A history of the most remarkable pestilential distempers that have appeared in Europe for three hundred years last past : with what proved successful or hurtful in their cure. Together with the method of prevention and cure of the plague. Founded upon the experience of those who were practitioners when it raged. Laid down in such a manner, that the generality of people may be able to manage themselves / By R. Brookes.

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# HISTORY

Of the most Remarkable

# Pestilential Distempers

That have appeared in EUROPE for Three Hundred Years last past;

# WITH

What proved SUCCESSFUL OF HURTFUL in their CURE.

### TOGETHER

With the Method of PREVENTION and CURE of the PLAGUE.

Founded upon the Experience of those who were PRACTITIONERS when it raged.

Laid down in fuch a Manner, that the Generality of People may be able to manage themfelves.

# By R. BROOKES M. D.

The Sweating-Sickness\*\*\*\* was most probably of a Foreign Original, and no other than a Plague abated in its Violence by the mild Temperament of our Climate.

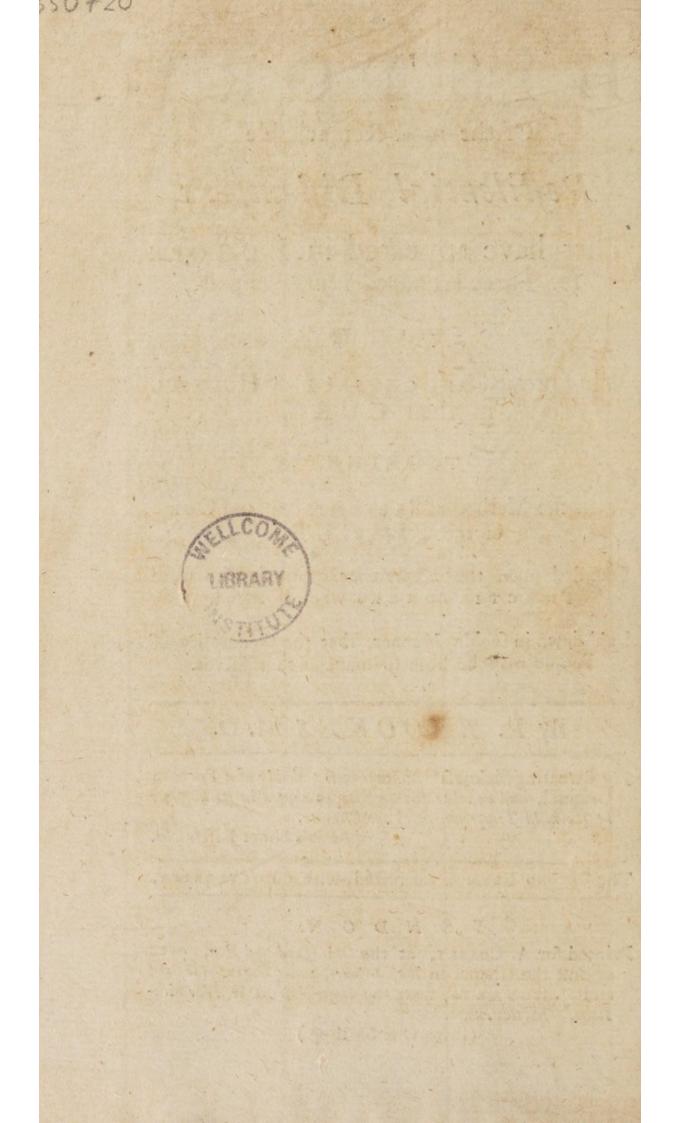
Mead's Short Difcourfe.

The SECOND EDITION Corrected, with a POSTSCRIPT.

#### LONDON:

Printed for A. CORBET, at the Old Hand and Pen, over against the Chapel in Russel-Court, near Covent-Garden; and J. ROBERTS, near the Oxford-Arms in Warwick-Lane. M.DCC.XXII.

(Price One Shilling.)





(3)

# Dr. BATLY.

TO

# SIR,



FTER fome Deliberation with myfelf, to whom I should make a Prefent of these Sheets, both my Inclination and Judgment fixed upon you: For at the

fame Time, that you have greater Abilities than others to judge of this Performance, you have Candour and Good-Nature enough to pardon its Faults.

You need not be acquainted, that Things of this Nature cannot be too Publick, when the Apprehensions and Fears of the Nation run so high; and considering that if they should come to pass, the Generality might probably have no other Assistance than such as this: and if this shall contribute any thing towards the Wellfare  $A_2$  of

# The DEDICATION.

of my Fellow-Creatures, I fhall have my End, and I know that you will not be displeased with any thing that looks like an Office of Humanity, who are yourself fo much concerned for the Good of Mankind.

I would not have you to think, Sir, that I am going to fay any thing that looks like a common Dedication; for if I did, your Generofity, Prudence, Learning and good Sense, would afford Matter enough to work upon: But I know that you would defpife whatever looks like Flattery; fuch mean Arts could never be agreeable to a Soul like Yours.

What therefore is defign'd for a Teftimony of my Respect, and not for a Catalogue of your Praises; I doubt not but you will have Goodness enough to pardon, from,

SIR,

1: 78 30H :0

4

Your real Admirer, and

to high; ; and counder

come to pais, the General

very Humble Servant

R. BROOKS,



(5)

# PREFACE.



HOEVER writes with any tolerable Success upon the PLAGUE, must found his Opinions upon the Observations and Experience of bis Predecess; for

they alone are able to inform us of the different Fortune of a various Practice, and the several Tryals that have been made to weaken the Force of so formidable an Enemy to Mankind.

If this be true, as undoubtedly it is, the Reader will not be displeased to find that he has a good deal of Labour saved in turning over Variety of Books, and that he may behold with one View Observa-B tions tions which before were scattered here and there.

In translating what I here present you, the I have made considerable Contractions, I have omitted no material Circumstance that would either explain the Nature of the Disease, or the Manner of its Cure; and if my Authors had been more particular, I might have been so too.

What I have faid in the Second Part, I have Authority for; and I believe as good as any Perfon elfe can have.

In this Second Edition I have taken care to correct fome Overfights that were committed for want of due Attention; and to make it as generally useful as I can, have added a probable Account of the Manner of its Progress, together with some farther Remarks upon the Method of Prevention and Cure.

I would not have the Reader mistake this for an entire Hiltory of Pestilential Distempers, but rather of the different forts of them; tho' by the by, I shall not be positive that any two that have yet appeared have been in all respects the same. Yet as Authors have distinguished between some kinds of these Diseases and the Plague it soft, I have kept to that Distinction, without apprehending any ill Consequences from it.

# PART

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# PART I.

A History of the most Remarkable Pestilential Diftempers, &c.



HE PLAGUE is a Subject of fo great Importance to Mankind, that whoever fincerely endeavours to weaken its Force or ftop its Progress, is suffi-ciently excused in the Attempt, tho' he fhould not meet with

any extraordinary Success.

However specious or conclusive the Reasonings of some may be, yet they fatisfy us no farther than they have Experience for, their Foundation; becaufe whatever is not built upon that, must needs be uncertain and preca-To fearch after the hidden Caufes of rious. Things, to give probable Gueffes in abstrufe Matters, may, indeed, answer the Ends of Oftentation and Vain-glory, and please fome curious and inquisitive Minds; but the Fears and B 2

and the Sufferings of Mankind call for fomething more: While a most dreadful Enemy of Mankind rages, and imperiously threatens the Death of Thousands, there is no time left for empty Speculations and idle Amusements; all Aids are to be fummon'd, all Methods try'd, that if possible one way or other this Deftroyer of Mankind may be vanquish d.

However, no one Method, how promifing foever, can be fecure enough wherewith to truft the Welfare of Millions of People, unlefs that one Method were infallibly certain, which it is not poffible any fhould be that have not been try'd : Besides, it is not fufficient, as some People seem to imagine, to call a Destructive Distemper by the name of the Plague, and then to give the Remedies for that Diftemper in general. We cannot be fure that Diftempers which to very difcerning Eyes feem to have the fame Symptoms, require the fame Method of Cure; much less ought we to adhere to one uniform Way of Practice, where the Difease puts on Variety of Shapes : And if we may believe Dr. Mead \*, the fame Diftemper that is call'd the Plague in France, may put on another Drefs, and in England become the Sweating-Sickness.

It does indeed feem to be very probable, that the fame Diftemper may put on different Appearances, or in other words, that the fame Caufe may produce various Effects; for the fame reafon, that an equal Quantity of the fame Medicine has different Operations upon different Bodies.

To be well guarded therefore, we fhould be able to know and overcome our *Enemy* under

<sup>\*</sup> See his Skort Difcourfe, p.6.

all Difguifes, at leaft under all those that we have had any Account he has yet appeared : This I take to be the most cautious and prudent Way of Proceeding ; for let us be attack'd on which fide we will, we shall in some measure be prepared to ward off the Blows, and defend ourselves against the Assault.

When any new Diftemper appears, *Phyficians* are commonly at a lofs what to do, or how to proceed, till a fufficient number of *Exper ments* have been try'd, which may enable them to do more than guefs at a Method of Cure. But if they find any old Diforder to which they may compare the new, tho' not alike in every Particular, they with good reafon conclude, that what has prevail'd againft that, is most likely to prevail againft this.

I think then it is very plain we cannot be too well armed against Contagious Distempers of any fort, much lefs against the most destructive; and if I can give any tolerable HISTORY of them, the Preservatives against them, and the Cure of those that were infected, I shall not contribute the least toward fo valuable a Purpose.

And what makes fuch an Attempt more neceffary, is, that nothing is more common than to give the fame Names to Difeafes very unlike Thus Crato affirms, that after 30 Years diligent Obfervation, the Hungaric Difeafe never return'd with the fame Symptoms that it had before, as Dolaus \* reports. Sennertus t makes it the Effence of a Plague to be Contagious and Mortal; fo that if it be attended with a Fever, Raving, Watching, Head-Ach,

\* Dolzi Encyclop. p.538. † De Natur. Peft. cap. I. proprofound Sleep, Ulcers of the Mouth, Quinfy, Pleurify, Vomiting, Loofenefs, Jaundice, Buboes, Carbuncles and Spots of various kinds, yet he comprehends them under the general Name of the Plague: for, fays he, it is not the Quinfy that fuffocates, the Fever that kills, Sc. but the Plague.

Dr. Willis \* in his Defcription of the Plague brings in Buboes and Carbuncles, and yet without doubt that was properly a Plague which Heurnius † fpeaks of, which happened in the Year 1445, when People dropt down dead without fo much as a Fever, or any other Symptom.

