their proper doſes; ſuch a proportion of any electary, in the foregoing ſection, may be be taken as will make a bole not exceeding two drachms. In this diviſion, therefore, we ſhall give examples only under the following heads.

Alexipharmics.

(1.) Take *lapis contrayervæ*, one cruple; Mithridate, two ſcruples; ſyrup of red poppies, as much as is ſufficient to make a bole. Or,

(2.) Take Gaſcoign's powder, one ſcruple; ſnake-root, eight grains; ſaffron, three grains; confection of alkermes, as much as is ſufficient to make a bole. Or,

(3.) Take Mithridate, one drachm; contrayerva-root, in powder, fifteen grains; ſyrup of red poppies, as much as is ſufficient to make a bole. Or,

(4.) Take contrayerva-root in powder, and Virginia ſnake root, of each ten grains; Venice treacle, half a drachm; ſyrup of poppies, as much as is ſufficient. Or,

(5.) Take the purple powder, one ſcruple; ſaffron, five grains; conſerve of wood-ſorrel, half a drachm; ſyrup of red poppies, as much as is ſufficient to make a bole. Or,

(6.) Take Gaſcoign's powder,

half a drachm; powder of ſaffron, three grains; confection of alkermes, as much as is ſufficient to make a bole. Or,

(7.) Take *lapis contrayervæ*, one ſcruple; conſerve of roſemary flowers, half a drachm; confection of alkermes, as much as is ſufficient to make a bole. Or,

(8.) Take Goa ſtone, fifteen grains; Virginia ſnake root and ſaffron, of each five grains; Venice treacle, half a drachm; ſyrup of red poppies, as much as is ſufficient to make a bole.

In an ordinary fever, any of theſe may be preſcribed, and repeated every ſix hours, or ſooner or later, as ſymptoms appear; until a diaphoreſis, or ſome critical diſcharge, abates it; and theſe may be varied as any particular circumſtances indicate, as where a diarrhœa is to be checked.

(9.) Take *lapis contrayervæ*, fifteen grains; diaſcordium without honey, two ſcruples; oil of cinnamon, one drop; ſyrup of white poppies, as much as is ſufficient. Or,

(10.) Take diaſcordium without honey, one drachm; ſnake-root and ſaffron, in fine powder, of each ſix grains; diacodium, as much as is ſufficient. Or,

(11.) Take Venice treacle, half a drachm; red coral and bole, of each ten grains; London laudanum, one grain; diacodium, as much as is ſufficient. Or,

(12.) Take red coral, one ſcruple; diaſcordium without honey, half a drachm; oil of cinnamon, one drop; diaſcordium, as much as is ſufficient to make a bole.

When bliſters are uſed, and the urine is hot, or difficult to make, the following alterations may be ſuitable.

(13.) Take conſerve of wood-ſorrel, one drachm; ſaffron and ſnake-root, of each five grains; *ſal prunellæ*, ten grains; ſyrup of marſhmallows, as much as is ſufficient. Or,

(14.) Take Venice treacle, half a drachm; Gaſcoign's powder, fifteen grains; ſaffron, five grains; *ſal prunellæ*, ten grains; ſyrup of raſpberries, as much as is ſufficient. Or,

(15.) Take contrayerva-root in fine powder, one ſcruple; ſaffron, five grains; *ſal prunellæ*, ten grains; balſam capivi, ſix drops; ſyrup of marſhmallows, as much as is ſufficient to make a bole.

And after theſe, inſtead of the uſual juleps, barley-water emulſions, and white wine, they may be plentifully drank. In a delirium, and convulſive twitches of the tendons, the higheſt alexipharmics are to be given; ſo that care be taken ſufficiently to dilute at the ſame time: ſuch as,

(16.) Take of the egg-electary, half a drachm; camphor, ſaffron, and caſtor in fine powder, of each five grains; confection of alkermes, as much as is ſufficient. Or,

(17.) Take contrayerva-root, one ſcruple; ſnake-root and caſtor, of each ſix grains; Venice treacle, half a drachm; ſyrup of red poppies, as much as is ſufficient. Or,

(18.) Take Mithridate, half an ounce; *lapis contrayervæ*, twelve grains; caſtor, ſalt of amber, and ſaffron, of each four grains; confection of alkermes, as much as is ſufficient. Or,

(19.) Take Gaſcoign's powder, one ſcruple; Matthews's pill, ſeven grains; camphor, caſtor, and ſalt of amber, of each five grains; alkermes confection, as much as is ſufficient.

In

In the laſt ſtage of the diſtemper, when there is no other hope, but that there is life, and the patient begins to hiccup:

(20.) Take contrayerva-root, one ſcruple; volatile ſalt of hartſhorn, and ſalt of amber, of each eight grains; ſaffron, five grains; confection of alkermes, as much as is ſufficient. Or,

(21.) Take oriental bezoar, fifteen grains; Mithridate, half a drachm; ſyrup of red poppies, as much as is ſufficient to make a bole. Or,

(22.) Take muſk, volatile ſalt of hartſhorn, of each ten grains; ſnake-root, fifteen grains: confection of alkermes, as much as is ſufficient to make a bole.

Theſe latter ought to be mixed as near as poſſible to their being taken, becauſe the volatiles will waſte. They may be repeated every three or four hours, if ſymptoms are preſſing, and helped down with ſuitable juleps; in which alſo may be dropped any volatile ſpirits. Theſe are all in proportion for adult perſons: for children, and thoſe of weaker conſtitutions, they may be leſſened accordingly. The conſiſtence of a bole ought to be ſomewhat ſtiffer than that of a common electary.

Cathartics.

(1.) Take powder of jalap, half a drachm; ſcammony rubbed very fine with an oiled peſtle, five grains; oil of cloves, one drop; ſyrup of buckthorn, as much as is ſufficient to make a bole.

This powerfully purges watery and pituitous humours, and therefore is very proper for robuſt corpulent conſtitutions. Or,

(2.) Take powder of jalap, half a drachm; oil of cloves, one drop; ſyrup of buckthorn, as much as is ſufficient.

There is hardly a better purge than this in a dropſy; although ſome give thoſe which are rougher: as,

(3.) Take gamboge, one ſcruple; cream of tartar, half a drachm; oil of cloves and aniſeed, of each one drop; ſyrub of buckthorn, as much as is ſufficient. Or,

(4.) Take elaterium, two grains; reſin of jalap, ſix grains; cream of tartar, half a drachm; oil of juniper, two drops; ſyrup of buckthorn, as much as is ſufficient.

The reſinous ſubſtances muſt be very well rubbed with the cream of tartar, or ſalt of tartar, elſe they will gripe intolerably. For milder purges, take either of the following:

(5.) Take powder of rhubarb, half a drachm; lenitive electary, one drachm; ſyrup of damaſk roſes, as much as is ſufficient. Or,

(6.) Take powder of jalap, one ſcruple; pulp of caſſia, one drachm; powder of nutmeg, three grains; ſyrup of rhubarb, as much as is ſufficient. Or,

(7.) Take either of the compound powders of ſena, half a drachm; pulp of caſſia, one drachm; or as much as is ſufficient to make it into a bole. Or,

(8.) Take calomel, fifteen grains; conſerve of red roſes, half a drachm: make them into a bole to take over night; and take any common purging potion, or a lenitive bole, the next morning.

For children, the doſe of theſe may be proportionably leſſened; and where there is ſuſpicion of

worms, or ſlimy humours, in the bowels, from a ſtinking breath, and a hard belly.

(9.) Take the earl of Warwick's powder, ten grains; lenitive electary, as much as is ſufficient to make a bole. Or,

(10.) Take rhubarb in powder, eight grains; calomel, ſix grains; lenitive electary, as much as is ſufficient. Or,

(11.) Take reſin of jalap and calomel, of each four grains; powder of cinnamon, one grain; conſerve of roſemary flowers, as much as is ſufficient. Or,

(12.) Take ſcammony, three grains; calomel, ſix grains; powder of cinnamon, one grain; ſyrup of rhubarb, as much as is ſufficient to make a bole.

Where there is calomel uſed, care muſt be taken that the bole is not made too thin; becauſe, otherwiſe, the weight of the calomel will be apt to make it ſeparate, and be loſt in taking; and notwithſtanding the prejudices of ſome againſt mercury, yet theſe are as ſafe purges as any, and may be given to chiſdren in the firſt year without hazard, if rightly prepared and proportioned to their ſtrength.

Opiates.

(1.) Take Matthews's pill, eight grains; Mithridate, half a drachm; make a bole. Or,

(2.) Take Venice treacle, half a drachm; London laudanum one grain; conſerve of wood-ſorrel, half a drachm; make a bole. Or,

(3.) Take diaſcordium without honey, one drachm, for a bole. Or,

(4.) Take conſerve of red roſes and Mithridate, of each half a drachm; liquid laudanum, fifteen drops: make a bole. Or,

(5.) Take Venice treacle, a drachm; liquid laudanum, ten drops: make a bole.

SECT. VII.

Of Pil's and Lozenges.

A Great deal is reduced into the firſt of theſe forms, for the conveniency of taking; becauſe they can be ſo wrapped up, as not to give any taſte as they paſs; which is an inducement to ſome, who will not be prevailed upon by any other form. The latter is likewiſe contrived in compliment to the palates of ſome nice people; and is generally concerned in things which are toothſome.

Cephalics.

Pilulæ Antipodagricæ.

Pills againſt the Gout.

Take the beſt Ruſſia caſtor, half an ounce; white amber, germander, ground-pine, of each ſix drachms; ſalt of amber, ceruſe of antimony, balſam of Tolu, opopanax, of each one ounce; roots of butterbur, three ounces; Chio turpentine, two ounces; balſam of ſulphur terebinthinated, as much as

as is ſufficient to make into a maſs for pills.

This is taken from Bates, where it ſtands marked for being frequent in his own practice; half a drachm is ordered twice a day, and to be continued ſome months together, to prevent the gout and rheumatic pains.

Pilulæ Succinatæ.
Amber Pills.

Take ambergriſe, two grains; muſk, one grain; opium, three grains; ſalt of amber, and flowers of Benjamin, of each ſix grains; balſam of Peru, as much as is ſufficient to make them into nine pills.

Theſe are good in the hiccup, when it happens upon an empty ſtomach; and may be given at three doſes, as there is occaſion.

Pilulæ Caſtoreæ.
Caſtor Pills.

Take Ruſſia caſtor, one drachm; ſalt of amber, half a drachm; balſam of Peru, as much as is ſufficient: make them into twenty-four pills.

Theſe are good in all nervous diſtempers in either ſex, whether the origin be in the head or uterus: five may be taken two or three times a day, and continued as there is occaſion.

Pilulæ cum Cinnabari.
Pills with Cinnabar.

Take native cinnabar finely powdered, two drachms; caſtor and ſalt of amber, of each one drachm; oil of marjoram, twelve drops; balſam of Peru, one drachm; ſyrup of piony, as much as is ſufficient. Make into pills, nine out of each drachm.

The ingredients of this are very good; and to take three of theſe pills two or three times in a day for ſome time together, will eradicate very obſtinate nervous complaints; and do great ſervice to perſons ſubject to the head-ach, giddineſs, epilepſies, and the palſy.

Trochiſci Apoplectici.
Lozenges againſt the Apoplexy.

Take ambergriſe, half a drachm; oil of roſemary, cinnamon, and nutmeg, of each two drops; oil of cloves, and marjoram, of each one drop; ſpirit of lavender, eighty drops; fine ſugar, four ounces. Make them into lozenges, with as much as is ſufficient of the mucilage of gum tragacanth.

Theſe are proper to chew and roll about in the mouth frequently, by ſuch who are ſubject to apoplectic diſorders; for this way the warm aromatics more immediately penetrate the fibres than when ſwallowed at once into the ſtomach.

Trochiſci Cephalici.
Cephalic Lozenges.

Take *pulvis de gutteta*, and native cinnabar, of each half a drachm; oil of roſemary, and nutmegs, of each two drachms; fine ſugar, two ounces; mucilage of gum tragacanth, as much as is ſufficient.

Trochiſci Paralytici.
Lozenges againſt the Palſy.

Take ſugar in fine powder, one ounce; ſpirit of lavender compound, ſixty drops; oil of roſemary, four drops; mucilage of gum tragacanth, as much as is ſufficient.

Theſe may alſo be given at diſcretion to ſuch who are inclinable to nervous diſorders, as they are beſt liked.

Trochiſci

Trochiſci Odorati.

Perfumed Lozenges.

Take muſk and ambergriſe, of each ſix grains; grind them fine with a little white ſugar-candy, and ten drops of ſpirit of roſes; then put to them powder of orris, four ounces; ſtarch, two ounces; fine ſugar, four ounces; and gum tragacanth, as much as is ſufficient.

Theſe are of no great ſervice, unleſs to thoſe few who delight in ſweets; and to diſguiſe a ſtinking breath.

Trochiſci Stomachici.

Stomach Lozenges.

Take Spaniſh angelica root in fine powder, one drachm; oil of cinnamon, nutmeg, and cloves, of each two drops; oil of mint, and wormwood, of each one drop; fine ſugar, four ounces; mucilage of gum tragacanth, made with orange-flower-water, as much as is ſufficient.

Theſe are good to warm the ſtomach, and diſſipate ſuch flatulencies as ſometimes communicate their diſorders a great way farther; and ſo are of ſervice to the head.

Trochiſci ad emulgendam Salivam.

Lozenges to occaſion Spitting.

Take pellitory of Spain in fine powder, half an ounce; maſtich, two drachms; oil of cloves, and marjoram, of each one drachm. Make them into lozenges and pellets, with as much as is ſufficient of the beſt ſcented yellow bees-wax.

Theſe may be of uſe to ſuch who want a diſcharge of rheum from the glands about the mouth, and cannot comply with the cuſtom of ſmoaking tobacco for that purpoſe. For a great many complaints ariſe from thoſe parts being overcharged with moiſture, for which this would be a convenient drain, the heat of it irritating the glands to the diſcharge of their contents.

Hyſterics.

Pilulæ Emmenagogæ.

Pills to promote the Menſes.

Take borax, and myrrh, of each one drachm; birthwort, and ſaffron, of each one ſcruple; oil of penny-royal, ſavin, and cloves, of each two drops; ſyrup of the five opening roots, as much as is ſufficient to make pills, ten out of each drachm.

Pilulæ Hyſtericæ.

Hyſteric Pills.

Take galbanum ſtrained, aſa fœtida, and gum ammoniacum, of each one drachm; caſtor, camphor, and ſalt of amber, of each fifteen grains; oil of amber, five drops; balſam of Peru, as much as is ſufficient to make into pills, twelve out of each drachm.

Pilulæ. —— Other. ——

Take powder of ſavin, dittany of Crete, of each one drachm; myrrh, galbanum, gum ammoniacum, caſtor, of each two drachms; make all into a maſs with ſyrup of mugwort, as much as is ſufficient, and form twelve pills out of each drachm.

Theſe all promote the uterine diſcharges, and do ſervice in many hyſterical affections; but they muſt not be meddled with upon any ſuſpicion of being with child; for they are ſo forcing as to occaſion abortion. To help the menſes, they ought to be taken about the time of expecting them; and in other caſes for a conſtancy, ſome

weeks together, three, twice in a day. They alſo would be of ſervice in all diſorders of the ſpleen, in either ſex: for there is a great affinity between thoſe, and what are termed hyſterical.

Strengtheners.

Pilulæ Cretaceæ.
The Chalk Pills.

Take chalk, white ſanders, and nutmegs, of each equal parts, and make them into pills, with as much as is ſufficient of Chio turpentine, ten out of each drachm.

Pilulæ Terebinthinatæ.
Turpentine Pills.

Take Venice turpentine, boiled in water to a due conſiſtence, half an ounce; amber, dragon's blood, bole, of each half a drachm: make ten pills out of each drachm.

Pilulæ Aſtringentes.
Aſtringent Pills.

Take fine bole, dragon's blood, red coral, amber, maſtich, aſtringent ſaffron of ſteel, of each one drachm: oil of cinnamon, and nutmegs, of each ſix drops; and make a maſs with as much as is ſufficient of turpentine, and form ten pills out of each drachm.

Theſe are good in all weakneſſes of the reins, and will be of ſervice in the whites and gonorrhœas; four or five may be taken twice a-day; but they are not to be meddled with, where the running is virulent, until neceſſary cathartics have been adminiſtered. They will do good likewiſe in fluxes of the belly, which ariſe from an habitual relaxation. But ſome of the following are more directly calculated for ſuch purpoſes.

Pilulæ cum Sanguine Draconis.
Dragon's Blood Pills.

Take fine dragon's blood, two drachms and an half; ſugar of lead, and roch-alum, of each fifteen grains; Venice turpentine, as much as is ſufficient to make forty-eight pills.

Pilulæ de Terra Japonica.
Japan Pills.

Take Japan earth, two drachms; oil of cinnamon, ſix drops; diacodium, as much as is ſufficient to make pills, nine out of each drachm.

Theſe greatly corrugate and draw up the relaxed fibres of the ſtomach and bowels; and therefore will not only be of ſervice in fluxes, but alſo aſſiſt in digeſtion. They may be taken two or three times a-day, four or five in a doſe.

Pilulæ ad Dyſenteriam.
Pills againſt the Bloody Flux.

Take the beſt ſcented yellow bees-wax, half an ounce; Japan earth, and ſperma ceti, of each one drachm; ſugar of lead, one ſcruple; oil of cinnamon, twelve drops. Make them into a maſs by the fire, and form ten pills out of each drachm.

This is a moſt effectual medicine for what its title expreſſes; for it not only ſtrengthens the fibres, but alſo, as it were, afreſh plaſters over the bowels, with that mucus they naturally are ſupplied with, and which the acrimony of humors had torn off, and waſhed away. It is alſo exellent in old gleets, and the whites in women. To which purpoſes likewiſe the following are calculated; but are not ſo eaſy or ſafe.

Pi-

Pilulæ ad Gonorrhœam.
Pills for a Clap.

Take ſugar of lead, and camphor, of each two drachms; calomel, half an ounce. Make them into a maſs with as much as is ſufficient of Venice turpentine, and form it into a hundred and twenty pills.

This is an efficacious compoſition: for ſome it will ſalivate, and others not; and therefore requires a great deal of ſkill to manage it. The doſe is five pills at night going to bed.

Pilulæ Stomachicæ.
Stomach Pills.

Take powder of cinnamon, mace, nutmeg, of each one ſcruple; cloves, long pepper, balauſtines, of each half a ſcruple; extract of gentian, one drachm and a half; *elix. proprietatis*, as much as is ſufficient to make them into pills.

Theſe warm a weak cold ſtomach, that is filled with crudities and flatulencies; and by degrees give a new firmneſs and ſtrength to the fibres; and procure a good digeſtion.

Pilulæ Martiales.
Steel Pills.

Take ſalt of ſteel, two drachms; galbanum ſtrained, as much as is needful to give a conſiſtence, and ſyrup of the five opening roots, as much as is ſufficient to make them into pills.

Or, (2.) Take ſalt of ſteel, and gum ammoniacum, of each half a drachm; zedoary, and extract of gentian, of each two drachms; ſyrup of ſteel, as much as is ſufficient to make them into pills, N° 9. out of each drachm.

Theſe are very convenient for ſuch as cannot take ſteel in any other form: the latter will beſt agree with cold weakly ſtomachs, becauſe warmed with the zedoary; for ſteel too bare will with ſome be apt to prove emetic. Either of theſe are excellent for young girls, who meet with difficulty in the firſt eruption of the menſes, and are apt afterwards to have them obſtructed They may be given twice in a-day, three for a doſe. There are many more examples of this kind from the preſent practice, for which the following may ſuffice.

Or, (3.) Take ſalt of ſteel, one drachm; ſaffron, and galangal in fine powder, of each half a drachm; extract of gentian as much as is ſufficient.

Or, (4.) Take ſalt of ſteel, one drachm; aloes, two drachms; gum ammoniaeum, half a drachm; balſam of Peru, as much as is ſufficient.

Or, (5.) Take ſteel prepared with ſulphur, two drachms; ſaffron, half a drachm; extract of gentian, as much as is ſufficient.

Pilulæ Gentianæ.
Gentian Pills.

Or, (6.) Take powder of gentian, two drachms; ſalt of wormwood, two ſcruples; extract of gentian, one drachm; ſyrup of the five roots, as much as is ſufficient.

Pilulæ Febrifugæ.
Febrifuge Pills.

Take powder of chamomile flowers, two drachms and a half; diaphoretic antimony, one drachm; ſalt of wormwood, half a drachm; mucilage of gum tragacanth, as much as is ſufficient.

The two laſt are intended againſt intermittents; and in old agues that have returned after the uſe of the bark: they will ſometimes ſucceed,

ceed, where nothing elſe will. They ought to be taken three or four times in a day, five pills at a doſe, that are made ten out out of each drachm; and if they fail in this, they will be of ſome ſervice in mending the ſtomach, and helping digeſtion.

Trochiſci Hemoptoïci.

Lozenges againſt ſpitting of Blood.

Take Japan earth, two drachms; aſtringent ſaffron of ſteel, one drachm; ſugar of lead, and ſtarch, of each half a drachm; fine ſugar, four ounces; mucilage of gum tragacanth, as much as is ſufficient to make them into lozenges.

This may be taken at diſcretion, by any who are ſubject to ſpit blood, and they will alſo do ſervice in all ſorts of fluxes, whether of the belly or other parts.

Trochiſci Peruviani.

Peruvian Lozenges.

Take of the Peruvian bark, one ounce; reduce it into a fine powder; balſam of Tolu, two drachms; of Gilead, half a drachm; ſugar, half a pound; mucilage of gum tragacanth, as much as is ſufficient to make them into lozenges.

This is in Dr. Fuller's Pharmacopœia, with two drachms of balſam of capivi, which would make it too nauſeous to take in ſuch a form; for its bitterneſs will render it troubleſome enough to many without that. They who can take theſe, will find ſervice from them in all hectic indiſpoſitions, and beginning conſumptions.

Balſamics.

Pilulæ Styracinæ.

Storax Pills.

Take ſtrained ſtorax, two drachms; flowers of ſulphur, one drachm; white Benjamin, half a drachm. Make them into pills with a warm peſtle, and as much as is ſufficient of balſamic ſyrup.

Theſe are good to thicken and dry up ſharp tickling rheums, and prevent thoſe coughs which proceed from them, and threaten a conſumption, without timely remedy. They may be taken twice a day, three or four at a time, for a month together.

Pilulæ Aſthmaticæ.

Pills againſt an Aſthma.

Take gum ammoniacum ſtrained, one drachm; ſaffron, ſalt of amber, flowers of Benjamin, of each half a drachm; balſamic ſyrup, as much as is ſufficient to make them into forty-eight pills.

Theſe are good for the ſame as the foregoing; being alſo ſomewhat deterſive; ſo that they are of ſervice in many nervous caſes, wherein aſthmas have very often a ſhare. They may be taken three for a doſe, and repeated three or four times a-day.

Or, take millepedes, three drachms; gum ammoniacum ſtrained, one drachm and a half; flowers of Benjamin, one drachm; ſaffron, and balſam of Peru, of each one ſcruple; balſam of ſulphur, as much as is ſufficient.

Or, take flowers of ſulphur, and Benjamin, of each half a drachm; ſaffron, one ſcruple; gum ammoniacum ſtrained, one drachm; common tar, as much as is ſufficient to make them into pills.

Theſe will do great ſervice, where the lungs begin to be ſtuffed with viſcid or acrimonious juices; and wear off thoſe ſhort huſky coughs, which are ſigns of tubercles, and beginning ulcerations. They ought to be taken two or

three times a day, three at a doſe; drinking ſome convenient pectoral apozem after each.

Pilulæ Gilcadenſes.
Gilead Pills.

Take white ſugar-candy powdered, two drachms; the cold ſpecies of gum tragacanth, one drachm; balſam of Tolu, two ſcruples; flowers of Benjamin, one ſcruple; balm of Gilead, as much as is ſufficient. Or,

Pilulæ cum Stermate Ceti.
Sperma Ceti Pills.

Take ſperma ceti, one drachm; white ſugar-candy in powder, two drachms; grind theſe well together; and then with a warm peſtle, and as much as is ſufficient of ſyrup of balſam, make them into pills.

Theſe are not only balſamic and emollient, with regard to the lungs, but vulnerary, and good to heal inward bruiſes, or other injuries; and are very proper and convenient after delivery. Where perſons cannot take the ſperma ceti in any other form, three or four of theſe for a doſe may be taken twice a day.

Pilulæ Pectorales.
Pectoral Pills.

Take powder of elecampane, orris, liquorice, of each one ſcruple; ſaffron, flowers of Benjamin, of each half a ſcruple; white ſugar-candy, two ſcruples; balſam of ſulphur aniſated, as much as is ſufficient.

In aſthmas, wheezing coughs, and all infarctions of the lungs, theſe will do ſervice. They may be taken twice a day, three for a doſe.

Pilulæ Sanctæ.
The Holy Pills.

Take gum guaiacum, and reſin of the ſame wood, of each one drachm and a half; oil of the ſame, twenty drops; balſam of Peru, as much as is ſufficient to make them into pills.

Theſe are contrived for ſuch as care not for the uſual diet-drinks of the woods, and are good for the like purpoſes, to dry up ſuperfluous humidities, aſſiſt tranſpiration, and ſweeten the blood. They may be taken twice a day, three for a doſe.

Pilulæ Tolutanæ.
The Tolu Pills.

Take balſam of Tolu, one drachm; gum guaiacum, two drachms; flowers of Benjamin, balſam of Peru, of each half a drachm; oil of juniper, eight drops. Make them into pills with as much as is ſufficient of the yolk of an egg.

Theſe are pretty much like the foregoing, but ſomewhat leſs abſorbent, and more balſamic. They are good not only where there is ſuſpicion of beginning exulcerations about the breaſt, but alſo in the urinary paſſages; and are excellent in the gonorrhœa. They may be taken every morning and night, three or four for a doſe.

Pilulæ contra Catarrhum.
Pills againſt a Catarrh.

Take pills of Ruffus, one drachm; ſtorax pills, half a drachm; oil of aniſeed, three drops. Make them into twenty pills.

Theſe are well contrived, both to ſtop the defluxion of tickling rheum, which continually provokes

vokes coughing; and to divert it by a proper diſcharge; whereby it is prevented from ſtraitening and ſtuffing any of the paſſages. They may be taken two or three every night.

Pilulæ Catarrhales alteræ.

Other Pills againſt a Catarrh.

Take pure opium, one grain; extract of ſaffron, four grains. Make them into pills. Or,

Take pil. Ruffi, one ſcruple; opium, one grain; make them into pills.

Both theſe are to be taken going to bed: and as the former is good to ſtop a defluxion of humours upon the glands of the fauces, and promote its diſcharge by the ſkin; theſe are contrived to divert it by ſtool; and are very good for that purpoſe.

Pilulæ Ecphracticæ.

Ecphractic Pills.

Take ſtomach pills with gums, aleophangine pills, gum guaiacum, and ſalt of ſteel, of each four ſcruples; ſalt of wormwood and extract of gentian, of each two ſcruples. Make them into pills, with as much as is ſufficient of gum ammoniacum diſſolved in vinegar of ſquills, ten out of each drachm.

The ſalt of wormwood makes the maſs ſo crumbly, as to be troubleſome to form into pills; and therefore the more gum is allowed, the better that is prevented; but then the doſe ought to be increaſed, elſe the other ingredients will not be taken in their intended quantity. The whole compoſition is a powerful deobſtruent, and is therefore of uſe in almoſt all chronic diſorders from obſtructions. They keep the body moderately open; and will do great ſervice in hypochondriacal affections. They ought to be taken a month together at leaſt, four or five for a doſe, every night going to bed.

Pilulæ de Allio.

Garlic Pills.

Take juice of garlic, half an ounce; gum ammoniacum, one drachm and a half; ſaffron, a ſcruple; millepedes prepared, one drachm; flowers of Benjamin, half a ſcruple; oil of aniſeed, four drops; elecampane in powder, as much as is ſufficient.

This is chiefly calculated againſt difficulty of breathing; and will do good ſervice in moſt complaints of that kind. To take five, twice a day.

Pilulæ de Guaiaco.

Guaiacum Pills.

Take gum guaiacum and aloes, of each a drachm and a half; balſam of Peru, as much as is ſufficient to make them into pills.

Theſe differ not much from the ecphractic pills; and avail in the ſame complaints. To be taken three or four every night going to bed.

Pilulæ de Croco.

Saffron Pills.

Take extract of ſaffron, one ſcruple; flowers of Benjamin, half a drachm; juice of liquorice, one drachm; oil of aniſeed, four drops. Make them into pills, with as much as is ſufficient of balſam of Peru.

Theſe warm and thin the blood, and make it fitter to paſs through the lungs; and are therefore to be recommended in ſluggiſh heavy temperaments, diſpoſed to aſthmas and dropſies. They may be taken

two or three times a-day, three for a doſe; ſomewhat warm being drank after them.

Pilulæ de Ammoniaco Magiſtrales.
The Magiſterial Ammoniac Pills.

Take gum ammoniac diſſolved in vinegar of ſquills, two drachms; fine aloes, one drachm and an half; myrrh, maſtich, Benjamin, of each half a drachm; ſaffron and ſalt of wormwood, of each one ſcruple; ſyrup of the five roots, as much as is ſufficient to make into pills.

Theſe are recommended againſt the ſpleen, and all diſorders from a heavy blood. They may be taken every night, five for a doſe.

Pilulæ Cachecticæ.
Cachectic Pills.

Take fine picked gum ammoniac in drops, and the beſt Succotrine aloes, of each one drachm and a half; ſteel prepared with ſulphur, a drachm; oil of aniſeed, ſix drops; ſyrup of ſteel, enough to make them into a maſs, out of each drachm of which make twelve pills.

This compoſition, as many before likewiſe of the ſame kind, is judiciouſly contrived to open all manner of obſtructions in the larger paſſages, and therefore helps in the ſpleen, hyſterical diſorders, and promotes the menſes. Doſe, four or five every night going to bed.

Pilulæ Splenecticæ.
Pills againſt the Spleen.

Take ſpikenard in fine powder, a drachm; aſa fœtida ſtrained, and ens Veneris, of each half a drachm; oil of amber, eight drops; balſam of Peru, a quantity ſufficient to make them into pills. Or,

Take ens Veneris, four ſcruples; ſaffron, long pepper, Virginia ſnake-root, ſpikenard, of each a ſcruple; galbanum, four ſcruples; tincture of myrrh, what is ſufficient.

In all hypochondriacal diſorders, and thoſe alſo called hyſterical, theſe are very ſuitable, and by continuance for ſome time, two or three times a-day, three or four to a doſe, they will prevail againſt the moſt obſtinate complaints of this kind. The following alſo is calculated for the ſame purpoſes, by one heretofore of conſiderable note in practice, with the addition of ſome briſk cathartics, which may make them not ſo proper for ſome.

Pilulæ Ecphracticæ.
Ecphractic Pills.

Take ſpecies of hiera, two ounces; ſalt of ſteel, half an ounce; and make them into pills with ſyrup of the five roots, or extract of gentian.

Theſe are good in all groſs and foul habits inclining to the jaundice and dropſies, eſpecially in ſtrong robuſt conſtitutions, which have been ſpoiled by intemperance and a groſs diet; to be taken five or ſix twice in a day.

Pilulæ Ecphracticæ Sylvii.
Sylvius's Ecphractic Pills.

Take gum ammoniacum ſtrained, two ſcruples; ſalt of ſteel calcined to whiteneſs, a ſcruple; myrrh and caſtor, of each fifteen grains; ſaffron, half a ſcruple; troches of alhandal, a drachm; reſin of jalap, and ſcammony prepared, of each a ſcruple; oil of fennel, five drops: *elixir proprietatis*, enough to make them into fifty pills.

Theſe

Theſe are very powerful in cutting and wearing away thoſe viſcidities, which not only clog the viſcera, but even fur up, as it were, the paſſages of the nerves, whereby ſenſation, and what communication the mind has by their means, is much interrupted; ſuch things therefore are uſed not only with ſucceſs in all hypochondriacal caſes, but will prevail, by a continued uſe, even in that height of melancholy which may juſtly be called diſtraction.

Pilulæ Ictericæ.

Pills againſt the Jaundice.

Take cream of tartar and cochineal, of each half a drachm; Venetian ſope, two drachms: make them into pills. Or,

Take Venetian ſope, two drachms; ſaffron, ſalt of ſteel, and ſalt of amber, of each a ſcruple; oil of juniper, ten drops; make them into pills. Or,

Take turmeric in fine powder, and ſaffron, of each half a drachm; gum ammoniacum diſſolved in vinegar, Venice ſope, of each a drachm and a half; oil of juniper, twelve drops; make them into pills, twelve out of each drachm. Or,

Take tartar of vitriol and ſaffron, of each two ounces; ſalt of amber, a ſcruple; Venetian ſope, two drachms; oil of juniper, ten drops; make them into pills. Or,

Take Venice ſope, an ounce; oil of aniſeeds, thirty drops; make them into pills.

Any of theſe will conquer the moſt obſtinate jaundice, if duly continued, and aſſiſted with the uſual aperitive apozems; they may be taken five to a doſe, two or three times a day.

Pilulæ Diureticæ.

Diuretic Pills.

Take Venice ſope, two drachms; ſalt of amber, and *ſal. prunel.* of each half a drachm; oil of juniper, twelve drops; make them into pills.

Pilulæ Nephriticæ.

Nephritic Pills.

Take millepedes, crude ſal ammoniac, and Venetian ſope, of each a drachm; ſaffron, a ſcruple; oil of juniper, ten drops; make them into pills with a ſufficient quantity of Venice turpentine. Or,

Take powder of bees, two drachms; *ſal. prunel.* a drachm; ſalt of amber, and muſtard-ſeed, of each half a drachm; oil of aniſeeds, twelve drops; Venice turpentine, a ſufficient quantity. Or,

Take crabs eyes prepared, a drachm; camphire, a ſcruple; cantharides in fine powder, half a ſcruple; Venice turpentine enough to make them into ſmall pills.

Theſe are not to be preſcribed but in caſes of great obſtinacy, that will not give way to milder methods, for they ſtimulate ſo much, that it renders them inconvenient on many accounts; and there is nothing under this intention that is reducible into pills, which does not do the ſame; and therefore it will rarely happen in practice, that this form will be required; for the ſafeſt diuretics are ſuch as dilute and ſoften, and therefore are moſt to be expected amongſt the liquid forms.

Alexipharmics.

This is an inconvenient form for moſt alexipharmics, becauſe they generally conſiſt of ſubſtances

which are aromatic and volatile, and will not lie in a pill, without extending their bounds, as has already in the preceding part been ſhewn of volatile ſalts, or elſe they will evaporate and be loſt; therefore this is never to be made uſe of but when the prejudices of a patient will not ſo eaſily comply with what is neceſſary herein under any other form, which will make a very few examples in this intention ſufficient.

Pilulæ Alexiteriæ.

Alexiterial Pills.

(1.) Take Virginia ſnake-root in fine powder, a drachm; camphor and ſalt of amber, of each half a drachm; make them into pills with a ſufficient quantity of diaſcordium, if it be not too thick, or elſe diacodium. Or,

(2.) The *lapis contrayervæ*, half a drachm; ſaffron, a ſcruple; cochineal, half a ſcruple; ſalt of amber and caſtor, of each ſix grains; diacodium, enough to make them into pills. Or,

(3.) Take diaphoretic antimony, and Goa ſtone, of each half a drachm; ſaffron, camphor, caſtor, and ſalt of amber, of each half a ſcruple; Mithridate, what is ſufficient. Or,

(4.) Take powder of ſcordium, a drachm; ſnake-root, and ſaffron, of each a ſcruple; treacle of Andromacus, enough to make them into pills. Or,

(5.) Take cochineal, two drachms; ſaffron, a drachm; honey, enough to make them into pills. Or,

(6.) Take Virginia ſnake-root, a drachm and a half; ſaffron, camphor, and ſalt of amber, of each half a ſcruple; make them into pills with a ſufficient quantity of Mithridate.

Thus any of the boles in the preceding ſection may, by a ſmall quantity of fluid, be reduced into pills, when a patient will not otherwiſe take them: and of moſt of theſe, if twelve pills be made out of each drachm of the maſs, about five will be a doſe, and may be repeated every three or ſix hours, according to the urgency of ſymptoms, and particular circumſtances of the patient.

Cathartics.

Pills are the moſt convenient form for ingredients of this intention, and therefore we ſhall be more particular in examples therein.

Pilulæ Crapulariæ.

Pills againſt a Surfeit.

Take diagrydium and ſpecies hieræ, of each two drachms; aloes Succotrine, half an ounce; oil of cloves, ten drops; make them into a maſs with a ſufficient quantity of ſyrup of ſaffron.

Theſe are proper to take after any debauch, or feeding upon what does not digeſt, and are little different from the common hiera, only ſomewhat quicker by reaſon of the ſcammony; they may be taken early in the morning, five to a doſe, if ten pills be made out of each drachm; they will likewiſe do ſervice in preventing the gout, and many other diſeaſes frequent amongſt thoſe who live high.

Pilulæ Catholicæ.

The Catholic Pills.

Take pil. cochiæ, a drachm; extract of Rudius, two ſcruples; reſin of jalap, a ſcruple; oil of aniſeed, two drops; make them into pills with a ſufficient quantity of balſam of Peru.

Theſe very well deſerve to be kept in the ſhops ready mixed thus for a common purge, being well fitted for moſt caſes that want evacuation. Or they may be thus made:

Pilulæ.——Others.——

Take pil. cochiæ, and extract of Rudius, of each a drachm; reſin of jalap and calomel, of each half a drachm; oil of cloves, three drops; balſam of Peru, enough to make them into pills.

Theſe are yet ſomewhat briſker than the former, and will ſuit with moſt who want purging: if ten pills be made out of each drachm, four will be enough for a doſe in moſt conſtitutions; and for weakly people, the doſe may be proportionably abated.

Pilulæ Cephalicæ.

The Head Pills.

Take pil. fœtidæ of the college, fifteen grains; reſin of jalap, caſtor, and ſalt of amber, of each five grains; oil of amber, two drops; ſpirit of lavender, what is ſufficient to make into five pills.

It is the common opinion, that pills are more proper for the head than any other form; becauſe they lie longer in the ſtomach, and by their irritations there, occaſion a flux of humours from the nerves, and remote parts, which they carry down with them by ſtool: theſe are only for one doſe, and are moderate in operation: they will work notwithſtanding with the ſtrongeſt bodies; for the ſalt of amber, though not cathartic in itſelf, yet greatly promotes their operation. The uſual way of taking theſe is two over night, and the reſt the morning following; but it ſeems much better to take them early in the morning, for thoſe over night, which are given under the notion of preparing the humours for the other to carry off, will be ready to operate by the morning, and leave a nauſea at the ſtomach, that makes the next to be taken very loathſome, and apt to be thrown up again.

Pilulæ Chalybeatæ Catharticæ.

Purging Steel-Pills.

Take Ruffus's pill, a ſcruple; ſalt of ſteel, five grains; make them into five pills, with a ſufficient quantity of balſam of Peru, or ſyrup of rhubarb.

Theſe are very proper to purge thoſe who are inclining to a chloroſis, and may be taken every night for a week together, for they will work but little, if the Ruffus's pill be good, and made of the beſt aloes.

Pilulæ.——Others.——

Take gum ammoniacum, two drachms; ſalt of ſteel, half a drachm; ſcammony prepared with ſulphur, a drachm; oil of cloves, three drops: make ten pills out of each drachm, after it is made into a maſs, with a ſufficient quantity of ſyrup of buckthorn.

This is not only good, as the former, againſt the green ſickneſs; but is alſo proper in all hypochondriacal caſes, and hyſterical diſorders: it may be given every other morning, for three or four times together, five to a doſe.

Pilulæ Stomachicæ catharticæ.

Pills to purge the Stomach.

Take Ruffus's pill, a ſcruple; reſin of jalap, and ſalt of tartar, of each five grains; oil of mint, a drop: make them into five pills, with a ſufficient quantity of *elixir proprietatis*.

This very well anſwers the ſame intention as the *tinctura ſacra*, when the bitterneſs of that cannot be endured by ſome patients; it makes but one moderate doſe, and may be taken early in the morning every ſecond or third day, for three or four times together: this is likewiſe good to promote the menſes, if taken about the time they ought to flow.

Pilulæ Cholicæ.

Pills againſt the Colic.

Take pil. ex duobus, half a drachm; calomel, half a ſcruple; London laudanum, two grains; make them into five pills.

It requires great ſkill to know when purging is neceſſary in the colic; for, in ſome that are from hyſterical diſorders, cathartics, and even clyſters, can hardly be endured, becauſe the leaſt ſtimulus promotes convulſions, and therefore opiates and anodyne fomentations only are of uſe: but in a bilious colic, to give opiates only, would quiet the bowels, until they had ſtrained ſo much into the blood as to cauſe a fever, and therefore it is neceſſary the humours ſhould be carried off by purging; but becauſe the periſtaltic motion is, in this diſtemper, often interrupted, if not quite inverted, and a cathartic alone ruffles too much, therefore opium is very conveniently added to procure ſo long truce from pain, that the purge may, as it were unfelt, act upon and help downwards the offending humours, which intention is likewiſe much aſſiſted by ſoftening diluters: in theſe caſes likewiſe, and under this management, purges may be given much ſtronger than at other times, not only becauſe the diſtemper requires it, but becauſe opium mitigates their ſeverity; for the like purpoſe the following alſo, which is ſomewhat more gentle, may be given.

Pilulæ.——Others.——

Take extract of Rudius, half a drachm; London laudanum, a grain and a half; chemical oil of chamomile, three drops: make them into pills. Or,

Take pil. cochiæ, half a drachm; Thebaic extract, a grain and half; oil of cloves, a drop: make them into five pills.

Pilulæ Hydragogæ.

Pills to purge Water.

Take gamboge, fifteen grains; oil of juniper, two drops; Mithridate, enough to make them into five pills. Or,

Take reſin of jalap, five grains; gamboge and ſalt of tartar, of each ten grains; oil of aniſeed, three drops; balſam capivi, a quantity ſufficient for five pills. Or,

Take gamboge, a ſcruple; ſalt of tartar, five grains; oil of aniſeed, three drops; balſam of Peru, enough to make them into five pills.

Theſe are all good in dropſies, but are only fit for ſtrong conſtitutions, and where the viſcera are ſound; and therefore, in an anaſarca and œdematous ſwellings, they will force away abundance of water and ſtrangely reduce the unwieldy bulk; but if reſtoratives and warm ſtomachics are not given after, the parts will ſoon fill again, becauſe they are rather more ſtrained by ſuch forcible medicines.

Pilulæ Arthriticæ Catharticæ.

Purging Pills againſt the Gout.

Take reſin, or extract of turpeth, reſin of jalap, and calomel, of each a ſcru-

a ſcruple; opium, three grains; ſoap of tartar, fifteen grains; balſam capivi, enough to make them into fifteen pills.

Three of theſe may be taken over night, and they will hardly operate till next morning, and then with a great deal of eaſe and moderation; ſo that in the gout or rheumatiſm, they may be taken five nights together, and they can hardly fail of doing good: in many inſtances they have been known, at the ſecond or third doſe, to have carried the fit quite off; and it is upon this baſis only, that ſuch obſtinate diſtempers are to be reached, viz. by ſending in powerful cathartics, which ſhall be reſtrained by opium from exerting themſelves in the firſt paſſages, and therefore fitted to operate upon the moſt diſtant parts, where the offending humours have their ſcene of action. The following are of the ſame kind, and may be depended upon.

Pilulæ.——Others.——

Take panacea of antimony, four grains; opium, a grain and a half; extract of black hellebore, three grains; or ſufficient to make them into one or two ſmall pills.

Other preparations of antimony, that are ſtrongly purgative, may be managed in the ſame manner; and it is by theſe that many empyrics have got great fame, when perſons of learning and judgment are backwards in adventuring on things where there is any hazard, though theſe, by a ſkilful hand, can never do harm; they are the baſis of Lockyer's pill, and many that are now in great eſteem in the moſt obſtinate rheumatiſms, though made and ſold only by ignorant people.

SECT. VIII.

Of Powders.

IN extemporaneous preſcriptions, this is the readieſt form for many things in ſubſtance; and this alſo may be obſerved, that the doſe of any thing in powder is juſt enough, with a ſufficient quantity of any liquor (ſome convenient ſyrup is generally uſed), to make into a bole.

Cephalics.

Becauſe theſe are of a volatile nature, no powder under this diviſion ought to be made long before it is to be taken; and where volatile ſalts, ſuch as thoſe of hartſhorn, and the like, are preſcribed, directions ſhould be given to mix them but juſt as they are to be taken, or to be included, in the mean time, in a cloſe ſtopped bottle; which is difficult to do, if divided into doſes.

Pulvis Cephalicus.

A Powder for the Head.

(1.) Take ſpecies diambræ, powder of crabs-claws compound

(i. e. Gaſcoign's powder), of each a drachm; oil of cinnamon, a drop. Mix and divide them into ſix doſes. Or,

(2.) Take marjoram, Arabian ſtœchas flowers, of each five grains; nutmegs, three grains; muſtard-ſeed, two grains; oil of roſemary, a drop. Make them into a powder for one doſe. Or,

(3.) Take nutmegs, a drachm; cinnamon, half a drachm; mace, cloves, marjoram, bettony, roſemary, lavender-flowers, of each half a ſcruple: make all into a fine powder, and divide it into doſes, of half a drachm each. Or,

(4.) Take rhodium-wood, a drachm; yellow ſanders, Florentine orris, of each half a drachm; Spaniſh angelica, a ſcruple; mace, ten grains; apoplectic balſam, two grains: make them into a groſs powder.

The laſt of theſe is deſigned only for the ſcent, but might alſo be of ſervice if powdered fine, and taken inwardly, for which reaſon damaſk roſes are left out, which ſome put in: the former are of ſervice in all nervous diſorders, and they ſtrengthen and fortify the head againſt fumes and vapours from indigeſtion, and a diſtempered fluid, which they purge and clear away from the fibres, as much as a common cathartic cleanſes the firſt paſſages; they may be taken morning or night, or both, in any convenient liquor, or made into a bole with a marmadale. Or,

(5.) Take the white part of peacock's dung, ſixteen grains; ſalt of amber, five grains. Make them into a powder for one doſe.

This, by ſome, is accounted a ſpecific in an epilepſy and vertigo, but the preſent practice does not much regard ſuch things; it is ordered twice a day, in a glaſs of wine, or made into a bole. Or,

(6.) Take male piony-root, human ſkull, of each five grains; native cinnabar, half a ſcruple. Mix them in a powder for one doſe. Or,

(7.) Take *pulvis de gutteta*, fifteen grains; caſtor, and troches of myrrh, of each ſix grains; ſaffron, three grains. Make them into a powder for one doſe. Or,

(8.) Take miſletoe in powder, native cinnabar, of each half a drachm; ſalt of amber and caſtor, of each five grains. Make them into a powder for one doſe. Or,

(9.) Take troches of myrrh, fifteen grains; ſaffron, caſtor, and ſalt of amber, of each five grains; oil of roſemary, a drop. Make them into a powder for one doſe.

Theſe are more deſigned for regulating the diſorders that ariſe from a diſtempered nervous fluid, than to repair its waſte, and fortify the tone of the nerves, as thoſe of the aromatic kind are; and therefore theſe are alſo of ſervice in hypochondriacal and hyſterical affections, and to be preſcribed in ſpaſms, or convulſions of any kind whatſoever; and it is with this ſort that the convulſions of children are to be encountered, only leſſening the doſes in proportion to their age: they are apt to be repeated as often as particular ſymptoms require. Or,

(10.) Take muſtard-ſeed and cloves, of each fifteen grains; nutmeg, a drachm; cinnamon and mace, of each half a drachm; marjoram and lavender-flowers,

of

of each a ſcruple. Make them into a powder in doſes, of half a ſcruple each.