The Ufe of a Name, indeed, I take to be a matter of no great moment, provided it does not lead us into Miftakes, and if we do not attempt the Management of all Diftempers of the fame Name after the fame Manner. But before I profecute my main Defign, I fhall defcribe what I mean by a *Plague* or *Pefilential Diftemper*, and fome of its more ufual Symptoms.

The Plague what.

The Plague then is an Epidemical Diftemper, Contagious, and very fatal to Mankind; it is often attended with Euboes, Carbuncles, Spots, Wheals and Puscules.

Some Authors think that a *Plague* may exift without being Epidemical or common, and that there are *Epidemical* Diftempers that are not contagious; and the *Cough* and *Catarrb* mention'd by || *Foreftus* is brought as an Inftance, which in the Year 1580 fpread throughout *Europe* in fix Weeks time, and of which fcarce one in a thoufand died, tho' whole Families were ill of if at once. How-

\* Willis de Pefte. † Heurnii Inft. Med. p. 200. || Forestus, Lib. 6. Obser. 3. ever just the latter Observation may be, the former seems too trifling to infift upon.

Buboes are Swellings of the Glands occa- Buboes fioned by the fharp Morbific Matter that is what. thrown upon them: which fometimes increafing, fuppurates and turns into Pus. Thefe most commonly appear in the Groin, fometimes behind the Ears, and in the Neck.

A Carbuncle is a fiery Swelling encompafied Carbuncles with the most fharp and burning Pustules, in-what. fefting the Sick with intolerable Pain; it breaks out in any Place without diffinction, does not suppurate or turn into Pus, but creeping and enlarging its Bounds, throws out the eaten corrupted Flesh, which leaves a hollow Ulcer behind it as if burnt with an Efcharotic.

What \* Dolaus relates of an Accident which happened in the time of the Plague in the Lower Palatinate, is pretty remarkable: 'A ' certain Maid, fays he, had a Carbuncle on ' the End of her Ring-Finger, and whether ' becaufe fhe was delirious, or through Ve-' hemence of the Pain, I know not, but fhe ' took a common Kitchen-Knife, and cut the ' End of her Finger off; yet for all that fhe ' died the next day, with her Finger and ' Hand mortify'd.'

The Spots, Wheals and Pustules are of the Spots, fame fort of Swellings with those before de-Wheals, fcribed, and are only more malignant for be-Pustules, ing lefs; for in these the Poison being more dispersed, is more deadly and fatal than if it was thrown upon one Place.

Some have taken a great deal of pains to inform us when we are to expect that we shall

\* Dolzi Encyclop. p. 540.

be visited with a Pestilential Distemper, but with very little certainty; especially if what Dr. Mead \* fays be true, That fuch Diftempers are not of English Growth : but that, perhaps, we may confider hereafter.

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Diagnoftie Signs what.

Sickness,

1486.

Diagnostic Signs indeed may be made better ule of, for these ferve to shew when Persons are afflicted with this dreadful Diftemper, and how we may know that they are fo; which being timely difcovered, any Help that can be got, is likely to prove most beneficial. The chief of which, as they are observed by Authors of most Note, are as follow.

The Pulfe fmall, weak, quick and unequal; a Pain at the Mouth of the Stomach; fometimes great and infatiable Thirft; Loathing of Food and all kind of Victuals; Vomiting; Shivering and Trembling; Wearinefs and Heavinefs. of the Body; Pains in the Head; continual Waking and Riving; fometimes extreme Heaviness and Sleepiness; the Urine often like that of a healthy Perfon, the Heat not extraordinary; Redness of the Eyes; Buboes in feveral Parts of the Body, or Carhuneles, or livid and black Spots.

Thefe are the Signs usually taken notice of, but do not agree with all Peffilential Diftempers, as you will find hereafter, but only to a Species of them. I shall therefore begin my Account of these Distempers with that re-Sweating-markable Difease call'd the Sweating-Sickness: This was first observed in the Year 1486, and becaufe it was fuppofed to be a new Diftemper, and to take its Rife in England, it is call'd by Authors Sudor Anglicus and Peffis Sudorifica Anglica; it continued in England almost

\* See pag. 5. of his Short Difcourfe.

conftantly for 40 Years together, and tho' the Cold of the Winter feem'd to drive it away fometimes, yet it would return in warmer Weather with fresh Vigour. It deftroy d fuch vast Numbers of People before there was a certain Remedy found out, that Foreigners hardly believed there were so many in the whole Island. From England in 1525 it took 1525. its Progress, and in five Years time march'd through Lower Germany, the Low Countries, Holland, Zeland, Brabant, Flanders, Denmark, Norway and France.

So mercilefs was this Diftemper, that when it first entered a City, it would feize five or fix hundred in a day, and scarce fix recover'd.

Those that were taken with it, had nei- Symptoms. ther Buboes, Carbuncles, nor Spots, but were exceffively weak and faint; they had Uneafinefs at the Heart, Pain in the Head, thick, fwift unequal Pulfe, and great Papitation of the Heart, which would last with some that recovered two or three Years, and did not leave others all their Life long; they were under a continual and plentiful Sweat, which did not end till the Diftemper ceased, which was in twenty four hours time. Those which did not farther their Sweating, nor used Cordials, and who, impatient of Heat, exposed themfelves to the cold Air, all died fuddenly in the fpace of twenty four Hours: But after the Cure came to be known, and they fortified the Sick with Cordials, and promoted their Sweating, not fo many perifhed.

The Caufe of this Diftemper was generally Caufe. allowed to be fome Poifonous Qual ty of the Air. Yet fome afcribed it to the malignant Influences of the Stars, amongst whom was Sennertus; but more effectially Camden, who C does does not at all doubt but it owed its Rife to an Opposition of Saturn and Mars from the Zodiacal Constellations Scorpio and Taurus, as you may fee more at large in his Britannia.

But whatever the Caufe was, the Effects were fometimes foon over; for it was obferved by Tyengius to enter Amsterdam with a misty Air on the 20th of September 1529 after Noon, and after a stay of five days entirely vanished, and returned no more.

In the Year 1550, England was again vifited with this ftrange Diftemper; it was faid to deftroy a great number of People in the Prime of their Age, and what is very remarkable that our Historians relate, it affected none but the English in foreign Countries. Our Ambassador at that time at Paris confulted three famous Physicians, Fernelius, Hollerius and Sylvius, for a Prefervative against it.

They advifed him to drink moderately of ftrong Liquors, and to eat fuch things as were eafy of Digeftion, as Small Birds, Partridges, Pullets, Pheafants, young Hares, Conies and Kid; and thefe not boiled, but roafted. That his Body might be kept as free from Crudities as poffible, they order'd him to take two or three of the following Pills once or twice a Week, an Hour before any thing was to be eaten.

Pills.

Take of the choiceft Myrrb two Drams; of the best Aloes half an Ounce; Saffron half a Scruple; of the Leaves of the true, and of the Roots of false Dittany of the Roots of Betony and Tormentil, of the true Bole Armoniac, of the Sealed Earth of Lemnos, of each half a Dram. With new Oil of fweet Almonds and Syrup of Lemons make

1550.

Diet to be used. make a Mafs, to be wrapped in Leather and kept for Ufe.

They also commended the frequent Use of candied Citron Peel, Conferve of Roses, Conferve of Borrage-Flowers, Conferve of Spleenwort, Scabious, Succory, and Tormentil Root. And also prefcribed the following Mixture, of which the Quantity of a Hazle-Nut was to be taken now and then, two Hours before Breakfast.

Take of the Conferve of Roses, Borrage Mixture. and Bugloss Flowers, candied Citron, of each an Ounce; of old Venice-Treacle three Drams; of Bole Armoniac, Sealed Earth of Lemnos, of each two Drams: make a Mixture.

After the taking of a little of which, two Ounces of diftill'd Wine was to be drank.

Whether or no any Prefervative was fufficient to keep away the Diftemper, Authors are filent; but as to the \* Cure, not fo: the Cure. whole Secret of which confifted in covering the Sick in Bed, and not fuffering the leaft Breath of Air to come near them. They would not fuffer the Sick to leave his Bed upon the most urgent Occasion, no nor fo much as to move themselves; nor could this be obtain'd by any Prayers or Intreaties of the Sick. When the Sick was very hot, and wanted to drink, they gave him fome of the following Decoction, which refresh'd his Spirits, and promoted the Sweating.

Take of the Flowers of white Water-Lillies Decoction. and Violets, of each half a Handful; of

\* Vid. Fracastorius lib. 2. cap. 5. de Morb. Contag. C 2 Car-

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Carduus Benediëtus, Pimpernel, Eorrage, Buglofs, ftoned Raisins, of each a Pugil; of Figs n° ten; Lentils husked, washed Lack, of each five Drams; of Tragacanth three Drams, Zedory, Dittary, Tormentil-Roots, boil in a sufficient Quantity of Water of white Water-Lillies and Buglofs, and make a Liquor to be kept for the Use abovemention'd.

They would also fometimes give the Sick, Syrup of Citrons, Pomegranates, or Sorrel, by way of Refreshment. They also made use of convenient Smells, and held them to the Nose of the Sick, or did as follows.

Fume.

Take Rofe-Water three Ounces; Vinegar an Ounce; Cloves, yellow Saunders, of each half a Dram: mix and evaporate upon a flow Fire in the Chamber.

When the Sick has flept long and plentifully enough, he is to be uncovered by little and little, and at laft the *Sweat* is to be carefully wiped off.

It will not be improper to take notice, that those that were yet well would earneftly intreat each other not to fuffer such of them that should fall fick to leave their Beds before the due Time upon any account whatever; and yet these fame Perfons, while ill, would beg and pray with the most moving Arguments they could think of, to be at liberty, firuggling, and crying out in the most pitiful manner: which violent Emotions the Physicians did not endeavour to pacify, imagining it hastned their Recovery. When the Sick did not fweat freely, they endeavour'd to promote it with proper Medicines.

Schen.

Schenckius \* relates an odd fort of a Story of one that would not fubmit to the ufual Methods of Cure, and in order to avoid it run away, and hid himfelf in an Oven from whence the Bread was newly drawn; which giving him a pretty plentiful Sweat, he at length crept out, with the ufual Signs of Recovery.

I fhall now go back to that terrible Pefti-Peftilence lence which raged in the Year 1348, in the with In-Reign of Edward the Third, in which Year it flammation rained in England from Midfummer till Christ-Lungs, mas. It was not only violent in our own 1348. Country, but made dreadful havock all over the World, fcarcely leaving the tenth part of Mankind alive. Where it began, and what was then imagined to be the Caufe of it, we have elegantly enough defcribed by Fracastorius in his Sypbilis.

Bis centum fluxere Anni quum flammea Marte Lumina Saturno triffi immiscente per omnes Auror & Populos, per que rigat Æquora Ganges Infolita exarsit Febris, que pettore anhelo Sanguineum Sputum exagitans, miscrabileVisu, Quarta Luce frequens fato perdebat acerbo.

Which, for the benefit of my English Reader, I shall thus translate:

A Hundred Tears twice told have took their flight Since Saturn mix'd with Mars his hated Light, Who with their baleful Influence did infeft The rich and potent Nations of the East: Hence rag'd a dreadful Peft, before unknown, Which feiz'd the Lungs, and made the Breaft its Throne;

\* Schenckius de Feb. Peft. Obf. 118.

Four

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Four Days it tyranniz'd with dreadful Sway, When Life in purple Streams broke out, and fled away.

It began in the Eaftern Parts of the World, and paffed on uninterruptedly to all the Countries in the Weft; fo univerfal, fo great was the Deftruction, that it's probable no Age ever faw the like: Thofe indeed, fpoke of by Galen, Thucydides and Avenzoar, are terrible enough in themfelves confiderd; but, when we compare them with this, our Admiration ceafes.

The Contagion was fo certain, that all friendly Offices were forgot among Mankind, the deareft Friends and Relations deferting each other; and it was fomething rare, if the Dead happened to have Survivors that would bury them: and there were very few, if any, that were feiz'd, that efcaped.

The Symptoms.

When this Diftemper entered any Place, for the first two Months it was accompanied with a Fever, D ficulty of Breathing, and Spitting of Blood. The Difficulty of Breathing was to great, that the Sick were obliged always to be in a fitting Posture, and could fcarce swallow any thing of any kind; they were exceeding restless, their Cheeks red and fiery: at first they coughed violently, but brought up no Blood, afterwards a little, and then a confiderable Quantity; in three days time they died. But after the aforefaid two Months, besides the foregoing Symptoms, they had Spots and Absceffes, and died all in five days time.

In procefs of time, when the Fury of the Difeafe began to abate, the Lungs were affected no longer, but the morbifick Matter was was thrown upon the Groin, Armpits, and behind the Ears, and was not then fo mortal. It lafted five Years in fome Places, in England nine, there were fifty thousand buried in 50,000 one Year in the Charter-House Churchyard at ried in one London. This was fucceeded with Murrain of London. Cattel, and Scarcity of all forts of Provisions.

\* Schenckius tells us, the Conjunction of the Planets, spoken of before, happened on the 28th Dav of March 1345, in the Sign Leo, too long before to perfuade many it was owing to that.

But with more Probability are those of this kind, which happened in Germany in the Years 1557 and 1564, ascribed to the diffe-1557. rent Conflitutions of the Air. The first of which succeeded a dry Autumn, followed by cold Northern Winds; this was attended with a violent Cougb, Difficulty of Breathing, and ob-Symptoms. tuse Pains in the Side: on the third Day, or before, their Spittle was bloody, on the fifth, fixth, feventh, or at farthest the eighth, they died.

Those who were let blood on the first or fe-Cure. cond Day, recover d on the fourth or fifth; but if Blood-letting was neglected till the fourth or fifth Day, it did no Service †.

That which fell out in 1565, was preceded 1565. with a fharp Froft, which was more remifs in *January*, when the *Distemper* began, which was supposed to fill the Air with gross Vapours, the Caufe of this Distemper. Those who exposed themselves to the Air after Sunfet, were soonest feiz'd with it; and, on the contrary, the Mid-day was less dangerous, and good Fires beneficial \*\*.

\* De Feb. Peft. Obf. 127. † Dodonzi Obf. Med. c. 21. \*\* Schenckius de Feb. Peft, Obfer. 128.

\* Sennertus informs us, that Meteors of various kinds were feen in the Air all the time the Difease lasted, as well as a little before.

Symptoms.

Cure.

Those who were seized with this, had a Fever, Cough, Hourseness, Difficulty of Breathing, and obtuse Pains in the Side. The Cure, as before, chiefly depended upon Blood-letting; which, if it was feasonable, to wit, the first or fecond Day, feldon failed. The Bodies of feveral that died were opened, and there was found a true Peripneumonia, or Inflammation of the Lungs.

I have one thing remarkable more to add from Sennertus, That the Women who had this Diftemper in the time of Menstruation, had intolerable Pains in the Back, and almost all of them died.

These Distempers were most frequent in some Parts of Germany; in which Country alfo, in the Year 1510, there was an Epidemical Head-Ach, accompanied with a kind of Distraction and Giddinefs, with Swellings behind the Ears, which deftroyed great Numbers t.

The like D stemper prevailed again in the Year 1557, throughout all Germany, though not fo mortal as that above-mention'd in the fame Year; for none died of it but Infants. Symptoms. The Symptoms were Pains in the Head, Difficulty of Breathing, and Hoarseness in the beginning; afterwards Shivering, a Fever, and fo violent a Cough, that it brought on a Danger of Suffocating: at first the Cough was dry, without Spitting; but after the seventh, or fourteentb Day, the Spittle was much and vifcid, tho fome had it light and frothy. As the

\* Sennert. de Feb. Mal.

+ Holler. Commen. in Coac. Hipp.

Spitting

1510. Symptoms.

1557.

Spitting increased, the Cough and Difficulty of Breathing leffened. In all Stages of the Difease, there was Weakness, Weariness, and Want of Appetite, together with Inquietude, Faintness, and Watching, by reason of the vehement Cough; some were troubled with a Loosfeness, others with Sweating, towards the end \*. It raged only at one time of the Year, and seized on all alike, without distinction.

In the Cure of this, neither Blood-letting, Cure. nor Purging, nor Alexipbarmicks were found of any fervice; but Bole Armoniac, taken in any Form, proved beneficial to appeale the Cough, if joined to things that promote Expectoration: Broths, and moist Food was better than attenuating; for the former help'd their Spitting.

Wierus + informs, usth at in 1564, an Epidemi- Epidemical Difease afflicted Mankind, which was pre- calDisease, ceded by the Small-Pox and Meafles; he fays 1564. it proved very fatal, depopulating Towns and Cities; of which Constantitople, Alexandria, Leyden, London, Dantzick, Vienna, Cologn, and the whole Tract of the Upper Rhine, even unto Basil, were sufficient Testimonies. In the Winter, in the Lower Rhine, People had Glandulous Tumours on the outfide of the Neck; in the Summer following, Quinfies, dangerous, and of fhort Duration: The Contagion of its Malignity equalled the most direful Pestilence; fome it deftroyed in one Day, others in two, three, four, fome few in feven; those that paffed the eighth Day, escaped.

The Sick were first taken with a Vomiting, Symptoms. then a Swelling of the Tongue, afterwards Loss

\* Valler in Appen. Loc. Com. cap. 2.

† Lib. Obfer. Med. rar.

of Speech, and great Difficulty of fwallowing any thing in a liquid, much more in a folid Form; after which, Suffocation foon followed. Nothing extraordinary appeared on the outfide of the Neck. Our Author fays, that inwardly there was a continued Defluxion of a virulent Humour, which occafioned a Phrenzy. Sometimes the Difeafe, inftead of the Fauces, would feize the Pleura, or Lungs; whence deadly Pleurifies and Peripneumonia's would follow.

Cure.

As to the Cure, Evacuations and Blood-letting were found to be dangerous; at leaft the latter was not fo fuccefsful as in the Year enfuing, before taken notice of. Our Author fays, he made ufe of Medicines to ftrengthen the lower Parts against the Defluxion, to break the Force of the Poifon, and to apply to the Part affected, but does not fpecify them; in the room of which, I shall produce several Prefervatives, that were made use of, and collected that Year by eminent Physicians.

Prefervative.

# Bohemius's Preservative Electuary.

Take Myrrb, Aloes, Saffron, Bone of a Stag's Heart\*, white Dittany, of each two Scruples and a half; white Ginger half an Ounce; Campbire a Dram and a half; Tormentil-Root an Ounce and two Scruples; the Roots of Snakeweed and Pimpernel, of each a Scruple; Zedoary two Ounces and two Scruples; Venice-Treacle, Mithridate, of each three Ounces. With a fufficient Quantity of a Peffilential Water make an Ele&uary, of which take the quantity of

\* Matthiolus commends this mightily, but whether justly or no, I know not. a Hazle-Nut in a Morning for a Preservative; but if infected, a Dram.

# Casmerus's Excellent Preservative Electuary for Families.

Family Prefervative.

Take Leaves of Rue dry'd and powder'd, a Handful; of Sage the fame, half a Handful; Pimpernel-Root dry'd and bruifed, an Ounce and a half; Gentian a Dram; Cardamoms half an Ounce ; Juniper-Berries an Ounce; Kernels of fresh Walnuts, an Ounce; Laurel-Berries, the Outfide being taken off, half an Ounce; Snakeweed two Drams; Tormentil-Root two Drams and a half; prepared Bole Armoniac half an Ounce. Thefe being bruifed and reduced to a Powder, add an Ounce of Venice Treadle mix'd with half an Ounce of Vinegar of Roses, and let them again be mixed and beaten in a Mortar. Take the quantity of a Hazle-Nut four Hours before Dinner.

# Preservative Pills.

Take Leaves of Water-Germander a Dram and a half; the Tops of leffer Centaury, Troches of Agarick, heft Aloes, of each a Dram; Tops of Maudlin, Wormfeed, Roman Coriander-Seed, Anife-Seed, Cloves, of each a Dram and 12 Grains; calcined Harts-Horn, white Amber, Seeds of Sorrel, of each half a Dram. Let all be powder'd by themfelves, and afterwards fprinkled with the Juice of Oranges mix'd with the fharpeft Wine Vinegar and Rofe-Water in equal parts; then dry them, and repeat the fprinkling feven times: at laft add Saffron twelve Grains; Musk, D 2 Amber,

Pills.

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Amber, of each ten Grains; with Syrup of Oranges make a Mass of Pills.

A Prefervative Infusion.

Infusion.

Take Bole Armoniac, Sealed Earth, both prepared with Rofe-Water and Vinegar, of each fix Ounces; Roots of white Dittany, Pimpernel, Tormentil, Valerian, Zedoary, Gentian, of each two Ounces; Roots of Angelica, four Ounces; Betony, Scabious, Cardnus Benedictus, of each two Handfuls. Let the Herbs and Roots be washed in White-Wine, afterwards fliced and infused in Vinegar and distill'd Wine, of each fix Pints. To this Infusion add of old Venice-Treacle a Pound. Dose for Old Men two Ounces, for the Young an Ounce and a half.