This is, as it were, a mixture of the two former kinds of cephalics, for the muſtard deterges, as the aromatics warm and ſtrengthen the nerves; it may be taken once or twice a-day in any convenient liquor; or being ſprinkled upon a toaſt, and ſoaked in wine or ale, it may be eat.

Carminatives.

Pulvis Carminativus.

Powder to expel Wind.

(1.) Take ſeeds of aniſe and ſweet fennel, of each a drachm; cinnamon, nutmeg, cloves, and ſaffron, of each half a drachm. Make all into a fine powder for eight doſes. Or,

(2.) Take aniſeed and ſweet fennel ſeed, of each half a drachm; nutmeg and cinnamon, of each a ſcruple; long pepper and cloves, of each ſix grains; maſtich, a ſcruple. Make all into a fine powder for ſix doſes. Or,

(3.) Take cinnamon, mace, nutmeg, cloves, and ginger, of each a ſcruple; ſeeds of aniſe, caraway, coriander, ſweet fennel, bay-berries, of each half a drachm; loaf-ſugar, two drachms. Make all into a fine powder, and divide it into doſes of two ſcruples each. Or,

(4.) Take the thin yellow rind of Seville oranges, cummin-ſeed, of each ten grains; caſtor, five grains; long pepper, a grain. Make them into a powder for one doſe. Or,

(5.) Take ſeeds of coriander, a drachm; aniſeed and ſweet fennel-ſeed, of each a ſcruple; nutmeg, ten grains; cinnamon, cloves, of each a ſcruple; white ſugar, two ſcruples: make them into a fine powder, to be divided into doſes of half a drachm, or two ſcruples each, or keep it together to rub upon a toaſt.

Theſe are all of ſervice to break wind off the ſtomach, and diſperſe thoſe flatulencies that ariſe from indigeſtion, but chiefly from the ſpleen, and a heavy blood; for a weak ſtomach is not ſo much fortified by theſe things, as by bitters and ſubaſtringents, for their oilineſs palls the ſtomach, eſpecially if they be loaded with an addition of chemical oils, as ſome injudiciouſly order, and they occaſion troubleſome and offenſive belchings; where the diſorder is therefore only in the ſtomach, half a lemon, or its juice ſqueezed out, is a much better digeſtive; but theſe are of ſervice in the flatuſes of hypochondriacal perſons, and will help to give eaſe in all hyſterical colics, eſpecially if joined with ſomewhat of a narcotic quality; to young children, who are much ſubject to the gripes, a proportionable diminution of the doſe will frequently procure eaſe, if given in their victuals, or any other convenient vehicle.

Hyſterics.

Pulvis Hyſtericus vulnerarius.

A healing Hyſteric Powder.

(1.) Take ſpermaceti, half a drachm; caſtor and ſaffron, of each three grains; white loaf-ſugar, half a ſcruple. Make this a powder for one doſe. Or,

(2.) Take zedoary, one ſcruple, in fine powder; troches of myrrh and ſpermaceti, of each fifteen grains; balſam of Peru, two drops. Mix into a powder. Or,

(3.) Take ſperma ceti and fine loaf-ſugar, of each half a drachm. Make them into a powder.

Theſe are moſt ſuited to cleanſe and heal the uterus after delivery, and are proper to take, whether any hyſterical ſymptoms appear or not; becauſe they forward thoſe neceſſary cleanſings, which being obſtructed, will do a great deal of miſchief.

Pulvis Hyſtericus fœtidus.

The fœtid Hyſteric Powder.

(4.) Take troches of myrrh, fifteen grains; caſtor, ſalt of amber, and ſaffron, of each five grains; aſa fœtida, two grains. Make a powder for one doſe. Or,

(5.) Take myrrh, caſſamunair-root, of each ten grains; caſtor, and ſalt of amber, of each five grains. Make a powder for one doſe. Or,

(6.) Take wild valerian-root, one ſcruple; caſtor and ſaffron, of each five grains; aſa fœtida, three grains. Make a powder for one doſe. Or,

(7.) Take powder of ſavin, and myrrh, of each ten grains; caſtor and ſaffron, of each four grains; grains of paradiſe, two grains. Make a powder for one doſe. Or,

(8.) Take wild valerian-root, caſſamunair-root, of each eight grains; troches of myrrh, ten grains; ſaffron and caſtor, of each three grains. Make a powder for one doſe.

Theſe are of that kind that deaden and deſtroy that inordinate emotion of the nervous fluid, which ariſes from uncommon titillation, or irritation of the uterine fibres; and, in ſome meaſure, alſo help to deterge and empty the glands of thoſe parts, whoſe turgeſcency contributes to ſuch diſorders; for this reaſon, they are by no means proper for perſons with child, for fear of abortion. On the ſame account, likewiſe, the following are to be uſed with like caution.

Pulvis Emmenagogus.

A Powder to promote the Menſes.

(1.) Take ſalt of ſteel, and myrrh, of each eight grains; ſaffron and caſtor, of each five grains; oil of ſavin, one drop. Make a powder for one doſe. Or,

(2.) Take borax, ſalt of ſteel, and ſaffron, of each five grains; fine loaf-ſugar, one ſcruple; oil of penny-royal, one drop. Make a powder for one doſe. Or,

(3.) Take powder of black hellebore, ten grains; of ſavin, caſtor, and ſaffron, of each five grains; ſalt of amber, four grains. Make a powder for one doſe. Or,

(4.) Take powder of black hellebore, fifteen grains; ſalt of amber, ſix grains; ſaffron, five grains. Make a powder for one doſe.

In all obſtructions of the menſes, and the proper uterine diſcharges, theſe will be of ſervice, whether to ſingle or child-bearing perſons. It has been already ſhewed where the ſteel, and where the hellebore compoſitions are moſt ſuitable for theſe purpoſes. They may be given once or twice a-day, in a little penny-royal water, or white-wine, or made into boles with ſyrup of mugwort.

Pulvis Hyſtericus odoratus.

The ſweet Hyſteric Powder.

(1.) Take caſſamunair root, one ſcruple; *aromaticum roſatum*, ten grains; muſk and camphor, of each three grains. Make them into a powder for one doſe. Or,

(2.) Take *pulvis de gutteta*, cinnabar native, of each fifteen grains; muſk and camphor, of each four grains. Make a powder for one doſe. Or,

(3.) Take

(3.) Take *ſpecies diambræ*, one ſcruple; camphor and ſalt of amber, of each three grains. Make a powder for one doſe. Or,

(4.) Take borax, ten grains; *ſpecies diambræ* and ſaffron, of each five grains; ſalt of amber, muſk, and camphor, of each three grains. Make a powder for one doſe.

There are not many hyſterical caſes wherein ſweets will not agree, yet they ſometimes chance to hit, when nothing elſe will; but in hypochondriacal diſorders, which are near akin in the other ſex, they frequently take place with ſucceſs. They may be given once or twice, or oftner in a day, with white wine, penny-royal-water, or any other convenient vehicle, as ſymptoms indicate.

Strengtheners.

Pulvis Incraſſans.

An Incraſſating Powder.

(1.) Take root of comfrey, mouſe-fleſh dried in an oven, of each half a ſcruple; powder of gum tragacanth, five grains. Make a powder for one doſe. Or,

(2.) Take powder of a whole hedge-hog baked dry in an oven, one ſcruple; maſtich and gum tragacanth, of each five grains. Make a powder for one doſe.

Theſe are principally directed againſt involuntary making of urine, and are accounted ſpecifics in ſuch caſes; therefore we ſhall not pretend to reaſon upon their *modus operandi*, but leave them to the practice of ſuch as have faith in them; with the powder of a female ſecundine; cock's gizzard, and the like conceits. Or,

(3.) Take ſeeds of henbane, and of white poppies, of each ſix grains: ſealed earth and bole, of each ten grains; ſugar of roſes, eight grains. Make a powder for one doſe. Or,

(4.) Take Solomon's ſeal, comfrey-roots, of each ten grains; fine Armenian bole and Japan earth, of each five grains. Make a powder for one doſe. Or,

(5.) Take marſhmallow root, gum arabic, dragon's blood, of each five grains; fine Armenian bole, ten grains. Make a powder for one doſe.

Theſe all conduce both to thicken and ſoften the blood, and cement lacerated veſſels; and are therefore good againſt hæmorrhage of all kinds, and alſo contribute to prevent, if not reſtore ruptures, and thoſe unnatural diſtenſions of ſome parts from weakneſs. They ought to be uſed for ſome time together, and given at leaſt twice a day, in a glaſs of red wine, or any other convenient liquor, or made into boles with marmalade, or ſyrup of quinces.

Pulvis Aſtringens.

An Aſtringent Powder.

(1.) Take kermes berries and tormentil root, of each fifteen grains; oil of cinnamon, one drop. Mix for one doſe. Or,

(2.) Take Japan earth, and ſpecies for the confection of hyacinth, of each fifteen grains, oil of cinnamon one drop; mix for one doſe. Or,

(3.) Take balauſtines, and powder of cinnamon, of each ten grains; ſpecies for the confection of hyacinth, and diambræ, of each five grains. Mix for one doſe. Or,

(4.) Take aſtringent ſaffron of ſteel, ten grains; dragon's blood and alum, of each five grains; ſugar of lead, two grains. Make a powder for one doſe. Or,

(5.) Take

(5.) Take gum lac and dragon's blood, of each ten grains; aſtringent ſaffron of iron, fifteen grains. Mix them into a powder for one doſe. Or,

(6.) Take maſtich and Japan earth, of each ten grains; ſugar of roſes, fifteen grains; oil of cinnamon, one drop. Make a powder for one doſe. Or,

(7.) Take Lemnian and Japan earth, bole and dragon's blood, of each five grains; oil of cinnamon, one drop. Make a powder for one doſe. Or,

(8.) Take aſtringent ſaffron of iron, and ſeeds of henbane, of each ten grains; ſugar of lead, three grains. Make a powder for one doſe. Or,

(9.) Take alum and nutmeg, of each one ſcruple. Make them into a powder for one doſe.

Theſe are from moderately binding to powerfully ſtyptic; and therefore may be preſcribed as particular ſymptoms and exigencies require. Some are good againſt abortion, and all thoſe weakneſſes which women are moſt ſubject to, particularly the whites; and a continued uſe will prevail againſt old gleets in either ſex: diarrhœas likewiſe are to be removed by them. But for ſuch ſymptomatical fluxes as happen in fevers, at their firſt appearance, eſpecially thoſe which precede the ſmall-pox and meaſles, the following may be yet more convenient.

(10.) Take ſpecies for the confection of hyacinth, one ſcruple; red coral, fifteen grains; oil of cinnamon, one drop. Mix for one doſe.

(11.) Take ſpecies for the confection of Fracaſtorius, one ſcruple; red coral, ten grains; oil of cinnamon, one drop; mix for one doſe. Or,

(12.) Take ſpecies for the confection of hyacinth, and of Fracaſtorius, of each twelve grains; oil of cinnamon, one drop. Mix for one doſe.

Theſe ought to be repeated every three, four, or ſix hours, as the ſymptoms are more or leſs preſſing; care being taken that ſuch diſtance be obſerved, that above two grains of opium are not exceeded in twelve hours time.

Pulvis Abſorbens.

An Abſorbent Powder.

(1.) Take white chalk, crabs eyes, and fine loaf-ſugar, of each one ſcruple. Make a powder for one doſe. Or,

(2.) Take oriental pearl prepared, and crabs eyes, of each fifteen grains; white chalk, ten grains; fine ſugar, one ſcruple. Make them into a powder for one doſe. Or,

(3.) Take bole and red coral, of each ſixteen grains. Make them into a powder for one doſe. Or,

(4.) Take calcined hartſhorn levigated, and Armenian bole, of each fifteen grains; white chalk and fine ſugar, of each ten grains. Make them into a powder for one doſe.

Theſe may be given almoſt at diſcretion, in any convenient liquor; and are chiefly good in immediately deſtroying that corroſion at the ſtomach from ſome ſharp humour, which is commonly called the heart-burn. But they are of moſt ſervice to children: the doſes being proportionably leſſened; becauſe children are much more ſubject to acidities in the firſt paſſages; and indeed owe moſt of their diſorders to ſuch cauſes; upon which account theſe are properly termed ſweeteners: but in thoſe foulneſſes of blood which deform

the

the ſkin with blotches, and which are ſuppoſed to want ſuch correctors, theſe will avail very little; therefore common practice relies too much upon them in ſuch caſes.

Pulvis Æthiopicus.

The Æthiopic Powder.

Take æthiops mineral, made without fire, half a pound; crude antimony, one pound. Mix them into a powder.

This is an admirable medicine in all thoſe obſtinate cutaneous foulneſſes, wherein the foregoing will not take place, and will conquer almoſt the worſt leproſies. It may be given half a drachm, two or three times in a day; and it would be of advantage to have the patient well vomited firſt. This is preſcribed in one of the public hoſpitals: and I have been informed it is a great ſecret amongſt farriers and ſome ſkilful leaches, for curing what they commonly call the mange in cattle.

Stomachics.

Pulvis Stomachicus Amarus.

A Bitter Stomachic Powder.

(1.) Take powder of gentian root, fifteen grains; yellow peel of Seville oranges, eight grains; ſaffron five grains. Make them into a powder for one doſe. Or,

(2.) Take gentian root and bayberries, of each ten grains; galangal and ſaffron, of each five grains. Make them into a powder for one doſe. Or,

(3.) Take chamomile-flowers, gentian root, and Winter's cinnamon, of each ten grains; ſaffron, four grains. Make them into a powder for one doſe. Or,

(4.) Take gentian root, nutmeg, and roach-alum, of each one ſcruple; oil of cinnamon, one drop; cochineal, five grains. Make them into a powder for one doſe.

Theſe warm and invigorate a cold relaxed ſtomach, and, where they can be thus complied with in ſubſtance, are, in ſome caſes, of better ſervice than tinctures made with them. In old agues, that have eluded the force of the bark, theſe will often make a cure; and the latter will ſeldom fail to do it, if taken twice a day on the well days, and an hour before the coming of the fit. They are alſo good in thoſe cachexies which tend towards a dropſy, and will deſtroy worms: and becauſe what is principally for this laſt intention, has, amongſt the ſimples, been given under this diviſion, we ſhall ſubjoin a few examples of ſuch as are generally in extemporaneous preſcriptions for ſuch purpoſes.

Pulvis Anthelminthicus.

Powder to kill Worms.

(1.) Take powder of coralline, and æthiops mineral made without fire, of each fifteen grains; ſaffron, two grains. Make them into a powder for one doſe. Or,

(2.) Take powder of tin, ten grains; æthiops mineral, fifteen grains; powder of ſavin and ſaffron, of each three grains. Make them into a powder for one doſe. Or,

(3.) Take tin reduced to an impalpable powder, one ſcruple; æthiops mineral, ten grains; fine ſugar, ſix grains. Make them into a powder for one doſe.

For young children the doſes may be proportionably leſſened, and one may be given every night and morning in a little common treacle; for they will not conveniently mix with thin liquors. Their uſe ought to be continued for ſome days together; and then they will hardly ever fail of deſtroying what worms are in the bowels. But where ſuch things

alſo

alſo require the help of cathartics, as generally they do, then every third day give ſome of thoſe hereafter to be met with under that diviſion in this ſection.

Balſamics.

There are few ſimples of this claſs reducible into the forms of a powder, becauſe they are generally natural balſams, and not hard enough for any but the liquid forms. Little therefore can be conveniently preſcribed in this manner for the purpoſe of a balſamic.

Pulvis Balſamicus.
A Balſamic Powder.

(1.) Take balſam of Tolu, ten grains; myrrh and Benjamin, of each five grains. Make them into a powder for one doſe. Or,

(2.) Take ſperma ceti and crabs eyes, of each one ſcruple. Make them into a powder for one doſe. Or,

(3.) Take ſpermaceti, one ſcruple; myrrh, ten grains; flowers of Benjamin, five grains; fine loaf-ſugar, ten grains. Make them into a powder for one doſe.

Theſe are healing and pectoral, and may be given twice a day, either with a ſpoonful of ſugar, or made into a bole with any convenient pulp or ſyrup; for they will not eaſily mix with a thin acqueous liquor; becauſe of the fatneſs of the ſpermaceti. It is here alſo to be noted, that there is a balſam of Tolu too thin for this purpoſe; but ſome there is which comes over in ſhells quite brittle, and will eaſily powder with rubbing. Or,

(4.) Take maſtich and myrrh in fine powder, of each fifteen grains; flowers of Benjamin, five grains. Make them into a powder for one doſe. Or,

(5.) Take olibanum, powder of gum tragacanth, and of Benjamin, of each ten grains; London laudanum, one grain. Make them into a powder for one doſe. Or,

(6.) Take powder of gum arabic, maſtich, and myrrh, of each ten grains; flowers of Benjamin, five grains; London laudanum, one grain and a half. Make them into a powder for one doſe.

Theſe are good in catarrhs and tickling defluxions of rheum, and may be given every night, going to bed, either mixed with ſome proper liquor, or made into a bole with marmalade.

Pulvis Splanchnicus.
A Powder for the Viſcera.

(1.) Take ſpikenard, ſaffron, maſtich, long pepper, and rhubarb, of each five grains; turmeric, ten grains. Make them into a powder for one doſe. Or,

(2.) Take ſpikenard, cinnamon, maſtich, and rheubarb, of each ſix grains; ſaffron, five grains. Make them into a powder for one doſe.

Steel is very conveniently preſcribed with things of this intention, and therefore may be added to the foregoing. Thus,

(3.) Take rhubarb, ten grains; cinnamon and maſtich, of each five grains; ſalt of ſteel, and ſaffron, of each five grains. Make them into a powder for one doſe. Or,

(4.) Take cinnamon, ſpikenard, ſalt of ſteel, ſaffron, and rhubarb, of each five grains. Make them into a powder for one doſe.

Theſe are of ſervice in all cachexies, foulneſſes of the viſcera, and particularly in the jaundice and dropſy; but other forms ſo much

more

more conveniently ſupply us with plenty for this purpoſe, that no more examples of this kind are here required.

Diuretics.

Pulvis Diureticus.

A Diuretic Powder.

(1.) Take ſal prunel. twelve grains; egg-ſhells powdered, eight grains; ſalt of amber, four grains; ſugar, one ſcruple. Make them into a powder for one doſe. Or,

(2.) Take crabs-eyes levigated, fifteen grains; cream of tartar, ſal prunel. of each eight grains; ſalt of amber, four grains. Make them into a powder for one doſe. Or,

(3.) Take tartar of vitriol and ſal prunel. of each ſix grains; powder of crabs-eyes fifteen grains. Make them into a powder for one doſe. Or,

(4.) Take tartar of vitriol and cream of tartar, of each one drachm; oil of cloves, one drop. Make them into a powder for one doſe.

Theſe are for little elſe than to cool the urine in gonorrhœas, and where the parts are eroded or hurt by the raking of gravel; for they are not much to be encouraged in obſtructions of urine; becauſe they force ſo ſtrongly that way, that if they cannot break through, they will render the obſtruction more obſtinate. The laſt of theſe is after the manner of ſuch, who imagining all diſtempers owe their origin to an alkali, conſtantly preſcribe acids; but as this hypotheſis was not founded on experiments, nor conducted by a mechanical way of reaſoning, it is now entirely forgot. For ſuch diuretics as ſoften and widen the paſſages, which is much the more laudable practice, take the following for examples.

(5.) Take ſaxifrage root and marſhmallow root, of each one drachm; crabs-eyes and fine loaf-ſugar, of each two drachms: ſal prunel. one drachm. Make them into a powder; and allow half a drachm to each doſe. Or,

(6.) Take millepedes prepared, ſal prunel. and ſperma ceti, of each ſix grains; fine loaf-ſugar, one ſcruple. Make into a powder for one doſe. Or,

(7.) Take powder of marſhmallow root, ten grains; ſalt of amber, five grains; fine white ſugar, one ſcruple. Make them into a powder for one doſe.

At the ſame time that theſe forward the diſcharge by urine, they alſo relax and widen the paſſages; which is the ſureſt and moſt ſafe way to procure ſuch evacuation. And all that can be conveniently preſcribed for this intention, does alſo, at the ſame time, anſwer that of a cooler; ſo that there will not be occaſion to inſtance any thing of that form under this diviſion; theſe being ſufficient for the ſame.

Alexipharmics.

A great deal that was ordered for this intention in the form of a bole, may be ſuitable alſo to this; by omitting the liquid ingredients; and giving the other in powder; however, the following examples may be of ſome ſervice.

(1.) Take *lapis contrayervæ*, one ſcruple; ſaffron, five grains. Make them into a powder. Or,

(2.) Take contrayerva root, half a ſcruple; Virginia ſnake-root and ſaffron, of each five grains. Make them into a powder for one doſe. Or,

(3.) Take

(3.) Take Gaſcoign's powder, one ſcruple; Virginia ſnake-root, eight grains; ſaffron and caſtor, of each four grains. Make them into a powder for one doſe. Or,

(4.) Take Virginia ſnake-root, Spaniſh angelica, and contrayerva root, of each ſix grains; myrrh and ſaffron, of each five grains. Make them into a powder for one doſe. Or,

(5.) Take diaphoretic antimony, fifteen grains; Virginia ſnake-root, eight grains; camphor and ſaffron, of each three grains. Make them into a powder for one doſe. Or,

(6.) Take tormentil-root, two drachms; Spaniſh angelica, Virginia ſnake-root, contrayerva-root, zedoary, ſpikenard, Celtic nard, and ſaffron, of each one ſcruple; mace, half a drachm; camphor, opium, of each ten grains. Make all into a fine powder, half a drachm for a doſe.

This laſt is proper for an officinal medicine; and is very good in all kinds of fevers, where either a diaphoreſis or reſt is to be encouraged. We have in ſome of theſe, as well as thoſe of another form, ordered Gaſcoign's powder, more for cuſtom ſake than any other reaſon; but have not therefore truſted it except in company with other ingredients of ſome virtue and efficacy. And theſe may be given in convenient juleps, as often as the ſtate of a fever requires. If volatile ſalts are at any time judged neceſſary to be mixed with them, they ought to be ſo ordered at the moment of taking, for reaſons before given. In intermittents, the cortex may be given by itſelf, from one ſcruple to one drachm at a doſe; and repeated in the intervals of the fits as often as required; or where the intervals are not very diſtinct, it may be joined with ſome proper alexipharmics: but when they ſettle in to confirmed agues, the following I have often uſed with ſucceſs.

(7.) Take chamomile flowers, myrrh, gentian, bay-berries, of each one drachm; flowers of Benjamin and ſaffron, of each half a drachm. Make them into a powder, half a drachm for a doſe.

Many truſt to the chamomile flowers only, with ſome ſalt of wormwood; but ſuch do not conſider, that the air will fuſe the ſalt, though indeed the medicine will often anſwer its intention. Theſe ought to be continued ſome time, and followed cloſe, viz. three or four times in a day; and the patient ought to live upon a warm ſubaſtringent diet, and drink ſtrong rough liquors, ſuch as red wine, or old ſtale beer; and when the diſeaſe is once conquered by this means, there is no fear of a return; as there is, after it is put away with the bark only.

Cathartics.

All the dry ingredients, that are in pills or boles of this claſs, may be eaſily preſerved in this form; but for examples, we ſhall farther give a few inſtances here.

Pulvis Catharticus.
A purging Powder.

(1.) Take reſin of jalap, and ſcammony, of each five grains; cream of tartar, and fine loaf-ſugar, of each twenty-five grains; oil of cloves, one drop. Make them into a powder for one doſe. Or,

(2.) Take jalap root in fine powder, two ſcruples; oil of cloves, one drop. Mix them for one doſe. Or,

(3.) Take

(3.) Take jalap, one ſcruple: gamboge, ten grains; cream of tartar, half a drachm. Mix them for one doſe.

There are few of the milder cathartics reducible in this form; it is moſt cuſtomary to order a proper doſe of ſome of the officinal purging powders, given in the foregoing part, without any mixture. For children, rhubarb and the cornachine powders are the uſual purgers.

Sternutatories.

There have been many compoſitions of medicines under this form, for purging the head by ſneezing; but they now all give place to the powder of aſarum leaves, or what at the phyſical ſtall the women call aſſarabacca; which is an admirable medicine for this purpoſe: and therefore it is not worth the pains of inſerting any thing elſe here for this uſe. The common tobacco ſnuffs are ſufficiently in faſhion, and want no recommendation to bring them into uſe, but rather the contrary; many taking them to great exceſs. For an ordinary and pleaſant cephalic ſnuff likewiſe in ſome particular diſorders of the head, eſpecially thoſe attended with vertigoes and faintneſs, the ordinary ſal volatile, diluted ſmall enough to take up the noſe, excels every thing; and has not thoſe inconveniencies in drying and ſtuffing the noſe, as the powdered ſnuffs have.

SECT. IX.

Of Glyſters, Injections, and Suppoſitories.

THE firſt of theſe was formerly called in to anſwer many intentions which the preſent practice has no recourſe to, as having contrived more effectual and leſs troubleſome means of cure; and they are now ſeldom uſed but to make a ſudden diſcharge, whereby relief may be ſooner had than from the courſe of an ordinary cathartic; as in colics, wherein purging glyſters are commonly preſcribed; or where the nature of a diſeaſe will not admit of the operation of a purge by the ſtomach, as in acute diſtempers, and then emollient glyſters are ordered to relax the bowels, and juſt keep the body open; and in fluxes and over weakneſs of the inteſtines they are now ſometimes ordered with cordial reſtringents, becauſe they more immediately bring the medicine to the ſeat of the diſeaſe than when it is received otherwiſe; in all thoſe intentions take the following for examples.

Enema commune.

The common Glyſter.

Take of the common glyſter decoction, ten ounces; honey of mercury, two ounces; common ſalt, half an ounce; oil of chamomile, an ounce. Mix for a glyſter, to give milk-warm. Or,

Take common glyſter decoction, twelve

twelve ounces; pil. cochia the leſſer, a drachm, diſſolved in ſyrup of damaſk roſes, an ounce; oil of chamomile, an ounce and a half: oil of aniſeeds, half a drachm, or twenty drops. Make all into a glyſter.

Theſe are proper, in ordinary caſes, to relax the belly, and give two or three ſtools; and where theſe would be too ruffling, even milk and ſugar may ſuffice; but in apoplectic and lethargic caſes, and alſo in the dry gripes, and obſtinate coſtiveneſs with great pain, the following may be more to the purpoſe.

Enema catharticum.

A purging Glyſter.

(1.) Take common glyſter decoction, ten ounces; pil. ex duobus, a drachm and a half; ſyrup of buckthorn, an ounce; oil of juniper, two drachms; of chamomile, an ounce. Mix for a glyſter. Or,

(2.) Take common glyſter decoction, ten ounces; *vinum benedictum*, two ounces; ſal gem. half an ounce; oil of chamomile, an ounce. Mix for a glyſter. Or,

(3.) Take common glyſter decoction, three ounces; pil. ex duobus, a drachm; *vinum benedictum*, two ounces; ſal gem. half an ounce; oil of amber, two drachms; oil of chamomile, an ounce. Mix for a glyſter, to be given milk-warm.

It has been controverted more than a little, how high in the inteſtines glyſters may extend their influence; and by all it is agreed, that they get not beyond the valve of the colon, unleſs the periſtaltic motion, with the diſpoſition of that valve, be quite inverted, as in ſome caſes it ſo manifeſtly is, that glyſters have been thrown up by vomit; but if it be ſuppoſed that they reach no farther than the rectum, it may eaſily be conceived how they help to fetch down the contents of the whole inteſtinal tube, by irritating and pulling the fibres of the rectum ſo forcibly, that they are ſhook quite to the remoteſt part; and theſe ſtrong ones laſt deſcribed are ſuppoſed to aſſiſt in apoplexies, and other great diſorders of the head, not ſo much by the immediate diſcharge they make, as by pulling and ſhaking the whole nervous ſyſtem, which promotes their natural vibrations, and throws off a great deal of adheſive ſuperfluous humors: in ſuch caſes, therefore, glyſters cannot well be made too ſtrong, nor can they be too bitter when they are given to deſtroy worms, the aſcarides particularly, which ſometimes are very troubleſome in the rectum. For an example of ſuch a glyſter take the following.

Enema Anthelminthicum.

A Glyſter to deſtroy Worms.

Take colloquintida a drachm and a half, tied up in a rag; ſavin, rue, of each a handful; boil in a pound of water to half a pound, to which add chemical oil of wormwood, fifteen drops; pil. cochia the leſſer, a drachm; ſyrup of damaſk roſes, an ounce; oil of chamomile, an ounce and half. Mix for a glyſter.

But this caution ought generally to be obſerved, not to be too buſy with theſe for hyſterical people; for by proximity and conſent of parts it is not poſſible to give any conſiderable irritation to the rectum, but the uterus will ſo far feel it, as to be thrown into ſtrange diſorders, which makes glyſters in general inconvenient for theſe people;

ple; but if any thing neceſſarily indicates any aſſiſtance from hence, uſe the following, or ſomewhat like it.

Enema Hyſtericum.
An Hyſteric Glyſter.

Take round birthroot root, an ounce; rue, penny-royal, chamomile flowers, of each a handful and a half; boil in a ſufficient quantity of water to ten ounces; in which diſſolve ſtrained aſa fœtida, a drachm; oil of amber, two drachms; of chamomile an ounce; and brown ſugar, a ſpoonful or two. Mix for a glyſter.

When wind is very troubleſome in the bowels, and, by being ſometimes pent, occaſions colic pains, the following, or ſomewhat like it, may be of ſervice.

Enema Carminativum.
A Carminative Glyſter.

Take chamomile flowers, a handful; bay berries, juniper berries, of each an ounce; ſweet fennel, and cummin ſeed, of each half an ounce; juſt ſimmer in a ſufficient quantity of water to ſtrain ten ounces; to which add oil of aniſeed, two drachms; common ſallad-oil, an ounce and a half; brown ſugar a ſpoonful. Mix for a glyſter.

Enema Hemorrhoidale.
A Glyſter for the Piles.

Take galls bruiſed, three ounces; boil them in a ſufficient quantity of ſpring water to ſix ounces, and ſtrain it out for a glyſter.

This is much extolled by ſome for what its title expreſſes. It is to be repeated as there is occaſion.

Enema Emolliens.
An Emollient Glyſter.

(1.) Take milk, ten ounces; oil of chamomile, three ounces; pulp of caſſia, an ounce. Mix them for a glyſter. Or,

(2.) Take thin ſtrained gruel, ten ounces; oil of olives, three ounces; pulp of caſſia, an ounce; brown ſugar, a ſpoonful. Make them into a glyſter. Or,

(3.) Take fat mutton, veal, or chicken broth, ten ounces; oil of ſweet almonds, four ounces; ſugar, a ſpoonful. Mix them for a glyſter. Or,

(4.) Take linſeed oil, and common oil of chamomile, of each four ounces; oil of turpentine, and aniſeed, of each two drachms. Mix them for a glyſter.

Theſe are proper in all bilious and convulſive colics; and becauſe the latter often happen from the gravel or ſtone, by conſent of parts. With lenients are alſo ſometimes given ſuch things as are ſuppoſed to reach even the ſeat of the diſorder immediately, beſides what they do by relaxing, by conſent, all the parts near which they are injected, which is common to them with all other glyſters; for examples hereof take the following.

Enema Terebinthinatum.
A Turpentine Glyſter.

(1.) Take Venice turpentine, an ounce; grind it with the yolk of an egg, and then mix it with ten ounces of common decoction for glyſters, and add to it oil of juniper, two drachms; oil of turpentine, a drachm; ſyrup of marſhmallows, two ounces; and coarſe brown ſugar, an ounce. Mix them for a glyſter. Or,

(2.) Take Venice turpentine, half an ounce; by the help of yolk of egg mix it with eight ounces of milk; to which add linſeed oil,

three ounces; ſyrup of marſhmallows, two ounces: oil of turpentine, and aniſeed, of each two drachms; brown ſugar, a ſpoonful, or an ounce. Mix them for a glyſter. Or,

(3.) Take balſam capivi, two drachms; mix it with the yolk of an egg, and diſſolve it by degrees with eight ounces of common decoction, in which has been boiled to ſolution, half an ounce of Caſtile ſoap; to which add common oil of chamomile, two ounces; oil of juniper, and aniſeed, of each a drachm and half; brown ſugar, an ounce. Mix them for a glyſter.

But beſides evacuating and ſoftening the bowels by this means, there is an intention of great moment, which is conveniently aſſiſted this way, and that is ſtrengthening and aſtringing them in long and obſtinate diarrhœas and dyſenteries.

Enema Balſamicum.

A Healing Glyſter.

(1.) Take the broth made of a ſheep's inwards, or of the head chopped to pieces, ten ounces; yolk of egg N° 2; ſheep's ſuet, two ounces; Lucatellus's balſam, half an ounce. Mix for a glyſter, and give it warm enough for the ſuet to remain melted. Or,

(2.) Take very ſtrong broth made of a ſheep's head, ten ounces; diaſcordium, half an ounce; yolk of two eggs; bees-wax, an ounce. Mix for a glyſter, to be given pretty warm.

Theſe will greatly heal, and as it were plaſter over the bowels, after being made raw by long fluxes; and where the bowels are very much relaxed, the glyſters may be made much more reſtringent. Thus,

Enema de Amylo.

Starch Glyſter.

Take of jelly of ſtarch, four ounces; linſeed oil, half an ounce; melt the jelly over a gentle fire; then add the oil, and occaſionally may be added of liquid of laudanum, 30 or 40 drops.

In caſe of a teneſmus, or a dyſentery, when the mucous is abraded from the bowels occaſioning pain and foreneſs, this glyſter may be adminiſtered with conſiderable advantage.

Enema Reſtringens.

A Reſtringent Glyſter.

(3.) Take diſaſcordium made without honey, half an ounce; diſſolve it with the yolks of two eggs in the white hartſhorn-drink, eight ounces, and mix for a glyſter. Or,

(4.) Take balauſtines, and red roſe leaves, of each half an ounce; pomegranate peels, an ounce; burnt hartſhorn two ounces; boil them in ſtrong mutton broth fourteen ounces to eight; in which diſſolve diaſcordium, made without honey, half an ounce, and the yolks of two eggs; and mix for a glyſter. Or,

(5.) Take ſtrong ſheep's-head broth, ſix ounces; powder of cinnamon, a drachm; of Japan-earth, half a drachm; the yolks of two eggs; mix them for a glyſter. Or,

(6.) Take of the white drink, ſix ounces; diaſcordium, half an ounce; Venice-treacle, and bole Armeniac, of each two drachms; mix for a glyſter.

The things contrived for this intention ought always to be in a little quantity, becauſe they will thus remain the longer, whereas a greater would ſooner occaſion their diſcharge; they ought likewiſe to be

given

given chiefly juſt before going to bed, that by ſleeping upon them they may be retained, if poſſible, till morning, or as long as can be. Whether a perſon may in ſome extraordinary injuries in the ſtomach, or the firſt paſſages, receive their nouriſhment this way, becauſe ſuch caſes very ſeldom happen, though the hiſtory of phyſic confirm to us many inſtances of ſucceſs in this practice; and it is not ſtrange, becauſe there are many lacteals within the reach of glyſters, though they are not here ſo plentiful as in the ſmall guts: how a cordial can be ſupplied this way too, is not to our purpoſe, becauſe there can be no neceſſity ſo to ſupply it. But for ſuch uncommon caſes as may require glyſters warmer, and more narcotic than any of the former, take the following for examples.

Enema Anodynum.

An Anodyne Glyſter.

(1.) Take diaſcordium without honey, half an ounce; the yolks of two new laid eggs; canary, ſix ounces; liquid laudanum, forty drops; mix them for a glyſter. Or,

(2.) Take henbane and white poppy-ſeed, of each half an ounce; balauſtines and red roſes, of each half a handful; boil in ſmith's-forge water, a pound to half a pound; ſtrain, and add Mithridate, three drachms; ſpirit of cinnamon, an ounce; mix.

Or, (3.) Take Venice-treacle, two drachms; the yolk of an egg; mix them with canary, half a pound; and give it for a gliſter. Or,

(4.) Take conſerve of red roſes, an ounce; diaſcordium without honey, two drachms; ſimmer them in Canary, ſix ounces; and ſpirit of cinnamon, two ounces; ſtrain, and mix the liquor with the yolk of an egg; and give it for a glyſter.

Oils and ſlippery things are all improper for gliſters of this kind, becauſe they make the parts too lax to retain them long enough to be of any conſiderable ſervice; in ſome long obſtinate diarrhœas theſe may be continued every night for ſome weeks together; and if a ſuitable diet and way of living be conformed to at the ſame time, a great deal of ſervice may be done, eſpecially if now and then a doſe of ipecacuanha be given, which may aſtringe the ſtomach, promote a better digeſtion, and cut off a ſupply of ſuch humors as irritate the bowels, and ſollicit their evacuation oftener than nature requires.

There is another purpoſe for which glyſters are given, viz. when the bark is abſolutely neceſſary, and a patient through prejudice or obſtinacy cannot take it any other way, which is often the caſe in young children; for we have many inſtances of its ſucceſs in glyſters; and for the manner of giving it ſo, take the following example.

Enema Febrifugum.

A Febrifuge Glyſter.

Take Peruvian bark in powder, an ounce; boil it in a ſufficient quantity of three or four different waters, to make all, when put together, half a pound, to which add Fracaſtorius's confection without honey, half an ounce, and give it for a glyſter.

This may be made ſtronger or weaker, and be in a greater or leſſer quantity, according to the age and ſtrength of the patient; what

ſtands here is ſufficient for a middle conſtitution full grown, and is proportionably to be leſſened for thoſe of fewer years; the manner is to give them as ſoon as a fit is off, and repeat them after every ſtool; or, if they come not away, three or four may be repeated in a day. Dr. Helvetius of Paris is the perſon who has given moſt credit to this practice, and there is no fear of its ſucceeding if it be carefully managed; but he gave the powder itſelf in common water warm, though we take boiling it to be better, when it need not be ſtrained out; if it be finely powdered and well boiled, they may be checked with aſtringents and opiates, as the patient is more or leſs diſpoſed to a laxity; for if they continue not in the bowels, but come again ſoon away, they will do little good.

Injections are a form of medicine uſed for a more immediate conveyance to the affected part, than by the common courſe of circulation it would be ſuppoſed to arrive, as into the ears, penis, or uterus; and this is done by a ſyringe or gliſter-pipe, as they beſt ſuit the part to be injected; for thoſe into the uterus, the ſyringes made to give glyſters with are the moſt convenient; or where the patients are their own operators, a common glyſter-pipe.

Injectio Auricularis.

An Injection for the Ears.

(1.) Take roſemary-water, a pound; Hungary water, an ounce; common honey, two ounces; mix them together for an injection. Or,

(2.) Take white wine, a pound; Hungary-water, half an ounce; honey, two ounces; mix them for an injection.

Theſe are uſed to ſyringe the ears with, in order to waſh out the wax that hardens there, and obſtructs the hearing; care muſt be had that it be not thrown in too forcibly, for fear of injuring the membranes, which are extremely fine, eſpecially the tympanum; and it is to be done with a ſhort-piped ſyringe made on purpoſe for ſuch uſes, and the liquor ſhould be moderately warm; but that this may be done with the more ſucceſs, ſomewhat like the following is to be dropt into the ears every night going to bed for ſome nights together, and kept in with a little cotton or wool, which alſo by its warmth aſſiſts the operation.

Take oil of bitter almonds, a drachm; of amber, of roſemary, and of marjoram, of each a drop; mix them together, and inſtil two or three drops into each ear, or that moſt affected, every night, till the cauſe ceaſes.

Injectio ad Gonorrhœam.

An Injection for a Gonorrhœa.

(1.) Take Rhaſis's white troches, three drachms; camphor, a ſcruple; diſſolve them in ſpring water twelve ounces, for an injection.

This injected into the urethra, two or three times a day, will allay the pain and heat which is cauſed by the urine and ſharpneſs of matter diſcharged by a venereal ulcer, and help to dry and heal it; but if it be an excoriation only from a hot ſandy urine, the following is better.

Take marſhmallow-root and whole linſeed, of each two drachms; boil them in a pound of water till it grows ſoft, and almoſt as thick as a ſyrup; then ſtrain it, and uſe it for an injection.

This

This admirably cools and lubricates the urethra, and even in a gonorrhœa it will greatly defend the part againſt the eroſion of purulent matter, and prevent a cordee. Or,

(3.) Take Venice-turpentine, two drachms; mix it with a ſufficient quantity of the yolk of eggs, to incorporate with linſeed oil, an ounce; and by degrees mix it with barley water, a pound; for an injection.

This is an excellent medicine even taken inwardly in any gonorrhœa; but if injected, it will ſoon cleanſe and heal up with ſafety any ulceration, from whence the matter runs, if uſed two or three times a-day.

Injectio Uterina.

An Injection for the Womb.

(1.) Take Rhaſis's white troches, two drachms; ſugar of lead, a ſcruple; diſſolve them in barley-water, in which has been boiled a handful; of red-roſe leaves, a pound; and make an injection. Or,

(2.) Take Roman vitriol, two drachms; bole, an ounce; boil them in ſmith's forge-water, two pounds to one; when cold filter it, or let it ſettle fine by ſtanding, for an injection.

The uterus is ſubject to a great many ails from weakneſs, and thereby are occaſioned ouzings and defluxions of humors, which are very troubleſome, and ſometimes there is a continual bleeding, eſpecially if the glands grow cancerous, as they do in many ſcrophulous conſtitutions, particularly ſome time after child-bearing, and the flowing of the menſes is over; in all ſuch caſes therefore much help may be had from hence, and according to the degree of relaxation, or aggravation of the ſymptoms, they may be made more or leſs reſtringent, and be injected once a day, as there ſhall be occaſion; though as to thoſe bleedings which come ſome years after the ſtoppage of the menſes, we have the authority of Hippocrates that they are fatal; but when they happen after hard labour or difficult miſcarriages, they are to be remedied by ſuch things as reſtringe and reſtore the uterus to its natural tone; and in weakneſſes ſometimes merely from ſuch cauſes, the following may perhaps be yet more ſuitable.

Injectio.——Another——

(3.) Take red wine mulled with ſpice as uſual, a ſufficient quantity; inject it milk-warm, or ſit over the ſteam of it hot, ſo that it may be received by thoſe parts. Or,

(4.) Take mint, red-roſe leaves, and ſanicle, of each a handful; cinnamon and pimento, of each two drachms; boil them in a pound of water to half a pound; then add a pound of red wine; and, after a little ſimmering together, ſtrain out the liquor for an injection, to be uſed juſt warm, or to ſit over its ſteam, when quite hot, without ſtraining it.

Suppoſitories are uſed either when a perſon cannot be put into a ſuitable poſture of body to receive a glyſter, or when a glyſter is not likely to be retained long enough to be of any ſervice, either through weakneſs, or want of knowledge to hold it, as in children, and perſons not ſenſible in acute diſtempers; and they are likewiſe much leſs troubleſome, when only a ſtool is wanted.

(1.) Take ſal gem. ſix drachms; boil it to ſuch a conſiſtence, as will

roll up into a convenient bigneſs and ſhape to thruſt up the fundament. Or,

(2.) Take ſal gem. and hiera picra, of each half a drachm; honey, enough to make a ſuppoſitory, to be uſed as the other.

There are many to be contrived ſomewhat different from theſe; and ſome uſe a bit of the aleophangine pill, or the extract of Rudius; and for children moſt commonly what the confectioners ſell by the name of a violet comfit; they are firſt to be dipt in oil, or juſt rubbed over with a little butter, to eaſe their paſſage.

SECT. X.

Of Gargles, Lotions, and Collyriums.

THE firſt of theſe are uſed chiefly either to cool and cleanſe the mouth from phlegm, and then are acrid and ſubaſtringent; or to ſoften and heal it when ſore and parched, and then are ſmooth and mucilaginous; there are in writings of this kind many under this diviſion for other purpoſes, but as the preſent practice rejects them, and becauſe thoſe intentions are better anſwered by other means, we ſhall not take up any room with them here.

Gargariſma detergens.
A detergent Gargle.

(1.) Take ſpring-water, ſix ounces; roſe-water, two ounces; ſyrup of mulberries, an ounce and half; oil of vitriol, fifteen drops, or enough to make it agreeably acid. Or,

(2.) Take verjuice, half a pound; ſyrup of raſpberries, two ounces. Or,

(3.) Take ſpring-water, half a pound; roſe water, two ounces; whites of two eggs beaten fluid; *ſal prunel.* two drachms; ſyrup of mulberries, two ounces. Or,

(4.) Take elm-bark, an ounce; boil it in a pound of water to half a pound; to the ſtrained liquor add ſyrup of mulberries, two ounces; ſpirit of vitriol, what is ſufficient. Or,

(5.) Take tincture of roſes (to be deſcribed hereafter) well acidulated, half a pound.

Gargariſma Aſtringens.
Aſtringent Gargariſm.

Take of oak-bark, one ounce; alum, one drachm; honey of roſes, one ounce; water, a pint and a half. Boil the water with the oak bark until half a pint is conſumed; then ſtrain off the liquor and add the honey and the alum.

Gargariſms, or gargles, are uſed to waſh the mouth and fauces; the firſt kind where ulcerations require to be deterged, or the excretion of thick viſcid ſaliva promoted; the ſecond ſort where the mouth is dry, parched, and rigid, to moiſten and ſoften it; and the third, when the parts are extremely relaxed, and the gums are ſpongy.

The

The common gargles do little ſervice in inflammatory quinſeys. Thoſe of an acid nature, by contracting the mouths of the emunctories and thickening the humors, do more harm than good; but a decoction of figs in milk and water, with two drachms of ſpirit of ſal ammoniac added to each pint when ſtrained off and almoſt cool, promotes an exeretion from the ſalivary glands, and greatly conduces to a cure.

Gargariſma emolliens.
An emollient Gargle.

(1.) Take roots of marſhmallows, liquorice, and pearl-barley, of each an ounce; gum arabic, half an ounce; figs, N° 8; boil them in three pounds of water to a pound and a half; and to the ſtrained liquor add ſyrup of marſhmallows, three ounces.

Or, (2.) Take quince-ſeeds, two drachms; beat them in a mortar, and draw out their mucilaginous ſubſtances, as in making emulſions, with half a pound of ſpring water; roſe-water, two ounces; and put to it ſyrup of mulberries, three ounces. Or,

(3.) Take linſeed, half an ounce; boil it in a pint of water till it is ſmooth, and almoſt as thick as a ſyrup; then ſtrain the liquor, and put to it ſyrup of mulberries, two ounces, for a gargle.

Lotions are ſuch as, ſtrictly ſpeaking, concern beautifying the ſkin, by cleanſing it of thoſe deformities which a diſtempered blood ſometimes throws upon it, or rather are made by a preternatural ſecretion; for generally thoſe diſtempers of the ſkin, commonly accounted ſigns of a foul blood, are from thoſe ſalts which are natural in the beſt conſtitution, thrown off by the cutaneous glands, which ought to be waſhed away through the kidneys; ſo that inſtead of thoſe inſignificant and ridiculous tribes of ſweetners, which in this caſe are frequently uſed, promoting the urinary diſcharge, or rectifying that of the ſkin by proper waſhes, frictions, or ointments, or both together, is the only way to get rid of ſuch diſorders; under this diviſion we ſhall therefore only give ſome examples of what is proper for this purpoſe, though many mix here with ſuch as are more ſuitable for fermentation, to which head we refer them.

Lotio Repellens.
A Repelling Lotion.

(1.) Take litharge of gold, four ounces: white-wine-vinegar, half a pound; digeſt them together three days, ſtirring it often, and then filter for uſe. Or,

(2.) Take alum, half an ounce; boil it till diſſolved in juice of lemons, a pound. Or,

(3.) Take ceruſe, half a pound; white-wine vinegar and elder-flower water, of each a pound and half; boil a pound away, and then let it ſettle fine for uſe. Or,

(4) Take ſpirit of wine, half a pound; ſugar of lead, a drachm; which diſſolve in it. Or,

(5.) Take litharge, an ounce; vinegar, ſix ounces; boil to the evaporation of a third; then put to it alum and ſalt, of each half an ounce; roſe-water, half a pound; and after one boiling more let it ſettle fine, and pour it off for uſe.

In tetterous eruptions and pimples, which with heat are apt to break out upon the ſkin, any of theſe are good to repel them; but this is to be always underſtood to be proper only when a perſon is

otherwiſe well, becauſe in any critical breakings-out they are by no means to be drove back, but encouraged, elſe a great deal of miſchief may be done: in ſuch waſhes too it is to be obſerved, that they cannot be uſed but for the face, and ſome particular parts, becauſe, ſo far as they are ſo uſed, they cannot but in ſome meaſure abate the natural perſpiration, which will be attended with inconveniency. There are ſome yet more repelling, but then their uſe is liable to more miſchiefs, if due care be not taken; when therefore any thing of this kind is uſed, a perſon muſt always regard that ſome other emunctory may be in readineſs to diſcharge what is leſſened by the application of this medicine; and that which is moſt ſuited to compenſate for what the ſkin is deficient in, is that by urine; wherefore diuretics are certain auxiliaries to coſmetics, and it is hardly ſafe to uſe one without the other. For what yet more expels, take either of the following.

(6.) Take common white vitriol, an ounce; crude alum, two drachms; boil them in twelve ounces of ſpring water to eight ounces; take off the ſcum and put the liquor up for uſe.

This muſt be boiled in an iron veſſel, becauſe it is ſo penetrating as to run through any other: it will keep a long time, and may be diluted with roſe-water, ſo as to make a good collyrium. Or,

(7.) Take white vitriol, a drachm; ſugar of lead, half a drachm; diſſolve both in roſe-water, four ounces; and they will make it milky. Or,

(8.) Take camphor rubbed ſmall in a mortar, two drachms; put to it, by a little at a time, juice of lemons, an ounce; when it is diſſolved, add white wine, a pound; or ſpirit of wine and roſe-water, of each half a pound.

This laſt is a very good lotion for all ſpots or redneſs of the face, and may be freely uſed without fear of miſchief, which cannot be ſaid of the mercurial lotions, tho' that miſchief is of another kind than the foregoing; but, becauſe ſome will venture their health for the amendment of a complexion, the following is as ſafe as any of that tribe.

(9.) Take white ſublimate, an ounce; put it into a pewter-pot, with water, three pounds; let it ſtand twenty-four hours, ſtirring it ſometimes with a ſtick till it looks blackiſh; then filter through cap-paper for uſe.

Lotio Oleoſa.
An Oily Lotion.

(10.) Take oil of tartar *per deliquium*, an ounce; oil of ſweet almonds, two drachms; roſe-water, four ounces; ſhake them together. Or,

(11.) Take almond milk, (*i. e.*) an emulſion with blanched almonds), four ounces; ſugar of lead, ten grains; white vitriol, a ſcruple; oil of tartar, two grains.

Theſe ſmooth and ſoften the ſkin, at the ſame time as they deterge or repel the humors which deform it; and they may be uſed at pleaſure, chiefly to cleanſe away freckles and morphew.

Collyriums are medicines ſuited to the eyes, tho' they might as well paſs under the general appellation of lotions; and of theſe there are none to any good purpoſe, but to cool and repel hot ſharp humors; and therefore moſt of the preceding being diluted, are proper; and

and they likewiſe more effectually anſwer their end if they be aſſiſted by the inward uſe of diuretics at the ſame time.

(1.) Take Rhaſis's white troches, a drachm; roſe water, two ounces.

Or, (2.) Take calamine levigated, half a drachm; roſe-water, two ounces. Or,

(3.) Take tutty levigated, half a drachm; roſe water, two ounces. Or,

(4.) Take white vitriol, and ſugar of lead, of each five grains; roſe-water, two ounces.

With any of theſe the eyes may be waſhed at diſcretion, in all hot defluxions; but when the ſight decays, from a dryneſs or default of the optic nerves, ſuch things can avail but little.

SECT. XI.

Of Embrocations, Fomentations, and Baths.

BY the firſt of theſe is meant ſomewhat to be tranſmitted into the ſkin, either to attenuate or diſlodge ſomething obſtructed underneath, to eaſe pain, or to irritate the part into more warmth, and a greater ſenſe of feeling; or to abate inflammation. Of the firſt kind are the following.

Take wood-aſhes, two ounces; ſtrong white-wine vinegar, eight ounces; digeſt them together, ſo as to make a lixivium, which filter for uſe. Or,

Take oil of tartar *per deliquium*, one ounce; ſpirit of ſal ammoniac, two drachms; ſpirit of wine, eight ounces. Mix for uſe.

Either of theſe rubbed upon any part ſtuffed with cold humors, will ſo help to thin them, as to diſpoſe them either for tranſpiration, or to be taken back by the refluent blood; but in ſanguine inflammatory ſwellings, ſuch things are not ſo ſafely meddled with. In tumors attended with great pains, as in the rheumatiſm and the gout, the following may be of uſe.

Take ſpirit *v. r.* ſix ounces; ſpirit of ſcurvy-graſs, two ounces; ſpirit of ſal ammoniac, half an ounce; Venice ſoap ſcraped thin, one ounce; camphor, ſix drachms; opium, one drachm; ſaffron, half a drachm; digeſt all together, ſhaking it now and then for three or four days; then let it ſettle clear for uſe. Or,

Take Venice ſoap, one ounce; camphor, two drachms; opium, one drachm and a half; digeſt in ſpirit of wine, half a pound for three days, and pour off for uſe.

Theſe are powerfully penetrating and anodyne: and therefore in rheumatic and arthritic ſwellings, they not only do a great deal in diſlodging the humors, and drawing them out by ſweat and tranſpiration; but alſo give eaſe and relaxation to the irritated fibres at the ſame time.

For paralytic numbneſſes, and to quicken the vibrations of the fibres, and motions of the nervous fluids, the following may be of ſervice, if well rubbed into the parts with a warm hand or cloth.

Take

Take Hungary water, one ounce; ſpirit of lavender, and ſpirit of ſaffron, of each two drachms; apoplectic balſam, one ſcruple; oil of cloves, ten drops: ſhake them all well together. Or,

Take camphorated ſpirit of wine, ight ounces; Venice treacle, one ounce; oil of cloves, and marjoram, of each fifteen drops; digeſt together for three or four days, and then pour it off for uſe. Or,

Take ſpirit of wine, four ounces; diſtilled vinegar, and Hungary water, of each one ounce; oil of cloves, ten drops. Mix them together for uſe.

Take of crude ſal ammoniac, a drachm; white-wine vinegar, two ounces; mix. This, or mixed with from equal parts, to three times its quantity of water, as circumſtances require, may be uſed in caſes of gangrene, or mortification in the external parts. It ſtimulates and excites ſuch a degree of irritation, upon the ſurface, as, with the uſe of internal medicines, will produce the wiſhed-for inflammation.

Take the ſugar of lead, half an ounce; diſſolve it in four ounces of ſtrong vinegar, and add to it wo pints of diſtilled water. This preparation is given by Mr. Bell, of Edinburgh, in his treatiſe on ulcers, as a uſeful general ſaturnine preparation. The addition of vinegar he obſerves, both diſſolves the ſugar of lead more perfectly, and alſo keeps it ſuſpended. It is uſeful in general, where Goulard's extract of lead is adviſed. In caſes of external inflammation, if the part is too tender to ſupport a poultice, apply this embrocation by means of ſoft rags dipped into it, and renew it ſo as to keep the part conſtantly moiſt; when it is mixed with crumb of bread into a poultice, the moiſture is more equally and conſtantly preſerved.

Fomentations differ in little elſe from the former, than that they are made moſtly with aqueous menſtruums, are more extenſive in their manner of application and operation, and are aſſiſted by actual heat, and hot woollen cloths; and when they are general, they are called baths.

Fotus Arthriticus.

A Fomentation for the Gout.

(1.) Take ſage, roſemary, chamomile, mugwort, St. John's wort, and common wormwood, of each ſix handfuls; bay-ſalt, three handfuls; water, three cong. boil to two cong. and ſtrain out for a fomentation.

This is of ſervice to the part affected, by breathing it, and giving more room for the offending matter to perſpire; which is the moſt natural outlet for it; and almoſt the only one it can be diverted by. It muſt be uſed hot once or twice in a-day.

(2.) Take oil of vitriol rectified, and rectified ſpirit of wine, of each equal parts. Mix them very gradually together, and let them ſtand in a moderate warmth ten days.

This is a very ſharp medicine, and will endanger excoriation; and therefore is not much to be encouraged; beſides, it is from things of this kind, that the gouty matter is apt to be repelled, and thrown back upon ſome of the principal viſcera, ſometimes to the immediate danger of life. But from ſuch warm fomentations as the foregoing, there is no ſuch danger; from the following.

(3.)

(3) Take ground-pine, ſouthern-wood, of each four handfuls; boil them in ſix pounds of water to four pounds; in the ſtrained liquor diſſolve ſalt of tartar, ſal ammoniac, of each two ounces.

This is warm and ſtrengthening, and therefore will not only breathe the parts it is applied to, but render them able to reſiſt freſh attacks. Uſe it once, if not twice in a day, hot.

Fotus Scorbuticus.

A Fomentation againſt the Scurvy.

Take ground-pine, and henbane, of each two handfuls; winter's cinnamon, half an ounce; horſe-radiſh-root, and earth-worms, added at laſt, of each two ounces; boil in lime-water, three pounds to two pounds; and to the ſtraining add ſpirit of ſcurvy-graſs, two ounces; and opium, one drachm.

This will help to chace away ſcorbutic and erratic pains; where inward remedies cannot prevail, or be complied with.

Fotus Spleneticus.

A Fomentation againſt the Spleen.

Take dried tobacco leaves, one ounce; infuſe them in warm water, four pounds, for two hours; and in the ſtrained liquor, diſſolve gum ammoniacum, half an ounce.

The region of the ſpleen muſt be fomented with it extremely hot; and it will give eaſe, and diſcuſs troubleſome flatulencies.

Fotus Carminativus.

A Carminative Fomentation.

Take chamomile-flowers, two ounces; juniper, and bay-berries, of each one ounce; crude ſal ammoniac, half an ounce; boil in ſix pounds to four pounds, adding at laſt ſeeds of ſweet fennel, caraway, cummin, and aniſe bruiſed, of each half an ounce; and to the ſtrained liquor add common ſpirit of wine, one pound.

This may be of ſervice in any kind of colic, but is moſt uſeful and neceſſary when the patient is ſo exceſſively coſtive that nothing will operate; and the belly is ſwelled and hard like a drum; for it will ſoften the membranes, and give liberty for the pent up vapours to tranſpire. It may be uſed very warm, and ſome emollient liniment alſo may not be amiſs.

Fotus Emolliens.

An Emollient Fomentation.

Take marſhmallow roots, white-poppy-heads, of each two ounces; ſeeds of flax, fœnugreek, cummin, bay berries, of each one ounce; mallows, feverfew, of each three handfuls; chamomile-flowers, two handfuls; boil in one cong. of water to four pounds.

Or, Take roots of marſhmallows, and white lilies, of each one ounce and a half; leaves of mallows, pellitory, henbane, flowers of elder, chamomile, and melilot, of each one handful; ſeeds of flax and fœnugreek, of each ſix drachms; boil in ſix pounds of water to four pounds.

Theſe ſoften and diſcuſs all hard windy ſwellings, and ſuddenly give eaſe to the pain occaſioned thereby; and will frequently provoke urine in the ſtone colic, by the relaxing and opening thoſe veſſels which were conſtringed, and drawn up with violent pain; to which end the following is on purpoſe contrived.

Fotus Diureticus.

A Diuretic Fomentation.

Take ſmallage-roots, four ounces; roots of fennel, and linſeed, of each two

two ounces; leaves of pellitory of the wall, mallows, arſmart, and chamomile flowers, of each two handfuls; boil in ſix pounds of water to four pounds; and in the ſtrained liquor diſſolve crude ſal ammoniac, half an ounce; common ſoap two ounces, and mix all together.

This not only is emollient and diſcutient, but carries ſomewhat alſo ſo penetrating along with it, as to be a means of opening obſtructions upon a double account; *viz.* by widening the paſſages, and dividing the humors thin enough to get through.

Fotus Eryſipelatoſus.

A Fomentation againſt the St. Anthony's Fire.

Take the green tops of flowers, or in the winter time, when thoſe cannot be had, the inner bark of elder, four handfuls; boil it in ſix pounds of water to four pounds; and in the ſtrained liquor diſſolve ſoap, one ounce.

This will wonderfully break that viſcidity which obſtructs the capillary veſſels, and at the ſame time ſo relax the membranes, as to give vent to the included humors, and draw them out by tranſpiration: it would be of uſe alſo with an emollient liniment, to ſoften the ſkin, if much ſtretched.

Fotus contra Hydropem.

A Fomentation againſt the Dropſy.

Take ſalt petre, two ounces; crude ſal ammoniac, one ounce; and diſſolve them in ſpirit of wine and water, of each one pound, by a gentle heat.

This is recommended to thin and fizy ſerum in the lower belly, that makes a tympany; and help it off by its proper veſſels, or by tranſpiration, through the ſubſtance of the parts.

Fotus Pacificus.

A Pacific Fomentation.

Take lettuce, houſeleek, and orrel, of each two handfuls; white lily-flowers, and red-roſes, of each one handful; white poppy-heads, with the ſeeds, two ounces; boil them in one cong. of water to four pounds; and in the ſtrained liquor diſſolve opium, two drachms.

Or, Take white poppy-heads, with their ſeeds, cut and bruiſed, and dill-ſeeds, of each two ounces; leaves of henbane, night-ſhade, and lettuce, of each two handfuls; boil them in ſix pounds of water to four pounds.

Theſe are both good to aſſwage pain in inflammatory ſwellings; but ſuch things require great ſkill, becauſe they elſe may do much miſchief, by diſpoſing to mortification, and deſtroying the natural heat of the part they are applied to.

Fotus Aſtringens.

An Aſtringent Fomentation.

Take oak-bark, two ounces; balauſtines, and red-roſes dried, of each one handful; boil them in water, four pounds to two pounds; ſtrain and add rough red wine, half a pound. To theſe may be alſo added alum, two drachms, or half an ounce.

Fotus Sanguinem ſiſtens.

A Fomentation to ſtop Bleeding.

Take ſtrong white-wine vinegar, one pound; diſſolve in it, over the fire, ſalt-petre, one ounce; and camphor, one drachm.

This is reported to be very effectual in ſtopping of blood from the

the noſe, if applied cold to the breaſt; for there is in it a penetrating chillineſs, which may ſo very ſoon reach the heart itſelf, as to ſlacken or retard its compreſſive force, by which the blood will ceaſe to flow with ſuch ſwiftneſs to the extreme parts. This is alſo ſaid to cure a drunken fit, by applying it to the pubes and teſticles. But the manner of operation, to ſuch a purpoſe, does not come within our compaſs of reaſoning in ſuch matters; and it will ſeldom be thought worth trying in ſuch caſes.

Fotus Hæmorrhoidalis.

A Fomentation for the Hæmorrhoids.

Take hounds-tongue, plantane, yarrow, elder-leaves, of each four handfuls; pomegranate-peels, one ounce; boil them in water and rough red wine, of each three pounds to four pounds. In the ſtrained liquor diſſolve alum, half an ounce; and ſugar of lead, two drachms.

This not only checks the inordinate bleeding of the hæmorrhoidal veins, but alſo an immoderate flux of the menſes; but the following is moſt ſerviceable in the dry piles.

Take onions and linſeed, of each four ounces; henbane, nightſhade, yarrow, and houſeleek, of each two handfuls; boil them in one cong. of water to four pounds; and in the ſtrained liquor diſſolve of the beſt opium, two drachms.

Where there is much heat and pain, if the part be bathed with this pretty warm, it will ſoon give eaſe: and ſo ſupple and relax it, as to breathe out a great deal of ill humours by tranſpiration, and leave it ſoft and eaſy.

Fotus Corroborans.

A Strengthening Fomentation.

Take ſhavings of ſaſſafras and guaiacum, of each one ounce: boil them in four pounds of water, to three pounds. To the ſtrained liquor add mother of thyme, marjoram, roſemary, lavender, of each one handful; muſtard-ſeed, half an ounce; nutmeg, mace, of each one drachm and a half; cloves, one drachm. Infuſe hot and cloſe for two hours, and then ſtrain it: and as it is uſed, drop in the ſpirit of ſal ammoniac, as much as is ſufficient to make it quick.

This is good to foment any ſprained limb, or that is paralytic; and may alſo be uſed to the head with ſucceſs in any diſorders from too much moiſture and pituitous defluxions.

Fotus Stomachicus.

A Stomachic Fomentation.

Take rough red wine, one pound; brandy, wine-vinegar, of each half a pound; dried mint, and worm-wood, of each half a handful; biſtort-root, half an ounce; pomegranate-peels, two drachms; cloves, mace, nutmeg, cinnamon, of each one drachm; Venice treacle, half an ounce; macerate cloſe for two hours, then ſtrain out hard for uſe.

This uſed hot to the ſtomach, or belly, will be found of admirable ſervice for relaxed weak ſtomachs that are ſubject to diſtenſion from wind; and will help to check immoderate vomiting, when nothing can be retained long enough to take effect that is given inwardly;

inwardly; as likewiſe in a diarrhœa.

Fotus Diſcutiens communis.

The common Diſcutient Fomentation.

Take St. John's-wort, common wormwood, and centaury, of each one handful; bay berries, two ounces; chamomile and elder flowers, of each half a handful; boil them in three pounds of water to two pounds; and to the ſtrained liquor put common ſpirit of wine, half a pound; and mix for uſe.

This is the uſual fomentation now amongſt our ſurgeons, to eaſe and draw off the humors from any part; either by tranſpiration, or by thinning them enough to be waſhed back into the common current by the refluent blood. But where there is any apprehenſion of a mortification, the following is preferred.

Fotus.——Another.——

Take common wormwood, two handfuls; St. John's-wort, centaury, and chamomile-flowers, of each one handful; bay-berries, four ounces; common aſhes, half a pound; boil in four pounds of water to two pounds; and to the ſtrained liquor add ſpirit of wine, half a pound; and ſpirit of ſal ammoniac, juſt when it is uſed, enough to make it quick.

In groſs hydropic habits, it is a difficult matter to cure the leaſt hurt in the legs, without ſuch helps; becauſe there is ſuch coldneſs of blood, and a flux of humors upon the part, that it will continually keep open, unleſs they be warmed and drawn away in ſteam by ſuch penetrating hot fomentations; which alſo prevent that diſpoſition to mortification, whereto the fleſh of ſuch perſons is ſubject.

Fotus Anthelminthicus.

A Fomentation againſt the Worms.

Take common wormwood, lavender-cotton, tanſy, ſavin, of each one handful; bears-foot, half a handful; colocynth and aloes, of each one drachm; boil them all together in three pounds of water to two pounds, and ſtrain out for uſe.

When children are troubled with worms, and will not be prevailed upon to take what is neceſſary inwardly, which often happens, ſuch kind of fomentations, even by their bitter offenſive ſteams which they ſend through into the belly, ſo diſturb thoſe ugly inhabitants, that they are, by this means, frequently forced away by ſtool.

Baths differ not from fomentations, except in the manner of uſing; theſe being partial, and thoſe for the whole body. Whatſoever caſes therefore may be judged relievable by ſuch means, a bath may be eaſily contrived after any of theſe examples, by proportioning the ingredients to as much as is ſufficient of liquor; and ſuiting them as conveniently as can be to the intention in view.

SECT. XII.

Of Oils, Liniments, and Plaſters.

THESE are much leſs frequent in the preſent practice than heretofore; becauſe they are found both diſagreeable to patients of any delicacy, and not of any great efficacy in caſes of moment. A few examples therefore of each will here ſuffice.

Oleum Coſmeticum.
A Beautifying Oil.

Take oil of bitter almonds, four ounces; oil of tartar *per deliquium*, two ounces; and oil of rhodium, ſix drops; ſhake all well together till thoroughly mixed.

This is much like the oily lotion in Sect. 10. but is ſomething more ſoftening, and makes the ſkin admirably ſmooth, as well as white, and frees it from ſpecks and pimples.

Oleum Cremoris.
Oil of Cream.

Take the inner green bark of elder, freſh gathered, three handfuls; the beſt cream, two pounds; boil them well together till the cream turns to an oil; and boil it over again with freſh bark.

It is recommended as the beſt of remedies againſt the piles, and all hot inflammatory tumors, which it both cools and breathes out by tranſpiration at the ſame time.

Oleum Acouſticum.
Oil to help Hearing.

Take oil of bitter almonds, one drachm; oil of nutmeg, cummin, marjoram, and amber, of each two drops; civet, two grains. Mix them well together.

This is to drop into the ears every night, keeping them ſtopt warm with wool or cotton. It helps to ſoften and break away the wax that fills up the paſſage to the tympanum: and fits it to be brought away eaſier by ſyringing.

Oleum Cephalicum.
A Cephalic Oil.

Take balſam of Peru, one drachm; oil of ſage, roſemary, marjoram, and nutmeg, of each four drops; camphor, fifteen grains. Mix all together ſmooth.

This is directed to rub the temples, noſtrils, and palms of the hands with, in any nervous caſes; eſpecially ſuch as are tending to the comatous, lethargic, or paralytic.

Oleum Paralyticum.
Paralytic Oil.

Take oil of amber, and ſaſſafras, of each one drachm, of roſemary, marjoram, and origany, of each one ſcruple; of cloves, nutmegs, and pepper, of each fifteen drops. Mix, *f. a.*

This is more particularly calculated for the palſy; and may be uſed as the former; but principally rubbed into the part more immediately affected; and it will aſſiſt fomentations of the ſame intention, by applying it as ſoon as they are over.

Oleum

Oleum ſeu Balſamum viride.

The green Oil or Balſam.

Take linſeed oil, a pound; fine verdegriſe, four drachms; boil them together till the verdegriſe is diſſolved.

This is much uſed in contuſed and lacerated wounds; and likewiſe in gun-ſhot wounds; and ſometimes alſo in foul ulcers; it being conſiderably detergent, and will not ſuffer a part to incarn too ſoon.

Linimentum Crinificum.

A Liniment to make the Hair grow.

Take gum labdanum, ſix drachms; bears greaſe, two ounces; honey, half an ounce; ſouthernwood powdered, three drachms; oil of nutmeg, a drachm; balſam of Peru, two drachms. Mix, *ſ. a.*

This is recommended for thoſe places which are bald, but they are firſt ordered to be rubbed with an onion till very red, and then to be done over with this, which is to be repeated two or three times in a day for three months.

Linimentum Depilatorium.

A Liniment to take off Hair.

Take quick-lime, four ounces; auripigment, an ounce and half; root of orris, an ounce; nitre and ſulphur, of each half an ounce; ſtrong ſoap-lees, two pounds: mix, and boil them to a conſiſtence, and then add oil of cloves, twenty drops, and mix all well together.

This is rather a cataplaſm than a liniment or ointment (which differ in nothing material, more than that liniment is the nearer term), and if it is not uſed with great caution, it will do miſchief, and make an eſchar upon the part; half an hour is enough for it to lie at a time; and after it is taken off, rub the part with any common oil; and after the ſoreneſs it occaſions is over, apply it afreſh, and ſo continue till it has eat to the very roots of the hair, and made it all ſhed off. The common depilatories uſed in France, Italy, &c. ſeem preparations of this kind; but they are not ſuffered to lie upon the part above a minute or two, the operator trying in the mean time whether the hair will come off with a gentle ſtroke of the finger; and after all is ſcraped off, they are very careful to waſh the part well with warm water.

Linimentum Opthalmicum.

A Liniment for the Eyes.

Take freſh butter, without any ſalt, four ounces; white wax, an ounce; tutty prepared, half an ounce; camphor, two ſcruples; make them into a liniment, *ſ. a.*

This is a very good medicine for ſore inflamed eyes, and may be uſed with the utmoſt ſafety, which cannot be ſaid of many things ordered for ſuch purpoſes; they may be juſt ſtroaked with it two or three times a day; the finer the tutty is levigated it is much the better; if the eyes are blood-ſhot, ſome of it may be mixed with as much conſerve of red roſes, and ſpread upon a cloth, and tied on all night.

Linimentum Cephalicum.

Take oil of nutmegs by expreſſion, and palm-oil, of each a drachm and a half; chemical oil of cloves, roſemary, and ſage, of each a ſcruple; mix them together ſmooth, *ſ. a.*

Linimentum Paralyticum.

A Liniment for the Palſy.

Take of the ſoldiers ointment (deſcribed Part II. Book IV. § 10.)

two

two ounces; oil of ſpike, of amber, of each three drachms; powder of euphorbium, a ſcruple; oil of roſemary, a drachm and a half.

Theſe are pretty much contrived like the oils juſt before under the ſame titles, and they are to be uſed in the ſame manner, which ſee. Dr. Fuller very juſtly diſtinguiſhes in the uſe of theſe things between a palſy in any particular part obſtructed by a viſcid and too heavy nervous juice, and from a want of fluid through ſome diſorder above in the organ; and though he generally expreſſes himſelf in a manner very particular, yet he is well worth tranſcribing here. He ſays, theſe things remove dams and obſtacles in the nerves, ſtopt up with viſcid juice, redintegrate the wonted radiation of the ſpirits, bring the ſlack fibres into order, and recover their tonic motion, exagitate the blood, and give it a rapid motion through the part, and ſo reſuſcitate natural heat, ſenſe, and motion: but here it is heedfully to be obſerved, that ſometimes the paralytic part, by the ill uſe of externals too intenſely hot, ſhrinks up and withers, to the irretrievable damage of the patient; and this happens moſt, when the temperament is hot, and the cauſe of the reſolution not in the relaxed part itſelf, but in the brain, or ſome member at a diſtance, whence the part, which is ſound enough of itſelf, and rightly conformed, ſuffers by way of eclipſe, being deprived of the rays of the ſpirits; for in that caſe, if ſuch heating and drying things be adminiſtered as are immoderate, and beyond what the temper of the part can bear, then they ſcorch, dry, and ſhrink up the fibræ motrices, diſſipate their indwelling ſpirits, and occaſion an incurable contraction; for theſe fibræ motrices are not fit to perform the function of motion unleſs they remain ſoft, flexible, moiſt, and ſlippery.

Linimentum Hæmorhoidale.

A Liniment againſt the Piles.

Take oil of roſes two ounces; *emplaſtrum de minio*, an ounce; white wax an ounce and half; when they are melted together ſtir in æthiops mineral two drachms; opium and ſaffron, of each a drachm; and make them into a ſmooth liniment, *ſ. a.*

This is given in Bates very injudiciouſly, which we have therefore corrected here; it is a good medicine againſt the piles, and will ſoon cool and procure eaſe upon their being anointed with it; it is alſo of uſe in gouty and arthritic pains, when they are confined to a narrow compaſs; but care muſt be had not to repel the humors to more noble parts.

Linimentum.——Another.——

Take ointment of poplar buds (deſcribed Part II. Book IV.) an ounce; ſugar of lead a drachm; opium; a ſcruple; oil of amber and aniſated balſam of ſulphur, of each ten drops.

This is more conformable to the preſent practice than the foregoing, and upon the ſame baſis may many more be contrived.

Linimentum Virilitatis.

A Liniment againſt Impotency.

Take clarified honey and oil of nutmegs by expreſſion, of each half an ounce; pellitory of Spain, black pepper, and cubebs, of each half a ſcruple; civet, one ſcruple; muſk half a ſcruple; balſam of Peru a drachm. Make all into a liniment, *ſ. a.*

With this it is adviſed to rub over the penis and perinæum, in order to ſtimulate to venery; but the ſole end ſuch means can anſwer, is only the purchaſe of a ſhort pleaſure, which, by being ſo procured, more ſtrains, damages, and debilitates, than twenty times as much that is prompted only by natural incentives.

Linimentum Sympatheticum.

The Sympathetic Liniment.

Take oil of roſes and fine bole, of each an ounce; linſeed oil two ounces; man's greaſe, moſs of human ſkull of a perſon killed by violence, in powder of each two ounces; mummy and man's blood, of each half an ounce. Make a liniment, *ſ. a.*

We give this here only to oblige ſuch as are weak and whimſical enough to have any belief in ſuch things. If the weapon by which a wound is made be dreſſed with it, it is ſaid to cure as much as any application immediately to the part itſelf; but for ſuch knowlege the reader may turn to Sir Kenelm Digby's treatiſe of the ſympathetic power, and meet with a philoſophy as ridiculous as the facts are falſe upon which it is founded; but ſo eaſy is deluſion to ſome minds, that they are better entertained with chimæras than demonſtrative truth.

Linimentum Herpeticum.

A Liniment againſt Tetters.

Take quick lime and auripigment, of each a drachm; tartar, bay ſalt, common ſoap, of each two drachms; oil of elder, enough to make them into a due conſiſtence.

This is not ſo ſafe a medicine, becauſe of the auripigment, as it is efficacious; therefore the following is preferable.

Take *unguentum nutritum* (deſcribed in Part II. Book IV.) two drachms; white vitriol and ſugar of lead, of each a ſcruple; oil of roſes, what is ſufficient.

This will check any humors of this kind, which, when they break out round the waiſt, are by the common people called the ſhingles; but ſuch things are to be uſed as ſparingly as poſſible, and only to the part affected, becauſe they are apt to check inſenſible perſpiration, which is very detrimental.

Linimentum ad Lumbricos.

A Liniment to deſtroy Worms.

Take common wormwood, mint, tanſy, rue, leeks, leaves of the walnut tree, of each three handfuls; ſavin, four handfuls; bearsfoot, ſix handfuls; bruiſe them well with wormſeed, two ounces; freſh bryony roots, four ounces; colocynth and aloes, of each two ounces; bullock's gall, a pound; new butter unſalted, five pounds; white wine, two pounds; boil with a gentle fire to the conſumption of the aqueous humidity, and then ſtrain for uſe.

This is fitter for an officinal medicine than to be made occaſionally, becauſe it is ſo troubleſome, and the ingredients ought to be had freſh gathered, and when they are in their prime; it is intended to anoint all the lower belly with, for ſuch as are troubled with worms, or cannot or will not take inwardly what is neceſſary to deſtroy and diſlodge them; this may be properly uſed after bathing, with the fomentation given in the preceding ſection for the ſame purpoſe; which ſee.

Lini-

Linimentum Laterale.

A Liniment for the Side.

Take ointment of marſhmallows, ſix drachms; oil of lilies and bricks, of each three drachms; camphor, half a drachm; melt them together into a liniment.

The perſon from whom we are furniſhed with many materials for this part, and has been frequently taken notice of before for his peculiar way of explaining the operation of medicines, ſays, that this ſmooths, lubricates, and compoſes into order the fibrillæ, which by dolorific ſpaſms being torn and racked, ſtrained and ſtiff, tangled in their ſeries, and confuſedly corrugated, depraved the internal channels, by diſtorting them, and cloſe the cutaneous vents, by purſing them up; alſo, that it liquifies, exagitates, and diſcuſſes the gelatinous lympha, which by ſtuffing up the minute paſſages of the parts, and hindering the courſe of the blood, occaſioned the inflammation; and for theſe reaſons, namely, compoſing the fibrillæ in order, opening the pores, reſtoring circulation, taking down inflammation, and quieting pain, it muſt needs conduce very much in quieting pains of the ſide, eſpecially when the muſcles and outward parts are affected; but in a true internal membranous pleuriſy he does not remember it ever to have done any good, becauſe it is probable it cannot penetrate ſo far.

Linimentum Pectorale.

A Liniment for the Breaſt.

Take palm oil, half an ounce; oil of nutmegs by expreſſion, a drachm; oil of chamomile, two drachms; ſpirit of lavender, two drachms: melt them together for a liniment. Or,

Take ointment of marſhmallows and palm oil, of each three drachms; oil of mace by expreſſion, a drachm; of aniſeed, three drops; ſpirit of lavender and common oil of chamomile, of each two drachms; melt them together for uſe.

In aſthmas, and any painful ſenſation or ſtraitneſs at the breaſt, theſe ſometimes do good ſervice, by warming and relaxing the fibres, and giving a greater capacity to the containing parts; the ſpirit of lavender, or any other warm ingredient that may be thought proper, of the like kind, will not indeed incorporate with the other unctuous things, but when warm, and rubbed upon the part, has a great ſhare in carrying in with it what is agreeable, and proving a cordial to all the parts it touches. After long rubbing it in with a warm hand, lay a brown paper firſt greaſed with the liniment upon it, and over that a warm flannel.

Linimentum Digeſtivum.

A digeſtive Liniment.

Take the yolk of one egg, and mix it well with two ounces of Venice turpentine.

This is a very common digeſtive, and now much uſed by our ſurgeons in their dreſſings.

Linimentum ad Foveas.

A Liniment after the Small Pox.

Take oil of ſweet almonds, two ounces; ſperma ceti, three drachms; oil of rhodium, ſix drops; melt them together by a gentle heat, and mix for a liniment.

This is of admirable uſe after the ſmall pox, and makes the ſcabs fall off eaſily, and preſerves the ſkin ſmooth; it muſt begin to be

uſed as ſoon as they grow brown and harden, being juſt touched upon them with a feather, ſo as to keep them always moiſt with it.

Linimentum Coſmeticum.
A Coſmetic Liniment.

Take oil of ſweet almonds, two ounces; ſperma ceti, three drachms; magiſtery of biſmuth, a drachm; oil of rhodium, ſix drops. Make them into a liniment.

This is a pleaſant and grateful beautifier, and keeps the ſkin not only free from freckles and ſpecks, but ſoft and ſmooth.

Linimentum Podagricum.
A Liniment for the Gout in the Feet.

Take black ſoap, two ounces; honey and Barbadoes tar, of each an ounce and half; and with the white of an egg well beaten up, make into a liniment. Or,

Take black ſoap, two ounces; camphor and opium, of each a drachm; honey, half an ounce; oil of petre and Barbadoes tar, of each two drachms; make them into a liniment.

Theſe are efficacious medicines, and ought to come into the hands only of ſuch as are well acquainted with the ſtate of the body, and the condition of the humors, ſo as to know whether they are fit to be thus treated; otherwiſe the gouty matter may be driven back upon ſome of the principal parts, or drawn down faſter than the patient can well bear.

Emplaſtrum Apoplecticum.
A Plaſter againſt the Apoplexy.

Take galbanum, opopanax, of each two drachms; pellitory of Spain and caſtor, of each a drachm; oil of amber a ſcruple; Venice turpentine, enough to make a plaſter.

Emplaſtrum Cephalicum.
A Cephalic Plaſter.

Take compound betony plaſter, three drachms; gum caranna and tacamahaca, of each two drachms; balſam of Peru a ſcruple; make them into a plaſter. Or,

Take maſtich, gum juniper, nutmeg, cloves, of each a ſcruple; gum labdanum, half an ounce; make them into a plaſter with a ſufficient quantity of oil of maſtich.

Any of theſe are to be ſpread upon thin leather, and laid upon the head freſh ſhaved, ſo as to cover all the ſutures; and they are of uſe in all nervous caſes, eſpecially from cold cauſes, for they warm, contract, and invigorate the fibres, whereby they are enabled to vibrate more ſtrongly, and ſhake off thoſe ſuperfluous humidities which clog and interrupt their motions.

Emplaſtrum Nuchale.
A Plaſter for the Nape of the Neck.

Take white pitch, half an ounce; powder of marjoram, half a drachm; euphorbium, five grains. Or,

Take white pitch, two drachms; galbanum, Venice turpentine, of each half a drachm; black pepper and muſtard ſeed powdered, of each a ſcruple; oil of origany, two drops. Or,

Take gum caranna, three drachms; oil of amber, four drops: mix.

Theſe ſpread to the breadth of a man's hand, are often applied to the nape of the neck, to divert rheums from the eyes, and ſuch humors, as occaſion pains in any part of the head: in ſome they will bliſter the ſkin by long lying, and in moſt they will collect a dewy

dewy moiſture. And for the ſame purpoſes they are ſometimes alſo laid behind the ears, to take away pain from the teeth, which is a very convenient place, becauſe the external jugular arteries detach ſeveral branches under the ears, which entering the inferior jaw, are divided to carry blood to the roots of all the teeth for their nouriſhment, whence thoſe parts are more immediately affected by ſuch application than when the plaſters are laid upon the temples, to which theſe are often applied, and the latter particularly, wherein ſome order a grain or two of opium.

Emplaſtrum Suppedale.

Plaſter for the Feet.

Take cephalic plaſter, ſix drachms; hard pitch, half an ounce; powder of euphorbium, two ſcruples; camphor and oil of amber, of each a ſcruple; ſpread and apply it to the feet. Or,

Take Burgundy pitch half an ounce; Venice turpentine, aſa fœtida, of each two drachms; euphorbium, camphor, of each a drachm; volatile ſal ammoniac, a ſcruple; oil of amber, half a ſcruple; make hereof two plaſters for the ſoles of the feet.

In fevers attended with great pains in the head, ſpaſms, and a delirium, theſe are frequently ordered, becauſe, by their heat and irritation of the feet, they are ſuppoſed to increaſe the blood's velocity that way, and of conſequence diminiſh it in the head; and they may alſo ſometimes favour the critical expulſion of certain humors which may be the cauſe of the diſeaſe, and be diſpoſed for diſcharge by thoſe pores. What has prejudiced ſome ſo much as to order euphorbium even out of the cephalic plaſter of the college for theſe uſes, it is not eaſy to gueſs; for the greater the ſtimulus is thus made, the better muſt certainly the intention in view be anſwered. What is by many ordered, is the following.

Take galbanum and cephalic plaſter, of each an ounce. Or,

Take Burgundy pitch and galbanum, of each equal parts.

And often galbanum is ordered alone, and ſometimes to wrap the whole feet in; when indeed euphorbium might be too hot, becauſe it would be too apt to bliſter, though the ſoles of the feet could bear it.

Emplaſtrum contra Paralyſin.

A Plaſter againſt the Palſy.

Take galbanum, ſagapenum, ammoniacum, of each an ounce; pellitory of Spain, muſtard-ſeed, of each half an ounce; wax, an ounce and a half; Venice turpentine, a ſufficient quantity.

This is of uſe to cold paralytic limbs, to wrap them up with it, becauſe it will warm and cheriſh the almoſt decayed fibres.

Emplaſtrum Arthriticum.

The Gout-Plaſter.

Take gum elemi, colophony, Burgundy pitch, of each an ounce; red lead, maſtich, of each two drachms; oil of petre, ſpike, and aniſe, of each a ſcruple: mix, *f. a.* Or,

Take Burgundy pitch, two ounces; galbanum, an ounce; live ſulphur, two drachms; powder of amber, one ounce; of hermodactyls, orris-root, cummin-ſeed, and chamomile-flowers, of each half an

ounce: make them into a conſiſtence, with a ſufficient quantity of oil of petre.

Theſe may be applied to gouty limbs when the pain is much fixed, but are chiefly adviſeable in the ſciatica, or hip-gout, becauſe that is ſometimes of long continuance; whereas in the feet or hands it frequently ſhifts places before a plaſter can well take effect: and to this purpoſe the following is alſo of great uſe.

Take volatile ſal ammoniac, two drachms; Venice turpentine, ſix drachms; wax, half an ounce; make them into a plaſter.

This ought immediately to be laid upon the part when made, and the volatile ſalt will penetrate very far, and remove pain ſometimes at a diſtance, where other things cannot reach; but this will make but an indifferent conſiſtence to ſtick, and therefore the following may be preferable.

Take cummin plaſter, half an ounce; common roſin, a drachm; yellow wax, half a drachm; melt theſe together, and when almoſt cold, ſtir in fine turpentine, a drachm; volatile ſal ammoniac, two ſcruples; camphor, a ſcruple; oil of amber, fifteen drops; and make them into an emplaſter.

Emplaſtrum Carminativum Laterale.
A Plaſter for the Side againſt the Wind.

Take cummin plaſter, an ounce; camphor, a ſcruple; oil of aniſeed, fifteen drops: mix them into an emplaſter.

This may be applied where ſtitches are obſtinate and laſting; and it will help to break away and diſcuſs the cauſe; and in a nervous or ſpaſmodic pleuriſy, it will do ſervice. Or,

Take Paracelſus's ſtyptic plaſter, and the ſoap plaſter, of each an ounce and a half; ointment of poplar-buds, half an ounce; melt them together, and when almoſt cold, ſtir in camphor in fine powder, three drachms.

Emplaſtrum Epiſpaſticum.
Epiſpaſtic Plaſter.

Take as much of the diſcutient plaſter deſcribed in Book IV. as is neceſſary to ſpread thick upon a leather, and work in as much powder of the cantharides, with your finger, as will ſtick upon it.

This is the common way in the hoſpitals, and it is as good as any for the niceſt patients; for what of the flies lie in the body of the plaſter is of little effect; and this way never fails; but then the margin muſt be ſpread with ſome ſticking plaſter, to keep it faſt upon the part.

Emplaſtrum Spleneticum.
A Plaſter againſt the Spleen.

Take cummin plaſter, compound melilot plaſter, and gum tacamahaca, of each two drachms; plaſter of hemlock, with ammoniacum, and balſam of Peru, of each a drachm: mix for a plaſter. Or,

Take cummin plaſter, and of hemlock plaſter, with ammoniacum, of each equal parts: make them into a plaſter. Or,

Take hemlock plaſter, with gum ammoniacum, and ſpread it by itſelf.

Any of theſe laid to the region of the ſpleen, will frequently give eaſe, by ſending in ſuch ſubtile and active particles as help to ſhake the ſpleen, and break thoſe heavy grumes with which it is ſometimes almoſt obſtructed.

Emplaſtrum

Emplaſtrum Hyſtericum.

An Hyſteric Plaſter.

Take ſtrained galbanum, half an ounce; aſa fœtida, two drachms; yellow wax, a drachm; camphor, half a drachm; oil of amber, ten drops; and make a plaſter for the navel. Or,

Take the hyſteric plaſter of the College, and ſtrained galbanum, of each half an ounce; aſa fœtida, a drachm. Or,

Take galbanum, a ſufficient quantity alone.

Theſe are reckoned to be of uſe in all hyſterical diſorders, and to looſen the belly; but galbanum alone is what is now generally preſcribed; and ſometimes a little civet in the middle of it upon cotton, and a piece of ſilk ſtuck over it; and where no civet is ordered, for neatneſs only, the cotton and ſilk are commonly put in the middle; to be placed juſt upon the navel.

Emplaſtrum Anthelminthicum.

A Plaſter againſt Worms.

Take aloes and myrrh, of each a drachm; ſpecies of hiera, and Venice treacle, of each half a drachm; oil of wormwood, four drops; ox-gall, a ſcruple; honey enough to make a plaſter. Or,

Take aloes, ſavin, and wormſeed in fine powder, of each half a drachm; ox-gall, a ſcruple; Mithridate ſufficient, with five drops of oil of wormwood.

Theſe may be laid all over the bellies of children troubled with worms, and that cannot be prevailed upon to take neceſſary remedies inwardly: they will alſo looſen the belly; for theſe purpoſes the ſtinking hepatic aloes is beſt; and where it can be diſpenſed with (for ſometimes weakly children cannot bear it) a plaſter may be contrived with little elſe in it; as thus:

Take hepatic aloes, two drachms; oil of wormwood, ten drops: make them into a due conſiſtence for ſpreading upon leather, with a quantity ſufficient of ox-gall.

Emplaſtrum Febrifugum.

A Febrifuge Plaſter.

Take frankincenſe, two drachms; tacamahaca, a drachm; ſaffron in powder, a ſcruple; Venice turpentine, what is ſufficient to make them into a plaſter. Or,

Take the febrifuge plaſter deſcribed Part II. Book IV. above.

Theſe are ſpread on leather, and applied to the wriſts, and ſometimes to the pit of the ſtomach, with a little powder of camphor rubbed upon them; but they cannot be much truſted to, and are fit only for young children, that will not be prevailed upon by other means.

Emplaſtrum Ictericum.

A Plaſter againſt the Jaundice.

Take ſaffron in fine powder, a drachm; make it into a due conſiſtence, with a ſufficient quantity of honey to ſpread upon leather, and apply to the right ſide.

This can be looked upon only as a ſmall auxiliary, where the caſe is ſo obſtinate as to require help from all quarters.

Emplaſtrum Nephriticum.

A Plaſter againſt Gravel.

Take powder of opium and ſaffron, of each a drachm; Caſtile ſoap, half an ounce; oxycroceum, two drachms; oil of juniper, half a drachm: make them into a plaſter for the reins.

This will be troubleſome to

keep on, and muſt be done by ſwathing: it is contrived to help away gravel lodged in the kidneys and ureters, by warming, ſtimulating, and ſhaking the veſſels, by thoſe ſubtile particles which it is ſuppoſed to tranſmit through the ſkin.

Emplaſtrum Anodynum.
An Anodyne Plaſter.

Take minium plaſter, an ounce; oil of lilies, a drachm; Venice turpentine, half a drachm; opium, camphor, and ſugar of lead, of each twelve grains. Mix for a plaſter.

This is of uſe to aſſuage pain in any part, whether from the gout, rheumatiſm, or any ſcorbutic cauſe; and will likewiſe give eaſe, if laid to the loins, in nephritic tortures.

Emplaſtrum Pectorale.
A Plaſter for the Lungs.

Take ſtrained tacamahaca, half an ounce; Venice turpentine, two drachms; when they are melted together, add powder of Benjamin and ſtorax, of each a drachm; ſaffron, half a ſcruple; oil of aniſeed, eight drops; of nutmegs, ſix drops. Mix for a plaſter.

This is to be laid all over the breaſt, where there is any diſorder of the thorax; and it is reckoned to comfort and aſſiſt weak lungs, and to give eaſe in aſthmas, and ſtraitneſs of breath.

Emplaſtrum Stomachicum.
A Stomachic Plaſter.

Take gum tacamahaca, an ounce; powder of mint and balauſtines, of each half a drachm; oil of cloves, nutmeg, and aniſeed, of each three drops. Make a plaſter. Or,

Take magiſterial ſtomach plaſter, half an ounce; gum tacamahaca ſtrained, two drachms; melt them together, and ſtir in balſam of Tolu in powder, a drachm; dragon's blood, and balſam of Peru, of each half a drachm; oil of nutmegs, and of cloves, of each three drops. Make them into a plaſter. Or,

Take magiſterial ſtomach plaſter, an ounce; ſpread it upon leather, and rub over it oil of mint, four drops; and of cloves, two drops.

In a weak ſtomach, that is ſubject to vomiting and indigeſtion, theſe ſometimes help internal means of the ſame intention; they are indeed inconvenient for men who have much hair upon their breaſt, and when they ſtick ſo indifferently as to want ſwathing; and they ought to be ſpread very thick, otherwiſe they will be ſoon dry.

Emplaſtrum Dorſale corroborans.
A ſtrengthening Plaſter for the Back.

Take diachylon, half an ounce; oxycroceum, two drachms; oil of amber, ten drops. Make them into a plaſter. Or,

Take minium plaſter, and diachylon, of each half an ounce; gum caranna, two drachms; bole and maſtich, of each a drachm; Venice turpentine, a ſufficient quantity. Or,

Take galbanum ſtrained, one drachm and a half; powder of maſtich, two drachms; Cyprus turpentine, half a drachm; hard pitch, two ſcruples: melt them carefully together, and add oil of mace by expreſſion, a ſcruple; and make them into a plaſter. Or.