I might add feveral more, but it would carry me beyond my Defign, without giving any Light into the Nature of the Diftemper; for we have no Account of the Succefs of thefe last mentioned Prescriptions, tho' it's certain they were much esteemed, and in some cases were probably of service : I shall therefore only add one other made use of by a Canon of Lorain, which he made a great deal of Money of, but was at length, says my Author, purchased by a certain Prince at a great Price.

Take Galen's \* Cordial Power, Sealed Earth, of each a Dram; of Bole Armoniac half an

\* Species Letitiæ Galeni, or Pulvis Letificans Galeni, under which Titles you will find it in most Dispensatories, which take as follows :

Take of Cloved Bafil-Seeds, of Saffron, Zedoary, yellow Sanders, Cloves, Citron-Peels, Galangals, Mace, Nutmegs, an Ounce; of Venice-Treacle three Ounces; Conferve of Rofes, Borrage, Buglofs, of each an Ounce; Syrup of Violets as much as is fufficient to make an Electuary.

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The next Peftilential Diffemper I shall take Hungaric notice of, is the Hungaric Disease, call'd in Disease, 1566. Latin, Morbus Hungaricus and Lues Pannonica. It began in the Year 1566 at Comorra, and increased at Gewer in Hurgary, where the Chriftian Powers were affembled under Maximilian II. against the Turks. When the Soldiers were disbanded, they distributed the Contagion over almost all Europe, but chiefly at Vienna, through which they most of them paft. They fo infected the Families where they lay, and died fo fast themselves, that the Streets were foon filled with dead Bodies. which contributed very much to fpread the Contagion.

Tho' this was fuppofed by Jordanus \* and others to be the first Appearance of this Difease, yet Langius †, who was present at an Expedition against the Turks fome Years before, describes a Distemper which raged in the Emperor's Army, and which || Sennertus imagined to be the same we are now speaking

Nutmegs, Styrax, of each two Drams and a half; Ivory Raspings, Aniseeds, Thyme, Dodder of Thyme, Bone of a Stag's Heart, Pearls, of each a Dram; Ambergrease, Musk, Leaves of Gold and Silver, of each a Scruple: make a Powder.

You have this in the new Edition of the London Difpenfatory, with the addition of half a Dram of Pearls and Camphire, and only half the Quantity of Gold and Silver.

\* Cap. 19. de Peft. Phænom.

† Epift. 4. Par. 1. in Cur. Cauf.

Il Senner. de Morbo Ungarico.

of. And if fo, I wonder he did not obferve that the fame Author mentions it as having appear'd feveral times before : take Langius's own Words; 'This, fays he, is the Difeafe 'which in the Autumnal Scason has lately fo 'often fubdued the Soldiers in Hungary, and 'which raged fo popularly amongft the Bor-'derers upon the Rhine \*.'

Symptoms.

The Symptoms of this Difease in the Year above-mention'd were as follow t. About three or four of the clock in the Afternoon it began with Cold and Shivering, about a Quarter of an Hour after Heat succeeded, which lasted the following Days. Their chief Complaint was of a Pain in the Head; they would alfo point with their Finger to that part of their Breaft directly against the Orifice of their Stomach; the Outfide was hard, and would not abide to be touched : the first Days they had an unquenchable Thirft; the fecond Day, or at fartheft the third, they grew delirious, which lasted a confiderable time : they grew worfe about Evening, and in the Night the Difeafe recovered ftrength; the Tongue was dry, the Lips chopt; fome fpit Blood, others had a Critical Loofenes. Deafnefs was a Sign of Recovery; Swellings behind the Ears were frequent : The worft Crifis was Tubercles on the Top of the Foot, which being open'd, fpread themfelves, and afterwards being neglected, a Mortification enfued. Some recovered on the fourteenth Day, others on the twentieth, tho' but few; all

\* ' Hic eft ille Morbus qui Autumni tempore in Pannonia Milites præteritis annis toties debellavit, & crebro populatim in Rheni Accolas fævit.'
† Jordan. de Peft. Phænom.

who

who did not abstain from Wine perished. All bad Spots like Flea-bitings, fome bigger, fome lefs, chiefly on their Breast and about their Back-Bone, fome all over their Bodies, fome on their Should rs.

Some think that the grofs Hungarian Air, Caufe. the Filth of the Camp, their eating great Quantities of Fifs and grofs Beef, their drinking unwholefome Water, and Hungarian Wine too immoderately, gave Rife to this Diftemper.

The Havock that this Difeafe made, caufed Cure. various Remedies to be invented : Some took the White of one Egg, or more, and having beaten it into Froth, would add half a Dram or a Dram of Saffron in Powder, and drink it in two Ounces of Spirit of Wine or Brandy, and then washed their Mouths with the same, rubbing their Gums and Tongue till the Blood came; this Method was fometimes repeated in the Evening, never oftener.

The following, fays Jordanus, has an Author of greater Fame, who used it with good Succefs: He took twenty Leaves of the greater Housleek, and carefully prefs'd out the Juice, to which he added a Scruple of Sal Armoniac, or a little Campbire, with a Pint and a half of Spring-Water; which he gave to the Sick to drink cold at pleasure, adding fometimes a little Powder of the Florentine Orris.

The Hungarians take Lovage newly digged up, and walh and beat it with Hog's Greafe freed from Films and walhed cold; then fhave their Heads, and anoint them with this Mixture: afterwards they take a large Linen Cloth dipped in Wine or Brandy, and cover the Sick all over, who being laid down in his Bed, is caufed to fweat plentifully, not without out Pain. Befides, they take Garlick fteeped in Vinegar, and rub the Balls of their Hands and Soals of their Feet very hard, thinking to divert the Difeafe, using nothing befides.

The Regular Physicians first used gentle Evacuations; for which Intention they chiefly commend Agarick in Variety of Forms; of which take the following, as grateful as any:

- Take of Pulp of Tamarinds two Drams; Manna and Callia, each three Drams; Troches of Agarick, Rhubarb, of each a Scruple; with Syrup of Roses and Sugar, Sennertus fays a Bolus nuft be made: but it must be confess'd it will be the largest I have met with. The following is more agreeable to that Form:
- Take of Troches of Agarick four Scruples; Oxymel fimple, Conferve of Rofes, of each a little; Sugar as much as fufficient: make a Bolc.

The Troches of Agarick you'll find in any Edition of the London Difpenfatory, and therefore needs not to be repeated here.

Blood-letting was also prefcribed the first or fecond Day, but after that was thought dangerous: For Diet they used tart things, such as four Grapes and Pomegranates. Some rely'd much upon the following Prefcription:

Take Venice-Treacle, Mithridate, of each three Ounces; Zedoary, an Ounce; white Ginger, half an Ounce; of the Roots of Tormentil, Snakeweed, Pimpernel, each three Drams; Campbire two Drams; Myrrh, Saffron, Bone of a Stag's Heart, Dittany, of each two Scruples and a half.

They

They used to take a small Quantity diffolved in equal Parts of Water and Vinegar : which way of taking presupposes the Ingredients to be powder d and mix'd with the Treacle and Mirbridate, tho not mention'd by our Author.

There were fome that only used to give Zedoary in fome Cordial Water with Success. Others gave the distill'd Water or Decoction of Vervain Morning and Evening till the Difease was conquered.

For Drink they had Mixtures of a Decoction of Barley or Harts-born, and Juice of Pomegranates or Citrons, or Spirit of Vitriol, at pleafure.

Schroterus, Professor of Medicine in the University of Jena in Germany, when this Difease was rife, prescribed the following Preser-Preservatives.

# A Preservative Powder.

Powder.

Take of Zedoary Roots, of white Dittany, Gentian, Leaves of Water-Germander, Carduns Benedictus, Sorrel, of each alike; make a Powder. Dose a Dram in a Morning fasting in Carduus Benedictus Water, or in the Winter in White-Wine.

# A Preservative Electuary for poor Women with Electuary. Child.

Take of Tormentil-Roots and Elecampane-Root, each fix Drams; Anife and Caraway-Seeds of each an Ounce and a half: with clarified Honcy make an Electuary.

### A Preservative Elixir.

Elixir.

Take Cinnamon an Ounce; Rosemary, Wood-Sorrel, Water-Germander, of each half a Handful; Angelica-Root, Red Roses, Lig-E num Aloes, of each a Dram; yellow Sanders, half a Dram; Mace, of both forts of Cardamoms, Cloves, Seeds of Sorrel, Carduus Benediaus, Citrons, of each a Scruple; Mask, eight Grains; reclified Spirit of Wine xxii Ounces: let them be almost continually shaked for sisteen Days in a Glass Vessel close stopp'd; then strain, and add Syrup of Citron-Peels, Marmalade of Quinces, of each two Ounces and a half.

## A Preservative Nut-Elestuary.

Electuary.

Take twenty Walnuts; twenty-five Figs; of long and round Birthwort, an Ounce and a half; white Dittany; Roots of Tormentil and Pimpernel, of each two Drams and a half; Leaves of Wormwood, Rue, Scabious, Afarabacca, of each a Handful; Bay-berries, Citron-Peels, Galangals, Mace, of each a Dram; Borrage-Flowers, two Drams; Bone of a Stag's Heart, Myrrb, of each a Dram; clarified Honey, a fufficient Quantity to make an Electuary, of which the quantity of a Cheftnut is to be taken every Morning.

I fhall conclude what I have to fay upon this Diftemper, with obferving, that \* Cornax thinks they are guilty of very great Errors who do not attempt the Cure of it with proper Evacuations and Blood-letting, rather than Smeating; for, favs he, if we obferve Nature, we fhall find that fhe often gets rid of her Enemy by a Hemorrhage of the Nofe, by Stool, by Urine, and Abfceffes, and but feldom by Sweat.

\* Conf. Med. Enchirid. lib. 2. cap. 9.

In the Years 1596 and 1597, a Diftemper 1596, So was very rife in the Diocefs of Cologn, Weft- 1597, Fophalia, the Counties Walleck, and Wittenstein, ver Conand Heffe, which \* Sennertus calls Febris maligna cum Spasmo, that is, a malignant Fever with Convulsions; tho he himself fays, it was fometimes with and fometimes without a Fever.