Take diapalma, ſix drachms; Cyprus turpentine, yellow wax, of each a drachm and a half; bal-

ſam

ſam of Tolu in powder, half a drachm; oil of nutmegs, four drops. Or,

Take rupture plaſter and diapalma, of each half an ounce; fine Armenian bole, and maſtich in powder, of each a drachm; oil of mint, ſix drops.

Any of theſe may be applied to the region of the loins in all weakneſſes of thoſe parts, from what cauſe ſoever; and they will aſſiſt in a gonorrhœa and the whites. For children who are rickety, they may be ſpread to cover quite down the ſpine, and from the nape of the neck to the bottom of the back.

Emplaſtrum contra Abortum.

A Plaſter to prevent Miſcarriage.

Take rupture plaſter, an ounce; wax, half an ounce; dragon's blood, maſtich, Armenian bole, galls, biſtort-root, of each half a drachm; amber, red coral, and nutmegs, of each two ſcruples; Cyprus turpentine, ſufficient to make a plaſter. Or,

Take rupture plaſter, an ounce; Cyprus turpentine, half an ounce; make a plaſter.

Either of theſe may be laid both upon the belly and back, where there is any apprehenſion of miſcarriage, and likelihood to prevent it, otherwiſe ſtrengtheners do miſchief.

Emplaſtrum contra Strumas.

A Plaſter againſt the King's Evil.

Take hemlock plaſter, with gum ammoniacum, of each three drachms; ſtrained galbanum, Venice turpentine, crude mercury, of each a drachm; balſam of ſulphur, half a drachm. Make all into a plaſter.

SECT. XIII.

Of Cataplaſms.

Cataplaſma Apoplecticum.

A Cataplaſm againſt Apoplexies.

TAKE freſh bryony-root, three ounces; muſtard-ſeed, and black ſoap, of each one ounce; cantharides, ſix drachms. Make them into a conſiſtence, with as much as is ſufficient of vinegar.

The proper conſiſtence for this form is ſuch as will eaſily ſpread upon a cloth, ſo as not to run thro', nor be very ſoon dry: for which purpoſe unctuous ingredients are ordered in moſt, eſpecially of the emollient kind; but where they are deſigned to ſtimulate, and give uneaſineſs, as in this, ſuch care is needleſs. This is to be laid all over the head, where the ſymptoms are threatening in any nervous caſes; and it may be ſuffered to lie on ſome days, as particular circumſtances may require, though it will, in twelve hours, draw a great deal of water away, although, by reaſon of the cuticle being tied ſo cloſe by the hair, it cannot raiſe a bliſter. After removal, a melilot plaſter may be laid on, and repeated, as uſual, till quite well.

Cataplaſmum Cephalicum.

A Cephalic Cataplaſm

Take powder of cloves and nutmegs,

megs, of each two drachms; Guinea pepper, half an ounce; muſtard, ſix drachms; ſour leaven, three ounces; compound ſpirit of lavender, one ounce and a half; or as much as is ſufficient; and make all into a ſmooth poultice for the head.

This is much milder than the former, will not bliſter, and is very warm and ſtrengthening to the nerves. It may therefore be applied to the head freſh ſhaved, in all diſorders which have their origin from thence; eſpecially if their ſeat be in the brain, and from a cold cauſe, for it will irritate and ſhake the fibres in ſuch manner, as to throw off what is offenſive, and quicken the motion of their proper fluids. The following is directed to the ſame intention, but not ſo good, though from Dr. Fuller.

Take honey, vinegar, and common ſpirit of wine, of each one ounce; muſtard-ſeed powdered, as much as is ſufficient to make it into a due conſiſtence.

Cataplaſma Paralyticum.

A Poultice againſt the Palſy.

Take the pulp of turneps baked, eight ounces; green rue, four handfuls; muſtard-ſeed, two ounces; oil of amber, two drachms; nerve ointment, as much as is ſufficient, or two ounces.

This is to cover over a paralytic member, and to be repeated when grown dry; if it be required more ſtimulating, it may be ſprinkled with powder of euphorbium.

Cataplaſma Podagricum.

A Poultice againſt the Gout.

Take black ſoap, four ounces; yolk of eggs, N° 2; ſaffron, one drachm; oil of ſpike, one ounce. Mix them together, ſo as to make a ſmooth poultice. Or,

Take honey and black ſoap, of each two ounces; muſtard-ſeed, half an ounce; opium, two drachms; camphor, one drachm; the ſoldier's ointment, as much as is ſufficient, or one ounce and a half. Or,

Take black ſoap, two ounces; honey, and ſalt of tartar, of each half an ounce; opium, three drachms; camphor and ſaffron, of each two drachms; nerve ointment, as much as is ſufficient, or one ounce and a half.

Either of theſe is a very effectual penetrating medicine, and they will carry their influence much beyond any plaſter or liniment; becauſe they lie warm upon the part, if thick ſpread. They will not only give eaſe where the pain is exquiſite and intolerable; but, in great meaſure, alſo breathe out the offending humour, by tranſpiration. There can nothing poſſibly be contrived more effectual to this purpoſe, though there are innumerable pretenſions made to it by quacks and impoſtors.

Cataplaſma Auriculare.

A Cataplaſm for the Ears.

Take onions roaſted and pulped, one ounce and a half; ſaffron, one ſcruple; oil of amber, fifteen drops; powder of cummin-ſeed, and ointment of marſhmallows, of each three drachms.

This is to be applied to the ears, when there are apprehenſions of impoſthumation in the head; and, if attended with great pain, ſome portion of opium may be added with ſucceſs; and there will be no danger; and if the patient can bear ſneezing, provokers thereunto

unto are very proper, at the ſame time, to ſhake the cyſtis, and break way for the matter as ſoon as ripe.

Cataplaſma Febrifugum.
A Febrifuge Poultice.

Take Venice treacle, two ounces; muſtard-ſeed, and grains of paradiſe, of each one drachm and a half; bay-ſalt, one ounce; black ſoap, two ounces; oil of ſpike, one ounce; vinegar as much as is ſufficient. Or,

Take freſh bryony-root, two ounces; black ſoap, three ounces; pickled herrings, or anchovies, four ounces; bay-ſalt, one ounce; vinegar, as much as is ſufficient. Or,

Take horſe-radiſh root and ſquills, of each two ounces; green rue, muſtard-ſeed, ſalt, of each one ounce; black ſoap, two ounces; vinegar, as much as is ſufficient. Or.

Take freſh rue, two ounces; freſh gathered bryony-root, four ounces; ſour leaven, bay-ſalt, black ſoap, of each one ounce and a half; muſtard-ſeed, two ounces; vinegar, as much as is ſufficient. Or,

Take green rue, one handful; black ſoap, bay-ſalt, of each one ounce; one pickled herring ſtript from the bones, ointment of marſh-mallows, one ounce and a half; ſharp vinegar, as much as is ſufficient to make them into a ſmooth poultice.

Any of theſe may be applied to the feet in fevers, where the head is much affected, and attended with a delirium; and they ought to be laid on thick, and renewed every ſix or eight hours: the laſt is moſt ſuitable to the preſent practice, and leaſt troubleſome to procure.

Cataplaſma ——
Another for the Wriſts.

Take powder of white hellebore, half an ounce; ſalt-petre, two ounces; pulp of figs, as much as is ſufficient to make a poultice. Or,

Take powder of white hellebore and muſtard-ſeed, of each two drachms; ſalt-petre, two ounces; oil of amber, twenty drops; camphor, two drachms; pulp of figs, as much as is ſufficient.

Theſe applied to the wriſts, and repeated once a-day, will frequently abate intermittents in children, without any other help; but ſometimes they are apt to bliſter, but they can then do no harm, and will be more likely to anſwer the end propoſed. For the ſame purpoſe is the following, but not ſo eaſily made, nor ſo certain in its ſucceſs.

Take Venice turpentine, one ounce; yellow paring of orange rind, two drachms; bole, one drachm and a half; ſoot, half an ounce; pigeon's dung, one ounce and a half; large ſpiders webs, Num. 6; black ſoap, two ounces; vinegar, as much as is ſufficient to make them into a ſmooth poultice.

Cataplaſma Anthelminthicum.
A Poultice againſt Worms.

Take Venice treacle, half an ounce, worm ſeed powdered, two drachms; hepatic aloes, one drachm; oil of wormwood, twenty drops. Make them into a poultice, with as much as is ſufficient of honey.

This is proper for young children troubled with worms, and that have large ſwelled hard bellies; and who will not uſe other means. It looſens the belly, and makes it ſhrink and ſoften.

Cataplaſma

Cataplaſma ad Hydropem.

A Cataplaſm againſt the Dropſy.

Take freſh cow-dung, one pound; white bryony root freſh gathered, half a pound: bay-berries powdered, four ounces; cummin ſeed, and flower of brimſtone, of each two ounces; hog's lard, three ounces. Make all into a poultice, with as much as is ſufficient of ſtrong lees.

This is good to ſoak out the water in the legs, by wrapping them up in it warm, and ſhifting it often; to which purpoſe ſcarifying is frequently neceſſary. It may alſo be laid to the belly in a tympany; but this is very troubleſome.

Cataplaſma Diureticum.

A Diuretic Poultice.

Take juice of onions, parſley, ſmallage, fennel, of each two ounces: crumb of white bread, as much as is ſufficient.

This is to be applied to the lower part of the belly, in obſtructions of urine; and will do the more ſervice, if an emollient fomentation be uſed before it, and the perinæum be rubbed over with oil.

Cataplaſma Synanchicum.

A Poultice againſt Quinſies.

Take album græcum, one ounce; pulp of the conſerve of roſes, two ounces; ſyrup of white poppies, as much as ſufficient.

This is to be ſpread very thick, and applied to the throat, from ear to ear, and renewed every ſix or ſeven hours, or oftener, if dry.

Cataplaſma Stomachicum.

A Cataplaſm for the Stomach.

Take Venice treacle ſix drachms; powder of cinnamon and cloves, of each one drachm; oil of mint, ſix drops; oil of wormwood, two drops; vinegar, as much as is ſufficient. Or,

Take Mithridate, one ounce; powder of mint, two drachms; cinnamon, one drachm; oil of cinnamon and mint, of each three drops; oil of mace by expreſſion, half a drachm; ſpirit of lavender, two drachms; vinegar, as much as is ſufficient, Or.

Take pulp of quinces boiled in vinegar, two ounces; powder of cinnamon and balauſtines, of each one drachm and a half; of mint, two drachms; oil of cloves, nutmegs and amber, of each four drops; ſpirit of lavender, as much as is ſufficient to make a poultice.

In a great debility of the ſtomach, when it cannot retain the food, theſe will greatly ſtrengthen the fibres, and aſſiſt internal means. They ſhould be applied hot, and frequently renewed.

Cataplaſma Laterale.

A Cataplaſm againſt the Pleuriſy.

Take meal of linſeed, ſix ounces; of the meal of fenugreek and cummin, of each one ounce and an half; honey, two ounces; linſeed oil, enough to bring them into a conſiſtence.

This laid hot to the ſide upon the affected part, will wonderfully diſcuſs the obſtructed humours, relax the corrugated fibres, and promote tranſpiration and expectoration. Some authors of good credit affirm, that butter and cummin ſeed applied to the breaſt will be taſted in the mouth; and this ſeems not ſo ſtrange to thoſe who are acquainted with animal tranſpiration; which is ſhewn by a multitude of inſtances, of the truth whereof we have too many proofs to call them in queſtion. For many of this claſs, and particularly

ticularly onions, from outward application, will ſo penetrate into the ſkin, and be taken up by the blood, as to prove diuretic, and make the urine ſmell in the ſame manner as when they are eaten.

Cataplaſma Emolliens.
An Emollient Cataplaſm.

Take pulp of caſſia, one ounce; elder ointment, two ounces; ſperma ceti, half an ounce; powder of agaric and album græcum, of each half an ounce. Make them into a cataplaſm.

This is a better medicine than the *cataplaſma ſynanchicum* above, which is from Bates's Pharmacopœia, for the quinſey, or any inflammatory ſwellings of the throat; but it is ſo unctuous, that the heat will make it apt to get through a cloth, unleſs it be many times doubled.

Cataplaſma Sambucinum.
A Cataplaſm of Elder.

Take green leaves of elder, four ounces; cut and boil them in milk till ſoft; ſtrain away the milk, and to the maſh add ſoft ſoap, one ounce; ſpread it upon a double cloth; ſtrew it over with ceruſe, and apply it warm.

This ſeems but an odd mixture; for the ſoap is very fretting and penetrating, and the ceruſe is much the contrary; for which the common excuſe is, that they qualify one another: but it is more commendable to have a compoſition as near of a piece as conveniently can be: in the room of this therefore take the following.

Cataplaſma.——Another.

Take green leaves of elder, four ounces; boil them in milk till very ſoft, then ſtrain out and beat them to a maſh, to which put ointment of elder flowers, two ounces; ointment of poplar buds, one ounce; camphor in fine powder, one drachm. Make all into a poultice.

In all inflammatory ſwellings, ſuch as are called the St. Anthony's fire, this is an admirable medicine; and it will, to a wonder, cool, eaſe, and relax the part; ſo that the humours may either tranſpire or return by the refluent blood into the common maſs, thence to be rejected by ſome convenient outlet. But unleſs a caſe be very ſlight, outward applications are by no means to be truſted alone: for ſometimes both bleeding, purging, and bliſtering, are alſo neceſſary, and generally ſome of them.

Cataplaſma Hæmorrhoidale.
A Poultice for the Piles.

Take yolks of eggs boiled hard, N° 4; oil of amber, two ſcruples; linſeed oil, as much as is ſufficient.

This is to cool the piles when inflamed and angry; and it is ſofter much than many more reſtringent things generally uſed in ſuch caſes.

Cataplaſma Refrigerans.
A Cooling Poultice.

Take pulp of baked or roaſted apples, one ounce; white bread boiled in milk, and gently ſqueezed, half an ounce; the white of one egg well beaten up, and Rhaſis's white troches powdered, two drachms. Mix them into a poultice with as much as is ſufficient of ſtarch.

This is intended for ſore inflamed eyes, and is to be ſpread upon a fine cloth pretty thick, and laid upon them going to bed.

Cata-

Cataplaſma ad Paronychiam.

A Poultice againſt Whitloes.

Take the yolk of one new laid egg, and add to it common roſin in fine powder, as much as is ſufficient; balſam of Peru, ſix or ſeven drops; and mix well together.

This is ſaid to be an excellent medicine for the purpoſe its title expreſſes; and to forward the ſuppuration and diſcharge of the matter.

SECT. XIV.

Of Anomalous Forms.

BEſides thoſe forms which we have given under the foregoing diviſions, there are alſo others which ſometimes an extraordinary exigency calls for, and which we ſhall here collect into one ſection; not with any regard to the curative intention, as in the foregoing, but as they occur from authors and the preſent practice.

Balſamum Arthriticum.

A Gout Balſam.

Take oil of olive, eight ounces; oil of vitriol well rectified, two ounces. Mix them in an open glaſs veſſel.

This comes recommended in the works of a phyſician who was the patron of acids. Schroder has the ſame, with the *adeps humanus:* however, it is not worth contending about; for it is ſo ſharp as to excoriate the place it is rubbed upon; and is as likely to fix and bind up the offending humours in the parts, or repel them, as to fit them for tranſpiration. As ſoon, almoſt, as theſe are mixed, they work into ſtiff reddiſh balſam, that will cut like butter, or the Lucatellus's balſam.

Balſamum Nephriticum.

A Nephritic Balſam.

Take oil of ſweet almonds newly drawn, four ounces; oil of white poppy ſeed and linſeed, of each two ounces; oil of nutmeg by expreſſion, half an ounce; oil of petre, five drachms; balſam of Peru, two drachms; oil of juniper, four ſcruples; oil of aniſeed, one ſcruple; oil of vitriol, one ounce; camphor, two ſcruples. Mix them together.

This is vaſtly preferable to the former, becauſe the penetrating aromatic oils not only help to diſlodge and diſſipate the peccant humors, but alſo to warm and ſtrengthen the fibres: and in the gout and rheumatiſm, where they fix with great pain, this balſam will do good ſervice. It is likewiſe proper to rub paralytic limbs with, becauſe it ſtimulates and ſpurs the parts to motion, whereby the nervous fluid is better diſpenſed to give new ſenſe and life.

Juſculum ad Tabem.

Broth for a Conſumption.

Take a capon picked, drawn, and cut into pieces; ſheeps trotters and calves feet, of each N° 4; ſhavings of hartſhorn and ivory, of each half an ounce; yellow ſanders, three drachms; dates, N° 40; raiſins ſliced and ſtoned, four ounces; pearl barley, one ounce; boil theſe in ſpring-water, one cong.

to four pounds; adding, when it is almoſt boiled enough, ox-eye flowers dried, leaves of colts-foot, maiden-hair, ſage, of each one handful; mace, half a drachm; one nutmeg; and of Malaga ſack, one pound; then ſtrain out the liquor for uſe. Or,

Take conſerve of red roſes, four ounces; comfrey-root, two ounces; ſhavings of hartſhorn, one ounce; maiden-hair, one handful; ſage, two handfuls; plantane, half an ounce; raiſins of the ſun, two ounces; dates N° 4; boil theſe together, with a chicken, and the ſcrag-end of a neck of mutton chopped to pieces, and three ounces of bread, in as much as is ſufficient of ſpring-water: when it is cold take off the fat. Or,

Take craw-fiſh, N° 100; bruiſe them to pieces alive in a mortar; then boil them in two pounds of ſpring-water to one pound and an half; adding towards the laſt, two blades of mace, one nutmeg, and of old Malaga wine, half a pound; and ſtrain it for uſe. Or,

Take the tails of twenty craw-fiſh, candied eryngo root, one ounce; the bottom of a white loaf, raiſins ſliced, and ſtoned, two ounces; liquorice, three drachms; boil in three pounds of water to two pounds, and ſtrain for uſe.

Any of theſe may, as particular circumſtances of the appetite direct, be made uſe of to reſtore perſons, recovering from long waſting diſtempers, and wherever a conſumption is threatened; for where the ſtomach is weak, it cannot digeſt ſolid and groſs food, and therefore a diet of rich nouriſhment is required, that needs but little trouble to aſſimilate and diſtribute it to the ſeveral parts of the body, to recruit what has been worn away. In hectic habits theſe are of great ſervice, becauſe they help to give a conſiſtence and ſoftneſs to the humors, whereby they neither run ſo faſt in the canals, nor waſh away with them the ſubſtance of the parts, but, on the contrary, leave good nouriſhment behind. The craw-fiſh particularly, as indeed moſt ſhell-fiſh, are greatly nouriſhing, and have a peculiar quality of ſmoothing and ſweetening acid and ſharp humours; as is even apparent in their deadening almoſt the acidity of vinegar in mixture, by covering its points with a ſoft oily ſubſtance. And for this reaſon theſe are of eminent advantage in ſcorbutic conſtitutions, and come next to the viper, whoſe excellencies for theſe purpoſes, ſee Part I. and amongſt the preparations at the latter end of that part: and with that they likewiſe agree in invigorating, after a peculiar manner, the organs of generation, and diſtending them with ſuch a ſemen, as not only more frequently prompts to venery, but makes thoſe intercourſes more prolific, and ſuſtained with leſs waſte of ſtrength. For all ſuch purpoſes theſe are to be choſen and uſed at diſcretion.

Epithema cum Calce viva.

An Epithem with Quick-Lime.

Take quick-lime, two ounces; honey, as much as is ſufficient to make it into a fit conſiſtence to be ſpread upon leather.

This term is, indeed, fit for any form externally to be applied, and is therefore common in lotions or cataplaſms, or any other topics. If this is not carefully mixed, it will not be ſmooth and eaſy upon the part, becauſe of the lumps which it is apt to run into: it is intended againſt gouty and rheumatic pains; and if ſoap, camphor, and opium were

were added to it, in due quantities, it would make an admirable compoſition for ſuch purpoſes; for it penetrates prodigiouſly, and rarifies the part ſo much, that it will give vent to the offending humors by perſpiration, without a poſſibility of repelling them; wherein is the greateſt danger in ſuch caſes, eſpecially in the beginning of a paroxyſm. For the expulſion, or rather attraction of ſuch tormenters therefore, the following may be made uſe of.

Epithema Saponaceum.

An Epithem with Soap.

Take ſpirit of wine rectified, four ounces; ſpirit of ſcurvy-graſs, two drachms; ſpirit of ſal ammoniac, ſix ſcruples; Venice ſoap ſcraped thin, one ounce and a half; camphor, ſix drachms; opium, one drachm; ſaffron, half a drachm; digeſt them three or four days, and decant the liquor for uſe. Or,

Take of the foregoing with quick-lime, and add to it black ſoap, one ounce; opium and camphor, of each two drachms; ſaffron, and oil of ſpike, of each one drachm.

Either of theſe, rubbed in upon the part, will infallibly anſwer the expectation of ſuch as know how, and when, to direct them; but things of this efficacy are not in the talent of every one who undertakes ſuch caſes.

Epithema cum Saccharo Saturni.

An Epithem with Sugar of Lead.

Take ſugar of lead, one ounce; the beſt white-wine vinegar, half a pound; digeſt together till all the ſugar is diſſolved.

This is recommended to ſtop any flux of blood, if it be applied to the region of the heart by a linen cloth dipped into it; but at firſt its extreme coldneſs gives a perſon a quaking like the horror of an ague fit; and as ſoon as it grows warm, it is to be let cool, and dipped afreſh.

Epithema Cephalicum.

A Cephalic Epithem.

Take of Hungary water, ſix drachms; compound ſpirit of lavender, and ſpirit of ſaffron, of each two drachms; apoplectic balſam, one ſcruple; oil of cloves, ten drops.

This is directed to rub the temples, noſtrils, &c. in ſwooning fits, or in any ſudden diſorders from a cauſe, whoſe ſeat is in the nerves; becauſe it warms and aſſiſts their tonic motions.

Epithema Stomachicum.

A Stomachic Epithem.

Take ſpirit of wine camphorated, four ounces; Andromachus's treacle, two drachms; oil of cloves, fifteen drops; oil of nutmegs, ten drops; and of mint, four drops.

This is, in virtue, much like the ſtomachic fomentation, before given, which ſee; and may be rubbed upon the pit of the ſtomach, and parts all around, with a warm hand at any time.

Epithema Anodynum.

An Anodyne Epithem.

Take ſpirit of wine, four ounces; camphor, one drachm; opium, two drachms; ſaffron and cloves, of each a drachm.

This is much of the ſame virtue as that with ſoap above, though not quite ſo ſearching; but it is cleanlier to uſe for ſuch as require nicer applications.

Sternu-

Sternutatorium cum Turpetho Minerali.

A Sternutatory with Turpeth Mineral.

Take turpeth mineral, half a ſcruple; powder of liquorice, half a ſcruple; numeg, one ſcruple; oil of roſemary, two drops. Mix them together.

This is very powerful in all ſuch illneſſes, of the head, as proceed from tough viſcid matter hanging upon the glands and ſinuſes, and have been of long continuance and obſtinate; for it brings it away in ſuch plenty, that it is almoſt like a ſalivation; but it is apt to make the noſe ſore, and therefore the noſtrils ſhould be rubbed ſometimes with a little oil of almonds, or warm milk.

Sternutatorium cum Euphorbio.

—Another with Euphorbium.

Take powder of euphorbium, half a ſcruple; white-wine, one ounce; ſpirit of ſcurvy-graſs, two drachms; oil of marjoram, two drops; ſhake all together.

This with the euphorbium, is too ſharp and violent to be truſted to ſnuff up: and therefore it is beſt to dip a little cotton and juſt thruſt it into the noſtrils. Ludovicus is ſo timorous, as to order but half a drachm in water, half a pound to be boiled and ſtrained, and even then to be uſed but very ſparingly.

Sternutatorium cum Succis.

With Juices.

Take leaves of honey-ſuckle, four handfuls; primroſe, three handfuls; betony, two handfuls; marjoram, one handful; bruiſe them all together, and preſs out their juice.

This is much milder than either of the former, and may be uſed in any diſorders and ſtoppages of the head; either by ſnuffing a little out of the hollow of the hand, or blowing it up the noſtrils with a quill; and theſe liquid ſnuffs have this advantage over powders, that they do not clog up and heat the noſe.

Sternutatorium cum Marjorana.

—With Marjoram.

Take of an infuſion of marjoram made like tea, one ounce; diſſolve in it ſalt of vitriol, ten grains; and put it in a glaſs for uſe.

This is directed and much recommended by Etmuller; and it may be made ſtronger or weaker, by a greater or leſſer quantity of water, as is found needful. But, of all the medicines to this purpoſe, the following is moſt preferable.

Sternutatorium cum Sale Volatili Oleoſo.

——With Sal Volatile.

Take ſal volatile ol. two drachms; ſpirit of lavender, twenty drops; damaſk-roſe water, or orange flower water, half an ounce. Mix.

This is both mild and grateful, and very refreſhing to the head, as well as a gentle provoker of what is ſecerned by the noſe.

Expreſſio Aſthmatica.

An Aſthmatic Expreſſion.

Take live millepedes 150, bruiſe them in a marble mortar, adding water of hyſſop, four ounces; of piony compound, an ounce; and in the ſtrained liquor diſſolve gum ammoniacum, half a drachm; and add tincture of Benjamin, two drachms; ſyrup of balſam, an ounce; oil of aniſeed, a drop; and as much ſal ammoniac as will make it quick,

If this be well managed, the oil of aniſeed will mix, otherwiſe it will lie in a ſpot at top, and pour off with one doſe, which is to be a ſpoonful, two or three times in a day, as ſymptoms are urgent; but the whole is an unſightly and unpleaſant medicine to the taſte, tho' the ſcent is grateful; it is very detergent and diuretic, and therefore cannot fail to open the breaſt in aſthmas and all infarctions of the lungs.

Expreſſio Icterica.

An Expreſſion for the Jaundice.

Take live millepedes N° 100; ſaffron cut ſmall, half a ſcruple; nutmeg, half a drachm; white ſugar, half an ounce; beat all theſe well together, and then pour upon them the laſt runnings of *aqua mirabilis* (or, for want of that, milk-water) four ounces; and magiſterial worm-water, an ounce; and after due mixture ſtrain the liquor out by ſqueezing hard.

This is good for the purpoſe its title expreſſes, and is of ſervice in almoſt all chronic diſorders that foul the glands. This quantity ſerves for two doſes, half to be taken in the morning, and the reſt at four o'clock in the afternoon.

Expreſſio Millepedum ſimplex.

A ſimple Expreſſion of Millepedes.

Take live millepedes and white ſugar, of each three ounces; beat them well together in a marble mortar, and pour upon them a pound of white wine, which ſtrain out again by hard ſqueezing.

Dr. Fuller, who had this in his *Pharmacopœia Extemporanea*, ſays, that millepedes abound in a volatile ſalt, as all inſects do; that they incide and diſſolve tough clammy phlegm whereſoever it ſticks, attenuate, exalt, and depurate the blood, penetrate into the glands, nerves, fibres, ſmalleſt pipes and paſſages, piercing thro' obſtructions, deterging, cleanſing, and comforting, and are famous for their diuretic quality; they are uſed in caſes of gravel, ſand, dropſy, jaundice, king's-evil, cough, phthiſic, conſumption at the beginning, hypochondriac affections, ſcorbutic joint-pains, and dimneſs of ſight; they procure and preſerve a good ſkin and fine complexion, and are much celebrated for an internal medicine in ſore breaſts, malignant phagedenic ulcers and cancers; they ſeem not convenient for a hot thin blood; and it is reported, that, taken in large quantities over night, they will give a ſcalding of urine, and that when they do ſo, their true remedy is balſam capivi. The expreſſion may be given for ſome time together, about three ounces every morning.

Expreſſio Icterica altera.

Another.

Take leaves of celandine, two handfuls; green juniper berries an ounce; to theſe well bruiſed add ſaffron a ſcruple; white-wine a pound; *aqua mirabilis* two ounces: after it has ſtood cold twelve hours ſtrain out the liquor, and ſweeten it with ſyrup of the five opening roots, an ounce and a half; and keep it for uſe.

This is a milder detergent than the former, and may be ſufficient in ſlighter caſes to be taken three ounces thrice a-day; or it may be a very convenient diluter, or vehicle for ſome other more ſolid forms of the ſame intention, in the moſt obſtinate jaundice.

Ex-

Expreſſio Cephalica.

A Cephalic Expreſſion.

Take freſh-gathered male piony roots, four ounces; miſletoe cut ſmall, an ounce; Canary wine, a pound; give them a hot and cloſe infuſion for two hours; then having ſqueezed out the liquor, add to it compound piony water, and compound ſyrup of pionies, of each two ounces; tincture of caſtor two ſcruples.

This is a good medicine where it happens conveniently to procure the ingredients as directed, and may be depended upon to do ſervice in all diſorders from a nervous origin, and where cephalics are indicated; three ounces may be taken every night and morning.

Expreſſio Scorbutica.

A Scorbutic Expreſſion.

Take brook-lime, water-creſſes, dandelion, clivers, of each two handfuls; oranges cut to pieces with their peel N° 4; bruiſe them together, and add white-wine and elder flower water, of each a pound; which after ſome time ſtrain off, and ſweeten for uſe.

This is good in hot ſcorbutic conſtitutions, and ought to be drank for a month together at leaſt in the ſpring-time every morning about ſix ounces; uſing a ſuitable diet.

Expreſſio Styptica.

A Styptic Expreſſion.

Take common daiſies, yarrow, and nettles, of each three handfuls; bruiſe them, and pour upon them plantane-water (or what is as good, ſpring-water), twelve ounces; after ſtanding an hour ſtrain it, and add *ſal prunel.* two drachms; and ſweeten it with ſyrup of dried roſes two ounces, for uſe.

This is good to cool and thicken the blood, and is principally ſerviceable in hæmorrhages at the noſe, or ſpitting of blood, making bloody urine, or an overflowing of the menſes; and may be given four ounces, three or four times a-day, as needful.

In country places remote from the ſhops, and inconvenient to manage ſimples in a more elaborate or elegant manner, divers good remedies may be ſupplied this way, where the materials are to be found; for nothing can be more ready and expeditious than to bruiſe a plant and preſs out its juice; but where there are better opportunities in great towns, ſuch preſcriptions would be deemed not very neat, nor are they agreeable to take.

Frontale Cephalicum.

A Cephalic Frontal.

Take roſe-cake made by the diſtillation of the flowers in a cold ſtill, fry it in vinegar, and ſprinkle it with powder of nutmeg, a drachm; zedoary, half a drachm, and camphor, two ſcruples.

This is to apply to the forehead and temples in violent hot heating pains of the head, and is to be refreſhed with vinegar as often as it grows dry, until it has anſwered its end.

Frontale Maſtachinum.

A Maſtich Frontal.

Take maſtich and frankincenſe in powder, of each two drachms; white chalk, bean-meal, of each half an ounce; white of eggs well beaten, oil of roſes, of each ſix drachms; and as much vinegar as is neceſſary to make it into a conſiſtence to ſpread upon cloth.

This is to be uſed to the forehead when the eyes are afflicted with rheums, and that for prevention as well as cure; for Dr. Fuller ſays it ſticks very faſt, compreſſes and conſtringes the little tubuli, and internal paſſages, and ſo hinders the deflux of humors; for the parts about the eyes are ſo conſtituted, both by their ſpongy fabric and declining ſituation, as to be apt to receive whatever humors flow down from either the pericranium or neighbouring muſcles, inſomuch that it is not unuſual for a blow upon the head to ſettle down into a black eye.

Frontale Camphoratum.

A Frontal with Camphor.

Take vinegar of roſes, two ounces; compound ſpirit of lavender (in which have been diſſolved opium and camphor, of each half a drachm), an ounce. Mix for uſe.

The camphor in this will ſeparate, and therefore muſt be well ſhook at the time of uſing. There are others of this denomination, but ſeldom uſed; and this laſt is the moſt eaſily made, and the neateſt and moſt effectual to waſh the head with in violent beating pains, or in the burning heat of a fever attended with a delirium.

Suffimentum Hyſtericum.

An Hyſteric Fume.

Take aſa fœtida an ounce; beſt white wine vinegar, a pound; boil them in a pot with a narrow mouth, and let the patient hold her head over it with her mouth open.

This is an untoward application, and ſeems juſtifiable only in caſes where other means cannot be uſed; tho' in ſome kinds of hyſteric convulſions, ſteams, this way received up the noſe, have very ſudden and remarkable effects.

Suffimentum Catarrhale.

A Fume for a Catarrh.

Take olibanum, amber, Benjamin, ſtorax, gum guaiacum, and balſam of Tolu, of each two ſcruples. Make all into a groſs powder to burn.

Where the defluxion is very thin, and has much of its cauſe in the laxity of the glands, ſuch means may do ſervice, by conſtringing the parts and repelling the flux, inſomuch that it may be thrown off by other more proper outlets; but where there is an aſthma and very weak lungs, there is great reaſon to fear miſchiefs, becauſe checking the rheum will thicken it, and make it paſs with great difficulty through the pulmonary veſſels, when in the courſe of circulation it comes thither; the following, therefore, may be leſs inconvenient, though this may alſo be uſed in the ſame manner to burn upon coals, only receiving the ſteam with a cap before it is put on, eſpecially at night going to bed.

Suffimentum. ——Another.——

Take gum guaiacum, gum juniper, maſtich, myrrh, of each a drachm; cloves, two drachms; balſam of Peru, ſixteen drops. Make all into a coarſe powder.

Filling a thick cap frequently with the ſteam of this, burnt upon coals, may, with ſome time uſing, ſtrengthen the fibres, and particularly the glands about the head, whereby they will not be liable to thoſe ſuffuſions of lymph, which ought

ought to be remedied by other ſecretions, and chiefly by urine.

Suffimentum ad procidentiam Ani.
A Fume againſt the falling down of the Fundament.

Take frankincenſe, maſtich, amber, and cloves, of each a drachm; red roſe leaves, balauſtines, of each two drachms. Make them into a groſs powder.

This is to be burnt upon a chafing-diſh of coals under a chair with a hole in it, over which the patient is to ſit with the bare part to it, after the gut is thruſt up, and by ſuch means continued, will the ſphincter at laſt get ſtrengh enough to keep it up without any ſuch help. In a teneſmus it is alſo of uſe.

Suffimentum ad procidentiam Uteri.
A Fume againſt the falling down of the Womb.

Take myrrh, maſtich, cinnamon, and ſpikenard, of each a drachm; mint and red roſes, of each two drachms; cloves, zedoary, and pimento, of each half a drachm. Make all into a groſs powder to burn.

This is to be uſed as the preceding, and in the ſame weakneſs it is alſo good, as that is of ſervice in this; theſe are very eaſy remedies, and might be beneficial in many uterine weakneſſes, where perſons are too ſqueamiſh or prejudiced to take what is neceſſary of medicines another way. Fumes from hot aromatic liquors, which are ſometimes directed to the ſame purpoſes, are hardly ſo efficacious as thoſe which ariſe from the burning of dry ingredients, becauſe their moiſture prevents their being ſo immediately reſtringent.

Suffimentum Odoriferum.
A ſweet-ſcented Fume.

Take Benjamin, an ounce; ſtorax, half an ounce; labdanum, two drachms; muſk and ambergriſe, of each five grains. Make them into a fine powder, to mix for candles.

The ſcent of this, burnt in places apprehended to be contagious, or infected with any noiſome ſteams, is not only pleaſant but beneficial; they are likewiſe very agreeable to light pipes with.

Suffimentum.——Another.——

Take cypreſs roots and *calamus aromaticus*, of each an ounce; roſemary a handful; ſtorax and Benjamin, of each two drachms; frankincenſe two ounces. Make all together into a groſs powder to burn.

This is uſeful to take away the ill ſcent of a room, from what cauſe ſoever it be; and, in a time of peſtilential contagion, would be of good ſervice to burn for an hour or two every morning in all the rooms of a houſe, or ſome convenient place where the whole may be filled by its ſteams; and by this caution many families, who lived in town all the time of the London ſickneſs, eſcaped being hurt by it.

Litus Aluminoſus.
A Litus with Alum.

Take crude and burnt alum, of each two drachms; Armenian bole, and Japan earth, of each a drachm; oil of ſaſſafras, ſix drops; honey of roſes, to make it of the conſiſtence of honey.

This is to rub ſpongy ſcorbutic gums with, that are apt to bleed upon the leaſt touch, and leave the

teeth looſe; they ſhould be done ſo every morning, as long as there is any occaſion.

Litus cum Spermate Ceti.

A Litus with Spermaceti.

Take ſpermaceti, two ſcruples; oil of nutmeg by expreſſion, a ſcruple; ſweet freſh butter, half an ounce; the yolk of one egg; white chalk waſhed in roſe-water, a drachm; and, with a ſufficient quantity of honey of roſes, make it into a proper conſiſtence.

This is recommended for the thruſh, which young children are much ſubject to, eſpecially with long looſeneſſes.

Litus detergens.

A detergent Litus.

Take verdegriſe, a drachm; honey of roſes, an ounce; vinegar, half an ounce; boil to the conſumption of the vinegar; and when cold, add powdered burnt alum, two ſcruples; maſtich, frankincenſe, and myrrh, of each a ſcruple. Mix.

This is alſo good for ſcorbutic gums; and it cleans the mouth, hardens the ſpongy relaxed glands, and prevents ſtagnation and eroſion by ſalt ſharp humours. Or,

Take Ægyptiacum, 3 drachms; honey of roſes, half an ounce; burnt alum in fine powder, half a drachm; ſpirit of vitriol, ten drops. Mix.

This is much readier to be had than the former, becauſe the Ægyptiacum is a common ſhop-medicine; and this is what is generally preſcribed for ſore mouths, eſpecially when they grow full of white ſpecks; which, if not rubbed well with ſome ſuch thing, will corrode and ſpread a great way with heat and pain. This happens frequently to children, when the pain of breeding teeth brings ſo much ſaliva into the mouth, that it is apt to ſtagnate long enough to erode the glands; and from ſuch cankerous ſpecks as will diſappear by rubbing three or four times in a day with this, by a rag tied upon a ſkewer. It is alſo a good dreſſing for foul ulcers, that turn out with fungous lips, which it eats down, and reſtrains the colluvies of humours.

Lixivium cum Calce.

A Lixivium with Lime.

Take aſhes of wormwood, twelve ounces; lime-water, and white wine, of each four pounds. Infuſe in a gentle warmth twelve hours; then filter it for uſe.

This is a notable and good diuretic, and is therefore not only of ſervice in dropſies, and all tendencies thereto, but alſo in foul ſcorbutic habits, that deform the ſkin with blotches; and it will aſſiſt even in the drying and cure of old ulcers.

Lixivium Hydropicum.

An Hydropic Lixivium.

Take ſifted aſhes of broom, and bean-ſtalks, of each two ounces: juice of parſley, four ounces; white wine, four pounds: make a lixivium; to which add, after it has been cleared down, and poured off fine, ſalt of tartar, one drachm; ſaſſafras-wood, one ounce; bay-berries, juniper-berries, ſeeds of daucus, muſtard, cummin, and aniſe, well bruiſed, of each half an ounce; infuſe cold, for two days; then ſtrain, and add comp. horſe-radiſh water, four ounces.

This is much for the ſame purpoſe

poſe as the former; but there is no great need of ſuch variety of lixivious ſalts, for any one will ſerve as well; and it is no great matter of what that is made, ſo that if it be well burnt, and has not imbibed the moiſture of the air, which all of them will do with a little time keeping, unleſs cloſe ſtopped in a bottle. This is moſt diuretic and drying; and is therefore effectual to diſcharge a corpulent conſtitution from ſuperfluous humidities, it both increaſing the ſecretions by urine, and inſenſible perſpiration. It may be drank as a diet-drink, four ounces three or four times a-day.

Pilæ Maſticatoriæ.
Spitting Balls.

Take maſtich, three ounces; pellitory of Spain, and ſtaveſacre, of each two drachms; angelica-root, half a drachm; cubebs and nutmegs, of each one drachm; euphorbium, half a ſcruple; wax, a much as is ſufficient to make them into balls or pellets.

Theſe are contrived for chewing in the mouth, to promote ſpitting; for, by their hot pungent quality, they prick the fibres, and make them compreſs the glands, whereby their contents are faſter thrown out into the mouth; and ſo a drain is promoted of ſuch watery pituitous humours from all ſuch parts of the head, as have any conſent therewith. Things of this kind may, therefore, be very convenient for thoſe who require to have ſuch diſcharges promoted, and cannot comply with ſmoaking tobacco, or for whom that deleterious plant may not be proper. In comas, lethargies, epilepſies, palſies, and in ſhort, all diſorders from a moiſt temperament of the brain, theſe are to be uſed with good ſucceſs. If the euphorbium be thought too hot in this recipe, it may be left out.

Nodulus Hyſtericus.
An Hyſteric Nodule.

Take caſtor in fine powder, half a drachm; aſa fœtida, one ſcruple; oil of amber, half a ſcruple. Mix, and tie them up in a piece of thin cherry-coloured ſilk, pretty looſe. Or,

Take galbanum, aſa fœtida, and powder of Ruſſia caſtor, of each one ſcruple; volatile ſal ammoniac, half a ſcruple; oil of amber, ten drops. Mix, *ſ. a.*

Theſe are very convenient for preſent uſe, to hold under the noſe of perſons in hyſteric convulſions; and they are much better than the ſcent of a bottle, becauſe much ſtronger; but they will not long retain their odour.

Nodulus Cephalicus.
A Cephalic Nodule.

Take ſpecies diambræ, half a drachm; oil of cloves, lavender, and marjoram, of each three drops; volatile ſal ammoniac, one ſcruple; rub them together, and tie them up, *ſ. a.*

This is grateful and refreſhing to the head, and may be of ſervice in faintings and depreſſions of the ſpirits, by holding it frequently under the noſe. After the ſame manner may be contrived many others of the like kind, and varied according to the different exigencies and liking of the patient; but they are proper to be preſcribed only in acute caſes, as when the ſpirits have been quite worn out by a fever, or waſted by ſome great evacuation, becauſe they ſoon decay; though in ſuch caſes they are neat enough, and are often very taking with a perſon, if neatly

ordered with a handſome coloured ſilk.

Fanis de Vipera.

Viper Bread.

Take powder of viper's fleſh, one ounce; the mealy part of ſarſaparilla finely powdered, three ounces; fine wheat-flour, one pound; yolk of an egg, a little yeſt, and as much as is ſufficient of milk, to make cakes, or loaves, to be baked in an oven.

This is ordered to be uſed as common bread, in the worſt ſcorbutic habits, and is reported to prevail even in the leproſy and venereal infections; yet we can have but a ſmall opinion of the viper's fleſh dried, becauſe its volatile ſalt, in which chiefly conſiſts its virtues, is by that means quite loſt, or in a great meaſure. If there be any virtue in the ſarſa, it is certainly beſt obtained this way; becauſe it has been much ſuſpected whether it gives any to a tincture. As to the reſtorative properties of the viper, which ſupply nouriſhment, there may poſſibly be ſomewhat conſiderable in this; becauſe that conſiſts in ſuch parts as are not ſo apt to fly away in drying.

There are many other ingredients of different intentions ordered after this manner, by phyſical writers; but they are ſo entirely out of the preſent practice, that they are not worth our retaining here.

Paſta Hypoglotida.

A Paſte for Hoarſeneſs.

Take white ſugar-candy, four ounces; oil of ſweet almonds, one ounce; or as much as is ſufficient to make into a paſte, by beating them well together in a marble mortar.

This can hardly be made into a due conſiſtence, without ſomething more adheſive in it. It is chiefly good in a hoarſeneſs, to hold and melt in the mouth frequently; though it may alſo do good ſervice in many other diſorders of the breaſt, and particularly in aſthmas, and difficulty of breathing, eſpecially when they proceed from taking cold. It may be uſed at diſcretion.

Paſta Hippiatra.

A Paſte for Horſe Balls.

Take powder of fœnugreek, aniſeeds, cummin-ſeeds, carthamus, elicampane, colt's-foot, flower of ſulphur, of each three ounces; juice of liquorice, one ounce; oil of cloves and honey, of each eight ounces; Genoa treacle, twelve ounces; oil of aniſeed, one ounce. Mix all together, and with one pound and a half of wheat-meal, or as much as is ſufficient, make it into a paſte, which roll into balls, about as big as a common waſh-ball.

There are many recipes abroad of this kind; and the name of the late celebrated Dr. Radcliff does honour to one of them; but there are none we have ever met with of more general uſe than this, in coughs and colds: one ball may be diſſolved in water, or new warm malt-wort, which is much better, and given to a horſe to drink every day, for twelve or fifteen days together, or as long as there appears occaſion.

Turundæ Odontalgicæ.

Pellets for the Tooth-Ach.

Take aſa fœtida, eight grains; camphor, dragon's blood, of each one grain; oil of pepper, two drops.

Dr. Fuller gives this; but it ſeems to be a very ungrateful me-

dicine for ſuch an uſe, as well as unlikely to do any ſervice, unleſs by the heat of the oil of pepper; which, by the way too, is hardly ever made, and therefore we muſt prefer either of the following.

Take maſtich, one ſcruple; camphor and opium, of each two grains; oil of origany, one drop. Make them into a pellet. Or,

Take frankincenſe and Matthews's pill, of each ten grains, and with oil of cloves, one drop, make them into a pellet.

Either of theſe ſtopped into the hollow of an aching tooth, or between that and the next, will often procure eaſe. But ſometimes, where the pain is occaſioned only by the chill air paſſing through a ſmall hole to the bottom of the tooth, which often happens, then ſtopping it with a little maſtich, or olibanum, is as good as any thing; as likewiſe is the ſtorax pill, if its conſiſtence be good. Where the pains ariſe from a flux of ſharp watery humours upon thoſe parts, they are ſometimes drawn away, by holding a piece of pellitory of Spain, or ſtaveſacre in the mouth; which, by its ſtimulating heat, draws it out of the glands, and at laſt blunts the acute ſenſe of the nerves.

Piſa Lutea.
Yellow Peaſe.

Take yellow oaker, half an ounce; Florentine orris-root, two drachms; yellow bees-wax, one ounce; Venice turpentine, as much as is ſufficient to make into a hard maſs, which muſt be formed into peaſe.

Theſe are intended to promote the running of iſſues when they grow dryiſh; becauſe they draw more than the common white peaſe. They are alſo of ſervice in leſſening ſome inflammations which are apt to attend them, by giving vent to the humours.

Piſa Rubra.
Red Peaſe.

Take vermillion, half an ounce; hermodactyls in fine powder, two drachms; yellow bees-wax, ſix drachms; Venice turpentine, as much as is ſufficient to make into a conſiſtence for peaſe.

Theſe draw more than the former; yet moderately enough.

Piſa Virida.
Green Peaſe.

Take verdigriſe, white hellebore, of each two ounces; cantharides, one drachm; root of Florentine orris, one drachm and a half; yellow bees-wax, ſix drachms; Venice turpentine as much as is ſufficient to make them into peaſe.

Theſe are yet much ſtronger, and will make way of themſelves without cutting, and are therefore not to be uſed for any other purpoſe.

If an iſſue is almoſt dried up, it is likewiſe ſometimes ſet running again by putting a piece of epiſpaſtic plaſter into it, inſtead of a pea; and rubbing a common pea with baſilicon or *linimentum arcæi*, will alſo frequently anſwer the ſame end.

Lapis de Goa.
Goa-Stone.

Take hyacinths, topaz, ſapphires, rubies, and pearls, of each an ounce; emeralds, half an ounce; oriental bezoar, white and red coral, of each two ounces;

muſk

muſk and ambergriſe, of each two drachms; leaves of gold, N° 40. Let all be levigated into a fine impalpable powder, and with roſe-water made into a paſte, which is to be formed in long or oval balls, and poliſhed.

This is generally brought to us from India, but whether exactly made according to this preſcription, is not certain. The chief reaſon why that of our own make is not ſo much in eſteem, is becauſe we have not that ſkill in the poliſh, and are more apt to admire what comes a great way; beſides, the bezoar bears ſuch a price here, that there is nothing to be ſaved by making it. It paſſes for an extraordinary cordial, and is alſo given in fevers as an alexipharmic; but ſuch qualities can proceed only from the ſweets, which herein are in large quantities. The doſe is from five grains to a ſcruple, or half a drachm. Many grate a little of it into punch, which the ſweets make very grateful, and of a pleaſant flavour; but it will much ſooner fuddle, and be longer before its influence wears off again for it.

Tinctura Roſarum.
Tincture of Roſes.

Take red roſe buds dried, with the whites cut off, half an ounce; infuſe them in two pounds of boiling water, in the manner of tea, for three hours, in an earthen or glaſs veſſel; then drop in thirty drops of oil of vitriol; ſtrain out the liquor, and ſweeten it with three ounces of fine loaf-ſugar for uſe.

When haſte will not permit it to infuſe ſo long as here directed, more roſes may be added, that may make it as ſtrong as if it had ſtood longer.

This is very proper, and makes a very grateful julep, in all caſes that require coolers and ſubaſtringents; and there is nothing better ſuited for drinking after boles or electaries of the bark; it likewiſe makes a very good gargle.

Directions for Preſcriptions.

AFTER a phyſician is ſupplied with neceſſary remedies, there is required ſome care and conſideration to manage them to the beſt advantage, both for the eaſe of the patient, and anſwering the intentions of cure.

In all chronic caſes, medicines are to be contrived as near to a diet as can be, and therefore the common drinks and foods are to be medicated as far as they will admit and the caſe requires; what medicinal forms ar requiſite ſhould be the moſt convenient for taking, and ordered at times beſt ſuited to the condition of living and conveniency of the patient; pills therefore, electaries, tinctures, or elixirs, are the moſt likely forms, becauſe they will keep, and may be ſo ordered in taking as to be of very little trouble; whereas boles or draughts, where there is a long continuance required, make ſuch a formidable ſhew, that very few will have patience to go through the courſe.

But

But in acute caſes, which are generally dangerous, there is required no ſuch regard, but all aſſiſtances muſt be called in that can be had, according to the exigency of the caſe; and as medicines of efficacy are concerned herein, they are moſt ſafely diſtributed into boles or draughts, that the patient may not be truſted to gueſs-work, but the doſe may be aſcertained to the greateſt exactneſs, and eſpecially where opiates are uſed; here no regard, or very little, is to be had to diet, but care taken to ſet all the helps to co-operate together, ſo that they interfere not with each other; thus a bole or a powder may be given every three, four, or ſix hours, with a draught, julep, or any other liquid form after it; and herein may be dropt ſpirits, tinctures, &c. of the like intention, and alſo into their common drink; the night doſes, or others if neceſſary, may be joined with an opiate; and in the intervals, where the aggravations of ſymptoms require, may be repeated the julep with ſuitable drops, as uſual: externals may be ordered at the ſame time; and if bliſters, becauſe they often occaſion ſtranguries and heat of urine, emulſions, notwithſtanding all that has been given before, may come in for a common drink.

What is farther neceſſary to add concerning extemporaneous preſcription may be contained in a little compaſs: all that may be ſaid concerning an uniformity, either in the intention, in the texture, or in the conſiſtence of a medicine, being as neceſſary here as in the more laboured preſcriptions; the chief therefore of what we have to attend to in this part is,

1. To contrive as many forms to go on together, as the exigencies of any caſe may require, in ſuch manner that they interfere not with one another. Thus in acute caſes, where helps are wanted from all quarters, boles, powders, or draughts may be directed at certain diſtances, at their intervals of taking ſupplied with juleps, apozems, emulſions, and the like, as circumſtances may call for them. But in chronic caſes, eſpecially where patients are liable to go about their affairs, all the means ought to be made as eaſy and efficacious as poſſible, elſe it is a great chance but that a croud of medicines, or their irkſomeneſs to take, tires the patient before any benefit can be received from them; ſo that in ſome circumſtances it may be eligible to do little, rather than nothing at all. The circumſtances likewiſe of perſons are no mean conſideration, ſo that where thoſe are narrow, not only a few, but the cheapeſt and moſt efficacious medicines ſhould be contrived. In ſhort, one very neceſſary caution is, never to make a remedy worſe than a diſeaſe, which in ſome circumſtances may happen. But with all the neceſſary good huſbandry, there is one thing ſometimes practiſed, which for many reaſons is blameable, and that is, the putting of powders into draughts or juleps, eſpecially the Gaſcoign's powder; for ſuch management not only renders the mixture very unſightly, but makes it impoſſible for an apothecary to comply with it, but to his loſs.

2. Another thing worth regard

is,

is, always, as much as poſſible, to diſguiſe known medicines, both by preſcribing them in terms the leaſt commonly known, and reducing them into forms as different as poſſible from what a patient hath been accuſtomed to diſcover them in: without this care the beſt preſcriptions are frequently loſt by a prejudice, and hence ſometimes happens a total refuſal of that upon which moſt ſtreſs was laid; beſides, it cannot have eſcaped every one's obſervation, how much the reputation of a cure hath been loſt by divulging the means by which it was effected. Something might be ſaid likewiſe as to the injuries hence ariſing to the apothecary, whoſe attendance requires more than the common profits of trade, which every patient hath not the generoſity to allow for, when they know the things preſcribed.

3. Another conſideration, and the laſt I ſhall take notice of on this occaſion, is, that all extemporaneous medicines be contrived, not only with all the elegance and pleaſantneſs poſſible, but alſo into the ſmalleſt doſes they are capable of. Draughts to grown perſons ought never to exceed four ounces, and to be ſeldom above three; and boles ought hardly ever to weigh above two drachms; and of the reſt proportionably.

But the moſt general and neceſſary rule in all caſes is, to anſwer the end by as few medicines as poſſible; and ſuch practice will always procure the beſt reputation amongſt thoſe whoſe applauſe is moſt valuable, and beſt ſupport the dignity of the profeſſion, and ſecure the ſatisfaction of a good conſcience.

APPEN-

APPENDIX.

Wherein is contained,

An Account of the Preparation, Nature, &c. *of Tar-Water*; *Mrs.* Stevens's *Medicine for the Stone,* &c. *being not properly reducible to any of the preceding Claſſes of this Work.*

Aqua Picis Liquidæ.

Tar-Water.

POUR a gallon of cold water on a quart of tar; ſtir and mix them thoroughly with a ladle, or flat ſtick, the ſpace of three or four minutes; after which the veſſel muſt ſtand forty-eight hours, that the tar may have time to ſubſide; when the clear water is to be poured off and kept covered for uſe; no more being made from the ſame tar, which may ſerve for common purpoſes.

This is the recipe of the biſhop of Cloyne, who firſt introduced tar-water into common uſe, given in his Siris, a moſt abſtruſe and learned treatiſe, wrote in order to recommend it as a remedy in almoſt every diſorder incident to the human conſtitution; and which occaſioned it to be as generally taken. That tar-water is capable of producing changes in the habit of thoſe who are not accuſtomed to it, is unqueſtionable; for it is frequently found in ſcorbutic caſes to throw out a copious eruption on the ſkin; thereby relieving other ſymptoms which attended the retention of the humor; and in ſome inſtances, it has even removed eruptions: it has been obſerved likewiſe to produce regular fits of the gout in thoſe who before had only ſlight moving pains; while others, who have had regular fits at firſt, have found them as well multiplied as aggravated by its uſe. In nervous caſes ſeveral perſons have for ſome time received benefit from it; but afterwards, have had returns of their diſorders, againſt which it proved then ineffectual. It appears therefore, on the whole, that, like other ſtimulating medicines, where a temporary increaſe of the *vis vitæ* is wanting, in order to any critical diſcharge, it produces the deſired effects; but where ſuch diſcharge is not the proper period of the diſtemper, it operates only palliatively; and, if taken for a long continuance, becomes habitual to the conſtitution, and, in common with other bodies, which act by their ſtimuli, loſes its power of exciting an extraordinary force in the circulation; and becomes itſelf perhaps neceſſary to the ſupport of the ordinary one. On this laſt account there may be the ſame reaſon to avoid a frequent

frequent or continued uſe of it, as of opium, ſpirituous liquors, and other ſubſtances which produce their effects by acting on the nervous ſyſtem. Though this uſe of tar is ſo lately introduced with the pretenſions of an invention; yet a medicine very nearly allied to it was formerly taken here in ſcorbutic caſes, and is ſtill much eſteemed in the ſame intentions in the northern parts of Europe: this is a decoction of the raſpings of the wood of the fir-tree, which, moſt probably, yields an extract very little different from what is thus obtained from tar. It has been a matter of diſpute, what kind of ſubſtance is ſeparated by the water from the tar, and by what quality it operates, and produces its medicinal effects. It appears, on examination, that the tar imparts a ſlight acid to the water, which acid is certainly of a ſaline nature; and an ethereal oil that ſeems to be combined with the water by means of this ſalt; as without ſuch a medium no oils are commiſcible with water. In this oil, and not in the acid, it has been idly imagined, conſiſts moſtly its medicinal quality; which the nature of its operation, being to quicken and fill the pulſe by increaſing the *vis vitæ*, evidently ſhews: effects quite contrary to thoſe produced by acids. And indeed the minute quantity of the acid, far too ſmall to work ſuch conſiderable changes in the habit, as have followed the uſe of this medicine, is a no leſs obvious proof of the truth of this opinion. There have been, ſince the prevailing fondneſs for tar-water, ſeveral other preparations offered to the public; the publiſhers of which, like others engaged in ſuch undertakings, have not been ſparing of high pretenſions of their medicinal merit: particularly one vended under the name of acid juice of tar; which is ſaid to have had for its inventor a perſon very capable in other matters, that lie within his proper province. But as the pretended excellence of his preparation is placed in collecting the acid, which, as I obſerved before, is not the part wherein the medicinal power of tar-water reſides, but only the medium by which the really efficacious ſubſtance is ſeparated by the water from the tar, either his acid juice is not ſo perfectly freed from the other part of the tar as he pretends, or he has refined away the medicine inſtead of improving it. As to the other preparations, they are neither in their nature, or the regard of the public, conſiderable enough to render them worthy a comment. Beſides the above recipe for tar-water, the biſhop has more lately recommended the following, for the convenience of travellers, or ſuch others as may not have an opportunity of preparing it each time it is to be taken.

Aqua Picis Liquidæ fortior, in Uſum Viatorum, &c.

Strong Tar-Water for the Uſe of Travellers, &c.

Take of tar, and water, each one quart, ſtir them well together for twenty minutes, then let them ſettle, and pour off the clear water.

As there is but little to be poured off here, this preparation may be improved by the introduction of filtering, in order to clarify that part of the water remaining, after all that can be poured off clear has been obtained, which in this caſe will

will be a conſiderable part. This tar-water has four times the ſtrength of the other, and muſt therefore be mixed when taken, with three times its quantity of water, if it is deſired to be of the ſame ſtrength with that. The doſe of tar-water the biſhop recommends in common caſes is half a pint, to be taken morning and night on an empty ſtomach.

N. B. The late improvement by Mr. Smith, Apothecary, in Taviſtock-ſtreet, Covent-garden, excels every other mode of preparing tar-water. With his Chymical Eſſence of Tar is given ample directions for its preparation, uſe, &c.

Lithontripticum Joannæ Stephens.

Mrs. *Stephens*'s Medicine for the Stone.

Calcine egg-ſhells in a crucible eight or ten hours, with a ſtrong fire; then expoſe them to a dry air a month or two, till the greateſt part falls into a ſubtile powder, which muſt be ſeparated from the groſſer and leſs perfectly calcined part by a fine ſieve; and preſerved for uſe in a glaſs phial well ſecured from the air.

Of the egg-ſhells calcined and half flaked by this method, take two ſcruples, and a half, or one drachm, three times every day, in any proper vehicle; drinking after it half a pint (*id eſt*, one third part) of the following decoction.

Take of Alicant ſope, two ounces; ſlice the ſope, and diſſolve it by boiling, in ſuch a quantity of water as will produce one pint and a half of decoction; ſtrain it, and ſweeten it to your palate with honey or ſugar. The uſe of copper or braſs veſſels muſt be avoided in preparing the decoction, otherwiſe the metal, being thereby corroded, may produce a violent ſickneſs in the patient.

This is the original recipe (except that about a ſixth part of ſnails, calcined to blackneſs, was added to the powder; and chamomile, ſweet fennel, or ſome ſuch vegetables, of ſtrong flavour were boiled in the decoction; which being entirely beſide the intention, and moſt probably added at firſt only to diſguiſe the really efficacious ingredients, have been ſince univerſally omitted) as it was publiſhed by Mrs. *Stevens*, who had five thouſand pounds given her by Act of Parliament for it. But a form much more expedient, both to thoſe who prepare and take the medicine, and, indeed, much better ſuited to the intention, has been ſince publiſhed by Dr. Hartley, in a treatiſe wrote by him on this ſubject; which is as follows:

Lithontripticum Joannæ Stephens forma commodiore ſecundum D. Hartley.

Mrs. *Stevens*'s Medicine according to the improved Recipe given by Dr. Hartley.

Take of Alicant ſope, eight ounces; quick-lime powdered and ſifted, one ounce; fixed alkaline ſalt, one drachm; ſlice the ſope; mix it well with the lime and ſalt; and beat the whole in a mortar into a ſoft paſte; adding as much water as is thereto neceſſary; then form this paſte into rolls two fingers

gers breadth long, of the weight of four ſcruples, and a little pointed at each end; let the patient take every day from eighteen or more to twenty-four of theſe, *id eſt*, from three to four ounces of the paſte, the roll being laid lengthways upon the tongue, and a little water taken into the mouth with each, by which means they may be ſwallowed with very little trouble.

The intervals betwixt each doſe may be three, four, or five hours, as ſhall be moſt convenient; only taking care neither to load the ſtomach, nor to produce a thirſt, by ſwallowing too many together. Theſe rolls muſt be kept in a cold and moiſt place; leſt, growing hard, they prove uneaſy to the ſtomach and paſs the inteſtines whole, or only diſſolved in part. But to prevent this, where there may be occaſion to keep them longer, it is proper to prepare them either with a milder lime, or a leſs quantity of ſuch as is pungent; that, in caſe they grow too hard, they may bear to be again beat up with a proper quantity of water and fixed alkaline ſalts.

To theſe directions for the beſt method of preparing and adminiſtering this medicine, which we have borrowed from the ingenious pamphlet above mentioned, I ſhall likewiſe ſubjoin ſuch others as the author has therein given, reſpecting the accommodation of the medicine to the condition of the patient: but I ſhall firſt give ſome account of what this medicine is pretended to effect; and on what foundation ſuch pretenſions are raiſed: and in this I muſt ſtill uſe the authority of the above pamphlet: the Doctor having there given a very fair and ſuccinct hiſtory of ſome of the moſt material caſes that have occurred in the uſe of it. It is offered to the public as a remedy againſt the ſtone, as being capable of diſſolving any ſtones either in the bladder or kidney, provided it be taken in a proper quantity, and for a due continuance. The ſuppoſition of ſuch a power is derived from theſe facts; from the ceſſation or mitigation of the ſymptoms which is conſequent to the taking it; from the report of the catheter, by whoſe aſſiſtance ſtones have been perceived before the uſe of the medicine, which could not be felt afterwards; from the appearance of ſtones taken out of dead perſons who had taken the medicine, ſuch ſtones bearing the ſuppoſed marks of lithontriptic power; from the qualities of urine thus medicated; and its actual power of diſſolving ſtones digeſted in it out of the body. Theſe are the facts as drawn up by Dr. Hartley; from whence a lithontriptic power is concluded to be in this medicine: and that there is ſuch in ſome degree can ſcarcely be doubted; as well from the broken parts of ſtones which have been voided after its uſe, as from the alteration that appears to be made by it in the texture and colour of the ſtones. But whether it can diſſolve ſuch as are of a harder and more equal conſiſtence, or ſo break them as to cauſe their being voided, is far from being clear. Since, according to the relations he has given us, the ceſſation of the ſymptoms has in ſeveral caſes happened where the ſtone has been found to remain; and the report of the catheter is not to be depended upon; as not only common experience, but his own account evinces,

evinces. And as to the inſtances of the mollified ſtones taken out of dead perſons, they lend not the leaſt argument for it; ſince even a ſingle inſtance is wanting, where a ſtone having been perceived before the uſe of the medicine, none was found in the bladder when opened: and indeed this change of the texture of the ſtone rather weakens what the uſe of the catheter had produced in favour of the opinion; as it accounts for the ſtones not being perceived after the medicine had been taken, that were felt before. As to the effects of medicated urine out of the body, all inference thence is very uncertain; for it is extremely evident, that a very conſiderable change in its properties happens to all urine ſoon after it is diſcharged; and qualities are then acquired by it, of which it appears utterly incapable while in the living body. The power of the medicine of looſening and ſeparating the leſs cohering parts of ſtones, and of rendering their texture ſoft and ſuperficies ſmooth, of the effecting which there is evident proof; together with the great probability that it is capable of diſſolving ſome ſtones; are however fully ſufficient to recommend the uſe of it, and ſo conſtitute it extremely beneficial to ſuch who, under the moſt excruciating ſtate of pain, are denied all other means and proſpect of relief; as is more particularly the caſe of thoſe afflicted with the ſtone in the kidneys, where no practicable operation can remove the evil, even from thoſe who have ſufficient reſolution to ſubmit to be cut.

The three varying doſes of the medicine above given are adapted to the ſuppoſed differences there may be in the condition of the patient. The middle doſe, that is, two drachms and a half of the powder, and two ounces and a half of the ſoap, each day, is proper for perſons of a middle age and ſize, under the common circumſtances of health, &c. But where a weakneſs of the ſtomach, or ſharp pains in the urinary paſſages occur, it is better to give the leaſt doſe; and in ſome caſes to uſe a weaker lime; that is, either ſuch as has ſuffered a ſhorter calcination, or ſuch as has been longer expoſed to the air: and the ſame holds good in reſpect of perſons of a very great age, in whom the ſtones are much more eaſily diſſolved. Boys and very young perſons ought to take as large a quantity as their ſtomach can bear; it being clear from experience, that ſtones in ſuch ſubjects reſiſt much more the power of the medicine. The ſame rule of proportion is to be obſerved alſo when the medicine according to Dr. Hartley's alteration is uſed; the leaſt quantity to be taken each day being eighteen rolls, the middle one twenty-one, and the greateſt twenty-four.

The above proportion betwixt the lime or calcined egg-ſhells and the ſoap, viz. one to eight, is ſuch as from experience is found to agree with moſt conſtitutions; as neither producing a too great coſtiveneſs or looſeneſs; but where, as it ſometimes may, it ſhall happen otherwiſe, the reſpective proportion of the one to the other is to be varied. If a coſtiveneſs enſues, the quantity of lime is to be leſſened; if a looſeneſs, the ſope is to be diminiſhed; and what loſs the medicine may ſuffer in quantity from the diminiſhed proportion of the one ingredient,

may be made up by an equivalent enlargement of the other: and the medicine by means of the oppoſition in the qualities of the two kinds of ingredients may thus be accommodated to every ſtate of the inteſtines. But if any difficulty ſhould occur in this, aſtringent or laxative medicines, in decoctions or other convenient forms, may be called in aid, and this common proportion preſerved. If notwithſtanding the uſe of aſtringents and an increaſed proportion of lime, by thoſe in whom that diſpoſition is found, a continued looſeneſs ſhould ſtill prevail, the aſſiſtance of opium muſt be neceſſarily taken, till a change is brought about; for vainly are the lithontriptic effects of the medicine hoped for, while it thus forces its paſſage through the inteſtines, and finds a ſhorter exit than by the kidneys and bladder.

In reſpect of the diet proper to perſons who take this medicine, it is only neceſſary that they ſhould eat moderately, and abſtain carefully from acids, and ſalts, or meats ſeaſoned with ſalts or ſpices; from the firſt, becauſe acids of courſe deſtroy the lithontriptic power of the medicine, which depends on its alkaline quality; and from ſalt, &c. becauſe they provoke thirſt, and thereby occaſioning a greater quantity of fluid to be drank, dilute the medicated urine, and thence both diminiſh the force, and ſhorten the time of its action; and for the ſame reaſon it is proper to avoid much exerciſe, which is apt to occaſion perſons troubled with the ſtone to make water frequently.

It is not unuſual for perſons, after they have taken the medicine for ſome days, to find their pains in the urinary paſſages increaſed, in which caſe they muſt avoid motion, and indulge in that poſture of the body which they find gives them eaſe; but if they fail of relief in this, and find their pains extremely acute, all the anti-inflammatory means muſt be uſed, and opiates taken, on which, indeed, the greateſt reliance is to be had. But it is above all other things neceſſary to caution the patient, that he ſhould not by this increaſe of his pains be deterred from perſevering in taking the medicine: for if the ſtone, as it generally becomes rough and of an unequal ſurface, again acquire its former hardneſs, which neceſſarily happens by the change of the urine to its former ſtate, from the omiſſion of the medicine, moſt exceſſive pains of courſe reſult; of the fatal conſequences of which examples have been ſeen: while on the contrary it has been obſerved, that thoſe, who under theſe circumſtances perſiſted in the uſe of the medicine, have been in a ſhort time entirely freed from theſe pains, even though very rough and large ſtones have remained in the bladder; and have even been able to uſe exerciſe without inconvenience. Theſe are all the rules experience has hitherto ſhewn to be neceſſary to be obſerved in taking this medicine: the innocent nature thereof, no clear inſtances having hitherto appeared of its producing any ill effects in what ever quantity it has been taken, giving a great latitude in the uſe of it; and leaving perſons afflicted with the ſtone no objection againſt the taking it, but the trouble and tedioufneſs which ariſe from the length of time, and great quantity, in which it muſt be taken.

Dr.

Dr. Chittick's *Secret for the Stone.*

Take ſalt of tartar, eight ounces; oyſter-ſhell, quick-lime, four ounces; ſoft ſpring water, two pints; pour the water boiling hot upon the ſalt and lime, let them ſtand twenty-four hours, now and then ſhaking them, then filter for uſe.

It is owing to the induſtry of the ingenious Mr. Alexander Blackrie, that this ſecret is aſcertained as to its nature; and to his ſkilful experiments and remarks that we are favoured with the above compoſition, ſo exactly correſponding in every punctilio with the Doctor's; and farther ſtill, that it is proved to be the ſame, both in nature, and kind of preparation. The tartar from whence the ſalt is obtained, ſhould be recently and well calcined, even till it acquires a pale blue colour: the ſhells ſhould be freſh calcined, and that to a perfect and equal whiteneſs. The ley ſhould be made immediately after the ſalt is obtained, and the ſhells calcined, and kept very cloſe from the air in a bottle with a glaſs ſtopper.

The Doctor orders as a vehicle for this medicine, two pounds of the crag-end of a neck of veal, to be boiled in five quarts of water to three quarts, freed from all fat and other impurities. Three pints of this broth when medicated, is to be taken every day, one pint in the morning faſting, by a little at a time, ſo as to be an hour in taking the whole, and the patient muſt faſt two hours afterwards; the ſecond pint at noon; and the third pint in the evening in like manner, faſting two hours after each.

When taking this medicine, he prohibits all ſalt meats, and even ſalt itſelf with the meat that is allowed, butter, cream, milk except it is ſkimmed, cheeſe, fiſh, eggs, ſauces of all kinds, tarts, paſtry, all vegetables except turnips, potatoes, and boiled onions, and even the potatoes are ſparingly allowed. As to drinks he forbids all acids, and all that tends to acidity, as wine, beer, cyder, perry, and all fermented liquors, and only allows water with a little brandy or rum.

He permits the patient to eat the lean parts of beef, mutton, veal, ducks, chickens, and rabbits, without any ſauce but their own gravy, which muſt be carefully ſeparated from the fat.

Such exerciſes are to be uſed as produce no pain, and the medicine muſt be continued ſeveral months before any benefit is to be expected.

In all gravelly caſes this medicine may be pronounced infallible; and in caſes of the ſtone, if it fails to diſſolve the concrete, it makes it ſmooth, ſo proves an excellent and deſirable palliative.

In a recent gravelly caſe, where the concretions are but ſmall, give from 30 to 40 drops of this ley, two or three times a-day, in half a pint of the broth above named, or any other ſoft mucilaginous vehicle, and continue this as long as there is any appearance of ſabulous matter ſubſiding in the urine. —If after a ſevere fit of the gravel, a ſmall calculus is tranſmitted from the kidnies to the bladder, in order to promote its ſolution and expulſion as ſoon as poſſible, a larger quantity may be given, a tea ſpoonful two or three times a-day, remembering to regulate the doſe according to its effects on

the patient.—In caſe of a ſtone being lodged in the urinary bladder (for thoſe in the gall bladder are not affected by this medicine) the doſe ſhould be gradually augmented, and with each pint of the broth, as much of the ley is to be mixed, as the conſtitution will admit of. In giving ſuch acrid medicines, particular attention muſt be had to the ſenſations they occaſion, and effects they produce: if their effects be painful, leſſen the doſe; if no degree of uneaſineſs ariſes, increaſe it, as ſome degree of painful irritation is neceſſary to effect the ſolution of ſuch hard ſubſtances. Many who have begun with one tea ſpoonful three times a-day, have gradually increaſed the doſe to half an ounce three times a-day.

It ſhould be noticed that, when a ſtone is paſſing from the kidney, is impacted, and firmly adheres in the ureter, occaſioning violent pains in the loins, and in the lower belly, like the colic, with bilious vomitings, obſtinate coſtiveneſs, ſtrangury, teneſmus, &c. this and all other irritating medicines ought carefully to be avoided, till the ſeverity of the fit is pretty well over, as they may occaſion painful ſtrictures, ruptures of blood-veſſels, inflammations, &c. The ſame caution will be equally neceſſary if any other kind of ſymptoms occur that forbid the preſent uſe of whatever irritates.

It is objected to by ſome, that ſo large a quantity of this medicine as is neceſſary to diſſolve the calculus in the bladder, will be productive of other diſeaſes, ſome of which may be as fatal as that which it is intended to relieve: but numberleſs experiments demonſtrate that thoſe who take large quantities for theſe diſeaſes, *viz.* the gravel and ſtone, are relieved alſo of other complaints to which they were before ſubject: and no inſtances have ever occurred, where a prudent uſe has produced diſagreeable effects.

Magneſia Alba.

Earths are either, 1ſt. Thoſe which diſſolve readily in all the acids except the vitriolic; as the mineral and animal calcareous earths, and the earth of bones and horns. 2dly. Thoſe which diſſolve in all the acids, as the magneſia alba, and the aluminous earth. And 3dly. The earths which do not diſſolve in any of the acids, as the clayey, the cryſtalline, the gypſeous, and the talcky earths.

The magneſia is ſaid by ſome, not to differ from calcined hartſhorn, or any other of the ſimple abſorbent earths. But, when duly prepared, it is a fine light white earth, perfectly void of all ſmell and taſte, ſoluble in all acids into a bitter purgative liquor; and, it is not convertible by fire into quick lime. It diſſolves freely and abundantly in the vitriolic acid, which diſſolves other earths but ſparingly; combined with this acid, it forms a ſalt very eaſily ſoluble in water, while the common abſorbent earths form with the ſame acid almoſt inſipid concretes that very difficultly diſſolve. Solutions of magneſia, in all acids, are bitter and purgative, while thoſe of the other earths are more or leſs auſtere and aſtringent. Hence it appears, that magneſia differs ſpecifically from the other abſorbent earths.

E.D.

E. D. *Magneſia Alba* White Magneſia.

Take of the bitter purging ſalt, and pearl aſhes, each an equal quantity. Diſſolve them ſeparately in double their quantity of hot water; let the fæces ſubſide, then mix the clear liquors, and immediately after add the mixture to eight times that quantity of boiling water. Boil the whole a little while, ſtirring it well together; which done, let it reſt quietly untill the heat is diminiſhed, then ſtrain through a clean linnen cloth; the magneſia will remain behind on the cloth, pure and free from any ſaline taſte.

This medicine has been ſome time in uſe in Germany, and is highly extolled by Hoffman: on whoſe authority it had been received into practice here by ſome particular perſons; but very confinedly, till the knowledge of it, and its ſuppoſed excellence, was made general by the author of a medicinal pamphlet, called, An Eſſay upon Nurſing, and the Management of Children, &c. who therein gives it extraordinary praiſes; and, having in moſt inſtances ſhewn great judgment and knowledge of the ſubject he treated of, has occaſioned this medicine to become much regarded. I cannot therefore more properly go about to explain its reputed virtues, than by quoting the paſſage wherein he recommends its uſe:

"As I have ſaid that the firſt and general cauſe of moſt of the diſeaſes infants are liable to, is the acid corruption of their food; it may not be amiſs juſt to mention an eaſy and certain remedy, or rather preventive, if given timely, at the firſt appearance of predominating acid; which is very obvious from the green ſtools, gripes, and purgings occaſioned by it. The common method, when theſe ſymptoms appear, is to give the pearl julep, crab's eyes, and the teſtaceous powders, which, though they do abſorb the acidities, have this inconvenience in their effect, that they are apt to lodge in the body, and bring on a coſtiveneſs, very detrimental to infants, and therefore require a little manna, or ſome gentle purge to be given frequently to carry them off. Inſtead of theſe, I would recommend a certain fine inſipid powder, called *Magneſia Alba*, which at the ſame time that it corrects and ſweetens all ſourneſſes, rather more effectually than the teſtaceous powders, is likewiſe a lenient purgative, and keeps the body gently open. This is the only alkaline purge I know of, and which our Diſpenſatories have long wanted. I could wiſh it was more univerſally received among us, and think it well deſerves the rank in our books of Pharmacy, which it has already in ſome foreign ones. I have taken it myſelf, and given it to others for the heart-burn, and find it to be the beſt and moſt effectual remedy for that complaint. It may be given to children from one to two drachms a-day, a little at a time, in all their food, till the acidities be quite overcome, and the concomitant ſymptoms diſappear entirely. I have often given it with good and great effect, even when the children have been far gone in diſeaſes firſt brought on by prevailing acid."

This is the account given of it by the above mentioned ingenious writer; but whether it really has ſuch peculiar properties as he intimates,

mates, may be reaſonably doubted. That it has not a general purgative quality, even in reſpect of children, is evident from experience; nor has it ſuch perhaps in any caſe, except where, meeting with a ſufficient quantity of acid in the inteſtines, it is again converted thereby into a ſaline ſtate: for it is the obvious property of earths, while in their ſimple ſtate, rather to induce a coſtiveneſs than promote a catharſis, as he himſelf above acknowledges.

Mr. Henry of Mancheſter gives the following proceſs for preparing magneſia.

"Diſſolve any quantity of the ſal cath. amar. in its own weight of water; filter the liquor, and add to it, by degrees, a filtrated ſolution of pearl aſhes in an equal quantity of water, ſtirring them gently until the mixed liquors have acquired the appearance of a complete coagulation, then ceaſe from adding any more of the alcaline lixivium; and having diluted the precipitate, and mixed it intimately with a ſmall quantity of hot water, immediately throw the mixture into a large veſſel of boiling water. Keep it boiling for a quarter of an hour, then take it out, and put it into glazed earthen veſſels. As ſoon as the powder has ſubſided, and before the water be quite cold, pour it off, and add a freſh quantity of boiling water: repeat theſe ablutions with ſeveral parcels of hot water, till the liquor has intirely loſt its ſaline taſte. Then let it be ſo agitated as to ſuſpend the finer parts of the powder, in which ſtate decant it into other veſſels; and having ſeparated the water from the magneſia by inclination, put it on large chalk-ſtones, till a conſiderable part of the humidity be abſorbed. Then wrap it up in ſheets of white paper, and dry it before the fire. Pour hot water on the remaining powder, ſtir it, decant it in its turbid ſtate, and ſeparate the magneſia from the water as before. Thus the whole, or moſt of it, will be reduced to an equal degree of fineneſs.

"The ſeparation of the magneſia will be promoted by heating the ſaline lixivia before they are mixed; and the larger the quantity of water into which the precipitated powder is caſt, the more ſpeedily and perfectly will the vitriolated tartar, which is formed by the alkali of the ſal cathart. be waſhed off. Dr. Black directs that three or four times the quantity of water, to that of the ſolutions, ſhould be added; but this I have found greatly inſufficient. The neutral ſalt ſhould be waſhed off as quickly as poſſible; otherwiſe, as he juſtly obſerves, by allowing the mixture to ſtand for ſome time, the powder concretes into minute grains: theſe concretions cannot be rediſſolved by any waſhing, however long continued. His intention in boiling the mixture is much better anſwered, by adding it to the water when in a ſtate of ebullition; and once boiling in this manner is more effectual than a dozen waſhings in hot water.

"Much depends on the purity of the water uſed in the proceſs. If it be hard pump-water, the ſelenites with which it is impregnated will be decompounded, and the calcareous earth be depoſited, after boiling; which mixing with the magneſia will render it impure, gritty, and diſcoloured. Rain water collected free from impurities,

impurities, or clear river water, are moſt eligible; but if the ſituation of the operator does not permit him to procure theſe in a proper ſtate, he ſhould either uſe diſtilled water, which has been kept until the empyreuma is gone off, or at leaſt ſuch pump water as is free from any calcareous or ſaline impregnation. When poured on the magneſia it ſhould be ſtrained through a thick linnen cloth, ſo as to intercept any accidental impurities, which it may acquire in heating.

The drying ſhould be performed with expedition. To this end, the chalk ſtones ſhould be expoſed to a moderate degree of heat; and when they have been employed two or three times, ſhould be dried before a freſh quantity of the magneſia is put on them. Cleanlineſs ſhould be particularly attended to, through the whole proceſs; and the veſſels ought to be carefully covered, that no duſt may enter.

"A large copper brewing-pan may be ſafely uſed to boil the magneſia in; for as the acid is perfectly neutralized, there can be no danger of its quitting the alcali, to which it hath a greater affinity than to the metal."

Mr. Henry obſerves, in his Experiments and Obſervations, that calcined magneſia is a better medium for making tinctures of reſinous ſubſtances, for preſent uſe, than the calx viva as recommended by Dr. Macbride.

Magneſia Uſta.
Calcined Magneſia.

Put the magneſia into a crucible, which place in the fire, and continue in a red heat for two hours.

Linimentum Opthalmicum. Hans Sloane, Eq. Aur.
Sir *Hans Sloane*'s Liniment for ſore Eyes.

Take of prepared tutty, one ounce; of lapis hæmatites prepared, two ſcruples; of the beſt aloes prepared, twelve grains; of prepared pearl, four grains. Put them into a porphyry, or marble mortar, and rub them with a peſtle of the ſame ſtone very carefully, with a ſufficient quantity of viper's greaſe, or fat, to make a liniment; to be uſed daily, morning or evening, or both, according to the conveniency of the patient, as hereafter directed.

This recipe was a long time ago purchaſed by Sir *Hans Sloane*, of a perſon who had it from Dr. *Rugeley*, and ſince publiſhed by him, in a pamphlet wrote for that end, wherein he highly extols it; and thence occaſioned it to meet with great regard from many perſons who are influenced by the authority of eminent names. But in order to give a juſt notion of what he attributes to it, and the method of its uſe, I ſhall here quote a part of his pamphlet:

"The method, which has beſt ſucceeded with me in facilitating the efficacious uſe of this liniment, is to bleed, and bliſter in the neck and behind the ears, in order to draw off the humours from the eyes; and afterwards, according to the degree of the inflammation, or acrimony of the juices, to make a drain by iſſues between the ſhoulders, or a perpetual bliſter. And for waſhing the eyes, I generally recommend ſpring-water; which I think preferable to any

ſpirituous lotion, whether ſimple or compound. And the beſt inward medicines I have experienced to be conſerve of roſemary flowers; antiepileptic powders, ſuch as pulvis ad guttetam; betony, ſage, roſemary, eyebright, wild valerian root, caſtor, &c. waſhed down with a tea made of the ſame ingredients; as alſo drops of ſpirit. lavendulæ compoſit. and ſal volat. oleoſ.

If the inflammation returns, drawing about ſix onnces of blood from the temples by leeches, or cupping on the ſhoulders, is very proper.

The liniment is to be applied with a ſmall hair pencil, the eye winking or a little opened.

In proſecuting the cure of ſore eyes, I have been ſometimes ſurpriſed by want of ſucceſs; till at length I found, that the cauſe was a lurking intermitting fever, every fit of which affected the eyes, and rendered their diſorder obſtinate; wherefore, upon taking off the fever by a proper uſe of the bark, the cure has been effectually performed.

This medicine has cured many, whoſe eyes were covered with opake films, and cicatrices left by inflammations and apoſtems of the cornea; which, though they happen to perſons of all conditions, yet are more common among the poorer ſort of people: many of ſight, as to be under a neceſſity of being led to me; and after ſome time could perfectly well find their way without a guide, to my great ſatisfaction. And it is not only very beneficial in ſuch caſes, but alſo where there is an exceſſive pain in the eyes, ſhooting thence up into the head: as I particularly remember in a great lady, who had ſuch pains in her ſore eyes, and head, that ſhe had, when I firſt ſaw her, taken about fifty drops of laudanum thrice in twenty-four hours, if I remember right; of which complaints ſhe and many others have been relieved by this medicine, without the help of any opiate.

Monſieur Aniſſon, who was ſent thither with the Duke d'Aumont, commiſſioner for ſettling a treaty of commerce with England, brought me recommendatory letters from ſome friends in France. I obſerved a great foreneſs and weakneſs in his eyes: of which the application of my medicine very ſoon cured him. Whereupon he aſſured me, that he would procure me from the king his maſter any reward I ſhould think fit to aſk for the ſecret; he being accuſtomed to oblige his ſubjects that way: but I anſwered him, that I was then bound by a promiſe to conceal it.

In reſpect to the real merit of this remedy (notwithſtanding Sir Hans's account of it) if we examine its compoſition, we ſhall find it not to differ from the common liniments uſed in that intention; except in the ſubſtituting viper's fat inſtead of freſh butter or hog's lard, and in the adding a ſmall quantity of aloes and prepared pearls, which ſeem very little to the purpoſe; and indeed the uſe of viper's fat is a change made in it by himſelf, hog's lard ſupplying the place thereof in the original recipe of Dr. Rugeley, and poſſeſſing the ſame qualities; the ſuppoſition of any ſpecific power in the fat of vipers, having been introduced without any foundation on facts or juſt analogy. To this fat uſed ſimply, ſir

Hans

Hans gives nevertheleſs the ſame efficacy with the compound medicine; though from his own account it appears, that in Dr. Rugeley's hands the ſame cures were effected by it while made with hog's lard; whence it ſeems to be in this ſtate, according to ſir Hans, a combination of two very powerful medicines; and yet (what is very extraordinary) in his application of it, he, by his own relation, calls into his aſſiſtance all the means medical practice has hitherto employed in caſes of this kind; as bleeding, cupping, bliſtering, iſſues, &c. ſo that either ſome of theſe methods muſt do very little proportionably to the trouble they give, or his medicine leſs, to render both neceſſary. Upon the whole, therefore, from the conſideration of his account of particulars, notwithſtanding the general praiſes he gives it, we may conclude this medicine to vary in nothing from thoſe of the ſame kind commonly uſed, but in the addition of ſome inſignificant ingredients, and the ſubſtitution of a dearer in the place of one of leſs price, and more eaſily procured.

The principal Medicines uſed by the late Dr. Ward.

Method of preparing Antimony, for the Pill and Drop.

PROVIDE yourſelf with an earthen unglazed pan, that will hold three or four quarts; ſet it on a naked fire, and have in readineſs, of the fineſt and pureſt crude antimony, as much as you pleaſe (that which appears in long ſhining needles, and is the eaſieſt powdered, is the beſt; being moſt free from metallic, or other heterogeneous bodies;) powder it indifferently fine; put ten or twelve ounces into your pan, ſtirring it continually with an iron ſpatula, and increaſing your fire till it ſends forth white fumes, and a flame like burning brimſtone: continue that degree of fire, continually ſtirring, till it burns or fumes no more; but is become a grey or aſh-coloured powder. If it ſhould melt, and run into lumps, in the beginning of your operation, you muſt take it out of your pan, and pound it again; putting it in again, and ſtirring as before, till it be thoroughly calcined. Then put in four ounces more of your crude matter; proceeding as before, and continuing ſo to do, till you have as much as you deſire. By this method you will calcine your antimony with much leſs labour and time, than in doing it altogether, as is uſual: for, by putting your crude antimony to your calcined, its melting will be prevented, and the fumes will fly off much ſooner.

(N. B.) It muſt be done in a chimney; otherwiſe the fumes will be hurtful to the operator.

Take a clean crucible, which will hold about a quart; put into it about two pounds of your calcined antimony; ſet it in a melting furnace, and make a gradual fire under it; put coals nearly to the top of your crucible: keep it in a moderate fuſion, ſometimes ſtirring it about with an iron rod: care muſt be taken that your fire be not too violent, while your matter is

in

in fuſion; or it will liquify it to ſuch a degree, and render it ſo ſubtle, that it will all run through the pores of your crucible, into your aſh-hole; not leaving one ſingle drop, or grain behind.

When you find your matter, which adheres to your rod, tranſparent and bright (which it will be, in about half an hour after it is in fuſion, if you have kept a proper degree of fire), have, in readineſs, a ſmooth marble ſtone, well dried, and heated as hot as you can bear your hand upon it; for fear your hot matter ſhould break it. [It will be proper to have an iron curb round yonr marble, to riſe half or three quarters of an inch above its ſurface, to prevent your matter from running off.] Pour your vitrified matter upon your ſtone; and if you have any more of your calcined matter, put your crucible again into the fire; put in more, and proceed as before. If your crucible is good, and your fire moderately governed, you may uſe the crucible five or ſix times; as I, myſelf, have frequently done.

Thus have you a fair and pure glaſs of antimony, of a light red colour.

As I have been informed that moſt, if not all the glaſs of antimony, uſed in this kingdom, is imported; and that the erroneous proceſs in making it, is alſo introduced here, I ſhall make the following obſervation upon it.

As the glaſs of antimony, uſed here, is made abroad, we cannot be competent judges whether it is made of pure antimony, or ſuch as may be mixed with other heterogeneous matter. I have alſo obſerved, that keeping the crucible covered, during the time of its fuſion, both hinders the vitrification, and makes the glaſs leſs pure, by preventing the remaining combuſtible parts of the antimony from flying off.

This glaſs of antimony, as prepared for Dr. Ward, is ſaid to differ much from that which is generally ſold in the ſhops; Dr. Ward's is of a brighter red colour, much ſofter, and not ſo harſh and gritty in the pulverization and levigation: whence it is probable that the glaſs of antimony imported, is not prepared from pure antimony, or it is not properly prepared.

Reſpecting the proceſs here given for preparing the glaſs of antimony, there is little or nothing but the common directions, which have been given for making it for officinal purpoſes, from the time of Baſil Valentine to the preſent day. However, the caution of not uſing the glaſs of antimony made at Venice, which is the only kind commonly met with in the ſhops, is well founded; for there is no doubt but that ſome ſophiſtication is practiſed in the preparation of it.

The Pill.

Take of the aforeſaid glaſs of antimony, as much as you pleaſe; pound it in a clean iron mortar, and ſift it through a fine lawn ſieve; then grind, or levigate it, on a ſmooth marble ſtone, to an impalpable powder. Take alſo dragon's blood, dried and powdered. To four ounces of your levigated glaſs, put one ounce of this dragon's blood; grind them very well together; and with good ſack, or rich mountain wine, make into a maſs for pills, of about one grain and half each, which is a full

full doſe for a man or woman.

Bruiſe this pill, and take it in a ſpoonful of any ſmall liquid, on an empty ſtomach. It ſometimes works upwards, at others downwards, according to the nature and ſeat of the diſorder: in which caſes it is proper to drink a ſmall quantity of baum or ſage tea, &c. between each motion: and, if it ſweats the patient, as it ſometimes does, he muſt be kept warm, and encourage it by drinking as above. The day that the pill is taken, avoid milk, greens, and fruit. Its ſucceſs has been happily experienced, in caſes where the ſtomach or bowels are foul, or the paſſages obſtructed; and particularly in inveterate rheumatic diſorders.

Dr. Ward uſed to make theſe pills of different colours, viz. white, red, and blue. The late Mr. Clutton analyzed them, and found them to conſiſt of the glaſs of antimony, coloured with white arſenic, red arſenic, and zaffer.

The Drop; called the Emetic, or Sack Drop.

The Drop, ſo called, is made by putting half an ounce of your levigated glaſs of antimony into a quart of the richeſt Malaga mountain, or ſack. Shake them well together, and let them ſtand two or three days to ſettle, and grow clear. Then pour off gently, to be quite fine.

The full doſe (half an ounce) is for a man or woman: but beſt to begin with the half or two thirds; according to the age or ſtrength of conſtitution.

When the ſickneſs comes on, drink about half a pint of water, or thin water gruel; and continue to do ſo every time it operates. It has been found to cleanſe the ſtomach more effectually than the vomits uſually given, and that without occaſioning uncommon reachings.

The White Drop.

Pound and bruiſe fourteen pounds of the cleaneſt copperas into a rough powder; then dry it, with a very gentle heat, ſpreading it thin, till it becomes a dry and ſubtle powder, to appearance like quick lime, only much whiter. [Care muſt be taken, at the beginning of the drying, that the heat be very moderate; otherwiſe it will melt, and ſhut up the pores of the copperas, and greatly injure your future operation.]

When your copperas is thus become dry and ſubtle (which may be done in about ſix or ſeven days) weigh it, and take an equal quantity of good and clean rough nitre, or ſalt petre, which let alſo be tolerably dry. Pound your nitre and dried copperas together, and ſift them through an indifferently fine hair-ſieve, then put them into a large glaſs retort, coated at the bottom, and ſet it in a ſand-furnace: let not your retort be above an inch from the bottom and ſides of your ſand-pan: fix on a very large receiver, and lute it: but leave a ſmall vent-hole in the joint, by ſtriking in the point of a ſmall ſkewer, to let out the wind, (which will iſſue from the matter at the firſt making of your fire) by drawing it out, and putting it in as you ſhall ſee occaſion, to prevent your retort or receiver's burſting. Make a gentle fire for the firſt three hours; then increaſe it gradually, for three or four hours longer, till your iron pan be red at bottom; continue your fire for about thirty hours;

hours; then let it out, and when all is cool, you will have a moſt powerful aqua fortis. Put it into a bottle, and ſtop it cloſe: let it ſtand ſix or eight days (the longer the better) to digeſt itſelf.

Put this aqua fortis into a glaſs retort; let it be about half, or two-thirds full; ſet it into your ſand-heat, and fix on a receiver, which need not be very large: make an indifferent fire, till your aqua fortis is come over into your receiver; leaving behind only a brown reddiſh earth, which was forced over by the violence of the fire in the firſt diſtillation. Thus you have a moſt ſtrong and pure aqua fortis.

[As I have never been able to procure any aqua fortis, proper for making the ſaid drops, but what I made myſelf, I have here ſet down a true and full proceſs for making it.]

Take of your rectified aqua fortis, as much as you pleaſe; put it into a large bolt-head, with a long neck, but not above a quarter full. Then take, of the pureſt and fineſt volatile ſal ammoniac, in which there is not the leaſt acid ſalt, or lime.

[As I have uſually bought this volatile ſalt ready made, and doubt not but it may be had pure and genuine at Apothecary's hall, I have omitted here ſetting down the proceſs for making it; having bought it of Mr. Godfrey, chemiſt.]