(31)

It begun with Twitching and Numbuefs in Symptoms. the Hands and Feet, fometimes on one fide, fometimes on both; afterwards it convulfed their Fingers and Toes, and crept by degrees up their Arms and Legs, till at length it feized their whole Bodies; and the Sick was either rolled up like a Hedgehog, or lay ftretched out at full length without Motion. These Convulsions were attended with violent Pains, which forced Cries and Shrieks from the Sick. It would take fome unawares at the Table, and, as it were, ftrike Knives and Spoons out of their Hands. It would attack others at Plough, or about any common Bufinefs, without any previous Notice. Some alfo would be feized with Vomiting at first. The Sick would remain feveral Days in the Condition above defcribed ; yea, fometimes whole Weeks without having their Heads molefted; and, moreover, not at all, if fit Remedies were feafonably given : But if thefe were neglected, it advanced to the Head; the Falling-Sickness fucceeded; after a Fit of which, the Sick would lie as if they were dead for fix or eight Hours. It render d fome stupid or foolish, some lethargick, others delirious; fome would remain fo four Days, others longer; and when they recovered, it was with Deafness, or Weakness of the Eyes, if

<sup>\*</sup> De Febre Malig. cum Spafin.

not the Palfy. When the Fit was over, they were all infatiably hungry, greedily devouring Victuals of all forts; to which a Loofenefs would fucceed; and the more fparingly they ate, the greater it was. Some had their Feet and Hands fwell'd, others had Tubercles full of a ferous Humour. They never fweated.

Experience plainly fhewed that this Difeafe was contagious; for those that were converfant with the Sick, feldom or never escaped free, tho the Contagion did not prefently appear: for some were ill of it, tho not even till twelve Months after.

This Difeafe was hard to cure; for those that were *Epileptick*, had now and then a Touch of it ever after: Those that were flupid, remain'd fo till Death, without ever recovering their former Vigour of Mind. And tho fome lived fifteen Years after their Recovery, yet every Year, in *December* and *January*, they perceiv'd fomething of the Difeafe.

Caufe.

The Reader may obferve, that I fay little or nothing of what Phyficians call the proximate Caufes of thefe Diftempers; and therefore when I talk of Caufes, I muft be underficod to mean what is called the *Procatartick Caufe*: In this Senfe the *Dearth* that was in thefe Parts, which obliged Men to eat unwholefome Food, may be faid to be the Caufe of this Difeafe.

The Manner of Cure you shall have from the Method of the Physicians of the Univerfity of Marpurg in Germany : First they gave an Ounce of the following purging Electuary, and four Hours after, Broth, wherein Rosemary, wild Thyme, Sage, and Savory were boiled; this they repeated thrice.

Take

Cure.

Take of Diaphanicon, four Ounces; Electuary of the Juice of Roses, two Ounces; Powder of Hermodactils, nbite Turbith, Spurge, cleaned and corrected, of each a Dram; Diagrydium, Castor, of each two Scruples; Costmary, Ginger, Cloves, of each a Scruple; Seeds of Rue and Cummin, Saffron, of each half a Scruple; with Syrup of Roses folutive make an Electuary.

The Electuary of the Juice of Roses you will find in the new London Lispensatory; the Diaphanicon in the old.

After the Purgation was ended, for fix Days after the Sick took of the following Powder against Convulsions.

Take of Roots of Swallow-wort, Elecampane, Devil's Bit, Clove July-Flowers, Peony, of each an Ounce and a half; Bay-Berries, an Ounce; Tops of Sage, wild Thyme, Rofemary Flowers, of each two Drams; Species Diamofchu dulcis, Species Pliris Archonticon, and Dianthus, of each a Dram and a half. Make a Powder.

The Species Plr. Arch. if you pleafe, you may fee in the Augustan Dispensatory; the Dianthus is in the new Edition of the London one; but the Diamoschu is only in the old.

The Day after either of the Quarters of the Moon, they again took a Dofe of the Purging Electuary, and then the Powder again for fix Days more, and then again the purging Electuary, obferving the Phases of the Moon for a Month. Afterwards every Month, the Day before the new Moon, but effectially in December and January, they took a Dram of the Powder Powder against Convulsions. Their Drink was medicated with Roots of Eecampane, Peony, Sage, Rue, Juniper-Berries.

They ordered Flowers of Lawender and Primrofes, Sage, Rue, Beiony, Caftor, to be freeped in Spirit of Wine; with which their Limbs were fuppled after they had been rubbed with a hot Linnen Cloth. If the Convulsions of the Feet were vehement, they were to be wash'd in Lotions made of Betony, wild Thyme, Camomile Flowers and Primrofes.

In the Time of the Fit they made use of the Infusion and Linnen Cloth before mentioned; but if that did nor do, the Limb was bound hard till the Convulsion ceased. They alfo at the fame time exhibited to the Sick a Dram of the Powder, or half an Ounce of the following Antidote against Convulsions.

Take of Peony-Roots, of Milletoe, each two Ounces; Caftor, Soge, of each an Ounce; Bay-Berries, Man's Skull prepared, of each two Drams; Venice-Treacle, Mitbridate, of each a Pound; clarified Honey, two Pound : make an Electuary.

The Day following they took half an Ounce of the Purging Electuary, and continued the Cure as before.

I cannot perfuade myfelf to pafs by that Spotted Fe-Diftemper called in England the Spotted Fever, becaufe \* Fracastorius mentions it as a new Difeafe, which as he imagined made its first appearance in Italy in the Year 1505, and return'd 1528, and thought it came nearer to the Nature of Malignant than Pestilential Fe-

\* Lib. 2. cap. 6, 7. de Contag. Morb.

ver.

vers: But \* Langius cenfures him for it, and not only denies that this is a new Diftemper, but also affirms that all others which are faid to be fo, are no more than old ones revived, which had lain *dormant* for fome time.

This Difease is contagious, but not quickly Contagious. fo, nor at a distance; but only by touching of the Sick. It was fo mild when any body was first taken, that the Sick would scarcely admit a Physician, and the Physicians themfelves were not feldom deceived with it.

But after a while the Signs of a malignant Symptoms. Fever began to difcover themfelves: The Heat, indeed, was not fenfibly great, but the Perturbation which the Sick felt throughout his whole Bedy was very evident, which was attended with a great Wearinefs like that of a Perfon tired. The Sick lay fupine in their Bed, their Heads were heavy, their Senfes dull, and after the fourth or feventh Day they began to talk wildly and much, their Eyes being red and fiery. At first their Urine was whitish, afterwards red and troubled : The Pulfe was flow, the Excrements corrupt and fætid. On the fourth or feventh Day little red Spots like Flea-bitings began to appear on their Backs, A ms, and Breasts. They had little or no Thirff, their Tongues were foul; fome were wakeful, others fleepy. Others again both by turns. This State lasted in fome to the feventh Day, in others to the fourteenth or longer.

It was fatal to a few Women, to a very few Old Men, but not one that was a *Jew* perifhed. *Toung Men* and *Boys* had the greatest share of its ill Effects, and amongst those the wealthier fort.

\* Lib. 2. Epiff. 15.

If the Sick felt his Strength to fail on a fudden, if after a Crifis no Alleviation of the Symptoms follow'd, if there was a Stoppage of Urine, if the Spots lay hid, or came out flowly, or were livid, if any or all of thefe Signs happen'd, the Sick were judged irrecoverable: but the contrary, if the contrary Signs appeared.

As Authors are divided about the proximate Caufe of this Diftemper, fo they are about its Cure. Riverius \* thinks if you know how to manage this, you will know how to deal with the Plague and all other Peftilential Diftempers, and for that reafon only infifts upon this. Some are for Evacuations, fome for Alexipbarmicks, and others for both; of this last fort is Sennertus, whofe Method of Cure I will prefent you with. Only obferve by the way, that Langius † fays he himfelf cured three Perfons of this Diftemper only with gentle Catbarticks and a proper Diet.

The above-mention'd Author advifes first to loofen the Belly with Syrup of Roses folutive, Infusion of Rhubarb, Cream of Tartar, Extract of Rhubarb, to any of which a little Camphire may be added, or with the following Potion.

Take Roots of Viper-Grafs, half an Ounce; Leaves of Sorrel, half a Handful; Carduus Benedictus, Water Germander, of each a Pugil; Leaves of Senna, half an Ounce; half a Dram of Rhubarb; Zedoary, Citron-Seeds, of each half a Scruple; Cinnamon, a Scruple; of the Cordial Flowers, each a Pugil. Infufe in a fufficient Quantity of Water, ftrain and diffolve in it half an

\* De Feb. Peft. † Lib. 2. Epift. 15.

Ounce

Ounce of Manna; to which add half an Ounce of Sy up of Roses fol. and two Drops of Spirit of Vitriol.

He leaves Blood-letting to the Judgment of the Phyfician, but would not have it meddled with after the fourth Day: he would have the Sick be kept in a pretty warm Room, and make use of the following Sudorificks.

- Take of the Seeds of Navew, or long Turneps, a Dram; of Citron and Carduus Benedictus Seeds, each half a Dram; Carduus Benedictus Water, three or four Ounces: make an Emulfion; to which add Syrup of the Juice of Water Germander half an Ounce. Or,
- Take Seeds of long Turneps, a Dram; Citron and Carduus Benedictus Seeds, calcined Harts-Horn, of each half a Dram; Bone of a Stag's Heart, Zedoary, of each a Scruple: make a Powder, of which give a Dram in any convenient Vehicle. Or,
- Take of Bole Armoniac. fealed Earth, Tormentil-Root, Roots of Butter-burr, Pimpernel, Water-Germander, calcined Harts-Horn prepared, of each a Dram : make a Powder.

In fhort, he concludes, that whatever is of use in promoting the Small-Pox, in the Cure of the Plague and Pestilential Distempers, will be of service here.

Riverius \* proposes to encounter the Fever with cooling and moistening Medicines, the sup-

\* De Feb. Peft.

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posed putrid State of the Humours with Evacuating and Alterative, and the malignant Quality with Alexipbarmicks, or Expellers of Poison.

Tho, notwithstanding his first Intention he allowed the Use of Wine to those whose Tongue was moist, and who were not thirsty, with good Success: and moreover he says he did this in the Year 1623 at Montpellier, where after the Siege a Disease raged of so great Malignity, that it wanted nothing but Buboes in the Groin to make it a true Plague; for there were not only Wheals and Spots, red, livid and black, but Swellings behind the Ears and Carbuncles: it destroy'd at least a third part of those that were feiz'd with it. Those who had an intenser Fever, whose Tongues were dry, rough or black, or who were thirsty, he forbid the Use of Wine to.