To ſixteen ounces of the aforeſaid aqua fortis, in your bolt-head, take ſeven ounces of the ſaid volatile ſal ammoniac; and, by half an ounce at a time, put it into your bolt-head, to your aqua fortis, immediately ſtopping the mouth of your bolt-head, till the fermentation is over: yet not ſo cloſe, but to leave ſome ſmall vent, for fear the wind, cauſed by the violent fermentation, ſhould burſt the glaſs. When all your ſal ammoniac is in, let it ſtand two or three hours, till the fumes are ſettled.

☞ [N. B. This is the right and exact proportion; if your operation in making your aqua fortis is rightly performed, and your volatile ſal ammoniac be good and pure.]

Now put it into a ſmaller bolt-head, half full, and ſet it in a moderate ſand heat; when it is warm, put in four ounces of the fineſt quickſilver to each pound (of ſixteen ounces) of your ſolution; and let it ſtand in that heat, till all the quickſilver is diſſolved. Increaſe your fire a little, and put in a ſmall quantity more of quickſilver; thus letting it diſſolve, by gentle additions, as much as it will. When it will diſſolve no more, take it out of the bolt-head, put it into an open glaſs veſſel, or a large white ſtone bowl. [I generally cut off a large glaſs body in the middle.] Set it in a moderate ſand-heat, and let it evaporate till a pellicle or ſkin comes over the top of it. Then take it from the fire, and let it ſtand in a cool place to congeal.

Great care muſt be taken, that your heat be not too great in your evaporation, nor continued too long; or it would coagulate, and mix the corroſive oil (which is to be poured off after its congealment) with the fine pure ſalt, and quite ſpoil the medicine.]

There will remain, uncongealed, a heavy liquor, or oil, which pour off, and let it drain until no more will run or drop from it. Take the remaining ſalt, put it into a glaſs body, and to each pound (ſixteen

(ſixtee ounces) put three pounds of the fineſt roſe-water; ſtopping the mouth of your body, by tying over it a piece of double brown paper. Set it again in your ſand-heat; make an indifferently hot fire, till all your ſalt is diſſolved; which is uſually done in twenty-four hours.

This medicine, thus rendered extremely mild, cannot poſſibly be accounted dangerous; ſeeing that, in the doſe of two drops, uſually taken in twenty-four hours, the quantity does not amount to half a grain.

The white drop thus prepared, is a ſolution of mercury in the nitrous acid, diluted with water. In caſes where mercurials are required, this preparation may be proper; but thoſe who recommend it to ſeafaring people as an antiſcorbutic, ſhould be appriſed, that in the ſcurvy and in every putreſcent diſeaſe, the exhibition of mercury, and all its preparations, is attended with certain deſtruction to the patient.

Of the white drop, two drops are directed to be taken, in a ſmall glaſs of water, in the morning faſting, or at night when going to reſt, for two or three days together. Then forbear for two or three days, from taking them; then proceed as before, till the whole bottle is taken. They ſeldom work viſibly, except in ſome conſtitutions, they occaſion one or two motions.

In many inſtances of eruptions on the ſkin this medicine is uſeful, but the proceſs given for making it, contains ſome unneceſſary and trifling circumſtances; but, without dwelling on theſe, the author of the Elaboratory laid open gives the following proceſs, which produces a medicine with every advantage poſſeſſed by Dr. Ward's, but free from the needleſs peculiarities which he preſcribes.

A more eaſy and ſpeedy Method of preparing Dr. Ward's White Drop.

Take of pure ſpirit of nitre, (ſuch as is made for gilding. Mr. Ward's direction makes an aqua fortis; and yet the evident principles of the proceſs is to have a pure ſpirit of nitre,) ſixteen ounces, put it into a bolt-head; gradually add to it ſeven ounces of volatile alkaline ſalt; then add to it four ounces of quick-ſilver; and ſet the bolt-head in a ſand bath of a gentle heat. When that quantity of quickſilver is diſſolved, raiſe the heat a little, and throw in more quickſilver, by ſmall quantities, till the fluid appears no longer to act on it. Then pour out the ſolution into a glaſs body, with a large opening, and evaporate it till the ſalt appears to form. Set it then in a cool place to cryſtallize; and when the whole of the ſalt that will ſhoot is formed, pour off the mothers, and let the ſalt drain till all the fluid be ſeparated from it. Evaporate the mothers again, and a freſh quantity of ſalt will ſhoot; which muſt be treated in the ſame manner. Put the whole of the ſalt thus obtained, into a glaſs body; and to each pound, put three pound of roſe-water, or any pure water. Let the body remain in a ſand bath, of leſs heat than will make it boil, untill the whole of the ſalt is re-diſſolved.

For forming the ſolution of the volatile ſalt and mercury, the bolt-head ſhould have a ſmall neck, and a piece of paper looſely rolled together, may be put into the top to keep in the fumes. If ſalt form,

during

during the operation, ſo as not to come eaſily out of the bolt-head, as much water, muſt be gradually added as will diſſolve it.

Sweating Powder, N° I.

Take ipecacuanha, liquorice, and opium, of each one ounce; nitre, and vitriolated tartar, of each four ounces. Fulminate.—— Thus according to Dr. Ward's book.

Nitre and vitriolated tartar will not fulminate: the manner in which this powder is to be prepared is doubtleſs as follows.

Take four ounces of nitre, and the ſame quantity of vitriolated tartar. Rub them together, in a mortar, into a powder. Take a crucible (not of the blue ſort) ſet it in the fire; and when it begins to be red, put in above half of your nitre and tartar; ſtirring it about with an iron rod. There will ariſe red fumes; which take care to avoid, for they are noxious. When the red fumes ceaſe, put in the remainder of your matter, ſtirring it as before, till no more fumes ariſe. Then pour it into an iron mortar; and, when cool, add to it opium, liquorice, and ipecacuanha, in powder, of each an ounce: pound and ſift them through a fine lawn ſieve, and mix them well together.

N. B. The ipecacuanha muſt be ſuch as will break eaſily, and not of the tough and woody ſort.

This is one of the moſt certain ſudorifics, and never weakens the patient by its operation. It was publiſhed by Dr. Dover in his book called the Old Phyſician's laſt Legacy to his Country, and has long been in uſe under the name of Dover's Sweating Powder.

The notice taken in the above directions for preparing this powder, reſpecting red fumes which are to be avoided, is not juſt; the two ingredients do not act on each other, nor yet produce any fumes except a very ſmall quantity of aqueous ones. The two ſalts may as well be uſed in this medicine in their ſimple ſtate, and only mixed by powdering them together.

Sweating Powder, N° II.

Take common tartar, and refined nitre, of each one pound; fulminate them together in a crucible, or an iron pot; which will reduce them to about fifteen ounces, after the fulmination. To theſe, add of white hellebore, and liquorice powder, of each ſix ounces; of opium, five ounces. Powder all theſe together, and ſift them through a fine lawn ſieve.

This powder is contrived on the ſame principle with the preceding, the ſtimulus of the hellebore and ſaline ingredients being determined to the ſkin by means of the opium.

The doſe, from twenty to fifty grains.

Dr. Ward adviſed ſuch of his patients as had never taken any of his ſweats, to begin with half a paper only (containing the full doſe) and to increaſe the quantity, or not, according to its operation, or the age and ſtrength of the patient.

Both theſe ſweating powders are to be taken in any liquid, going to bed, between the blankets, and drinking moderately now and then, ſomething warm; ſuch as white wine whey, baum tea, &c. Be careful not to check the ſweating ſuddenly, but rather encourage it by lying ſtill and keeping warm.

At firſt taking, it may be proper to begin with half a doſe, gradually increaſing it, as occaſion may

other

require. If half the quantity does not raiſe a proper ſweat, then take, the next night, three quarters, or the whole doſe; repeat it every other night at diſcretion; and for as long a time as ſhall be found neceſſary; or as they agree with the conſtitution.

In ſtubborn rheumatic caſes, and other ſettled pains in the limbs, the pill has has been found to anſwer better than theſe powders.

Paſte for the Fiſtula, &c.

Take a pound of elicampane root; three pounds of fennel ſeeds, and one pound of black pepper. Pound theſe ſeparately, and ſift them through a fine ſieve. Take two pounds of good honey, and two pounds of powder ſugar; melt the honey and ſugar together, over a gentle fire, ſcumming them continually, till they become bright as amber. When they are cool, mix and knead them into your powder in the form of a ſoft paſte.

This paſte has been found to be a ſpecific remedy for the fiſtula, piles, &c. The doſe is the quantity of a nutmeg, morning, noon, and night, drinking a glaſs of water or white wine after it.

In cold conſtitutions, where there is a want of digeſtion, and a redundance of pituitous humours, this paſte may be of ſome ſervice to the general habit; but, as to anſwering the title given to it, that can only be negatively: while the paſte is taken, impediments to the cure are ſet aſide; and as many inſtances of diſorders in the anus, would diſappear if left to themſelves, ſo, without intending it, depending on this medicine accidentally admits of relief.

Liquid Sweat.

Take a gallon of good ſpirit of wine, and half a gallon of good white wine; put them into a ſtrong bottle, and add half a pound of good ſaffron; four ounces of good cinnamon; two ounces of ſalt of tartar; and one ounce of good opium, cut into ſmall bits. Stop the bottle cloſe, and ſet it within the air of the fire, for eight days, ſhaking the bottle three or four times a day. Laſtly, filter it through paper.

The doſe is from thirty to ſixty drops in a glaſs of white wine. The ſame general obſervations are proper in the uſe of this medicine, as are given with the ſweating powders.

This is a very trifling compoſition. The only efficacious ingredient is opium; but the doſe thereof is too ſmall to be productive of any conſiderable advantage.

Dropſy purging Powder. From Dr. Ward's Book.

Take of jalap, cream of tartar, Florentine orris root, each four ounces: make them into a fine powder ſeparately, and mix them well.

Dropſy purging Powder, as prepared by Mr. D'Oſterman for Dr. Ward.

Take a pound of jalap in powder, a pound of cream of tartar, and an ounce of bole ammoniac in fine powder: mix them well.

The doſe is from thirty to forty grains, in broth, or warm beer, two or three days together, or oftener, as neceſſary. This medicine rarely fails in the watery or the windy dropſy;

dropſy; provided that the patient hath not been tapt. It muſt be repeated at proper intervals, as the caſe may require.

Eſſence for the Head-Ach. and Pains. From Dr. Ward's Book.

Take ſpirit of wine, four ounces; camphor, two ounces; volatile ſpirit of camphor, two ounces: mix them well, and apply it with the hand.

Eſſence for the Head-Ach, and Pains, as prepared by Mr. D'Oſterman for Dr. Ward.

Take two pound of true French ſpirit of wine, put it into a large ſtrong bottle, and add two ounces of roch alum in very fine powder; four ounces of camphor, cut very ſmall; half an ounce of the eſſence of lemons; and four ounces of the ſtrongeſt volatile ſpirit of ſal ammoniac. Stop the bottle quite cloſe, and ſhake it three or four times a day, for five or ſix days.

Gently rub a little of it upon the palm of the hand, or apply it to the part affected; holding it there till it is dry. Repeat it two or three times, if the pain is not ſooner relieved.

Of all Dr. Ward's medicines, this, in his life-time, ſurpriſed the multitude, and baffled the curioſity of enquirers the moſt; as he never would, it is ſaid, either ſell it, or entruſt it in the cuſtody of any other perſon. After all, the ſubtile fluid called æther, is more probably the real medicine which he uſed, than this mixture, which is little more than a ſpirit of wine and camphor.

As to the volatile ſpirit of camphor mentioned in Dr. Ward's book, there is no ſuch ſpirit known; nor does he give any direction to make it. Beſides, the quantity of camphor cannot be diſſolved in the quantity of the two ſpirits which he preſcribes. In the preſcription given by Mr. D' Oſterman, there is a conſiderable deficiency; the volatile alkali ſhould be in the cauſtic ſtate, that is, it muſt be the ſpirit of ſal ammoniac prepared with quicklime, or it will not even with the aſſiſtance of the rectified ſpirit of wine, mix with the eſſence of lemons. The addition of the alum is injurious, for its acid uniting with the volatile alkali, will deſtroy the greateſt part of it.

This medicine differs little from a mixture of camphor with the volatile aromatic ſpirit of the ſhops.

INDEX *of thoſe Names of Medicines which have been changed by the College of* London *in the laſt Edition of their* DISPENSATORY.

The former Names.	*The new Names.*
ANtimonium diaphoreticum	CAlx antimonii; *the calx of antimony.*
Aqua benedicta compoſita Bateana	Aqua calcis minus compoſita; *the leſs compound lime-water.*
Aqua Hungarica Bateana	Spiritus roriſmarini; *ſpirit of roſemary.*
Aqua ſtyptica Camphorata	Aqua vitriolica camphorata; *the camphorated vitriol water.*
Aqua ſtyptica Sydenhami	Aqua vitriolica caerulea; *the blue vitriol water.*
Arcanum corallinum	Mercurius corallinus; *coralline mercury.*
Aurum moſaicum	Aurum muſivum; *moſaic gold.*
Balſamum polychreſtrum	Balſamum guaiacinum; *balſam of guaiacum.*
Calomelas	Mercurius dulcis ſexies ſublimatus; *dulcified mercury ſublimate ſix times ſublimed.*
Confectio Archigenis	Confectio Paulina; *the confection called* Paulina.
Confectio Raleighana	Confectio cardiaca; *the cordial confection.*
Crocus metallorum	Crocus antimonii; *crocus of antimony.*
Diacaſia cum mannâ	Electarium è caſia; *electary of caſia.*
Diaſcordium	Electarium è ſcordio; *electary of ſcordium.*
Elixir aſthmaticum	Elixir paregoricum; *paregoric elixir.*
Elixir proprietatis Helmontii	Vinum aloeticum alkalinum; *aloetic alkaline wine.*
Elixir proprietatis ſimplex	Elixir aloes; *elixir of aloes.*
Elixir ſalutis	Tinctura ſenæ; *tincture of ſena.*
Elixir vitrioli Minſichti	Elixir vitrioli acidum; *acid elixir of vitriol.*
Elixir vitrioli Vigani	Elixir vitrioli dulce; *dulcified elixir of vitriol.*
Emplaſtrum diachylon ſimplex	Emplaſtrum commune; *the common plaſter.*
Emplaſtrum diachylon cum gummi	Emplaſtrum commune cum gummi; *the common plaſter with gums.*

Emplaſtrum epiſpaſticum	Emplaſtrum veſicatorium; *bliſtering plaſter.*
Emplaſtrum è meliloto	Emplaſtrum attrahens; *drawing plaſter.*
Ens veneris	Flores martialis; *martial flowers.*
Gas ſulphuris	Aqua ſulphurata; *ſulphurated water.*
Julepum camphoratum	Julepum è camphora; *the camphorated julep.*
Julepum cretaceum	Julepum è creta; *the chalk julep.*
Julepum moſchatum	Julepum è moſcho; *the muſk julep.*
Lac ſulphuris	Sulphur praecipitatum; *precipitated ſulphur.*
Lapis contrayervae	Pulvis contrayervae compoſitus; *compound powder of contrayerva.*
Laudanum liquidum Sydenhami	Tinctura Thebaica; *Thebaica tincture.*
Linimentum Arcaei	Unguentum è gummi elemi; *ointment of gum elemi.*
Linimentum opodeldoc	Linimentum ſaponaceum; *ſaponaceous liniment.*
Mercurius praecipitatus per ſe	Mercurius calcinatus; *calcined quickſilver.*
Mercurius praecipitatus ruber	Mercurius corroſivus ruber; *the mercurial red corroſive.*
Oleum antimonii	Cauſticum antimoniale; *the antimonial cauſtic.*
Oleum ſulphuris per campanum	Spiritus ſulphuris per campanum; *ſpirit of ſulphur by the bell.*
Oleum tartari per deliquium	Lixivium tartari; *ley of tartar.*
Oleum vitrioli	Spiritus vitrioli fortis; *the ſtrong ſpirit of vitriol.*
Paſta epiſpaſtica	Epithema veſicatorium; *bliſtering epithem.*
Philonium Romanum	Philonium Londinenſe; *the* London *philonium.*
Pilulae cocciae minores	Pilulae ex colocynthide cum aloe; *pills of coloquintida with aloes.*
Pilulae diambrae	Pilulae aromaticae; *aromatic pills.*
Pilulae è duobus	Pilulae ex colocynthide ſimpliciores; *the more ſimple pills of coloquintida.*
Pilulae Rudii	Extractum catharticum; *the cathartic extract.*
Pulvis cephalicus	Pulvis ſternutatorius; *ſneezing powder.*
Pulvis comitis Warwicenſis	Pulvis è ſcammonio compoſitus; *compound powder of ſcammony.*
Pulvis diaſenae	Pulvis è ſena compoſitus; *compound powder of ſena.*
Saccharum roſatum	Saccharum roſaceum; *ſugar of roſes.*

Species

Species confectionis Fracaſtorii — Species è ſcordio cum opio; *Species of ſcordium, or water-germander, with opium.*

Species diambrae ſine odoratis — Species aromaticae; *aromatic ſpecies.*

Species diatragacanthi frigidae — Pulvis è tragacantha compoſitus; *compound water of gum dragant.*

Species hieræ picrae — Hiera picra; *hiera picra.*

Spiritus vini camphoratus — Spiritus vinoſus camphoratus; *camphorated ſpirit of wine.*

Spiritus vitrioli — Spiritus vitrioli tenuis; *the weak ſpirit of vitriol.*

Spiritus volatilis oleoſus — Spiritus volatilis aromaticus; *aromatic volatile ſpirit.*

Sulphur auratum antimonii — Sulphur antimonii praecipitatum; *precipitate ſulphur of antimony.*

Syrupus capillorum Veneris — Syrupus pectoralis; *pectoral ſyrup.*

Theriaca Londinenſis — Cataplaſma è cymino; *cummin cataplaſm.*

Tinctura antiphthiſica — Tinctura ſaturnina; *the ſaturnine tincture.*

Tinctura croci vino canarino — Vinum croceum; *ſaffron wine.*

Tinctura hellebori — Tinctura melampodii; *tincture of black hellebore.*

Tinctura Helvetii — Tinctura ſtyptica; *the ſtyptic tincture.*

Tinctura hierae — Tinctura ſacra; *tinctura ſacra.*

Tinctura ſpecierum diambrae ſine odoratis — Tinctura aromatica; *aromatic tincture.*

Trochiſci alba Razis — Pulvis è ceruſſâ compoſitus; *compound powder of ceruſe.*

Trochiſci è carabe — Pulvis è ſuccino compoſitus; *compound powder of amber.*

Trochiſci è myrrha — Pulvis è myrrhâ compoſitus; *compound powder of myrrh.*

Turpethum minerale — Mercurius emeticus flavus; *the yellow mercurial emetic.*

Vinum benedictum — Vinum antimoniale; *antimonial wine.*

Unguentum dialthaeae — Unguentum ex althæâ; *ointment of marſh-mallows.*

Unguentum martiatum — Unguentum viride; *the green ointment.*

Unguentum nutritum — Unguentum tripharmacum; *ointment of three ingredients.*

Uguentum pomatum — Unguentum ſimplex; *the ſimple ment.*

INDEX REMEDIORUM.

A

ABIES 112
Abelmoſchus 203
Abrotanum 106
Abſinthium Pontic. 93
Roman. 93
Santonicum 94
Vulgare 113
Abſinthii Sal fixum 307
Acacia 85
Ægyptiaca 84, 79
German 84, 85, 412
Trifolia 85
Acanthus 93
Acetoſa 187
Acetoſae ſal eſſentiale 306
Acetoſella 106, 188
Acetum 264
Colchicum 267
Diſtillatum 266
Lythargyrites 268
Roſatum 267
Rutaceum 267
Sambucinum 267
Scilliticum 267, 268
Theriacale 268
Achillea 82, 116
Acidulae 219
Acidum Nitroſum and A. N. tenue 279
Acorus 60
Aconitum Anthora 146
Pardalianches 146
Salutiferum 146
Adeps Anſeris 194
Canis 194
Ceti 130
Hominis 194
Viperae 194
Urſi 194
Adianthum Album 100
Capillus Veneris 100
Nigrum 100
Vulgare 100
Ærugo Æris 198, 317
Æther 291
Æthiops Antimonialis 331
Mineralis 331
Agarici fungus 164, 203
Agallochum 60
Agnus caſtus 187
Agreſta 189
Agrimonia 106
Albumen ovi 192
Alcea 202, 203
Alchimilla 106
Alcohol 264
Alhandala 170
Alkali volatile cauſticum 284
Alkegengi 138
Alkermes 56
Alkerva 485
Allium 113, 118, 126, 129
Alnus Nigra 175
Aloes 165
Alſine 187
Althae fol. 96
Radix 139
Altilis major 54
Alumen 90
Rupeum 90
Uſtum 281, 282
Amaranthus 76
Amara dulcis 183
Ambragryſea 74
Tinct. & Eſſent. 243
Ambroſia 115
Ambroſoides vulgo 115
Ammi fol. 113
Semina 120
Ammoniacum Gum 122
Sal 282
Sublimatum 282
Amomum 202
Cardamomum 66
Zinziber 62
Amoris Pomum 202
Amygdal. Amar. 121
Dulces 99
Perſica 158, 190

Amygdal. Similis Guatimal. 103
Amygdaloides 104
Amylum 202
Anacardium 56
Occidentale 56
Anagallis Aquatica 113
Anchusa 187
Anethum 64, 140
Fruct. Ovat. 64
Angelica 63, 66
Anguria 98
Anima Articulorum 167
Pulmonum 148
Anisum 64
Anonis 114
Anthelmenthia 212
Anthemis 64, 153
Anthora 146
Anthos 52
Antihectic. Poterii 322
Antihistericorum Princeps 295
Antimonium 202
Æthiops 331
Butyrum 339, 340
Calx 337
Catharticum 338
Causticum 339, 340
Ceruſſa 338
Cinnabar 339, 340
Crocus 336
Diaphoret. 337
Lotum 337
Panacea 338
Praeparatum 332, 649
Regulus 332, 334
Martis 333
Stellatus 334
Sulph. Aurat. 334
Tinctura 338
Vitrum 335
Ceratum 336
Antirrhinum 208
Antithora 146
Aparine 76
Apes Praeparat. 248
Apiana 54
Apium 114, 136, 141
Aqua Abſinthii Magis Comp. 352, 361
Aqua Abſinthii Minus Comp. 362
Alexiteria Simplex 354
Spirituoſa 358
cum aceto 358
Aluminoſa 292, 366
Bateana 282
Magiſt. 282
Anethi Seminum 354
Angelicae Comp. 352, 361
Anhaltina 368
Aniſi Sem. Comp. 358
Antiepileptica Langii 363
Antiphthiſica 366
Antiſcorbutica 364, 367
Aromatice 360
Aurantior. Cort. 354
Spir. 358
Bryoniae Comp. 352, 362
Calcis Maj. Comp. 371
Simplex 370
Min. Comp. 371
Cardam. Sem. 358
Camphorata 365
Cardui Benedicti 358
Carui 358
Caſtorei 354
Cephalica 365
Ceraſſor. Nigr. 355
Comp. 352, 362
Cinnamomi S. 355, 377
Spirituoſa, 359
Crapula 184
De Luce 435
Epidemia 352, 360
Ferruginea 220
Fluvialis 217
Foeniculi 356
Fontana 216
Fort. 280
Dupl. 280
Comp. 280
Simpl. 280
Purificata 280
Hordea 385
Hormini Comp. 365
Hungarica 371
Imperialis 351
Juniperi Co. 359
Lactis Alex. 352

Aqua Limacum Ten. 352
Marina 219
Meliſſae 147
Comp. 250, 368
Menthae Piperit. Si. 356
Sp. 359
Vulg. Si. 356
Sp. 359
Mirabilis 59, 360, 362
Naphaeae 53
Nephritica 138, 352, 360, 366
Nivealis 218
Nucis Moſchatae 360
Opthalmica 369
Sapphir. 318
Paluſtrius 218
Paeonia Comp. 351, 363
Phagaedenica 371
Picis Liquidae 637
Fortior 638
Piperis Jamaicenſis 356
Spirit. 363
Pluvialis 218
Protheriacalis 352, 360, 363
Pulegii Simplex 356
Spirituoſa 360
Purgantes 219
Putealis 218
Raphani Comp. 142, 352, 360
Regia 280
Reginae Hungar. 371
Roſar. Alb. 357
Damaſcen. 356, 357
Rubrum 357
Sapphirina 318
Scordii Comp. 363
Sclopetaria 369
Stephani 352, 364
Styptica 370
Camph. 365
Sulphurata 263
Theriacalis 352, 364
Valeriana Comp. 360
Vitriolica 370
Caerulea 369
Camph. 370
Vulneraria 369
Aquila Alba 324
Aquilegia 114
Arabic. Gum 79
Aracus Aromaticus 56
Arbor Canella Malabarica 80
Narbonenſis 125
Vitae 203
Arbutus 82
Arcanum Duplex 280
Duplicatum 280
Archangelica 77, 97
Arcium 138
Aretium 138
Areca 203
Argentina 76
Argentum 203, 310
Preparat. 309
Ari Radix 125
Ariſtolochia Longa 71
Rotunda 71
Virginiana 153
Aroma Germanicum 127
Aromaticum Roſatum 476
Artanita 114
Artemiſia 68, 93, 94, 106, 113
Arum 125, 146
Aſafoetida 70
Purificat. 248
Aſarum 180
Hypociſtis 85
Aſclepias 49
Aſelli 142
Aſpalathum 60
Aſparagus 139
Aſperula Odorata 114
Aſplenium 78, 100, 101, 115
Aſter Atticus 104, 106
Aſtragalus Tragac. 80
Aſtrantia 152
Athamanta Annua 65
Atriplex Olida 68
Atropa 182, 183
Avellana 99
Mexicana 103
Avena 78
Aurantia Curaſſavenſia 94, 189
Aurantiorum Cortex 94
Flores 53
Fructus 189
Auricula Muris 76

Aurum 203
Muſivum vulgo Moſaicum 322
Axungiae Porcinae Praep. 246
Viperinae Praep. 246

B

Baccae Juniperi 122
Lauri 66
Piſcatoriae 184
Balanus Marepſica 99
Balauſtia 82
Balnea Calida 221
Frigida 221, 222
Mariae 27
Balſamum Americanum 123
Anodynum 483, 491, 502
Bateanum 483
Apoplecticum 448, 484
Arthriticum 622
Capivi 123
Commendatoris 431
Gileadenſe 123
Guaiacinum 483
Guidonis 491
Hyperici 488
Judaicum 123
Lucatelli 448
Mecha 123
Nephriticum 622
Perſicum 431
Peruvianum 59
Polychreſtum 483
Saponaceum 501
Simplex 259
Succini 294, 484
Sulphuris Aniſatum 260
Craſſum 260
cum Oleo Lini 260
Oliv. 259
Knoephelii 484
Rulandi 484
Succinat. 260
Terebinth. 259
Syriacum 123, 204
Terebinth. 259, 379, 490
Tolutanum 103
Traumaticum 432
Viride 483, 502, 608
Bamia Ægyptiaca 203
Moſchata 203
Banilla 56
Barba Capri 147
Bardana 138
Baſilicum 68
Baume de Commandeur 431
Bdellium 104
Becabunga 113
Bellis 71
Belzoinum 104
Benzoinum 104
Flores 244
Oleum & Spiritus 245
Tinctura 244
Berberis Cortex 125
Fructus 83
Beta 97
Betonica 49
Betula 97, 175
Bezoar Occident. 156
Orient. 156
Bezoarticum Minerale 340
Biſmalva 96
Biſmuthum 203
Flores 341
Magiſterium 341
Biſtorta 86
Bitumen 132
Blitum Foetidum 68
Boletus 203
Bolus Armen. 91
Praeparat. 246
Alexipharmac. var. 565
Cathart. var. 567
Opiat. 568
Bonus Henricus 97
Borax 161
Botrys 115
Branca Urſina 93
Braſſica 107, 141
Brionia 71, 168, 177
Britannica 128

Bruſcus 118
Bubon 78
Bufo Praeparat. 248
Buphthalmum 68
Bupleurum 109
Burſa Paſtoris 76
Butyrum 203
Buxus 87

C

CAcao 56, 103
Caerefolium 135
Cajous 56
Calaminaris Diaph. 248
Lapis 193
Magiſterium 248
Praeparat. 246
Calamintha 146
Calamus Aromat. 60
Calcanthum Rubefactum 288
Calendula 147
Calomelas 324
Calx Viva 199
Antimonii 337
Jovis 321
Nitrata 337
Zinci 289
Cambogia 172
Camphora 149
Camphorata 49
Cancrorum Chelae 90
Praep. 246
Oculi 90
Praeparat. 246
Canella alba 60
Javanenſis 50, 80
Malavaricae 50, 80
Zeylanica 85
Cannabis Semina 189
Cantharides 142, 199
Tinct. 424
Capillus Veneris 100
Capivi Balſamum 123
Capparis 115
Cortex 125
Caprifolium 115
Capſicum 58
Caranna 110
Cardamine } 115
Cardamines }
Cardamomus 65
Cardamum 65
Cardiaca 68
Carduus Benedictus 93
Fullonum 107
Careum 65
Carica 121
Carlina 146
Caros 65
Carpeſium 57
Carpobalſamum 204
Carthamus 158
Carum 65
Careum 65
Cariophyllus 53
Aromat. Americ. 59
Hortenſis 53
Carpeſium 57
Caſcarilla 150
Caſeus 204
Caſſamunair 71
Caſſia Alexandrina 163
Fiſtula 165
Lignea 80
Caſtanea 83, 99
Caſtoreum 73
Cataplaſma Apoplecticum 617
Anthelminth. 619
Aromaticum 504
Auriculare 618
Cephalicum 617
è Cymino 503
Diſcutiens 503
Diureticum 620
Emolliens 621
Febrifugum 619
Haemorrhoidale 621
ad Hydropem 620
Laterale 620
Maturans 504
Paralyticum 618
Paronychiam 622
Podagricum 618
Refrigerans 621
Sambucinum 621
Stomachicum 620
Suppurans 504
Synanchicum 620
Cataputia 170, 200

Cataria

Cataria 69
Catechu 91, 250
Cauda Equina 76
Cauſticum commune fortius 306
mitius 306
Antimonii 340
Lunare 309
Cauterium Potentiale 306
Centaurea 94, 128
Centinodium 76
Centaurium minus 94
Centauroides 117
Cepa 126
Cera Alba 204
Flava 204
Cerae Oleum 272
Ceraſi 56
Ceratum Album 502
Citrinum 502
Epuloticum 503
è Lapide Calaminare 503
Mercuriale 503
Cereviſia 203
Hydropica 516
Juniperina 516
Stomachica Amara 513
Ceruſſa 193, 318
Ceterach 78, 115
Chaerefolium 135
Chalybis Praeparationes 310
Rubigo Praeparat. 310
Sal 313
cum Sulph. praep. 311, 312
Tartarizatus 311
Chamaeacte 125, 138
Chamaeciſſus 108
Chamaedaphne 169
Chamaedrys 115
Chamaelea 169
Chamaeleon Albus 146
Chamaemelum 63
Chamaepitys 107
Cheiri 50
Chelae Cancrorum 90
Praeparat. 246
Chelidonium 107
Chenopodium 68, 97, 115
China 89
Chryſocolla 161
Chryſtal. Tartari 297
Chrythmum Marit. 116
Cicer 102
Cichoreum 187, 188
Cicla 97
Cicuta 181
Cinara 77
Cinchona 150
Cineres Ruſſici 204
Cinnabar. Factit. 326
Nativ. 74
Cinnamomum 85
Ciſtus Ladanifera 59
Citrei Cortex 94
Fructus 189
Citrulli 98
Cnicus 158
Sylveſtris 93
Cnidia Grana 170
Coagulum Aluminoſum 504
Coccinilla 155
Coccum Inſectorium 56
Coculus Indicus 184
Coccus Baphica 56
Cochlearia 141
Hortenſis 115
Marin. 116
Spirit. Aureus 257
Simplex 256
Coffaea 56
Colchicum 140, 167
Colcothar Vitrioli 312
Colocynthis 170
Colophonia 379
Colubrina 153
Columbinum 77
Columboe 86
Confectio Alkermes 407, 454
Archigenis 449, 455
Cardiaca 448, 449
Damocratis 449
Fracaſtorii 454
Japonica 447
Paulina 449
Raleighana 448, 456
Conium 181
Conſervae 440, &c.

Conſolidae Flores 78
Radix 81
Contrayerva 152
Convolvulus 141, 168, 169, 174
Copaifera offic 123
Corallina 94
Corallium rubrum 92
Corallii praeparatio 246
Cordia Sebeſtena 60
Coria Sebeſten 121
Coriandri ſemina 65
Corinthiacae 121
Cornu Cervi calcinatio 271
Praeparat. 246
Ragura 89
Spirit. ſal, ol. 270, 271
Aromat. 273
Cornus 77
Coronopus 77, 78
Cortex Peruvianus 150
Extractum 392
Infuſio 251
Tinctura 425, 426
Ulmi 112
Winteranus 60
Corylus 99
Coſtus Arabicus 62
Cotyledon 77, 189
Crataegus 138
Cremor Tartari 297
Creta 91
Cretago 84
Crithmum 116
Crocodilus Terreſtris 155
Crocus 147
Antimonii 336
Lotus 336
Martis Aſtringens 312
Aperiens 310, 312
Metallorum 336
Cryſtalli Tartari 297
Cubebae 57
Cucumis 98, 170, 189
Cucumeris Aſinini faecula 174, 413
Cucurbita 98, 190
Cuminum 65
Æthiopicum 113
Cuminum Pratenſe 65
Cunicula 119
Cuprum 203
Ammoniacum 317
Curcuma 126
Cuſcuta 107, 187
Cuurdo 85
Cycas Indica 78
Cyclamen 114
Cydonia Mala 83
Cumini Sem. 65
Cynhorrhodon 103
Cynogloſſum 77
Cynoſbatos 103
Cyperus 68
Babylonica 61
Longa 152
Cyprus Indica 126
Cytinus 82, 84
Cytiſus Spinoſus 85

D

DActyli 122
Daphne 169
Daucus Creticus 65
Sylveſtris 65
Decoctum Album 382, 519
Comp. 383
Allii 527
Altheae 530
Amarum Aromaticum 529
Antiphthificum 523
Aperiens 531
Aromat. Amarum 529
Balſamicum 523
Cannabinum 521
Catarrhale 521
Catechu 520
Comp. 521
Chamaepityos 517
Commune pro Clyſt. 383
Corallinum 529
Corticis Balſam. 533
cum acidis 533
Chalybe 533
Helleb or 533

Decoctum contra Diarrhoeam 519
Cretaceum 382
Diureticum 530
Dyſentericum 520
Edulcorans 522
Emmenagogum 518
Expect. potent. 527
Febrifugum 532
Fracaſtorii 520
Hordei 386
Hyſtericum 519
Japonicum 383
ad Ictericos 383
Icteric. var. 527, 528
Increaſſans 521
Juniperinum ſim. 530
comp. 530
Liberans 522
Lignorum 384
Limacum 523
Malvae 526
Maſtiches 520
Nephriticum 384, 530
Nitroſum 384
Pacificum 535
Pectorale 384, 523, 526
Polychreſtum 534
ad Rachitidem 521
Refrigerans 536
Reſtringens 520
Roſarum 526
Rubicundum 519
Sacrum 532
Sanctum 522
Sarſaparillae 522
Scarleticum 531
Scorzonerae 536
Serpentariae comp. 385
Stypticum 522
Tamarind. cum Senna 385
Ulmi 528
Diaboli Inteſtina 187
Diacaſſia 446
Diachylon ſimp. 493
cum gum. 493
comp. 508
Diacodium 404
Diagrydium 256
Dianthus 54
Diapentia 82
Diaſcordium 454
Diaſulphuris 461
Dictamnus Creticus 68
Albus 68
Digitalis 107
Dipſacus 107
Diureticorum Princeps 295
Doronicum 146
Dorſtenia 152
Draconis Sanguis 80
Dracontium 146
Dracunculus 146
Drakena 152
Dulcamara 183

E

EAU des Carmes 368
Eau de Luce 435
Eboris Raſſura 90
Ebulus Cort. 125
Semen 138
Eclegma 415
Elaeoſacchara 242
Elaterium 174, 413
Elatine 208
Elect. Acidum 565
Æthiopicum 560
Alexipharmacum 563
Analepticum 554
Cordiale 555
ex Angelica 552
Anti-Epidemic. 563
Aſthmatic. 560
Aſtringens 554
Baccis Lauri 446, 552
Camphoratum 563
Cardiacum 449, 550
magn. 550
Caryocoſtinum 447, 456
Caryophyllat. 549
è Caſſia 446
contra Catarrh. 555
Cephalicum 549
Chalybeat. 553
Cinnabari 550
Cinnamomo 556
de Conditorum 558
Dialthaea 557

Elect. Diureticum 562
Ducis Sabaudiae 549
contra Dyſenter. 556
Emmenagogum 552
cum Chalybe 553
Helleboro 553
de Guaiaco 560
Haemoptoen 557
Haemorrhoidale 558
ad Hernias 555
Hyſtericum 552
Ictericum 562
Increaſſans 554
Japonicum 447
Juniperin. 552
Lenitivum 446
Lithontripticum 561
Nephriticum 561
Paralyticum 549
Pectorale 447, 557
cum Cort. Peruv. 563
ad Phthiſin. Var. 558
Poterii 557
Refrigerans 564
Reſtaurans 558
cum Chalybe 555
Reſtringens 556
è Scammonio 447
è Scordio 447
de Sinapi 551
Solutivum 564
de Sperm. Ceti 557
Splanchnicum 553, 562
Stomachicum 551, 556
ad Strumas 561
de Symphyto 554
Terebinthinatum 561
Thebaicum 452
de Viſco Quercino 550
Vulneraria varia 559
Elemi Gum 198
Eleoſelinum 114
Eleutheria 150
Elixir Aloes 432, 433
Rhubarb. 432
Antivenereum 439
Aſthmaticum 433, 439
Camphoratum 437
Guaicinum 433
Guaic. vol. 431
Hypochondriac. 439
Myrrhae Compoſitum 434
Paregoricum 433
Pectorale 433
Proprietatis 432
cum Acido 433
Dulce 437
Helmontii 418
Tartarizatum 437
Vitriolicum 433
Sacrum 432, 434
Salutis 429
Stomachicum 423
Traumaticum 532
Vitae 437
Vitrioli 434
Acidum 433
Dulce 434
Mynſicht. 434
Uterinum 434
Elleborus alb. 181
Niger 175
Embrocationum Forma 601
Emplaſtrum contra Abortum 617
Adhaeſiv. 493
ex Ammoniaco cum Merc. 491
Anodyn. 491, 616
Anthelminth. 615
Antihyſtericum 492
Apoplecticum 612
Arthritic. 510, 511, 613
Attrahens 492
Carminativum 614
Cephalicum 492, 612
Cereum 492
è Cicuta cum Ammon. 492,
è Cymino 493
Commune 492
adhaeſiv. 493
cum Gum. 493
cum Mercur. 494
Croceum 494

Emplaſtrum Defenſivum 493
Diachylon ſimpl. 493
Comp. 508
cum Gum. 493
Diapalmae 493
Dorſale Corrob. 616
Epiſpaſticum 496, 508
Febrifug. 615
Flos Unguentor. 509
è Gum Elemi 509
Gummoſum 493
ad Herniam 495
Hyſtericum 615
Icſtericum 615
de Meliloto ſimp. 509
Mercuriale 494, 509
de Minio 494
Mucilag. 495, 508
Nephriticum 615
Noſtratibus 509
Nuchale 612
Opiatum 509
Opodeldoc 509
Oxycroceum 494
Paralyticum 613
Pectorale 616
Podagricum 510
Roborans 493, 495
de Sapone 495
Spleneticum 614
Stomach. 495, 616
ad Strumas 510
Suppedale 613
Vermifugum 510
Veſſicatorium 496
Volatile 496, 503
Emulſio Alexipharmica 534
cum Ammoniaco 528
Analeptica 518
Arabica 389
Aſthmatica 531
Balſamica 524, 528
Camphorata 388
Communis 389, 526
Cretacea 523,
cum Cornu Cervi 524
Diuretica 531
Edulcorans 524
Emulſio Hyſterica 519
Pacifica 536
Paconiata 518
Tulleri 518
de Sarſa 527
Sperma Ceti 529
contra Strumas 617
Styptica 524
Varioloſa 533
Vulneraria 528
Endivia 188
Enema de Amylo 594
Anodynum 595
Anthelminthicum 592
Balſamicum 594
Carminativum 593
Catharticum 592
Commune 591
Emolliens 593
Febrifugum 595
Hæmorrhoidale 593
Hyſtericum 593
Reſtringens 594
Terebinthinatum 593
Ens Veneris 314
Enula Campana 127
Epithema Anodynum 624
cum Calce Viva 623
Cephalicum 624
cum Sacch. Saturn. 624
Saponaceum 624
Stomachicum 624
Veſſicatorium 503
Volatile 503
Epithymum 107
Equiſetum 76
Erigeron 158
Eriſymum 116
Erpillos 52
Erucae fol. 100
Ervum 102
Eryngii Rad Condit. 443
Eryngium 104
Eſſentia Ambraegryſ. 243
Martis 315
Neroli 53
Oderifera 435
Viperarum 269, 270
Expreſſio Aſthmatica 625

Expreſſio Cephalica 627
Icterica 626
Millepedum 626
Scorbutica 627
Styptica 627
Eupatorium 116
Euphorbium 180, 200, 201
Euphragia 50
Euphraſia 50
Eutraſia 50
Extracta &c. 389
Extractum Abſinthii 391
Antiſcorbuticum 364
Aconitum 390
Aloe 391
Belladonae 391
Campech. lign. 392
Catharticum 394
Centaurii minoris 391
Chamemaeli florum 391
Cicutae 393, 394
Enulae Camp. rad. 390
Euſtachii
Flamulae Jovis 391
Gentianae rad. 390
Guaiaci lign. molle & durum 393
Glycyrrhizae 391
Hellebori Nigri 390, 391
Hyolcyami 391
Jalapii 391
Martis 315
Opii 253
D. Goddard 253
Peruviani Cort. mollis & durum 392
Plantaginis 390
Rudii 395
Rutae 390, 391
Sabinae 391
Saturni 320
Stramonii 391
Thebaicum 253

F

FABA 78
Sal Stipitum 307
Fagus Caſtanea 99
Farfara 101
Fel Naturae 165
Ferrum 208
Praeparatio Williſ. 310
Ferula Perſica 70
Ficus Communis 121
Filago Germanica 81
Filipendula 140
Filius ante patrem 101
Filix 87, 126
Fiſtula Caſſia 165
Flores Benzoini 244
Biſmuthi 341
Martis 314, 315
Salis Ammoniaci 285
Sulphuris 257
Alb. 258
Lot. 258
Zinci 289
Flos Cereviſiae 195
Unguentorum 509
Foeniculum 64, 140
Mar. 116
Foenugraeci ſim. 98
Foenum Camelorum 52
Fotus Anthelminthicus 606
Arthriticus 602
Aſtringens 604
Carminativus 603
Communis 383
Corroborans 605
Diſcutiens 606
Diureticus 603
Emolliens 603
Eriſypelatoſus 604
Haemorrhoidalis 605
contra Hydropem 604
Pacificus 604
Sanguinam Siſtens 604
Scorbuticus 603
Spleniticus 603
Stomachicus 605
Fragaria 135
Frangula 175
Fraxinus 120, 167
Frontale Cephalic. 627
Maſtachin. 627
Camphoratum 628

Fuga Daemonum 108
Fuligo Ligni 209
Fulginis Oleum 272
Fumaria 116
Fungus Agarici 164
Sambuci 108
Furfur 195

G

GAlanga 61
Galbanum 70
praeparat. 248
Galega 147
Galeopſis 77, 97
Gallae 83
Galium 76, 77
Gambogia 172
Gargariſma Aſtringens 598
Detergens 598
Emoliens 599
Gas Sulphuris 263
Gelatina Berberorum 413
Cydoniorum 412
Ribeſiorum 413
Gelſaminum 54
Geniſta 117
Gentiana 94
Geranium 77
Columbin. 77
Moſch. 77
Robertianum 77
Gilla Vitrioli 214, 290
Ginſeng 61
Glandes 83
Glans Unguentaria 99
Glaſtum 81
Glechoma 108
Glycyrrhiza 126
Gnaphalium 81
Goſſipium 201
Gramen 141, 153
Grana Paradiſi 66
Granadilla 152, 170
Granata 84, 86
Gratia Dei 77
Gratiola 117
Groſſulariae 190
Guaiacum 88, 150, 395
Guajacum 88
Gum Elemi 193
Gum Rubrum Aſtringens 80
Gutta Alba 651
Emetica D. Ward 651
Gamba 172
Guttae Vitae 254
Gummi Aloes 395
Guaiacum 395
Rubrum Aſtringens 80
Verum 80

H

HAlec 195
Haematoxylon 210
Halicacabum 138
Handala 170
Hedera terreſtris 108
Hedychroi 460
Heliotropium 90
Helxine 97
Hepar Sulphuris 258
Hepatica 117
Herba Inferni 187
Herba Sacra 51
Herculeum 118
Hermodactyli 167
Herniaria 81
Hibiſcus 203
Hiera Picra 474
Hieracium 76
Hippoſelinus 117
Hirudo 195
Hirundinaria 49
Hordeum 102
Horminum 77
Humulus 102
Hydrargyrum 132
Hydrolapathum 128
Hydromel 516
Hydropiper 135
Hyoſciamus 181, 184
Hypericum 108
Hypociſtis 85
Hyſſopus 117

I

JAlapium 177
Jalapii Reſina 249
Japonica Terra 91
Tinctura 259

Jaſminum 54
Ibiſcus 96
Iberis 118
Ichthyocolla 79
Ilex 56
Imperitoria 152
Infuſio Alexipharmica 534
Amara 386, 387
Chalybeata 529
Antiphthiſica 524
Cathartica 535
Communis 535
Corticis Peruviani 251
Diuretica 532
Liberans 525
Paralytica 518
Rhubarb 388, 535
Roſarum Com. 525
Urticarum 525
Zedoariae 534
Infuſum Amarum 386
Simplex 387
Purgans 387
cum Sena 387
Flamul. Jovis 387
Senae Com. 387
Limoniat. 388
Unciae Quatuor 388
Tamarind. cum Sena 388
Inguinalis 104, 106
Injectio Auricularis 596
ad Gonorrhoeam 596
Uterine 597
Inula 127
Jovis 321
Ipecacuanha 159
Iris 105
Iſatis Tinctoria 181
Iva Arthritica 107
Juglandes 99
Jujubae 121
Julapium Alexiph. 542
Balſam. 540
è Camphora 545
Carminativ. 538
Cephalic. & Cardiac. 538
Julapium è Creta 545
Diaphoretic. 542
Diuretic. 549
Hyſteric. 539
è Moſcho 545
Juncus Odoratus 52
Juniperi Baccae 122
Gum. 110
Juſculum ad Tabem 622
Jus Viperinum 386

K

KALI 13
Kermes Mineralis 335
Kino 80

L

LAbdanum 59
Lac Ammoniacum 528
Aſſininum 129
Caprinum 129
Ovinum 129
Sulphuris 258
Vaccinum 129
Virginale 244
Lactuca 188
Ladanum 59
Lambatio, v. Linctus
Lamium 97
Lapathum acutum 127
Lapis Ætites 156
Calaminaris 92, 193
Praeparat. 246
Magiſterium 248
Contrayervae 473
de Goa 633
Granatorum 92
Haematites 92
Hibernicus 131
Hyacinthus 92
Lazuli 92
Medicamentoſus 293
Rubinus 92
Sapphicus 92
Septicus 306
Smaragdus 92
Tutiæ 92, 193
Lappa Major 138
Laſer 64
Laſerpitium 64
Laudanum Liquid. 253, 254, 422