He afterwards relates an Experiment which he made upon the following Occasion. He observed that all those that had Parotides, or Swellings behind the Ears, which would appear on the ninth or eleventh Day, died in two days : thefe upon trial would neither yield to Sudorificks nor Topicks; which caufed him to think of fome other Method. After reasoning with himself, he resolved upon Blood-letting; but being fearful of the Event, he only ventured upon two Ounces at first, and finding the Succefs anfwerable, he ordered fix more to be taken away, which appeared to be corrupt; the next day he prefcribed a loofening Medicine, which compleated the Cure, and delivered the Sick from the Confines of Death.

1623.

... The Summer of the Year 1583 \* being hot 1583. and dry, it was fucceeded with a Difentery or Difentery Bloody Flux of a malignant nature, which mant. fpread in Germany far and near, and lasted to the End of the Autumn. It was observed chiefly to infeft Boys, of whom many died; it alfo laid hold of a great many more advanced in Years, but thefe with proper Remedies mostly recovered. The most gentle Purgatives and Clyfters were found profitable: Great numbers also made use of calcined Harts-Horn and Bole Armoniac. Wine was hurtful by reafon of the Fever. When the Evacuations were too great, Extract of Opium was found of fervice. When the Stools were extremely bilious, and in great plenty, together with want of Appetite and Vomiting, there was little Hope left.

Dr. Willis + observes, that Malignant Fevers Malignant of late Years have been greater Strangers in Fever, England than the Plague itfelf; and he fays, 1643. the only one that he observed begun in the Army in the Year 1643, when Reading was befieged by the Earl of Effex. It took off a great many of the Earl of Effex's Army; nor did it spare the King's, while it was quartered in and about Oxford: at last it grew rife among the Citizens, and infefted the Villages ten miles round. After the Summer Solftice it raged most, and the Symptoms grew worse, infomuch that the Number of those that were well, were scarce enow to wait on the Sick: it was most fatal to the Old and Unhealthy, tho it took off of Boys, Young Men and Middle-aged Perfons, not a few.

<sup>\*</sup> Schenckius Observ. de Feb. 131.

<sup>†</sup> De Febribus.

Symptoms.

At first it appeared like a putrid Synochus; and when a Sweat or Loofenes's had feemed to carry it off, it would prefently gather ftrength again. Often when the Deflagration of the Blood had continued for fix or feven Days, it would remit, and inftead of a Crifis, the adust Matter was translated to the Brain, which held the Sick a long time, fometimes with Madness, but oftener with Stupidity, great Weaknefs and convulfive Motions, fo that at last they hardly escaped. About the middle of the Summer the Signs of a Peftilential Diftemper began to appear plainly; for tho it was contagious and mortal before, yet now Spots and Puffules began to appear. Some had a weak, unequal, irregular Fulfe, without any great Fever, attended with a fudden Dejection of Strength. Others, who were taken after the fame manner, had Spots appeared upon them, fometimes little and red, fometimes broad and livid; and many had Buboes as in the Plague, fome of whom without any apparent Fever and without ftruggling died fuddenly and at unawares, while others would rage and struggle as if under frightful Agonies. Those that escaped, not having any laudable Crifes, were affected with Dullness of the Senfes, Tremblings, Weakness of the Limbs and, Convulfive Motions for a long time.

(40)

Cure.

While the Dog-Days lafted, this Difeafe was fo fatal, that it was not treated as a Fever, but as a milder Plague, only with Alexipharmicks. Blood-letting was believed to be fatal; Vomits and Purgatives were fometimes ufed, tho not often. But the Cure chiefly depended on Alexiterials, and promoting a fealonable Sweat. 'Twas now the Countefs of Kent's

Kent's \* Powder began to be in great Efteem in this Country; and alfo another of an Afhcolour, which a certain Perfon who was at Oxford accidentally, gave with good Succefs, and fold at a great Price. After the Sick had drank half a Dram of this Powder in any Liquor, they were wont to fall into a great Sweat, and fo were delivered from the Virulence of the Diftemper. This Powder, as Dr. Willis was afterwards inform'd by a Kinfman of the Man's, was the Powder of a Toad cleanfed with Salt, and washed in good Wine, and a little calcined in an Earthen Pot. Before the Autumnal Quarter was ended, the Difeafe abated much of its Fury; as fewer were fick of it, fo alfo more of those few that were fick recovered : till at length the Winter came on, and the Fever almost wholly vanished, and the former State of Health return'd, both in the City and the Country round about it.

(41)

Sennertus † takes notice of Fevers of this 1551 and kind, which appeared in 1551 and 1580, 1580. which did not only over-run all Europe, but

\* The Powder is made as follows:

Take the black Tips of Crabs Claws gathered in June, Contrayerva-Root, of each two Ounces; Pearls, red and white Coral, Crabs-Eyes, all ground with the fuice of Lemons, of each an Ounce; white Amber and Chryftal ground very fine in Rose-Water and dry'd, of each an Ounce; Harts-Horn calcined to the greatest Whiteness, and ground with the fuice of Citrons well sharpened with the Spirit of Vitriol and dry'd, an Ounce; Occidental Bezoar, Earth of Lemnos, of each an Ounce and a half; Ceruss of Antimony, two Ounces; Ambergrease a Dram and a half; Musk, half a Scruple: let all be well mixed together with felly of Vipers Skins and Harts-Horn, and made with Carduus-Water, and a little tinged with Saffron: divide it into little Balls, dry carefully and keep for Use.

† Senn. de Febrib.;

almost

almost all the World; and again in 1616, which was preceded by an extraordinary Heat: he fays it was Epidemical to all Germany, and at Wittenberg there was not a House that did not feel the Effects of it, even in some Houses they would be all ill at a time; and yet tho' this was both Contagious and Epidemical, there was scarce the fix hundredth died.

Our Author, as well as Willis, lays the greateft ftrefs upon Sudorificks in the Cure; and if he advifes other things, it is upon particular Occafions, and for the Succefs of them appeals to Experience. Horftius \* commends Opiates in Malignant Fevers of all forts, and would have no Alexipharmicks compounded without them.

1572.

Platerus † mentions a malignant Fever which raged at Bafil in 1572, which was chiefly fatal to Men that were of robust Constitutions, rarely meddling with Women, the Younger Sort, or Infants. It feized Men with a fudden Weaknefs, after it had imitated a continual putrid Fever, and was fatal to most; who, before their Deaths, had Spots appeared on their There were no Euboes or Carbuncles Bodies. found in any. The Intemperate were fooneft infected. Those that it was fatal to, died on the tenth, eleventh, or twelfth Day, fcarce any reached the fourteenth; those that evaded, were fix Weeks before they entirely recovered; and the Fever difappeared in about half that time.

Hettick Montuus, || in his Halofis Febrium, gives us Pestilence, an account of a Disease, which he calls a Hec-1525.

> \* Jud. de Chir. Infus. p. 83. † Observ. lib.2. || Lib. 7. cap. 1.

tick

tick Pestilence, in the Year 1525, which raged at Leyden and Vienna; the Fever was but little, and the Sick imagined they had none at all. The Pulje was moderate, and the Colour and Confistence of the Urine not bad; nevertheless they all died.

(43)

At \* Venice, in the Year 1576, there was 1576. a Pestilential Distemper, in which some of the Sick voided Worms, as well upwards as downwards, and were more difficultly cured than others; Carbuncles appeared on fome, but were neither red nor black, but the Part was much pained, and the Skin was livid, under which the Carbuncle was fomething deep. Very few of those escaped. Some that feemed to be recovered for feveral Months, relapfed again; yet even fome of thefe were cured. It was likewife found, that black Spots were worfe than either Carbuncle or Bubo. Blood-letting was found to be hurtful; but the Application of Leeches to the Hamorrhoidal Veins was beneficial. It is also worth observing, that many who were about the Sick for twenty Days, or a Month, and lived with them, and felt no Damage, would be afterwards feized with the Difease, and die fuddenly. Bloodletting was often beneficial, by way of Prevention, but Lenitives, and Sudorificks, and Alexipharmicks never failed.

Having now gone over the moft remarkable Peftilential Diftempers that Authors have taken notice of, it will not be amifs to fubjoin fome Obfervations concerning the Nature of

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\* Schenckius Obf. de Feb. 136.

Contagion, which may ferve the better to explain the Nature of the Pestilence it self.

Benedictus \* a Phyfician of Verona, informs us, that in the City of Venice, in the time of the Plague, a Quilt was thrown into a byplace, and being fought again feven Years after, the Servants that found it were immediately infected with the Plague.

In the Year 1511, when Verona was held by the Germans, there arofe a Peftilence, which deftroy'd ten thoufand Perfons; and no lefs than twenty-five Germans were infected with one Leather Garment. † Our Author fays, He himfelf remembers, that when a certain Woman brought fome Clothes out of Zeland to Alcmeria, a Town in Germany, and having exposed them without the Walls to the Sun, fome Children that played upon them were infected, and all died.

At || Justinopolis in Italy, after the Pestilence had ceased, some Cords that were made use of about burying the Dead were thrown behind a Box in some part of the Church, which being cleansed, about twenty or thirty Years after, upon some particular Occasion, the Cords were again brought to light, which a Servant took up, as thinking them fit for Bell-Ropes, and by that means fell into a Pestilential Fever, which infected others, which was succeeded by the Death of ten thousand Persons.

Foreftus \*\* tells us of a Man that was infected by touching a Spider's Web, which occafioned a Puftule, and thence the Peftilence;

<sup>\*</sup> Lib. de Pefte, cap. 3.

<sup>†</sup> Foreft. Schol. ad Observ. 22. lib. 6. de Feb.

<sup>||</sup> Trincavel. lib. 3. Confil. 17.

<sup>\*\*</sup> Obfer. lib. 6. Obf. 22.

and this, tho there was no Perfon died in the House fix Months before, and the House had been cleanfed in all Places but that.

In the Year \* 1542; at Breflau, 5900 died of the Plague in twenty-two Weeks time, which lay hid in fome Linnen 14 Years, which being opened at another Place, again fpread the Infection.

. Some Authors have feemed to reftrain the Return of the Plague to fome Places to a certain Number of Years; but this is a mere Fancy, and contrary to Reafon and Experience. The Account that Platerus + gives of the Return of the Plague to Basil seven times in seventy Years, feems most to favour this Opinion of any thing that I have met with : But Platerus, with good reafon, afcribes this to the Confluence of Strangers to that City, amongst whom infected Perfons might probably come.