Laudanum Sydenham 253, 254
Londi 256
Lavendula 54
Staechas 55
Laureola 169
Lauri Bac 66
Laurus Benzoin 104
Zeylanica 85
Caſſia 80
Saſſafras 88
Camphora 149
Vulgaris 66
Lemna Minor 188
Lens Aquatic vel Paluſtris 188
Lentiſcus 87
Leonurus Cardiaca 68
Leontodon 189
Lepidium 118, 200
Leucoium lut. vulg. 50
Leviſticum 64
Lichen 117
Caninus 117
Coriaceus 117
Terreſtris Ciner. 117
Licoperſicon 183
Lignum Nephriticum 139
Peregrinum 139
Tinctile Campech 210
Liguſticum 64, 149
Liguſtrum 118
Lilium Album 97
Conval 54
Vernum 54
Limaces 129
Limonum Cortex 94
Fruct. 189
Linctus Detergens 547
Emolliens 546
Lingua Serpentaria 109
Linimentum Album 501
Arcaei 505
Cephalic 608
Cereum 501
Coſmetic 612
Crinific 608
Depilatorium 608
Digeſtivum 611
ad Foveas 611
Linimentum Haemorrhoidale 609
Herpeticum 610
Laterale 611
ad Lubricos 610
Ophthalmicum 608
—Hans Sloane 647
Paralyticum 608
Pectorale 611
Padagricum 612
Saponaceum 501
Sympatheticum 610
Tripharmacum 502
Virilitatis 609
Volatile 502
Lini Sem 98
Linum Cathartic 169
Liquamen Salis Tartari 298
Liquor Æthereus Vitriolicus 291
Anod. Miner. Hoffmanni 292
Lythargyrus 193
Lithoſpermum 138
Lithontript. Joan. Stephens 639
Doct. Chittick 643
Litus Aluminoſus 629
Detergens 630
cum Sperma Ceti 630
Lixivium cum Calce 630
Cauſticum 303
Hydropicum 630
Martis 315
Salis Tartari 298
Saponaceum 303
Lohoc Commune 415
ex Amylo 415
de Lino 415
de Manna 415
Saponaceum 415
Sanum 415
de Sperma Ceti 415
Lonicera 115
Lotio Oleoſa 600
Repellens 599
Saponacea 370
Lujula 106, 188
Lumbrici Terreſtres 131
Lupinus 68
Lupulus 102
Lycoperſicon 202

M

MACIS 57, 60
Magiſter. Biſmuthi 341
Lapid. Calaminar. 248
Magneſia Alba 645
uſta 647
Majorana 50
Cret. Seu Syriac 50
Mala Armeniaca 190
Aureo 183, 202
Catonea 83
Hortenſia 190
Perſica 190
Punica 82, 84
Sylveſtris 82, 84, 190
Malabrathum 50, 80
Malicorium 84, 86
Malva 97, 202
Mandragora 182
Manna 167
Margaritae 90
Praeparatae 246
Marrubium 68, 108
Mars Diaphoreticus 314
Saccharatus 211, 443
Solubilis 311
Sulphuratus 312
Martis Crocus Aperiens 312
Aſtringens 312
Flores 313, 314, 315
Limatura praep. 310, 311
Lixivium 315
Praep. cum Sacchar. 311
cum Sulph. 311, 312
cum Tartar 311
Williſiana 310
Rubigo Praeparata 310
Sal 313
Tinctura 316
Florum 316
in Sp. ſal. Marin. 316
Vitriolum 313
Vinum 315, 316
Marum 50
Creticum 50
Maſtichen 50
Syriacum 50
Maſtiche 123
Materia Medica 2, 43
Matricaria 68
Matriſylva 115
Mecoachana 168, 177
Meconium 185
Mei 152
Mel 208
Ægyptiacum 409, 505
Anacardium 56
Anthoſatum 411
Diamoron 412
Elatines 409
Elleboratum 410
Mercuriale 411
Mororum 412
Roſaceum 410
Saponis 409
Violaceum 412
Meliſſa Calamintha 146
Melleguetta 66
Mellis Deſpumatio 247
Mellilotus 109, 196
Meliſſa 146, 147
Nepeta 146
Melones 98, 190
Mentaſtrum 81, 118
Mentha Varia 81
Felina 69
Sylveſtris 118
Menyanthes 119
Mercurialis 97
Mercurius Alcalizatus 332
Calcinatus 330
Calx 323
Corallinus 331
Emeticus Flavus 329, 330
Panacea Alba 328
Rubra 328
Praecipit. Albus 328, 329
ruber 326, 327
Dulcis 324
Ruber corr. 326, 327
Praecip. per ſe 330
Purificatio 322
Reſuſcitatus 326
Solutio 323

Mercurius Sublimatus corrof. vel albus 323, 324
Dulcis 324
Vitae 340
Meſpilus 84, 138
Metreum 117
Meum 152
Milium Solis 138
Millegrana major 81
Millefolium 82
Millepedes 142
Millepedium praeparet 251
Ol. Sp. & Sal. Vol. 252
vinum 251, 421
Mimoſa Ægypt. 85
Mimoſa Nilotica 79
Minium 193, 318
Mirqueth 85
Miſtura, v. Potio
Mithridatum 449
Miva Cydoniorum 412
Molen 140
Mori Fructus 84, 190
Morſus Gallinæ 187
Moſchatum 77
Moſchus 72
Moxa 68, 201
Mucilago Gum. Arab. 79
Semin. Cydonior 386
Muſcus Marinus 94
pixidatus 77
Myriſtica Moſchata 57
Myrobalani 165
Myrrha 70
Myrrhae Oleum 252
per deliq. 252
Myrrhis 135
Myrti Baccae 84
Myrtillus 84
Myrtus Jamaicenſis 59
Pimenta 59

N

NAPTHA 132
Nardus Celtica & Indica 153
Naſturtii fol. 115, 118, 119
Sem. 120
Nepeta 69
Nicotiana 181, 183, 196
Ninzig 61
Nitrum 143
Catharticum 277
Nixatum 277, 281
Purificatum 276
Stibiatum 337
Vitriolatum 279, 281
Nitri Spiritus 278
cum ol. Vitriol 278
Nitri Spiritus Dulcis 279
Glauberi 279
Tinctura 281
Nodulus Cephalicus 631
Hyſtericus 631
Nux Moſchata 57
Torrefact. 247
Vomica 184

O

OCIMUM 68
Ocularia 50
Oculi Concrocum 90
præparat. 246
Oenanthe 182
Offa Alba 273
Oleum Abſinthii 375, 486
Acouſticum 607
Amygd. 485, 486
Amar. 485, 486
Dulce. 485, 486
Anethi 375, 486
Anifi 375
Anthos 376
Balſami 123
Benedictum 490
Benzoin 245
Buxi 489
Camphorae 264
Camphoratum 486
Caryophyl. 376
Carui 376
Cephalic 607
Cerae 272
Ceti 130
Chamaemel 376, 486
Cheirinum 486
Chryſomelinum 485
Cicinum 486
Cinnamomi 377
Copaivae Comp. 490
Cornu. Cerv. 270, 271

Oleum Coſmetic 607
Cremoris 607
de Kerva 486
Exeſtrenſe 489
Foeniculi 377
Fuliginis 272
Guaiaci 489
Hederae 377
Hyperici 486, 488
Juniperin 377
Keirinum 488
Lateritium 490
Lavendulae 377
Laurin 486
Lilior. Alborum 486
Limonum 376
Lumbricorum 488
Macis 58, 377, 486
Mandragore 489
Majoranae 377
Martiſper deliq. 315
Menthae 378
Piperitidis 378
Myrrhae 252
per deliquium 252
e Mucilaginibus 486
Neroli 53
Nicotianae 488
Nucis Moſchat 57, 378
Olivarum 196, 486
Omphacinum 189
Origani 378
Palma Chriſti Sem. 484
Papaveris 488
Paralyticum 607
Petrolei Barbadenſ. 490
Philoſophorum 490
Pulegii 378
Rhodii 378
Ricini 484
Roſaceum 486, 488
Rutae 378
Rutaceum 486, 488
Sabinae 379, 488
Salviae 379
Sambuci 486, 488
Sanctum 490
Saſſafras 379
Semin. Lini. 486
Oleum Sinapi 486
Spicae 132
Succini 293, 295
Sulphuris per Camp. 261
Tartar. per deliq. 298
Terebinth. 379, 490
Æthereum 490
Empyreumat. 490
Viper. Rectificat. 269
Viride 486, 608
Vitriol 289
Olea perdiſtillationem 374
Eſſentialia 241, 374
per Expreſſionem 482
per Infuſionem & Decoctionem 486
Olibanum 80
Olivae 191
Omphacinum 189
Ononis 114
Oniſci 142
Opium 185
Colatum 253
Extract 253
Goddardi 253
Praeparat 252
Ophiogloſſum 109
Ophthalmica 50
Opobalſamum 123
Opodeldoc 501
Opoponax 110
Orchis 61, 105
Origani flores 51
Origanum 50, 51
Majorana 50
Onites 51
Anglicum 51
Creticum 51
Vulgaris 51
Oriza 78
Orobanche 85
Orobus 102
Sepiae 198
Oſmunda Regalis 87, 126
Ovum 210
Oxalis 187, 188
Oxyacantha 83, 135, 138
Oxycroceum 494

Oxylapathum 127
Oxymel ex Allio 411
Colchicum 411
Pectorale 411
Scilliticum 411
Simplex 411
Oxyrrhodium 486
Oxys Alba 106

P

PÆONIA. vid. Pœonia
Palma Dactylifera 122
Christi 170
Oleosa 210
Prunifera 78
Paludapium 114
Panacea Antimonii 338
Panax 118
Coloni 118
Hercules 110
Panicula Minore 100
Panicum 100
Panis 210
Viperat 632
Papav. Alb. 184
Errat. 183
Nigr. 185
Paralysis 184
Pareira Brava 141
Parietaria 97
Parthenium 68
Passulae 121
Corinthiacae 121
Minores 121
Pasta Epispastica 508
Hippiatra 632
Hypoglotida 632
Pastilli Cathartic 467
Pastinaca 105, 110
Pentaphyllum 128
Pepo 98
Pepones 98
Perfoliata 109
Periclymenum 115
Perficaria 135
Perficarum flores 158
Pes Columbinus 77
Petasites 153
Petroleum 132
Barbad 131
Petroselinum 136, 141
Petrum 181
Philonum Londinense 453
Romanum 453, 455
Phœnix Dactilifera 122
Phu 154
Physalis 138
Pilæ Masticatoriæ 631
Pilulae Æthiopicae 463
Alexitariae 578
de Allio 575
Aloeticae 464
de Ammon. Mag. 467, 576
Antipodagricae 568
Aromaticae 463
Arthriticae Cathart. 580
Asthmaticae 573
Astringentes 571
Barbarossae 468
Cachecticae 576
Caerulae 464, 468
Castoreae 569
contra Catarrh. 574, 575
Catharticae 578
Catholicae 578
Cephalicae 578
Ceti 130
Chalybeat. Cathart 579
Cholicae 580
cum Cinnabari 569
Cocciae 464
Cochiae 464
Majores 468
Minores ie Pil. col. cum aloe
ex Colocynthide Simp. 464
cum Aloe 464
Communes 468
Crapulariae 578
Cretaceae 571
de Croco 575
Diambrae 464
Diureticae 577
ex Duobos 464
ad Dysenteriam 571

Plulae Ecphracticae 465, 575, 576
purg. 465
Sylvii 5 6
Emmenagogae 570
Febrifugae 572
Gentianae 572
Gileadenſis 574
ad Gonorrhœam 572
Guaiaci 575
Gummoſae 465
Hydragogae 580
Hyſtericae 570
de Jalappa 465
Ictericae 577
Martiales 572
Matthaei 254, 466
Mercuriales 465, 466
Nephriticae 577
Pacificae 466
Pectorales 574
Plumeri 466
Rudii 394
Ruffi 466, 468
Sanctae 574
em Sang. Drac. 571
Saponacae 466
Scilliticae 467
cum Sperma Caeti 574
Spleneticae 576
Starkaei 255
Stomachicae 467, 572
Cathart. 579
Styrace 467, 573
Succinatae 569
Terebinthinatae 571
de Terra Japonicae 571
Thebaicae 466
Tolutanae 574
Pimento 59
Pimpenella 82
Aniſum 64
Saxifraga 137
Pini Nuces 121
Pinus 109
Piper 58
Rotund. Theoph. 57
Piperitis 200
Piſtolochia 153
Piſum 78
Piſa Rubra 633
Lutea 633
Virid. 633
Piſſelaeum Indicum 131
Piſtachia Lentiſcus 87, 123
Piſtachia Nuces 103
Pix Burgundia 196
Navalis 196
Plantago 78
Coronopus 77
Plumbum 318
Uſtum 319
Pœonia 54, 61, 69
Polygonum 76, 81, 86, 135
Polypodium 128
Polium Creticum 109
Hydropiper 135
Montanum 109
Pompholyx 193
Populus 188
Tacamahacca 124
Porri Fol. 118
Rad. 128
Portulaca 188
Potentilla 218
Poterium Sanguiſorba 82
Poteſtates 242
Potio Balſamica 540
Caminative 538
Cathart. Mit. & Fort. 543
Cephalica & Cardiaca 538
Corroborans 539
Cretacea 545
Diaphoretica 542
Diuretica 540
Emetica 542
Hyſterica 539
Narcotica 544
Refrigerans 544
Poudre des Chartreux 335
Praſſium 108
Praeparationes Argenti 309
Biſmuthi 341
Calamin. Lap. 246
Corallii & Teſtar. 245, 246
Ferri 310
Metallorum 308
Opii 252
Salinæ 274

Preparationes Saturni 318
Scammoni 256
cum Sulph. 256
Terraeorum aliorumque quæ Aqua non diſſolvuntur Corpora 245
Veneris 317
Primula 180, 184
Pruna 165
Prunell Sylveſt. 84
Prunus Armeniaca 190
Prunus Sylveſtris 84, 85
Pulegium 69
Pulmonaria 109
Pulparum Extractio 247
Pulvis Abſorbens 586
Æthiopicus 587
Alexipharmicus 589
Algarothi 340
Anthelminthicus 587
Anticardialgicus 477
Antilyſſus 117, 471
Ari Comp. 471
Arthriticus Duc. Portlandi 477
Arthriticus Turneri 478
Aſtringens 585
Balſamicus 588
Baſilicus 478
Bezoardicus 472
èBolo. Comp. Sine Opio 471
cum Opio 471
Cantianus 478
Carminitavus 583
Carthuſianorum 335
Cathartic 590
pro pueris 480, 481
Cephalicus 474, 581
è Ceruſſa Comp. 472
è Chelis Cancr. Co. 472
Comitis Warwic. 477
Contrayervae Comp. 472
Cornachini 473, 476
Cretaceus 473
Dentrificus 481
Diaromaton 475
Diatragacanthi 474
Diureticus 589
Doveri 474
Pulvis Emmenagogus 584
Epilepticus 471, 481
Febrifugus certus 479
Fulminans 281
de Gutteta 471, 476
Hali 477
Hierae Picrae 474
Hydragogus 480
Hyſtericus Fœtid. 584
Odorat. 584
Vulnerar. 583
Jalappa Compoſit. 473
Incraſans 585
Martial Comp. 479
è Myrrha Comp. 473
Principis 327
Purpureus 479
è Scammonio Comp. 473
è Senae Comp. 473
Solutivus 480
Splanchnicus 588
Sternutatorius 473, 474 480, 591
Stomach. Amar. 587
Stypticus 474
è Succino Comp. 474
Sudorific 474
è Tragacanth Co. 474
Vermifugus 480, 481
Punica 82, 84
Pyrethrum 153
Pyrola 110
Pyrus 83, 190

Q

Quercus 86
Gallum Ferens 83
Quinquefolium 128
Quinquenervia 78

R

Ranunculus 107
Rapa 141
Raphaniſtrum 141
Raphanus Hortenſis 141
Ruſticus 141
Raſura C C & Eboris 89
Regina Prati 147
Regulus Antimonii 332, 335
Reſina 196, 389
Aloes 395

Reſina Guaiaci 249, 395
Jalapii 249
Laricis 111
Scammonii 249, 256
Reſta Bovis 114
Rha. Dioſc. 128
Rhababarrum 168
Torrefact. 247
Rhaeas 183
Rhamnus 172
Zizyphus 121
Rhaponticum 128
Rheum Dioſc. 128
Ribes 190
Ribeſia 190
Ricinus 170
Rob. Bauar. Sambuc 412, 414
de Berberis 413
de Ceraſis 413
de Cornis 413
Prunor. Acidor. 414
de Ribes 414
Simplex 413
Robertianum 77
Rodium 60
Ros Solis 51
Roſa Canina 103
Damaſc. 55, 164
Rubra 83
Sylveſtris 103
Roſmarinus 52
Rubia Tinctorum 128
Rubeola 114
Rubus Idaeus 84
Rumex 127, 187
Ruſcus 118
Ruta 69
Muraria 100
Capraria 147
Ryſagon 71

S

Sabina 69
Saccharum 210
Hordeat 444
Roſaceum 462
Roſarum Rubrum 462
Saturni 319
Tabulat. Simpl. & Perlat. 444
Sagapenum 110
Sago 78
Sal Abſinthii fixum 307
Acetoſae Eſſential 306
Ammoniac 211, 282
Diuretic. 305
Flor. 285, 312
Sublimat. 282
Cathartic. Amar. 211
Glauberi 275
Chalybis
Commune 132, 211
C. C. 270, 271
Succinat. 273
Diuretic 305
Ducis Holſatiae 281
Enixum Paracelſi 279
Fabarum Stipit. 307
Fuliginis 272
Geniſta 307
Gemmae 132
Glauberi 275
Jovis 321
Lixivium Purificatus 298
Marinus 132, 214
Martis 214
Millepedum 252
Mirabile Glauberi 275
Nitri 143
Polychreſt. 276, 277
Prunellae 276
Sedativum 293
Hombergii 293
Succini 293, 295
Rectificat 294, 295
Sulphuris 263
Tartari 297
Viperar. 268
Vitrioli 214, 290
Volatil. Oleoſ. 286
Salis Ammoniac 282
284
Urinae 287
Salinae Praeparationes 274
Salis Spiritus, vide Spiritus
Salix 188
Salop 51, 211
Salſola 135
Salvia 51

Salvia Agreſtis 52
Sclarea 77
Vitae 100
Sambuci Baccae 121
Cortex 125
Flores 120
Fol. 118
Sambucus Ebulus 125, 138
Herbacea 138
Humilis 125, 138
Nigr. 125
Sampſuchus 50
Sandarache 110, 122
Sanguis Draconis 80
Draconis ver. 80
Sanguiſorba 82
Sanguis Sulphuris 260
Sanicula 82
Santalor. Omn. Lign. 87
Santerna 161
Santonicum 94
Sapa Simplex 413
Sambuci 414
Saponaria 128
Sapo 124, 201
Amygdalin. 304
Philoſophor. 302
Tartari 302
Starkeii 302
Saracenica 78
Sarcocolla 111
Sarſa 89
Sarſaparilla 89
Saſafras 88
Satureia 119, 137
Satyrium 61, 105
Saxifraga 137
Scabioſa 100, 154
Scammonii Praeparatio 256
cum Sulph. 256
Reſina 249, 256
Scamonium 174
Scandix 70, 135
Schœnanthum 52
Schropularia 107
Scillae 158
Coctio 247
Exſiccatio 247
Scinci 155, 214
Scolopendrium 78, 115
Scolymus 77
Scordii fol Salviae 52
Scordium 147
Scordonia 52
Scorodotidis 52
Scorzonera 153
Schrophularia 107, 119
Sebeſten 121
Secale 119
Sedativum Archaei 314
Sedum vel Sempervivum 188, 193
Sempervivum 166, 188
Sena 163
Senecio 158
Septinervia 78
Sepiae Os 198
Serpentaria 146
Virginiana 155
Serpyllum 52, 137
Serum 212
Aluminoſum 386
Catharticum 516
Scorbuticum 386, 515
Sinapinum 516
Seſamum 98
Seſeli 137, 149
Sevum Bovinum 197
Cervinum & Ovium 197
Praeparat. 246
Sief. Alb. 458
Silar Montanum 149
Silique Hirſuta 201
Arabica 165
Simarouba 86
Sinapi 55
Sinapiſmus Simplex 504
Syſymbrium 81, 118, 119
Smilax China 89
Virginana 89
Smyrninum 117
Solamen Inteſtinorum 66
Solanum 138, 183, 202
Solidago 101
Sonetrus Laevis 188
Sophia Chirurgorum 119
Sorbus 84

Spartium 117
Species
Aromatieec 475
Diambrae cum Odor. 476
Hierae Picrae 474
è Scordio cum Opio 475
ſine Opio 475
Sperma Ceti 130
Sphondilium 93
Spica 54
Spigelia 212
Spina Alba 135, 138
Ægyptiaca 85
Cervina 172
Spinachia 188
Spiræa 140, 147
Spiritus Aceti 266
Ætherus 291
Antiepilepticus pueror 374
Aurantiorum 373
Benzoin 245
Caſtorei 373
Cochleariae 256
Aureus 257
C. C. 270, 271
Aromat. & Succinat. 273
Croci 273
Febrifugus Di Clutton 293
Fulginis 272
Lavend. Si. 372
Co. 372
Melliſ. 250
Millepedar 252
Mindererі 287
Nitri 278
Dulcis 279
Glauberi 279
cum Ol. Vitr. 278
Roris Marini 371
Sacchari Ardens 263
Salinus Aromaticus 286
Salis Ammoniaci 283
Arm. Calx Viv. 284
Dulcis 285
Succinatus 285
Crim. Tart. 283
Vinoſus 285
Salis Dulcis 276
Glauberi 274
Spiritus Salis Marini 274
Coagulatus 276
Glauberi 274
Succini 293, 295
Sulphur 261, 262
Theriacalis Camph. 374
Vini 213
Camph. 435
Rectif. 213
Tartariz. 273
Vitrioli 289
Dulc. 290, 291, 292
Tenuis & Fort. 289
Volatilis Aromat. 286
Fœtid. 287
Urinæ 287
Spongia 201
Spongaei uſtio 247
Staechas 55
Stannum 213, 321
Pulveratum 321
Staphiſagria 184
Sternutat. cum Euphorb. 625
Majoran 625
Sal Volat. 625
cum Succis 625
cum Turp. Mineral. 625
Stibium ie Antimonium
Stramen Camelor 52
Strychnos 184
Strammoneum 183
Styrax 104
Purificat. 247
Succinum 74
Succini Poteſtates 296
Sal Rectificat. 294, 295
Sal Vol. Spir. & Ol. 293 295
Tinct. 296
Succi Antiſcorbut. 412
Attemperans 536
Cochleariae Vinos 429
Glycyrrhizae 414
ad Haemorrhoides 525
Hydropici 532
Prunor. Sylveſtr. 412
Scorbutici 412
Succiſa 154

Sulphur Antimonii 334
Caballin. 131
Balſ. Aniſat. 260
Craſſ. 260
cum Ol. Oliv. 259
cum Ol. Lini. 260
Simplex 259
Succinat 260
Terebinth. 259
Flores 257
Hepar 258
Lac 258
Ol. per Camp. 261
Praecipitat. 258
Sal 263
Sanguis 260
Spiritus per Camp. 262
263
Tinctura 261
Vitrum 131
Suffimentum Catarrhale 628
Hyſtericum 628
Odoriferum 629
ad Proced. Ani 629
Uteri 629
Symphytum 78, 81, 109
Syrupus Acetoſus 407
ex Allio 401
Althaeae 401
Aurantior è Corticibus 482
Balſam. 402
de Berberies 407
Capillor Veneris 407
de Caryophyl. Aromat. 408
Caryophyl. Rubr. 403
de Citreorum Cortice 408
Colchici 403
Communis 406
Croci 403
Cydonior. 403
de Glycyrrhiza 408
Kermeſinus 403
è Limonum Succo 404
de Meconio 404
è Mororum Succo 404
Papaveris Albis 404
Errat 404
Paralyſis 405
Pectoralis 405
Syrupus Perſicor 408
Reſtringens 409
de Rhubarb 408
Roſarum Pallidarum 405
Roſarum Solut. 405
de Roſis Siccis 405
Rubi Idæi 404
Scilliticus 406
Simplex 406
de Spina Cervina 406
Violarum 406
Zinziberis 407

T

Tabacum 181
Tabellæ Diatrag 444
Cardialgicæ 462
Tacamahacca 124
Tamarindi 165
Tamariſens 125
Tanacetum 119
Tapſus Barbatus 97
Taraxacum 189
Tartarum 213
Cryſtal. & Cremor. 297
Emet. & Cathart. 299, 301
Lixivium 298
Regenerat. 305
Sal 297
Sapo 302
Solubile 299
Vitriolat 301
Tecomhacca 124
Tela Aranearum 193
Terebinth. Argentorat. & Balſ. Omn. 111, 125, 198
è Chio 111
Commun. 111
è Cypro 111
Indica 103
Straſburgh 111
Venet. 111
Volgaris 197
Terra Japonica 91
Tinct. 259
Lemnia 92
Samia 92
Sigillata 92
Torreor. Præparat. 245

Teſtae Oſtrearum Præparat. 246
Teucrium 107, 109, 115, 147
Thapſia 178
Thea Bohea 101
Thea Viridis 101, 136
Theobroma 103
Theriaca Andromach 450
Germanorum 122
Londinenſis 455
Thermae 221
Thlaſpi 55
Fatuum 76
Thya, vel Thuja 203
Thus 197
Maſculum 80
Thymellaea 169
Thymus 52
Tilia 55
Tincal 161
Tinctura Abſinthii 423
Amara 423
Ambraegriſeae 243
Antimonii 338, 430
Antiphthiſica 317
Aromatica 423
Aſtmatica 436
Balſamica 424
Benzoin 244, 424
Cantharid. 424
Cardamomi 424
Caſtorei 425
Comp. 425
Cephalica 421
Purgans 421
Cinnamomi 425
Corticis Perur 425, 426
Volat. 425
Croci 426
Dictamni Albi 426
Euphorbii 252
Fœtida 426
Fuliginis 426
Guaiac. Vol. 426
Hellebore Alb. 431
Nigri 428
Jalapii 427
Japonica 427
Ipecacuanha 428
è Kino 427
Tinctura Lacca 427
Martis 316
Sp. Sal Marin. 318
Florum 316
Mynſichti 438
Meconii 253
Melampodii 427, 428
Mellis 229
Menthae 421
Moſchi 421
Myrrhae 428
& Aloe 428
Paralytica 437
Regina 438
Rhabarbari Sp. 428
Vin. 421
Rhaei Amara 428
Dulcis 429
Roris Solis 439
Roſarum 422, 634
Sacra 422
Salis Tartari 304
Saturnina 317
Senae 429
Comp. 429
Serpent. 429
Comp.
Stomachica 429
Amara 438
Succini 296
Sudorifica 430
Sulphuris 261
Styptica 429
Thebaica 253, 254, 422
Theriacalis 436
Terrae Japonicae 427
Tolutana 430
Valerianae Si. 217, 430
Vol. 431
Veneris 217
Vol. 218
Veratri 431
Tithymalus 201
Toluifera Balſ. 103
Carthag. 59
Tolutanum Balſ. 103
Tormentilla 87
Tota Bona 97
Tragacantha 80

Tragopogon 153
Tremella Aricula 108
Trichomanes 101
Trifolium Melilotus 109
Odoratum 109
Paludoſi 119
Paluſtre 119
Trigonella 98
Triſſago 115
Triticum 78, 141
Trochiſci Alb. Rhaſ. 458, 472
Apoplectici 569
Balſamici 462
Bechic. Alb. 459
Nigr. 459
cum Opio 459
de Benzoino 462
de Carabe 474
Cephalici 569
Cypheos pro Mithrid. 459
ad Emulgend. Saliv. 570
Haemoptoici 573
Magma Hedychroi pro Theriaca Andr. 460
de Minio 460
de Myrrha 460, 473
è Nitro 460
Odorati 570
Paralytici 569
Peruvian 573
de Scilla 461
Scillitici pro Ther. Andr. 461
Stomachici 570
è Sulphure 461
de Terra Japonic. 461
de Viper 462
Turpethum 169
Mineral 329, 330
Turundae Odontalgicae 632
Tuſſilago 101, 153
Tutia 92, 193
Prep. 246

V

Vaccinia 84
Valentia Scabioſae 507
Valeriana 153, 154
Veratrum Album 181
Nigrum 175
Verbaſculum 180
Verbaſcum 97
Verbena 120
Vermicelli 78
Veronica Mas 120
Becabunga 113
Viciae 149
Vincetoxicum 49
Vinum 213
Aloeticum 422
Alk. 418
Amarum 419
pro Oenopolis 513
Antimoniale 419
Arthriticum 511
Chalybeat 315, 316, 420, 512, 513
Croceum 420
Dictamni Albi 420
Enulatum 514
Hypocraticum 512
Hydropicum 515
Ipecacuanhae 420
Ictericum 515
Millepedum 251, 421
Mirabile 512
Pectorale 514
Rhei 421
Scilliticum 436
Scelotyrbic 514
Scorbuticum 514
Stomachicum 513
Viperin 420
Viola Lutea 50
Violae Flores 164
Viperae 129
Diſtillatio 268
Eſſentia 269, 270
Sal Volat. 268
Viperaria 153
Virga Aurea 101
Paſtoris 107
Viſcus Quercinus 110
Alb. 110
Vitellum Ovi 198
Vitex 187
Vitis Idaea & Vini fera 84 121
Vitriolum 213

Vitriolum Calcinat. 288
Gilla 290
Martis 313
Ol. & Sp. 289
Purificat 288
Spirit. Dulcis 290, 291
Tenuis & Fortis 289
Ulmaria 147
Ulmi Cortex 112
Umbilicus Muralis 189
Veneris 77
Unguentum Ægyptiacum 505
ex Ærugine 505
Comp. 505
Album 496, 497
Camph. 496
ex Althaea 496
Aureum 505
Basilicon Flavum 497
Nigrum 497
Viride 497
Cereum 497
Ceruleum Fortius 497
Mitius 498
è Ceruſſa 496
Citrinum 497
Emolliens 498
Epiſpaſticum 501
Mitius 501
Flos Unguentum 509
de Gum Elemi 498, 505
è Lap. Calamin. 503
Martiatum 507
è Mercurio Precipit. 498
Mercuriale 498
Nervinum 499
Unguentum de Nicotiana 506
Nutritum 499, 506
ex Oxylapatho 506
de Peto 506
è Pice Liquidâ 499
Pomatum 500, 506
Populneum 508
Roſaceum 500
Rubrum Deſiccat 507
Sambucin 499, 507
Saturnin 499
Simplex 500
è Sulphure 500
Tetrapharmacum 497
Tripharmacum 500
Tutiae 500
Camph. 500
ad Veſicatoria 501
Viride 501
Detergens 497
Ungula Alcis 73
Uniones 126
Urtica 82
Mortua 97
Uva Urſi 82
Vulvaria 68

W

Winteranus 60

X

Xylo Aloes 60

Y

Ylzecuinpathi 68

Z

Zodoaria 62
Zibethum 214
Zinziber 62
Zizyphus 121
Zizypha Sativa 121

INDEX.

ABSORBENT earths ſoluble in acids Page 40
which to prefer 229
Abſorbents 87
Abſterſive. See Detergents.
Acacia 84, 85
German 84, 85, 412
Indian 165
Trefoil 85
Acid Spirit, menſtrual powers of, 7
Species, and gradation in power 8
Acids 225
deſtroyed by abſorbents 40
ſaturated by alkalies 39
Acorns 83
Acrids 234
and Bitters 237
Adders tongue 109
Æther 291
Sterne's Balſamic 104
Æthiops Antimonial 331
Mineral 331
Affinities, table of 6
Agaric 164, 203
Agglutinants, operation of 76
Agrimony 106
Air, ſupplied by nitre 34
Alder, Black 175
Ale 203
Bitter ſtomachic 513
for Dropſy 516
Gill 108
Juniper 516
Alembic 25
Alexanders 117
Algaroth's powder 340
Alkaline Salt, menſtrual powers 9
Species, and gradation of power 9
Fixed, to ſaturate acids 139
Alkaline Salt, fameneſs of 242
Alkaline Salt, obtained from Nitre 35
Alkanet 187
Alkermes 56
Allheal 118
Clowns 118
Alligator-wood 150
Allſpice 59
Almonds, bitter 121
ſweet 99
Aloes 165
Purification of 243
prepared, or waſhed 243
Wood 60
Alum 90
Burnt 281, 282
Curd 90
Rock 90
Amaranth 76
Amber 74
Powers of 296
Salt, ſpirit, and oil 293, 295
Salt rectified 294, 295
Tincture 296
Ambergriſe 74
Eſſence or Tincture 243
Ammoniacum, gum 122
Milk of 202
Amomum 56
Anacardium Occidental 56
Oriental 56
Angelica leaves 63
Roots 66
Candied 443
Animal volatile ſalt, how to make eſſential 273
Aniſeed 64
Anti-inflammatory ſimples, what 186
Antimony 202
Æthiops 331
Butter 339, 340
Calx 337

Antimony Cathartic 338
Cauſtic 340
Ceruſe 338
Cinnabar 339, 340
Crocus 336
waſhed 336
Diaphoretic 337
waſhed 337
Glaſs 335
prepared with wax 336
Golden Sulphur 334
Panacea 338
Prepared 245, 332
Purging 338
Regulus 332, 333, 334
with ſteel 333
Tincture 338
Aperitive. See Detergents
Appendix 367
Apozem. See Decoction
Apple, Bitter 170
Carthaginian 84
Crab 190
Other ſorts 190
Apricots 190
Aqua Fortis 280
Double 280
Compound 280
Purified 280
Regia 280
Arabic, gum 79
Archangel 77, 97
Argillaceous earths 229
Armenian bole 91
Aromatics 235
to collect 245
their produce of oil 41, 235
Arſmart 135
Artichoke 77
Aſſafœtida 70
purification of 248
Aſarabacca 180
Aſh 120
Aſhen keys 120
Aſparagus 139
Aſtringents, their operation, &c. 81, 232
Attraction, different kinds 3
Attractions, table of 6

B

BAlauſtines 82
Balls, ſpitting 631
Balm 147
Balneo mariae 27
Balſamics 47
Balſamics, their operation 95
Balſams a menſtruum 10
Balſams, flowers, oil, and ſpirit of 245
what fit for ſuch forms 482
Amber 294, 484
Anodyne 483, 491, 502
Bates's 483
Apoplectic 448, 484
of Berne 431
Capivi 123
Friars 431
Gilead 123
Gout 622
Green 483, 502, 608
Guaiacum 483
Guido's 491
Locatellus's 448
many virtues 483
Nephritic 622
St. John's wort 488
Sope 501
Perſian 431
of Peru 59
of Sulphur 259, 260
Knophelius's 484
with Barbadoes Tar 259
with oil of Linſeed 260
with oil of Olives 259
with oil of Turp. 259
Rulandus's 484
Vulnerary 432
of Tolu 103
Turpentine 259, 379, 490
Wade's 431
Bang 203
Banilloes 56
Barbadoes Tar 131
Barberry bark 125

Barberry fruit 83, 135
Barks, when and how to take off 45
Bark Peruvian 150, 237
Extract of 237
Infuſion of 251
Tincture 150
Barley French 102
Pearl 102
Baſil 68
Baſtard ſaffron 158
Bath water 27
Baum. See Balm
Baume de Commandeur 431
Bay berries 66
Bdellium 104
Beans 78
Malacca 56
Bears breech 93
Foot 93
Wortle berry 82
Bedſtraw, ladies 77
Bees prepared 248
Beets 97
Ben Nut 99
Benjamin 104
Flowers 244
Oil and ſpirit 245
Tincture 244
Betony, Paul's 120
wood 49
Bezoar mineral 340
Occidental 156
Oriental 156
Birch tree 97
Bird's neſt 65
Birthwort, long 71
Round 71
Biſhop's weed leaves 113
Seeds 120
Biſmuth 203
flowers and magiſtery 341
Biſtort 86
Bitter apple 170, 237
Purging ſalt 211
ſweet 183
Bitters 236
Bitumen 132
Black berry 84
Blood ſtone 90
of ſulphur 260
Bloom paper, a filter 19
Boiling 17
Bole alexipharmac 565
Cathartic 567
Opiate 568
Armenian 91
prepared 246
Borace 161
Borax 161
Box-wood 87
Bran 195
Brandy 213
Brank urſin 93
Braſilian root 159
Bread 210
Tree 78
Vipers 632
Briar 103
Brimſtone 131
Brooklime 113
Broom 117
Broths for conſumptions 622
Bryony 71
Buckbean 119
Buckſhorn plantane 77
Buckthorn berries 172
Bugle 78
Burdock 138
Burnet 82
Saxifrage 137
Butcher's broom 118
Butter, May 203
Burr 153
of Antimony 339, 340

C

CAbbage 107
Calamine 92, 193
Diaphoretic 248
Magiſtery 248
Preparation of 246
Calamint 146
Calcination, as an operation explained 33
by calefaction 34
by combuſtion 34

Calcination, by detonation 34
imperfect and perfect 34
Calomel 324
Calx of zinc 289
Camel's hay 52
ſtraw 52
Camomile 63
Campeachy wood 210
Camphor 149
Candies 443
Cantharides 142, 199
Caperbark 125
Flowers 115
Capivi balſam 123
Caranna gum 110
Caraway 65
Cardamoms 65
Cardiacs 46, 47
their operation explained 47
Carduus 93
Carline thiſtle 146
Carminatives, their operation explained 62
Carrot Candy 65
Deadly 178
Wild 65
Caſhew nut 56
Caſſia bark 80
Extract 247
Fiſtula 165
Caſſamunair 71
Caſtor 73
Catechu 91, 250
Cataplaſm Apoplectic 617
Aromatic 504
Bran 195
Cephalic 617
Cooling 621
of Cummin ſeed 503
Diſcutient 503
Diuretic 620
againſt the Dropſy 620
for the ears 618
of elder 621
Emollient 621
Febrifuge 618
againſt the Gout 618
Cataplaſm againſt the palſy 618
againſt the piles 621
againſt the Pleuriſy 620
againſt Quinſies 620
Ripening 504
Stomachic 620
Suppurating 504
for Whitloes 622
to kill Worms 619
for the Wriſts 619
Cathartics 46
their operation explained 162
Cat Mint 69
Cauſtics, their operation explained 199
Antimonial 340
Lunar 309
ſtrong Common 306
weak Common 306
Celandine 107
Cementation, what 24
Centaury, leſſer 94
Cephalic Medicines 46, 47
Cephalics, their operation 47
Cerate Epulotic 503
Mercurial 503
White 502
Yellow 502
Ceruſe 318
of Antimony 338
Chalk 91
Stone, uſe of 17
Chamomile 63
Characters uſed in Pharmacy explained 36
Chaſte Tree 187
Cheeſe 204
Rennet 77
Chemical Pharmacy 1
Cherries 56
Chervil 135
Cheſnuts 83, 99
Chickweed 187
Chiches 102
China root 89
Chittick Dr. his Medicine 643
Chocolate 103

Churchbugs 142
Cinnabar of Antimony 339, 340
Artificial 326
Factitious 326
Native 74
to Sublime
Cinnamon 85, 237
White 60
Cinquefoil 128
Circulation explained 20
Citron fruit 189
Peel 94
Candied 413
Citruls 98
Civet 214
Clarification explained 18
Clary 77
Clivers 76
Clove July flowers 53
Cloves, the Spice 59
Clyster anodyne 595
Carminative 593
Cathartic 592
Common 591
Emollient 593
Febrifuge 595
Healing 594
Hysteric 593
againſt the Piles 593
of Starch 594
Reſtringent 594
Turpentine 593
to kill Worms 592
Cobweb 193
Cochineal 155
Coction as an operation 17
Coffee berries 56
Colebatch's ſtyptic 312
Coleworts 107
Collyrium dry of Rhazes 458
Colophony 111, 379
Coltsfoot 101
Columbine 114
Comfrey flowers 78
Roots 81
Comminution, as an operation, explained 14
Commenſtruation, what 3
how promoted 4
Compoſition, what 342
Advantages of 342
Compoſitions, officinal 342
Rules for 342
Confection of Alkermes 407, 454
Archigenis 449, 455
Cordial 448, 449
Damocratis 449
Fracaſtorius 454
Japan earth 447
Paulina 449
Sir Walter Raleigh's 448, 456
Conſerves of the Edin. Diſ. 443
of the Lon. Diſ. 440, &c.
Contrayerva, German 146
Subſtitute for it 49
Root 152
Contuſion, what 14
Coolers 46
Copper 203
Tincture 317, 318
Coral 92
Prep. of 246
Cordial flowers 44
Cordials 47
Coriander 65
Cornelian tree 77
Corroboratives 75
explained 75
Corroſion, as a principle, explained 4
as an operation 24
by immerſion 24
Cotton 201
Weed 55
Counter poiſon 152
Cow itch 201
Parſnip 93
Cowſlips 184
Crab apples 190
Crabs claws 90
eyes 90
prepared 246
Cranes bill 77
Cream of Tartar 397
Creſs ſeeds 120
Creſſes, Water 118
Cryſtalline Earths 229
Cryſtallization, as an operation 30

Cryſtallization explained 30
Cryſtal mineral 276
Cryſtals and cream of tartar 297
Cubebs 57
Cuckow flowers 115
Pint root 125
Cucumber fruit 189
Seed 98
Cucurbit ſeed 98
Cudweed 81
Cummin 65
Æthiopian 113
Meadow 65
Cupmoſs 77
Curd of Alum 504
Currants 121, 190
Cyprus 68

D

Daiſy, ox-eye 71
Leſſer 71
Damaſk roſe 164
Dandelion 189
Dates 122
Indian 165
Daucus, true 65
of Crete 65
Deadly carrot 178
Decantation explained 17, 18
Decoctions, how to be made 380, 382
General rules of the Edin. Diſp. for making 382
Aromatic bitter 529
Balſamic 523
of bark with acids 533
Balſamic 533
with hellebore 533
with ſteel 533
Binding 520
Bloody flux 520
Catarrh 521
Chalk 382
Common for Clyſters 383
Conſumption 523
Cooling 536
Coralline 529
Diuretic 530
Decoction, Elm-Bark 528
Expectorating 527
Febrifuge 532
Fracaſtorius 520
Garlic 527
Ground pine 517
Hempſeed 521
Holy 522, 532
Hyſteric 519
of Japan earth 383
Japonic 383, 520
Comp. 521
Jaundice 383, 527, 528
Incraſſating 521
Juniper compound 530
Simple 530
Luberans 522
Looſeneſs to ſtop 519
Many virtues 534
Marſhmallows 526, 530
Maſtich 520
Menſes, to provoke 518
Nephritic 384
of Nitre 384
Opening 531
Pacific 535
Pectoral 384, 523, 526
Red 519
Reſtringent 520
againſt Rickets 521
Roſes 526
Sacred 532
Sarſaparilla 522
Scarlet 531
Scorzonera 536
Snails 523
Snake-root comp. 385
againſt the Stone 530
Styptic 522
Sweetening 522
Tamarinds with ſena 385
of the Woods 384
White 382, 519
Comp. 383
Deer's ſuet 197
Deliquation, what 22

Deobſtruent. See Detergent
Depuration, as an operation, explained 18
Deſpumation explained 18
Detergents, how they operate 112, 198
Detonation, what 34
Devil's bit 154
Guts 188
Diacaſſia 446
Diachylon 492
Compound 508
with gums 493
Diagrydium 256
Dianthus caryophyllus 54
Diaphoretic Antimony 337
waſhed 337
Nitrated 337
Diaphoretics 46
Operation of 144
Diaſcordium 454
Diet-drink 511
Digeſtion, as an operation, explained 20, 21
How underſtood by the College of London 21
Digeſtives, how they operate 112, 194
Dill 64
Diſcutient. See Carminative
Diſſolved, what 4
Diſtillation, as an operation explained 25
in Balneo Mariæ 27
Diſtribution of ſimples 42
Dittander 200
Dittany of Candy 68
of Crete ib.
Diuretics 133
their operation explained 133
Dock, ſharp pointed 127
Water 128
Dodder 187
of Thyme 107
Dragon's blood 80
True 80
Dragons 146
Draſtic purges 169
Draught, what proper for that form 537
Balſamic 540
Carminative 538
Cathartic mild 543
rough 543
Cephalic and cardiac 538
Cooling 544
Diaphoretic 542
Diuretic 540
Emetic 542
Hyſteric 539
Narcotic 544
Strengthening 539
Drops, Jeſuits 431
of Life 254
Palſy 54
Dropwort 140
Duck-meat 188
Dwarf elder bark 125
Seeds 138

E

EAgle ſtone 156
Earth Armenian 91
Calcareous 227
Japan 91
Lemnian 92
Samos 92
Sealed 92
Worms 131
Earths abſorbent 227
not ſoluble 229
Soluble 227
Eau d'Arquebuſade 369
des Carmes 368
de Luce 435
Eccoprotics 163
Eclegma, what 415
Edulcoration, what 35
Eggs 210
White 192
Yolk 198
Elaterium 174
Elder bark 125
Berries 121
Dwarf 125, 138
Flowers 120
Leaves 118

Elecampane 127
Candied 443
Electaries 445, 548
to prevent drying 446
Rules to make 446
Acid 565
Æthiops 560
Alexipharmic 563
Analeptic 555
Angelica 552
Aſthmatica 560
Aſtringent 554
Balſamic 557
Bay-berries 446, 552
againſt the bloody flux 556
Blood ſpitting 557
Camphor 563
Cardiac 419, 550
Carminative 551
Caſſia 446
Catarrhs 555
Cathartic 564
Cephalic 549
Cinnabar 550
Cinnamon 556
Clove and Coſtus 456
of Clove July flowers 549
Comfrey 554
againſt Conſumptions 558
Cooling 564
Diuretic 562
of the Duke of Savoy 549
againſt a Dyſentery 556
Great Cordial 550
for the Green-ſickneſs 553
with hellebore 553
the ſame with Steel 553
Guaicum 560
Hypochondriac 552
Hyſteric 552
of Japan earth 447
againſt the Jaundice 562
Incraſſating 554
Juniper 552
King's Evil 561
Lenitive 446
Marſhmallows 557
Electaries Menſes 552, 553
Miſleto 550
Muſtard ſeed 551
Nephritic 561
Palſy 549
Pectoral 447, 557
Peruvian bark 563
Piles 558
Plague 563
Poterius 557
of Preſerves 553
Refrigerating 564
Reſtorative 554, 558
with ſteel 555
Reſtringent 556
Ruptures 555
Scammony 447
Scordium 447, 454
Solutive 564
Splanchnic 553, 562
Sperma Ceti 557
Steel 553
Stomach 551, 556
Stone 561
Thebaic 452
Turpentine 561
Vulnerary 559
Eleutheria 150
Elicampane 127
Elixir 416
Aloes 432, 433
with Rhubarb 432
Antivenereal 439
Aſthmatic 433, 439
Camphor 437
Guaiacum 433
Guaiacum, vol. 431
Health 429
Hypochondriac 439
Life 437
Myrrh, compound 434
Paregoric 433
Pectoral 433
Propriety 432
Acid 433
Helmont's 418
Sweet 437
Tartarized 437
Sacrum 432, 434

Elixir Stomachic 423
Vitriol 434
Acid 433
Mynſicht's 434
Sweet 434
Vulnerary 432
Elks-hoof 73
Elm Bark 112
Elutriation 15
Embrocations 601
Emmenagogues 66
Emeralds 92
Emetic Tartar 299
Emetics 46
their Danger, Advantages, and Operation explained 157
Chymical not ſo ſafe as Simple 158
Emmenagogues 66
Emollient Herbs 44
Emollients, their Operation 96
Emulſion, how different from Oils 232
Alexipharmic 534
Ammoniacum 528
Analeptic 518
Arabic 389
Aſthmatic 531
Balſamic 524, 528
Burnt Hartſhorn 524
Camphor 389
Chalk 523
Common 389, 526
Diuretic 531
Edulcorating 524
Hyſteric 519
Pacific 536
Paralytic 318
Piony Seeds 518
Fullers 518
Sarſa 527
for the Small-pox 533
Sperma Ceti 529
Styptic 524
Vulnerary 528
Endive 108
Epithem Anodyne 624
Cephalic 624
Epithem Quicklime 623
Sope 623
Stomachic 624
Sugar of Lead 623
Eringo 104
Root preſerved 443
Eſſence of Ambergriſe 243
Odoriferous 435
White Dittany 426
Eſſential Oils a menſtruum 10
Adulteration of 241, 379
obtainable from different Aromatics. 41
Vipers 269, 270
Euphorbium 180, 200
Exhalation, as an operation, 17
Expreſſion, as an operation, 16
Aſthmatic 625
Cephalic 627
Jaundice 626
Millepedes 626
Scorbutic 627
Styptic 627
Exſiccation, as an Operation, 17
Extraction, what, 24
Extracts and Reſins 389
Rules for 389
uncertain 17, 25
Extract Aconite 390
Antiſcorbutic 364
Camomile 391
Cathartic 394
Centaury, the leſſer 391
Deadly Nightſhade 391
Elecampane 390
Gentian Root 390
Goulard's 320
Guaiacum Wood, ſoft and hard, 393
Hellebore, black 390, 391
Hemlock 390, 394
Henbane 391
Jalap 391
Iron 315
Lead 320
Liquorice 391
Logwood 392
Monkſhood 390
Opium 253

Extract Opium, 253
Comp. 253
Peruvian Bark, ſoft and hard, 392
Plantane 390
Poppy Seeds 390
Rudius 394
Rue Leaves 390, 391
Saffron 148
Savin Leaves 391
Thorn-apple Leaves 391
Thebaic 253
Upright Virgin's Bower 391
of Wormwood 391
Eyebright 50
Eyewort 50

F

FAT, Animal 231
Bears 194
Dogs 194
Geeſe 194
Mens 194
Vipers 194
Faſel 202
Febrifuge. See Alexipharmic.
Powder, Dr. James's 337
Fennel 64, 140
Fenugreek 98
Fermentation, as an Operation, 32
Fern 126
Feverfew 68
Figs 121
Figwort 119
Filters, the kinds in uſe 18, 19
Filtration explained 17, 18
Filtering by Attraction 17
Fire, a Medium of Pharmacy 10
what, 10
Powers of 10
ſupported only by Air and Nitre 34
Fir 109, 112
Fixedneſs, what 10
Fixed Salts 242
Flax Seed 98
Flix-weed 119
Flowers, when beſt gathered 45
how to be dried 45
Cordial 44
Flowers, what in Pharmacy 29
to preſerve 45
Flower-de-luce 105
Flowers of Benjamin 244
Biſmuth 341
Steel 314, 315
Sulphur 257
white 258
waſhed 258
Zinc 289
Fluellin 208
Fomentation againſt St. Anthony's Fire 604
Aſtringent 604
Blood to ſtop 604
Carminative 603
Common 383
Diſcutient 606
Diuretic 603
Dropſy 604
Emollient 603
Gout 602
Pacific 604
Piles 605
Scurvy 603
Spleen 603
Stomachic 605
Strengthening 605
Worms to kill 606
Fox-glove 107
Frankincenſe 111, 197
Male 80, 197
Frontals, ſeveral 627, 628
Fruits, when to be gathered 45
Fume, for Catarrh 628
Hyſteric 628
Fundament 629
Sweet ſcented 629
for the Womb 629
Fumitory 116
Funnel, ſeparating, 12
Furnaces 12
Fuſion 23

G

GAlangals 61
Galbanum 70
Prepared 243, 248
Galenical Pharmacy 1

Galls 83
Gamboge 172, 237
Gargles 598, 599
Garlic 113
Gentian Root 94
Germander 115
Water 147
Gill Ale, how made 108
Gilly Flower, Clove 54
Ginger 62
Candied 443
Ginſeng 61
Glac 11
Glaſſwort 135
Glaſs of Antimony 335
Prepared with Wax 336
Glutinous Subſtances 230
Glyſters. See Clyſters
Goa Stone 633
Rue 147
Gold 203
Moſaic 322
Golden Rod 78, 101
Graſs 76
Berries 190
Gourd 98, 190
Gout-Ivy 107
Grains of Paradiſe 66
Granate Stone 92
Grapes 189
Graſs 141
Quick 141
Gravity, of Liquids 37, 39
of Solids 38
Gromwell 138
Ground Ivy 108
Pine 107
Stinking 49
Groundſel 158
Guaiacum-wood 88
Bark 89
Reſin 249
Gum 238
Aloes 165, 395
Ammoniacum 122
Arabic 79
Aſtringent 80
Elemi 198
Gum Guaiacum 150, 395
Olibanum 80
Senegal 80
Tragacanth 80
Gummy Subſtances 230
Gypſeous Earths 229

H

HArtſhorn calcined 271
prepared 246
Shavings 89
Spirit of Hartſhorn Salt and Oil 270, 271
Spirit aromatized 273
with Amber 273
Salt with Amber 273
Hart-wort 149
Haws 138
Hazel 99
Hedge Hyſſop 117
Muſtard 116
Hellebore, black 175
White 181, 237
Helmet Flower 146
Hell-weed 188
Hemlock 181
Hempſeed 189
Henbit 187
Hepatic. See Detergent
Herbs, the five emollient 44
when beſt gathered 45
how dried 45
Herb, Holy, 51
Robert 77
Hermodactyls 167
Herrings 195
Hiera Picra 474
Hippocrates's Sleeve 12, 18
Hips 103
Hog's Lard prepared 246
Holly roſe 85
Sea 104
Wood 88
Honeys 396
Honey 208
Purification of 247

Honey Ægyptian 409, 505
of Fluellin 409
Hellebore 410
Mercury 411
Mulberries 412
Roſes 410
Roſemary 411
Sope 409
Spirit of 250
Tincture of 249
Violets 4 2
Honeyſuckle 115
Hops 102
Horehound 108
Horſe Mint 118
Radiſh 141
Tail 76
Hot Seeds 44
Hound's-tongue 77
Houſe-leek 188, 193
Hurtle-berries 84
Hypnotics 181
Hyſop 117
Hyſterics 66

J

Jacinth 92
Jalap 177, 237
Reſin 249
White 168
Japan Earth 91
Tincture 42
Jellies 231
Jelly of Barberries 413
Currants 413
Quinces 412
Jeruſalem Oak 115
Jeſſamy 54
Jeſuit's Bark. See Bark Peruv.
Jews Ears 108
Incenſe Cakes 459
Incorporation, as an Operation, 32
Indian Leaf 50
Nut 203
Infuſions 380, 517
Infuſion, Alexipharmic 534
of Bark 251
Bitter, ſimple 386, 387
Chalybeate Bitter 529
Infuſion, Bitter, Purging 387
with Sena 387
Conſumptions 524
Diuretic 532
Liberans 525
Nettles 525
Purging 535
Common 535
Rhubarb 388, 535
Roſes Comp. 525
Sena 387
with Lemons 388
the four ounces 388
Upright Climber 387
Zedoary 534
Injection for the Ears 596
Gonorrhoea 596
Womb 597
Inſolation explained 17
Inſtruments, particular, of Pharmacy 11
Ipecacuanha 159, 237
Iriſh Slate 131
Iron 208
Pots 27
Prepared with Sulphur 311
with Tartar 311
Iſinglaſs 79
Juices 396
Cooling 536
againſt Dropſy 532
Liquorice 414
againſt bleeding Piles 525
Scorbutic 412
of Scurvy-graſs 529
Sloes 412
Jujebs 121
Julep, what proper for the form, &c. 537
Balſamic 540
Camphor 515
Carminative 538
Cardiac and Cephalics 538
of Chalk 545
Diuretic 540
Diaphoretic 542
Hyſteric 539
of Muſk 545
Strengthening 539

Juniper-berries 122
Gum 110
Ivory Shavings 90

K

Kermes Mineral 335
Knot Grass 76

L

Labdanum 59
Lady's Bedstraw 77
Mantle 106
Smock 115
Lambative, what 415
what fit for 415
Laser, Gum, 64
Laudanum, Liquid 253, 254, 422
Sydenham's 253, 254
London 256
Lavender 54
Cotton 106
French 55
Lazuli Stone 92
Leaches 195
Lead 318
Burnt 319
Calcined 319
Red 193, 318
Sugar 319
White 193, 318
Leaves, how to preserve 45
Lee Capital 303
Sope 303
Caustic 303
Leeks 118, 128
Lemnian Earth 92
Lemon Fruit 189
Peel 94, 237
Candied 443
Leopards-bane 146
Lettuce 188
Levigation, what 14
Lilies of the Vallies 54
May 55
White 97
Lime-tree Flowers 55
Linctus, what 415
what fit for 415
Detergent 547
Emollient 546
Liniment, of Arceus 505
Liniment, for the Breast 611
Cephalic 608
Cosmetic 612
Digestive 611
for the Eyes 608
Gout 612
Hair to make grow 608
to take off 608
Impotency 609
Palsy 608
Piles 609
for the Side 611
Small-pox 611
Sope 501
Sympathetic 610
Tetters 610
of three Ingredients 502
Volatile 502
Wax 501
White 501
Worms 610
Linseed 98
Liquids, Table of their Weights 37
Liquor, Hoffman's Anodyne Mineral 292
Liquorice 126
Litharge 193
Lithontriptic of Mrs. Stephens 639
Dr. Chittick 643
Litus with Alum 629
Detergent 630
with Sperma Ceti 639
Liver of Sulphur 258
Liverwort 117
Lixivium Hydropic 630
with Lime 630
Logwood 210
Lohoch, what 415
Common 415
Healing 415
of Linseed Oil 415
of Manna 415
of Sope 415
of Sperma Ceti 415
of Starch 415
Long Necks 27
Lotion oily 600
Repelling 599

Lotion Sope 370
Lovage 64
Love-apple 183, 202
Flower 76
Lozenges 458
Rules for making 458
againſt Apoplexies 569
againſt blood-ſpitting 573
Cephalic 569
of Gum Tragacanth 444
againſt the Palſy 569
Pearl 444
Pectoral black, 459
White 459
Perfumed 570
Peruvian 573
to occaſion Spitting 570
Stomachic 570
Sugar with Roſes 445
Lunar Cauſtic 309
Lung-wort 109
Lupine 68
Lutes, different Sorts 13

M

MACE 57, 60
Madder 128
Sweet Mountain 114
Magiſtery of Biſmuth 341
Calamine 348
Magneſia Alba 645
Maiden-hair, common 100, 101
Engliſh 101
Black 100
True 100
White 100
Marjoram 50, 51
Mallows, common 97
Mandrake 182
Manna 167
Maranth 76
Marjoram, Sweet 50
Wild 50, 51
Marmalade, of Quinces 412, 414
Marſhmallows 96
Root 139
Marygold 147
Maſterwort 152
Maſtich Gum 123
Herb 50
Plant or Tree 87
Materia Medica, Diviſion of the 2, 43
Maturation. See Suppuratives.
Maudlin 116
Mead 516
Meadow Creſſes 115
Saffron 140, 167
Sweet 147
Meaſures 35, 36
Medlars 84, 138
Melilot 109, 196
Melons 98, 190
Menſtrual Powers and Menſtrua in general 3
Menſtrua, particular 7
of Animal and of Vegetable Subſtances 23
Menſtruum, what 3, 7
Mercury, Herb 97
Mercury, the Metal 132
Preparations of 322
Alcalized 332
Calx of 323
Panacea, red and white 328
Precip. Green 330
Red 326, 327
White 328, 329
Sweet 323
White 323
per ſe 330
Yellow Emetic 329, 330
Purification of 132, 322, 324
Revived 326
Solution of 323
Sublimate cor. or white } 323
to ſublime 29
Metheglin 516
Mezereon 169
Milk of an Aſs 129
Cow 129
Goat 129
Gum Ammoniac 528

Milk of Sheep 129
Sulphur 258
Virgins 244
Millepedes Prepared 251
Volatile Salt, Spirit, and Oil of 252
Wine of 251
Mineral Acids 225
Mint, of all Sorts 81
Miſletoe 110
Mithridate 449
Mixtures 537
Moſch ſeed 203
Moſs, Sea 94
Mothers, what 30
Motherwort 68
Mouſe-ear 76
Moxa 201
Mucilage of Gum Arabic 79
Quince ſeeds 386
Mucilaginous Subſtances 230
Mugwort 68
Mulberries 84, 190
Mullein 97
Muſk 72
Mallow 203
Wood 150
Muſtard 55
Mithridate 55
Treacle 55
Myrobolans 165
Myrrh 70
Oil of 252
by Reſolution 252
Myrtle-berries 84

N

NArcotics 46, 181
Navel-wort 77, 189
Nephritic. See Diuretic.
Nephritic Wood 139
Nervous Simples 46, 47
Nettles 82, 97
Neutral bodies, what 3
Nightſhade 183
Ninzig 61
Nitre 143
Antimoniated 337
Calcining, power of 34, 35
Nitre Fixed 277, 281
Purging 277
Purified 276
Spirit of 278
Glauber's 279
with Oil of Vitriol 278
Sweet 279
a Subſtitute for Air 34
Tincture of 281
Vitriolated 279, 281
Nodule Cephalic 631
Hyſteric 631
Nuts, Piſtachio 103
Nutmegs 57
candied 443
torrified 57, 247

O

OAK 86
Gall 83
of Jeruſalem 115
Oats 78
Ochres, their Contents 91
Officinal Compoſitions 342
Oils, their Species 9
Aromatic 235
Inſipid 231
to render miſcible with Spirit of Wine 232
Menſtrual powers of 9
Compound, by Infuſion and Decoction 486
by Diſtillation 374
by Expreſſion 482
Eſſential 241, 348
from different Aromatics 41
a Menſtruum 10
by Infuſion 486
of Almonds 485, 486
bitter 485, 486
ſweet 485, 486
Amber 293, 295
Aniſe 375
Apricot kernels 485
Bay berries 486
Beautifying 607
Behen 99

Oils, Ben 99
Benjamin 245
Box 489
Bricks 490
Camomile 376, 487
Camphor 264, 486
Capivi comp. 490
Caraway 376
Caſtor 484
Cephalic 607
Chocolate Nuts 103
Cinnamon 377
how adulterated 85
Cloves 235, 376
Cream 607
Dill 375, 487
Elder-flowers 487, 488
Exeter 489
Fennel 377
Green 487, 608
Guaiacum 489
Hartſhorn 270, 271
Hearing to help 607
Jamaica Pepper 380
Juniper 377
Ivy 377
Kik 485
Lavender 377
Lemons 376
Lilies 487
Linſeed 486
Mace 58, 377
Mandrake 489
Marjoram 377
Mint 378
Muſtard-ſeed 486
Mucilages 487
Myrrh 252
by Reſolution 252
Nutmegs 57, 378
Olives 189, 196, 486
Origanum 51, 378
Palm 103
Paralytic 607
Penny-royal 378
Pepper-mint 378
Pimento 380
Poppies 488
Oils, Rhodium 378
Roſes 487, 488
Roſemary 376
Rue 378, 487, 488
Sage 379
St. John's Wort 486, 488
Saſſafras 379
Savin 379, 488
Soot 272
Spike 132
Sulphur by the Bell 261
Tar, Barbadoes 490
Tartar per Deliquium 298
Tobacco 488
Turpentine 379, 490
Empyreumatic 490
Ethereal 490
Vipers rectified 269
Vitriol 226, 289
Wall-flowers 488
Wax 272
Worms 488
Wormwood 375
Tops 487
Oily purging Grain 98
Ointment. See Unguent.
Olibanum 80
Olives 191
Onions 126, 158
Opening Roots 44
Opiates. See Narcotics.
Opium 185
Extract 253
Goddard's Comp. 253
Purified 253
Opodeldoc 501
Opoponax 110
prepared 247
Orange 189
Curaſſao 94
Flowers 53
Peel 94
Preſerved 443
Orache, ſtinking 68
Origanum 51
Orris 105
Oſmund Royal 87

Ox-eye 68
Daiſy 71
Ox's Suet 197
Oxymel garlic 410
Meadow Saffron 410
Pectoral 411
Simple 411
Squills 411
Oyſter-ſhells prep. 246

P.

PALM 203
Palm oil tree 210
Panic 100
Paper, as a filter 19
Parmaſitty 130
Parſley 136, 141
Parſnips 105
Italian 110
Paſte bliſtering, 508
Hoarſeneſs 632
Horſeballs 632
Peaches 190
Peachbloſſoms 158
Pearl-aſh 203
Pearls 50
prepared 246
Peaſe 78
Green 633
Red 633
Yellow 633
Pelican, what 20
Pellets, for the tooth-ach 632
Pellitory of Spain 153
the Wall 97
Penny-royal 69
Peony-flowers 54
Roots 61
Seeds 64
Pepper 58, 59
Percolation, what 18
Peruvian Bark. See Bark.
Pharmacy, chemical 1
Definition of 1
Diſtinction of 1
Diviſion of 2
Galenical 1
Subject of 2
Inſtruments of 11
Pharmacy, particular Inſtruments of 11, &c.
Operations of 14
Theory of 1, &c.
Philonum London 453
Roman 453, 455
Pilewort 107, 116
Pills and Troches 457
Pills, general Rules for making 463
Æthiopic 463
Alexiterial 578
Aloetic 464
Amber 464, 569
Ammoniac magiſterial 467
576
Aromatic 463
Aſthmatic 573
Aſtringent 571
Balſamic 573
Barbaroſſa 468
Bloody-flux 571
Blue 468, 464
Cachectic 576
Caſtor 569
Catarrh 574, 575
Catholic 578
Cephalic 579
Chalk 571
Colic 580
Cinnabar 569
Clap 572
Cochiae 464
Greater 468
Leſſer, i.e. Pil. Col. cum Aloe
Colocynth with Aloes 464
Simple 464
Common 466, 468
Deobſtruent 465
Purgative 465
Diuretic 577
Dragon's blood 571
Ecphractic 575, 576
of Sylvius 576
Febrifuge 572
Garlic 575
Gentian 572
Gilead 574

Pills, Gonorrhœa 572
Gout 568, 581
Guaiacum 575
Gum 465
Head 579
Holy 574
Hyſteric 570
Jalap 465
Japan earth 571
Jaundice, ſeveral 577
Matthews 254, 466
Menſes 570
Mercurial 465, 466
Nephritic 577
Paſific 466
Pectoral 574
Plummer's 466
Rudius's 394
Rufus's 466, 468
Saffron 575
Sope 466
Sperma Ceti 574
Spleen 576
Squills 467
Stomach, to purge 579
Stomachic 467, 572
Starkey's 255, 466
Steel 572
Purging 579
Storax 467, 573
Surfeit 578
Strengthening 571
Thebaic 466
Tolu 574
Turpentine 571
Water, to purge off, 580
Pimento 59
Pine 109
Nuts 121
Piony 54, 61, 69
Piſtachio Nuts 103
Pitch, Burgundy 196
Common 196
Plantane 78
Buckſhorn 77
Plaſters, rules general to make 491
Abortion to prevent 617
Adheſive common 493
Plaſters, Ammoniac with Hemlock 492, 494
with Mercury 494
Anodyne 491, 509, 616
Antihyſteric 492
Apoplectic 612
Bliſtering 496, 503, 508
Cephalic 492, 612
Common 492
Adhaeſive 493
with Gums 493
with Mercury 494
Sticking 493
Cummin 493
Defenſive 493
Diachylon 492, 493
with Gums 493
compound 508
Drawing 492
Epiſpaſtic 496, 614
Evil 510
Febrifuge 615
Feet 613
Flower of ointments, 509
Gout 510, 613
Gravel 615
Gum Elemi 509
Hemlock, with gum ammon. 492, 508
Hyſteric 615
Jaundice 615
King's Evil 617
for the Lungs 616
Mercurial 494, 509
Melilot 509
Mucilages 495, 508
Nape of the Neck 612
Opodeldoc 509
Oxycrocium 494
Paralytic 613
Red lead 494
againſt Ruptures 495
Side 614
Sope 495
Stomach 495, 616
Spleen 614
Strengthening 493, 495

Plaſter, ſtrengthening for the Back 616
Volatile 496, 503
Waxen 492
Worms 510, 615
Pockwood 88
Poly Mountain 109
Polypody 128
Pomatum 500, 506
Pomegranates 82, 84, 86
Pompions 98
Poplar 188
Poppies black 185
White 184
Wild 183
Pot-aſh 204
Potion, chalky, 345
Poudres des Chartreux 335
Poultice. See Cataplaſm.
Pounding, what 14
Powders and Species, what fitteſt for theſe forms 469
General rules for making 476
Abſorbent 586
Alexipharmic 589
Algaroth's 340
Amber comp. 474
Antiepilectic 476, 481
Antiſpaſmodic 74
Arum root comp. 471
Aſtringent 585
Balſamic 588
Bezoardic 472
Bite of a mad dog 471
Bole with Opium 471
without Opium 471
Carminative 583
Carthuſians 335
Cathartic, ſeveral 590
Cephalic 474, 581
Ceruſs, comp. 472
Chalky 473
Contrayerva Root, comp. 472
Cornachin 473, 476
Counteſs of Kent's 478
of Craanius 332
Powder, of Crab's-Claws, comp. 472
Diuretic 589
Dover's 474
Earl of Warwick's 477
Epilepſy 471, 481
Ethiopic 587
Febrifuge 332, 479
Dr. James's 337
Gaſcoign's, *i. e.* Bezoardic
Gout, Duke of Portland's 477
Turner's 478
Holy 477
for the Head 581
Heartburn 477
Hyſteric Fetid 584
Healing 583
Sweet 584
Incraſſating 585
Jalap, comp. 473
Menſes, to promote 584
Morton's Antiſpaſmodic 74
Myrrh, comp. 473
Prince's 327
Purging for Children 481
Purple 479
Royal 478
Scammony, comp. 473
Sena, comp. 473
Sneezing 473, 474, 480, 591
Solutive 480
Steel, comp. 479
Stomachic bitter 587
Styptic 474
Sudorific 474
Teeth, to cleanſe 481
Tragacanth, comp. 474
Viſcera 588
Water, to purge off, 480
Wind to expel 583
Worms to kill 480, 481, 587
Purging 480
Powers 242
of Amber 296

Powers of Scabious 507
Precipitation, as a Principle 50
as an Operation 25
Preparations of Antimony 332
of Calamine and other Earthy Bodies, &c. 245
Copper 317
Lead 318
Mercury 322
Metals 308
Opium 252
Scammony 256
Silver 309
Steel 310
Tin 321
Preſcriptions, directions for 634
Preſerves. See Conſerves.
Primroſe 180
Privet 118
Prunes 165
Pudding Pipe-tree 165
Pulp of Fruit prepared 247
Pulverization explained, &c. 14
chemical, what 33
Purges, milder 163
Rougher 169
Purging Flax 169
Grain 93
Purification of Aloes, &c. 243
Purſlain 188
Putty

Q

Queen of the Meadow 147
Quicklime 199, 227
Quickſilver 132
its Preparations 322
to purify it, 132, 322
Quinces 83
Quinquina. See Bark.

R

Radiſhes 141
Raiſins 121
Raſpberries 84
Receiver 26
Red-lead 193
Red Rot 51
Regulus of Antimony 332, 334
Repellents explained 191
Reſin 111, 196
of Aloes 395
Black 111
Guaiacum 249, 395
Jalap 249, 427
Scammony 249, 256
Reſt Harrow 114
Reſtoratives explained 100
Retort and Receiver 26
Rhapontic 128
Rhubarb Indian 168
Monks 128
Toaſted 247
Ruſſian and Turkey 168
Ribwort 78
Rice 78
Rob, or Sapa 413
Barberries 413
Cherries 413
Wild 413
Elderberries 412, 414
Quinces 414
Simple 413
Sloes 414
Rocket leaves 100
Roots, how to be gathered and managed 45
Opening 44
Roſes damaſk 55, 164
Dog 103
Red 83
Roſemary 52
Roſe Spice 476
Wood 60
Rubies 92
Rue 69
Rupture-wort 81
Rye 119

S

Saffron 147
Baſtard 158
of Iron aſtringent 312
Opening 312
of Metals 336
Sagapenum 110
Sage 51
Jeruſalem 110

Sage Tea 52
of Virtue 52
Wood 52
Sago 78
Saint John's-wort 108
Saline preparations 274
Sal volat. oleoſ. 286
Salap or ſaleb, or ſalop } 62, 72, 211
Sallow 188
Salt of Amber 293, 295
Ammoniac 211, 28
Flowers of 285
Martial 313
Sublimation of 282
Volatile ſalt of 282, 284
Bean-ſtalks 307
Bitter purging 211
Common, or ſea 132, 211
to decripitate 274
Purification of 274
Spirit of 274
Diuretic 305
Epſom 211
Gem 132
Glauber's 275
Hartſhorn volat. 270
with Amber 273
Hoglice 252
Iron 313
Lixivial purified 298
Petre. See Nitre.
Prunel 276, 277
Rock 132
Sorrel 307
Sulphur 263
Tartar. Fixed 297
Tin 321
Vipers 268
Vitriol 290
of many Virtues 277
Enixum of Paracelſus 279
Urine 287
Wood-ſoot 272
Wormwood 307
Salts alkaline, their ſpecies and menſtrual powers 9
Animal to elixirate 273
Salts, Fixed, what 242
Tables of the quantities of water required by different Salts for their ſolution 22, 23
How known 30
Samphire 116
Sand-pots 13
Sanicle 82
Sapa. See Rob. 116
Sapphire 92
Saracens conſound 78
Sarcocol 111
Sarſa 89
Sarſaparil 89
Saſſafras 88
Bark 89
Saturation, what 3
Saturn 318
Satyrion 61, 105
Saunders, all ſorts of 87
Savin, 69
Savory 119
Saxifrage 137
Scabious 100
Scammony 174, 237
Preparations of 256
with Sulphur 256
Reſin of 249, 256
Sciatica creſſes 118
Scurvy-graſs, garden 115
Sea 116
Scuttle-fiſh bone 198
Sea holly 104
Sea onions 158
Sebeſtens 121
Seeds, how and when to be gathered 45
Hot and cold 44
Sena 163
Separating glaſſes 12
Services 84
Sheep's ſuet 197
Shepherd's pouch 76
Purſe 76
Rod 107
Silver 203, 310
Preparations of 309
Silver-weed 76

Simples Diſtribution of 42, 225
included under one denomination 44
Method of 46
Preparation of 239
Rules to collect them 45
Rules for preſerving them 45
Sinapiſm 504
Size 11
Skinks 155, 214
Sloes 84, 85
Smallage 114
Snails 129
Snake-root 153
Snake-weed, Engliſh 86
Virginian 153
Snuff, when uſeful and not 179
of Euphorbium 625
with Juices 625
Marjoram 625
Sal volat. 625
Turpith mineral 625
Solids, gravity of 38
Solvent, what 7
Solution, as a principle, what 4
as an operation 21
how facilitated 4, 22
per deliquium, what 22
Sope 124, 201
of Almonds 304
Starkey's 302
of Tartar 302
Sopewort 128
Sorrel 187
Eſſential Salt of 306
Soul of the Lungs 148
Joints 167
Southernwood 106
Sow-bread 114
Sow-bugs 142
Sow-thiſtle 188
Spaniſh flies 142, 199
Species, what fit for that form 469
Aromatic 475
Diambra, with perfumes 476
Species, Scordium, with and without Opium 475
Speedwell 120, 208
Sperma Ceti 130
Spignel 152
Spikenard 68, 153
Spinage 188
Spirit of Wine a menſtruum 8
Spirits, how produced 239
the beſt way to diſtil them 239
Diſtilled 348
of Amber 293, 295
Antiepileptic for children 374
Benjamin 245
Caſtor 373
Ethereal 291
Febrifuge, Clutton's 293
Hartſhorn 270, 271
Aromatic 273
with Amber 273
Hog-lice 252
Honey 250
Lavender comp. 372
Simp. 372
Lemons 372
Mindererus's 287
Nitre 278
Glauber's 279
with Oil of Vitriol 278
to purify 309
Sweet 279
Oranges 373
Roſemary 371
Saffron 148, 373
Sal Ammoniac 282
with Quicklime 284
with Amber 285
Sweet 285
Vinous 285
Saline Aromatic 286
Sea ſalt 274
Coagulated 276
Glauber's 274
Sweet 276
Scurvygraſs 256

Spirits

Spirits, Scurvygrafs, Golden 257
Soot 272
Sugar burning 263
Sulphur 261, 262
Treacle camph. 374
Turpentine 379
Vinegar 266
Vitriol 289
Strong 289
Weak 289
Sweet 290, 291, 292
Volatile Aromatic 286
Foetid 287
Urine 287
Wine camphorated 435
Rectified 263
Tartarized 273
Spirits 348
Spleenwort 78, 115
Spring-water 216
Spunge 201
Burnt 247
Spunk 203
Spurge 170, 200, 201
Flax 169
Laurel 169
Olive 169
Squills 158
Baked 247
Dried 247
Squinanch 52
Staechas, Arabian or Purple 55
Starch 202
Starwort 106
Steel candied 311
Deliquate 315
Extract of 315
Flowers of 313, 315
Lixivium 315
Lye 315
Preparations of 310
Reſtringent 312
Ruſt of prepared 310, 311
with Sulphur 311,
with Tartar 311
Prepared by Willis 310
Saffron of, aſtringent 312
Opening 312
Steel, Salt of 313
Sugared 443
Tartarized 311
Tincture of the flowers 316
in Spirit of Salt 316
Wine of 315
Sternutatories. See Snuff. 46, 178, 625
Still (worm) 26
Stomachics 46
Operation of 93
Stevens's (Mrs.) her medicines 639
Stone-breaker 137
medicinal 293
Mrs. Stephen's medicine for the Stone 639
improved 639
Dr. Chittick's 643
Goa 633
Storax 104
Purified 247
Strawberries 135
Strawberry-tree, (perennial-leaved) 82
Strengtheners. See Corroboratives 46, 75
St. John's Wort 108
Sublimation, as an operation 28
Sublimate. See Mercury, alſo 29
Succory 187
Suet Deer's 197
Ox's 197
Sheep's 197
Prepared 246
Sugar 210
Barley 444
Candy 211
of Lead 319
Lozenge ſimple and pearl 444
Lozenge with Roſes 445
of Roſes 462
Red 462
Sugar plums, purging 467
Sulphur of Antimony 334
Balſam of Linſeed 260
with Oil of Amber 260

Sulphur, Balſam of,
with Oil of Aniſeed 260
with Oil of Olives 259
with Oil of Turpentine 259
Thick 260
Blood of 260
Flowers of 257
Liver of 258
Milk of 258
Oil of, by the bell 261, 262
Salt of 263
Spirit of 261, 262
Tincture of 261
Sundew 51
Suppoſitories 591
Suppuratives explained 194
Swallow-wort 49
Sweeteners. See Abſorbents.
Sweet Cicily 135
Flag 60
Ruſh 52
Sweets 233
Syrup, what fitteſt for that form 396
Why beſt from dried herbs 400
Why rejected in Practice 401
What medicinal intentions propereſt for 396
Rules in making 396, 431
Balſamic 402
Barberries 407
Buckthorn 406
Citron Peels 408
Clove-July flowers 403
Clove ſpice 408
Common 406
Cowſlips 405
Diacodium 404
Garlic 401
Ginger 407
Juice of Lemons 404
Kermes 403
Liquorice 408
Maidenhair 407
Marſh-mallows 401
Meadow ſaffron 403
Syrup, Meconium 404
Mulberries 404
Orange-peel 402
Peaches 408
Pectoral 405
Poppies white 404
Wild 404
Quinces 403
Raſpberries 404
Reſtringent 409
Rhubarb 408
Roſes, Damaſk 405
Dried 405
Solutive 405
Saffron 403
Simple 406
Squills 406
Vinegar 407
Violets 406

T

TAble of Attractions or Affinities 6
of the quantities of Water which different Salts require for their diſſolution 22, 23
of the weights of different Liquids 37
of the ſpecific gravity of different Solids 38
Liquids 39
of the quantity of fixt Alkaline Salt, neceſſary to ſaturate different Acids 39
of the quantity of Acids deſtroyed by different abſorbents 40
of the quantity of abſorbent Earths, ſoluble in Acids 40
of the quantity of eſſential Oil, obtainable from different Aromatics 41
Tacamahac 124, 243
Talcky Earth 229
Tamarinds 165
Tamariſk 125
Tanſy 119

Tanſy, Wild 76
Tar, Barbadoes 131
Water 637
Strong 638
Tares 149
Tartar 213
Cathartic 301
Cream and Cryſtals 297
Emetic 299
Lixivium 298
Regenerated 305
Salt 297
Deliquiate 298
Sope 302
Soluble 299
Vitriolated 301
Tea Bohea 101
Green 101, 136
Sage 52
Teaſel 107
Tents for the tooth-ach 632
Teſtacea, and their preparations 245
Thiſtle, Bleſſed 93
Thorn, Egyptian 79, 85
Apple 183
Black 85
Goats 80
Tree 85
White 138
Thorow Wax 109
Thyme 52
Syrian Maſtich 50
Wild 52
Tin, 213, 321
Preparations of 321
how powdered 321
Calx 321
Earth of 321
Salt of 321
Tinctures, rules for extracting them, &c. 416, 435
Alexipharmic 436
of Amber 296
Ambergriſe 243
Antimony 338, 430
Aromatic 423
Aſthmatic 436
Tinctures, Balſamic 424
Balſam of Tolu 430
Benjamin 244, 424
Bitter 423
Cantharides 424
Cardamom Seed 424
of Caſtor 425
Cephalic 421
Purging 421
Tincture of Cinnamon 425
of Copper 317
Volatile 318
Euphorbium 252
Fetid 426
Flowers of Steel 316
Gum Guaiac. vol. 426
Hellebore black 427, 428
White 431
Holy 422
Honey 249
Jalap 427
Japan Earth 427
Ipecacuanha 420
of Kino 427
Lac Gum 427
Meconium 253
Mint 421
Muſk 421
Myrrh 428
of Aloes 428
Opium 253
Palſy 437
Peruvian bark, ſimple 154, 425, 426
Volatile 151, 425
Rhubarb, bitter 428
Spirituous, 428
Sweet 429
in Wine 421
Roſes 422, 634
Royal 438
Saffron 426
Salt of Tartar 304
Sena 429
compound 429
Snake-root 429
Soot 426

Tincture, Steel 316
Mynſicht's 438
in Spirit of Sea Salt 316
of the Flowers of 316
Stomachic 429
Bitter 438
Styptic 429
Sudorific 430
Sulphur 261
Sun-dew 439
Thebaic 253, 254, 422
Valerian Root ſimp. 430
vol. 431
Volatile Gum Guaicum 426
White Dittany 426
Wormwood 423

T.

Toads, prepared 248
Toaſting, an Operation 17
Tobacco 181, 183, 196
Topics 46, 191
Tormentil 87
Torrefaction, as an operation 17
Touchwood 203
Tragacanth Gum 80
Tree of life, 203
Treacle, Edinburgh 452
Muſtard 55
London 455
Venice 450
Trefoil, 119
Tritorium, what 12
Trituration, what 14
Troches and Pills 457
general rules to make them 458
Apoplectic 569
Balſamic 463
with Benjamin 462
of Benjamin 462
againſt Blood-ſpitting 573
Cardialgic 462
Troches, Cephalic 569
Cyphi for the Mithridate 459
Hedychroi for Venice treacle 460
Japan Earth 461
Myrrh 460, 473
Nitre 460
Palſy 569
Pectoral, black and white 459
with opium 459
Peruvian 573
Pleaſant coloured 460
Redlead 460
Spitting, to cauſe 570
Squills 461
Stomach 570
Sulphur 461
Vipers 462
White of Rhaſes 458, 472
Turbith 169
Mineral 329, 330
Turmeric 126
Turnips 141
Turpentine Chio 111
Cyprus 111
in General 111, 125, 198
Straſburgh 111
Venice 111
Tutty 92, 193
prepared 246

V.

VAlerian 154
Vanelloes 56
Vegetable acids 225, 226
Vegetables, to gather and preſerve 45
Venice treacle 450
Verdigriſe 198, 317
Vermicelli 78
Vervain 120
Mallow 202, 203
Vetch bitter 102
Vinegar 264

Vinegar Diſtilled 266
Elder 267
Litharge 268
Meadow Saffron 267
Roſe 267
Rue 267
Spirit of 266
Squills 267, 268
Treacle 268
Violets 164
Vipers 129
Broth 386
Diſtilled 268
Eſſence 269
Fat 194
prepared 246
Rectification of that oil 269
Volatile ſalt 268
Viper Graſs, 153
Vitriol 213
calcined 288
Colcothar of, 312
of Iron 313
Oil and Spirit, 289
Purified 288
Salt 290
Spirit, ſweet 290, 291
weak and ſtrong 289
Volatile Narcotic of M. Homberg 293
Unctuous Bodies 231
Unguents, general Rules to make them 491
Ægyptian 505
comp. 505
of Apples 506
Baſilicon yellow 497
Black 497
Green 497
Bliſtering 501
Milder 501
Blue, milder, 498
Stronger 497
of Calamine Stone, 503
Elder 499, 507
Emollient 498
Four Ingredients 497
Golden 505
Unguents, Green 501
detergent 497
Gum Elemi 498, 505
Lead 499
Marſhmallows 496
Mercurial 498
Mercury precipit. 498
by Mixture 506
Nerve 499
Nutritum 499, 500, 506
Pomatum, 500, 506
Poplar 508
Red drying 507
Roſes 500
Saturnine 499
Simple 500
Soldiers 507
Sharp-pointed dock 506
Sulphur 500
Sugar of Lead 499
Tar 499
Three Ingredients 500
Tobacco 506
Tutty 500
with Camphor 500
Verdigris 505
Wax 497
White 496, 497
camphorat. 496
of White Lead 496
Yellow 497
Volatility, what 10
Urine, Provokers to. See Diuretics.
Uterines. See Hyſterics. 66
Vulneraries, their operation, 105

W.

WAke Robin 125
Wallflower, 50
Wallnuts, 99
Wart wort, 210
Waſhingover, what 15
Water, differences and natural hiſtory of 214
as a menſtruum 7
Acton 219

Water, Alexiterial ſimple 354
ſpirituous 358
with Vinegar 358
Alum 282, 306
Dr. Bates's 282
Angelica 357
greater comp. 352, 361
Anhalt 368
Anniſeed comp. 358
Antiſcorbutic 364, 367
Aromatic 360
Arquebuſade 369
Balm 147, 357
Barley 385
Bath 221
Black Cherry 355, 357
Bryony comp. 352, 362
Buxton 221
Camphorated 365
Caraway-ſeed 358, 359
Cardamom-ſeed 358
Carduus 357
Carmelites 368
Caſtor 354
Celandine 357
Cephalic 365
Chamomile comp. 352, 362
Cinnamon ſimple 354, 375, 377
ſpirituous 359
Clary comp. 365
Colic 184
Conſumptions 366
Dulwich 219
De Luce 435
Dill-ſeed 354
Diſtilled ſimple 353, &c.
compound or ſpirituous 358
from leaves, buds, flowers, fruits and animals 357
Rules relating to them 353
Epidemic 352
Epſom 219
Water, Eye 369
Eye-bright 357
Fennel, 356
Fumitory 357
Goulards 320
Hampſtead 220
Honey 250
Horſe-radiſh comp. 142, 352, 360
Hungary 371
Hyſſop 357
Jamaica pepper 354, 356
ſpirituous 363
Imperial 351
Iſlington 220
Juniper compound 359
Kilburn 219
Lime 370
compound 371
leſs compound 371
Marjoram 357
Medicinal 219
Milk, alexiterial 352
Mint 356
Nephritic 138, 352, 360, 366
Nutmeg 360
Northaw 219
Orange-peel ſimple 354
ſpirituous 358
Paſque-flower 354
Penny-royal 354, 356
ſpirituous 360
Peppermint ſimple 356
ſpirituous 359
Phagedenic 371
Piony comp. 351, 363
Plague 360
Pond 218
Purging 219
Rain 218
River 217
Scarborough 220
Scordium comp. 363
Scurvy 367
Sea 219
Simple diſtilled, ſeveral, 348, &c.

Water, Snail, ſmall and ſtrong, 352
Snow, 218
Spearmint ſimple 356
ſpirituous 359
Spring 216
Steel 220
Dr. Stephen's 352, 364
Styptic 370
camphorated 365
Succedaneum and treacle water 352, 360, 363
Succory 357
Sulphurated 263
Surfeit 184
Tar 637
ſtrong 638
Treacle 352, 364
Tunbridge 220
Valerian 360
Vegeto-Mineral 320
Vitriol 370
camphorated 370
Roman 369
Vulnerary 369
Well 218
Wonderful 59, 360, 362
Wormwood, greater 352, 361
leſſer 361
ſimple 357
Waterpepper 135
Waters 348
Rules for making 353, 360
Wax, a menſtruum 10
Oil of 272
White 204
Yellow 204
Weights and Meaſures of the London Diſpenſatory 35
of the Edinburgh 36
Wheat 78
Whey 212
Alum 386
Muſtard 516
Purging 516
Scorbutic 386, 515
White of an egg 192
Eagle 324
Hellebore 181, 237
Lead 193
Thorn 135, 138
Whortle. See Wortle.
Wild Creſs 119
Honey 165
Willow 188
Wine 205, 213
what ſort the beſt 205
which diſpoſes moſt to the gout, and why 208
Alcaline of aloes 418
Aloetic 422
Antimonial 419
Bitter 419, 513
Bleſſed, i. e. Antimonial
Chalybeate 315, 316
Dropſy 515
Elecampane 514
Emetic, i. e. Antimonial
Gout 511
Hippocrates 512
Hoglice 515
Jaundice 515
Ipecacuanha 420
Millepedes 251, 421
Pectoral 514
Rhubarb 421
Saffron 420
Scurvy 514
Squills 436
Steel 420, 512, 513
Stomachic 513
Vintner's bitter 513
Viper 420
White Dittany 420
Wonderful 512
Winter's bark 60
Winter cherries 138
Green 110
Woad 81
Wolf-bane 146
Wolf's-peach 202
Wood-bine 115
Wood-lice 142

Wood, preparation of 251
Wine 251
Spirit, volatile ſalt and oil 252
Wood, nephritic 139
Wood roof 114
Wood-ſoot 209
Wood-ſorrel, 106, 188
Woods, to obtain and preſerve 45
Worm-graſs 212
Seed 94
Still 26
Wormwood common 113
Roman 93
Wortleberry, berries 82
black 84

Y.

YArrow 82
Yeaſt 195
Yolk of an egg 198
A menſtruum 10

Z.

ZEdoary 62, 146
Zinc, calx of, 289
flowers of, 289

THE END.

The following BOOKS are Printed for

T. LONGMAN, No. 39, Pater-noſter Row.

Price Six Shillings, 8vo.

I. LEXICON PHYSICO-MEDICUM: Or, a New Medicinal Dictionary; explaining the difficult Terms uſed in the ſeveral Branches of the Profeſſion, and in ſuch Parts of Natural Philoſophy as are Introductory thereto: with an Account of the Things ſignified by ſuch Terms. Collected from the moſt eminent Authors.

By JOHN QUINCY, M. D.

The NINTH EDITION,

With new Improvements from the lateſt Authors.

Price Five Shillings, 8vo.

II. The DISPENSATORY of the Royal College of Phyſicians, London, tranſlated into Engliſh with Remarks, &c.

By H. PEMBERTON, M. D. Profeſſor of Phyſic in Greſham College, and F. R. S.

The Second Edition.

Price Two Shillings and Six Pence, 12mo.

III. PHARMACOPOEIA Collegii Regalis Medicorum Londinenſi.

Where may be had a Quarto Edition on Royal Paper. *Price, Seven Shillings and Six Pence.*

In Two Volumes, Quarto ; Price One Pound Ten Shillings.

IV. A NEW METHOD of CHEMISTRY; including the Hiſtory, Theory, and Practice of the Art: Tranſlated from the Original Latin of Dr. Boerhaave's Elementa Chemiæ, as publiſhed by himſelf. To which are added, Notes; and an Appendix, ſhewing the Neceſſity and Utility of enlarging the Bounds of Chemiſtry. With Sculptures.

By PETER SHAW, M. D. F. R. S.

The Third Edition Corrected.

Price Four Shillings, 8vo.

V. ESSAYS for the Improvement of Arts, Manufactures, and Commerce, by Means of Chemiſtry: containing,

I. An Eſſay for the farther advancing and applying Chemiſtry, in England, to the Improvement of numerous Arts and Trades.

II. An Eſſay to improve the Britiſh Diſtillery, in the Hands of the Malt-ſtiller, Rectifier, Compounder, and Apothecary; by directing the carrying on their ſeveral Works with greater Accuracy.

III. An Eſſay to introduce an Art of concentrating Wines, Beers, and other fermented Liquors, or reducing their Bulk to Advantage, for Exportation and long Voyages.

By PETER SHAW,

Fellow of the College of Phyſicians, London, F. R. S. and Phyſician in Ordinary to his Majeſty.

The Second Edition, Improved.

Price Six Shillings, 8vo.

VI. EXPERIMENTAL INQUIRIES: Part the Third. Containing a Deſcription of the Red Particles of the Blood in the Human Subject and in other Animals; with an Account of the Structure and Offices of the Lymphatic Glands, of the Thymus Gland, and of the Spleen: being the remaining Part of the Obſervations and Experiments of the late Mr. WILLIAM HEWSON, F. R. S. and Teacher of Anatomy.

By MAGNUS FALCONAR,

Surgeon and Teacher of Anatomy.

BOOKS Printed for T. LONGMAN.

Price Six Shillings, 8vo.

VII. A SYNOPSIS of a Courſe of Lectures on ANATOMY and SURGERY.

By MAGNUS FALCONAR,

Surgeon, and Profeſſor of Anatomy.

In Two Volumes, Octavo; Price Ten Shillings,
The Fourth Edition corrected.

VIII. SYNOPSIS MEDICINÆ; or a ſummary View of the Whole Practice of Phyſic: being the Sentiments of the moſt celebrated Authors in all Ages relating to Diſeaſes, their Cauſes and Cures, with moſt Caſes in Surgery and Midwifery. To which are added, ſome Obſervations very rare and uncommon, and a curious Treatiſe on all Sorts of Poiſons.

By JOHN ALLEN, M. D. F. R. S.

Tranſlated by Himſelf, from the laſt Edition of his Latin Synopſis, with very large Improvements.

In Six Volumes, Octavo; Price One Pound Ten Shillings.

IX. Dr. Boerhaave's ACADEMICAL LECTURES on the THEORY OF PHYSIC; being a genuine Tranſlation of his Inſtitutes, and explanatoty Comment, collated and adjuſted to each other as they were dictated to his Students, at the Univerſity of Leyden.

In Eighteen Volumes, Octavo; Price Five Pounds Eight Shillings, bound.

X. The COMMENTARIES upon the APHORISMS of Dr. HERMAN BOERHAAVE, the late learned Profeſſor of Phyſic in the Univerſity of Leyden, concerning the Knowledge and Cure of the ſeveral Diſeaſes incident to Human Bodies.

By GERARD VAN SWIETEN, M. D.

Tranſlated into Engliſh.

Price Six Shillings, 8vo.

XI. CASES and REMARKS in SURGERY: To which is subjoined, an Appendix, containing the Method of curing the Bronchocele in Coventry.

By B. WILMER, Surgeon.

Price Two Shillings, 8vo.

XII. OBSERVATIONS on the POISONOUS VEGETABLES which are either Indigenous in Great Britain, or cultivated for Ornament.

By B. WILMER, Surgeon.