It happen'd in England in 1603, and returnd again in 1625; in which Year there died of it 41,313 Perfons, being the fame Number that were deftroyed in the aforementioned Year; and, what is as remarkable, they were both faid to begin in the fame House, and on the same Day of the Month. Forty Years after, to wit, in the Year 1665, began that extraordinary and memorable Plague, which in a little above a Year killed 100,000 Perfons; fince which time, which is nigh 60 Years, we have been fo happy as to be free from it : which makes it plain, that there is no stated Period of its Return, as Sydenham feemed to intimate.

† Plater. Obfer. lib. 2. \* Sen. de Feb.

|| Hunc orbem nostrum Britannicum Pestis vix frequentius, quam post annorum circiter quadraginta intervalla fummo Perniciei Vigore, ac tota furiarum Acie adoriatur. Of Of this last mentioned Plague I need not fay any thing, because there are Accounts of it lately published; and it is not my Design to interfere with any body.



## PART



(47)

## PART II. Of the Methods to prevent, or cure the Plague.



CANNOT tell how to call it the Unhappiness of the Physicians of the prefent Age, that they treat of a Diftemper which they themfelves never had the Opportunity

of observing: But this I must fay, that if they did not wholly depend on the Faithfulnefs and Abilities of others, they might, with fomething more of Certainty, eftablish a Method of Cure. There would indeed be no great reason to fear the Accounts which others give of the Progress of the Disease, and the Succefs of Remedies, if they had not been Favourers of some Hypothesis or other, whose Foundation, to fay no more, is very uncertain.

All that I shall do therefore in this Part, is to examine the Writings of different Authors, and faithfully relate what they have agreed to be beneficial; and which they declare to be so, not from uncertain Guesses, but from often-repeated Experiments.

One

One great Property of the Plague, is, that it is contagious; which leaves us no room to doubt of the Exiftence of fomething which has the Effects of Poifon; what this is, or the Nature of it, has not been fufficiently explain'd by Authors. Some have thought it to be the Eggs of Infects; others a Poifon, of the Nature of Arfenick; others again, fomething arifing from the Putrefaction of a Human Body. However, this is certain, that it is fomething very fine and fubtle, and that it will lie lodged in Clothes, or fuch like things, for feveral Years together.

We may farther observe, that Authors generally talk of a Putrefaction, or Stagnation of the Air, and a Disposition of the Air to Contagion; or elfe, fay they, it cannot be conceived how the Plague would ever end, without the total Destruction of the whole Nation where it raged. But it feems pretty eafy to me to conceive, how Particles of different Natures might abound in the Air fucceffively, without either the Corruption, or Stagnation of the Air itself: and moreover it may be questioned, how the Corruption of the Air is ended, as well as how the Plague would end, if it was not corrupted. All that Experience helps us in this Cafe, is, that in the Heat of Summer this Difease commonly rages more than in the Cold of Winter.

But let this be as it will, it is certain, that the Bodies of Perfons must be in a certain manner predifposed to be capable of receiving Infection: This is evident from *Peffilential* Distempers afflicting particular forts of Perfons more than others; and fome have been in the greatest feeming Danger, and yet have escaped: escaped : Thus \* Schenckius tells us of a Child that fucked two Nurfes, which died of the Plague, and yet never was infected with it. And befides, we find, that when the most dreadful Plagues have raged, there has ftill fome one or another been found hardy enough to wait on the Sick, without any ill Confequence. Fallopius + fays, that fome Fellows that attended upon the Sick, in the time of the Plague, used no other Preservative than chewing a little Ginger in the Morning, then drinking fome Wine, and afterwards chewing Zedoary the reft of the Day. Droetus ||, a French Physician, alfo tells us, that there were fome Villains condemn'd to Death by the Magiftrates of Lions for propagating the Plague. who confessed when they came to die, that they used no other Method to preferve themfelves, than the eating of a roafted Walnut.

If fuch a neceffary Predisposition of the Body to receive Infection be allowed, as there is all the Reason in the World to believe there should, it would be a Matter of the greatest Moment to know what the contrary Disposition to that is, and the certain Means how to preferve it: But seeing this is at present but guess'd at, I shall advance what seems to come most near it, and is most likely, and what is allowed on all hands to be serviceable; and that is, To keep the Mind as chearful, and the Body as bealthful as possibly we can.

This I take to be the most certain Preservative next to that of flying from the Place where the Plague rages.

The

# Confil. de Peft. cap. 10.

<sup>\*</sup> Observ. de Feb. 149.

<sup>†</sup> De Bubon. Peftilent. cap. 13.

The way to keep the Mind chearful, is not to be over-anxious about worldly Matters or the Confequences of Things, and to banifh from the Mind, as much as may be, Fear, Anger, Hatred, Revenge, and all violent Paffions of what kind foever.

As to keeping the Body healthful, every one should study what is agreeable to his own Constitution; but a Temperate Diet, Moderate Exercise, Reading aloud, or Singing and chearful Company, may be serviceable to all.

To which may be added, drinking Wine or other ftrong Liquors moderately; but I except against Brandy, and most distilled Waters, for their Effects are soon over, and the Dejection of Spirits is greater after than before they are drank.

The Care of Clothing fhould at this time be more than ever, for fear of hindring Infenfible Perspiration, or in other words, for fear of taking Cold; and for the fame Reason, Violent Motions and Exercises ought to be avoided, as well as Excesses of all kinds.

As to the Medicinal Part, different Authors have recommended different things; but I shall recommend those that have had most Experience on their side.

I do not know whether one Reafon that the Winter abates the Plague, may not be from the Quantity of *nitrous Particles* that abound in the Air then; for if we may believe Authors, *Nitre* has been found beneficial more ways than one.

Hence there is little Reafon to doubt, but Nitre or Salt-Petre diffolved in Vinegar, and evaporated in an Earthen Pan over a Charcoal Fire in the middle of a Room, would be of fervice to purify the Air. And for the fame purpurpole, Rue steeped in Vinegar, and suffered to fume away till the Moisture was chiefly gone, in the same manner as before, would doubtless be proper. In either of which, if a little Campbire were added, some think it would be so much the better; for \* Campbire has the Praises of most, upon such Occasions.

The following Composition is also recommended by an Eminent Author.

Take Nitre, a Pound; Sulphur, four Ounces; Benzoin and Styrax, as much as you pleafe: melt together, and form it into fmall Sticks, to throw upon burning Coals when ufed.

As to Amulets; Quickfilver, Arfnick and Toads are most remarkable. The afore-mentioned Droetus gives us an Instance wherein Quickfilver has been found to be fuccefsful hung about the Neck in a Walnut-Shell.

Some Italian Physicians thought nothing of greater Service than Arfnick carried about a Perfon; and affure us, that not one that did fo died, as † Pistorius informs us.

Those that use Toads either bore a hole through their Heads, and so hang them about

\* Particularly Matthiolus in his Italian Commentary upon Diofcorides, fpeaks thus of it, after he had enumerated feveral of its Virtues. ' Preferva dalle Putrifattioni, & imperò ' utilmente fi mette ne gli antidoti, che fi fanno contra i ' veleni, contra la Peste, & contra i morsi de velenosi ' Animali. Ha in somma affai altre Virtù le quali per ' brevità lascio da parte.' That is, It hinders Putrefaction, and if mixed with Antidotes, is excellent against Poisons, the Pestilence, and the Bitings of Venomous Beasts. In a word, it has so many other Virtues, that for brevity fake I am forced to omit them. Discorsi del Matth. nel Lib. Dioscor. p. 80.

† Lib, de Peft, pag. 34.

their Necks, or make Troches of them, as Helmont; or encompass them with Ising-glass, and so hang them as before.

As to my own Opinion of the Matter, I can only fay, that if thefe, as we are told, have been ferviceable, 'tis probable they may be fo again, and I fee no manner of harm in the Trial: I am apt to think, the Toad will be the leaft fancy'd of any of the three.

Before I come to Internal Prefervatives, I must take notice of one Caution by the way, That Perfons with *empty Stomachs* have been more apt to receive Infection than others; which should be carefully avoided by all that go near the Sick.

Etmuller \* tells us, that Juniper-Berries, Myrrb, Zedoary, are worth a thoufand other Compositions, if steeped in good Vinegar, and taken by way of Prevention. A little Venice-Treacle diffolved in Vinegar, and t filtred, is alfo excellent. You may alfo diffolve a little Campbire in Wine, and add to fome Vinegar at pleasure; for Campbire will hardly diffolve in Vinegar. Sylvius fays, that when he used to visit fick Perfons, he only used to foak fome foft Bread in a Spoonful of Wine-Vinegar, and ate it in a Morning before he went to fee them. Some commend Rhenis Wine or a Draught of stale Beer in a Morning.

Acid or tart Fruits are alfo faid to be very good for this Ufe, to be eaten fparingly now and then; fuch as Citrons, Oranges, Pomegranates, Currants, Apples, &c.

\* Etmuller. Opera, ubi de Peffe.

† Filtred, that is, suffered to run as much as will through' brown Paper.

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Il Pag. 275.

I fhould have observed before amongst the Externals, that a Spunge dipt in Vinegar, and held to the Nostrils, is of service; to which a little *Campbire* or *Myrrb* may be added at pleasure: as also that a little *Ginger* or Zedoary steeped in Vinegar, and held in the Mouth or chewed, is very beneficial.

Camphire, as I faid before, ftands recommended very much in these Cases; and where hot things are found serviceable, the following Composition may not be improper.

Take Flowers of Sulphur three Drams; Myrrb two Drams; Aloes a Dram; Saffron, Campbire, of each half a Dram: mix and make a Powder, or with the Pulp of Citrons make an Electuary.

But, according to my Judgment, what I recommended before is most proper.

All violent Purges are to be forborn; for they, inftead of refreshing, weaken the Body, and diffipate the Spirits: But if it should appear that there is evident Occasion for such fort of *Physick*, the following Form from Barbette will be proper.

Take choice Rhubarb, a Dram and a half; Leaves of Senna pick'd, two Drams; Cream of Tartar, a Dram; Roots of Viper-grass, half an Ounce; Anise-Seeds, half a Dram; boil in Carduus Benedictus Water: ftrain, and to three Ounces of the Colature add Syrup of Succory with Rhubarb, fix Drams; Spirit of Salt a little; Confectio Alkermes a Scruple: mix and make a Draught.

Or this;

Take of Leaves of Senna an Ounce and a H half: half; Mechoacan, half an Ounce; Zedoary, Citron-Peels, Galangals, of each a Dram; of the Cordial Flowers a Pugil: pour on a sufficient Quantity of Rhenish Wine; let them ftand a day, then strain, of which take four Ounces.

Some number Iffues amongst the best fort of Preservatives, amongst which are Hildanus Riverius, Horffins. Lindanus fays, that his Uncle was at Morocco at a time when 85000 died of the Plague in five Weeks, and he perfuaded a Jew, who was a Phyfician, to make Islues, and they all of them escaped but one, who refused to have one made : and moreover, Lindanus himfelf confirms their Serviceablenefs, and adds, that those that have Issues feel a pricking Pain in them when they go near the Infected, which Hodges \* also confirms.

I have not ventured to fay any thing by way of Recommendation of the hotter fort of Antidotes, becaufe, as Sydenham + observes, if they were not follow d by a Sweat, they were generally noxious in the last Plague at London : therefore with this Caution I shall give you one of that fort.

Take Zedoary two Drams; Wormwood, Dittany of Crete, of each half a Handful; Water Germander, Carduus Benedictus, of each a Handful; Citron-Pecl, half an Ounce; Pimpernel-Root, half an Ounce; Elecampane-Root, two Drams : let them be cut into Bits, and tyed up in a Linnen Cloth, and hung in Wine or Ale, of which a Draught is to be drank after Breakfast or at Dinner.

\* Pag. 241. de Peste. † Pag. 132.

Some

Some have recommended the Use of Absorbents, such as Bole Armoniac, Terra Sigillata, Pearls, Coral, Crabs-Eyes, Crabs-Claws, and the like. Those who rely much upon Amulets, may wear the following, as good as any.

Take white Arfnick, half an Ounce; Orpiment, a Dram and a half; Powder of dry'd Toads, two Ounces; red Sanders, a Dram: with Mucilage of Gum Tragacanth make an Amulet in the ufual Form.

Before I take my leave of Prefervatives, I'll give you as odd a one as I have read of. Lemnius \* fays, his Countrymen, that is, the Rufticks and meaner fort, take Pieces of Skins, and Horns, and Bones fomething fresh, and cast them into the Fire, and fume their Cottages and Huts with them, and fo preferve themselves from the Plague. Perhaps this may help us to account for what Palmarins + affirms to be true concerning the Leather-Dreffers at Paris : For he fays, that tho' the Plague was great, and they lived in the midft of the City, vet few of them were infected; and thinks the Smell that is about their Houfes kept out the Plague : but fays, others imagine they are fo used to ill Smells, that the Contagion could not affect them; and adds, that the Cleanfers of the Streets and Vaults and Hofpital Servants laugh at and defpife it.

Lemnius, whom I mention'd just before, fays a Garifon that lay in the Castle of Tournay freed the Town from a Pestilential Distemper, by firing the great Guns Morning and Night. So much for Prefervatives.

\* De Occult. Nat. Mirac. lib. 2. cap. 10.

† De Feb. Peft. cap. 15.

But

But before I come to the Cure of those that are infected, it is proper to fay fomething of the ufual Signs whereby we may know the Event of the Difease; tho' you must take no tice by the way, that the most certain Rule in this Cafe may fometimes prove fallacious.

Prognofties. If the Buboes or Tumors break out quickly, and the Symptoms then remit, you may hope for a good Event. A Plague with Buboes is the mildeft and leaft dangerous of all; that with Carbuncles is next; but that with Spots is worft of all. The more Buboes there are, the better; the more Carbuncles, the worfe: Large free Sweating is a good Sign; a cold Sweat is a bad, as likewife if the Extremities of the Body are cold, particularly the No/e. The Dropping of the Nofe is mortal. Tumors lying hid, portend Danger. It is a deadly Sign for Hiccupping to fucceed Bubocs. Raving with fiery Eyes and a dry Tongue is a bad Sign. If a Carbuncle succeed a Buboe, it is mortal. Carbuncles appearing on the Fingers are dangerous, by reason of the Tendons. It is better for Tumors to appear before than after the Fever. For Tumors to be a little inflamed. is not very dangerous; but if a livid Circle fur ounds them, it is dangerous. If when a Bliftering Plaster is apply'd, no Blifter is raifed, you may fafely fay the Sick will not recover. A Carbuncle with a Streak of yellow or red, is dangerous; but if the Streak grows white without the Decreafe of the Fever, there is little Hope left. If Euboes in the Neck, or behind the Ears, bring on Pains of the Throat, and Swallowing is hinder'd, without any notable internal Inflammation; the Sick will scarce live fifteen or fixteen Hours longer. A Remarkalle Fever without Anxiety of

of the Heart, is lefs dangerous than Anxiety of the Heart without a Remarkable Fever. Sometimes it happens that there are Carbuncles on the Eyes, Hands or Stomach, without any Hopes of Recovery. Likewife if Carbuncles fhould happen on the Urinary Bladder, the Sick will die in very great Pain.

The chief Aim which Authors have had in Cure. the Cure, has been to throw the Matter of Contagion out of the Body; which Method Nature feems to have fuggefted, in endeavouring to expel the Poifon, as is evident from the Buboes and Carbuncles: And for this purpofe they have agreed that Sweating is most proper. And Etmuller would have no Sudorifick Composition be given without Campbire. Of which take the following Forms.

Take of Treacle Water fix Drams, or an Ounce; Saffron, about as much as a Pea; Camphire, half a Dram : mix.

To an adult Person give all of it, to a younger half.

#### Another.

Take Venice-Treacle, two Scruples; Flower of Sulpbur, a Scruple; Campbire, fifteen Grains: mix. Give it all to an infected Perfon, expecting a Sweat.

Next to Campbire, Spirit of Harts-born given to a Dram, is accounted excellent; of which \* Hodges gives an Inftance. Ivy-berries given to a Dram in Wine, has been observed to be profitable. In the Management of the Sick, observe the following Rules.

\* Pag. 164. de Peste,

I. The

I. The Sweating Medicine is to be repeated every eight Hours, that the Sick may sweat three times a day. While there is a Remiffion of the Sweating, the Sick should be supply'd with comfortable acid Liquors : if Bubyes, Carbuncles, or Spots appear with some Ease, Sweating is to be continued. Regard is always to be had to the Strength and Constitution of the Sick, as to the Degree of Sweating.

II. The Sick should not be fuffered to fleep while he fweats. If you find the Sick inclinable to fleep, dip a Spunge in a little Wine Vinegar, and hold to his Nofe; if a little Camphire has been diffolved in it, it will be better.

III. While the Sick is fweating, take a Penny Loaf hot out of the Oven, and cut off the bottom Cruft; make a little hole in the middle, and put in two Drams of Venice Treacle, and apply it to his Navel. The Loaf is faid to draw out the Poifon.

IV. If the Sick is inclinable to be very wakeful, and thence delirious, a little Laudanum fhould be added to the Sudorifick Medicine, efpecially in the beginning, that the Symptoms may abate, and after the Sweat is wiped off, a refreshing Sleep may follow : But note, in wiping the Sick you must take the greatest Precautions against the cold Air; and the Linnen that is used should be hot, and fumed with Sulphur, Amber, Frankincense, or Myrrb.

V. The Plague is fometimes attended with a Burning Fever; and then Venice-Treacle, or Mithridate, unlefs corrected with Acids, is not proper.

VI. Acids are never to be omitted : For they are to be given with the Sweating Medicine in the Declination of the Sweat, and after the Sweat is over, to refresh the Sick. But

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on the other hand, you fhould take care always to correct the Acids with fomething that is Sudorifick.

VII. Bliftering Plasters are used in the Plague with good Success: they may be laid to the Neck, Shoulders, or Calves of the Legs, and even to the Buboes too with profit. The following Composition was used in the great Plague at London.

Take of Tar five Ounces; Galbanum an Ounce; Bees-Wax an Ounce and a half; melt them together, and remove them from the Fire, and then add Powder of Spanish Flies an Ounce: old Teast, Seeds of Bishop's Weed, of each three Drams; Euphorbium a Dram; add a fufficient Quantity of Vinegar of Squills; let them be well mixed and incorporated till they are brought into a Mass for Plasters.

The Part to which it is apply'd, fhould be firft rubbed till it is red; and after the Plafter is taken off, the Sore fhould be kept running for fome time: To that end you may apply Melilot Plaster fprinkled with Powder of Spanish Flies. If an Inflammation should follow, you may apply Colewort Leaves. But you are not to use these Plasters to all indifferently, as where there is Heat or Incontinence of Urine, an Inflammation or Ulceration of the Sphinster of the Bladder, or where there is bloody Urine, or Women are with Child or near Menstruation, or to very weak Patients, they are not to be used.

VIII. In the very beginning of the Difeafe, a Vomit is fometimes fuccefsful, the Poifon being yet in primis Viis: But if the Sick is fo troubled (60)

troubled with Vomiting, that it will not fuffer him to retain any Medicines, then only cover him with Clothes, and try to make him fweat that way; which will ftop his Vomiting, and put him in a Condition to retain any thing.

IX. Blood-letting most fay is hurtful, tho \* Sydenham would fain perfuade us to the contrary, and gives us a Catalogue of the Authors that have voted for it. But Paraus + tells us, that in the Year 1565, when the Plague raged throughout all France, Charles IX. being upon a Journey to Bayonne, he diligently enquired of the Phylicians and Surgeons how Purging and Blood-letting fucceeded, who all anfwered with one Voice, that they had obferved carefully, and all who had Blood taken away freely, or were purged briskly, thenceforward grew worfe, and afterwards died; and the reft, who used only Alexiterials, almost all efcaped. I could give other Inftances of this kind, and fome to the contrary; fo that all we can conclude from it, is, that tho Bloodletting is generally bad, yet, in fome particular kinds of this Diffemper, it may be ufeful.

Before I have done with this Part, I will give you an eafy camphorated Composition, faid to be of great Efficacy. Take of Sugarcandy three Drams; white Ginger two Drams; Campbire a Dram; make a Powder: The Dofe a Dram; to be taken in any convenient Vehicle. As to the comfortable acid Liquors before mentioned, they are variously compounded of the fimple distilled Waters of Sorrel, Scabious, Roses, and the Juices of acid Fruits, fuch as Citrons, Currants, Raspberries, Mulber-

<sup>\*</sup> Obferv. Med. p. 139.

<sup>+</sup> De Peste, cap. 24.

ries and Pomgranates, Syrups of the fame, and Wine, and a few Drops of the Spirit of Vitriol, which the Compounder must fo manage, as to make them grateful and ageeable. To make it cordial, fome add *Extract of Saffron*; but it must be only a few Grains; for to be over-bot, is contrary to the Intention: for which reason the Compound Waters are omitted, which are prefcribed in ordinary Juleps.

I now come to give fome Rules concerning the relieving the Symptoms.

In curing Buboes, the Intentions are to draw out the Poifon, to ripen them, and to cleanfe and heal them.

To draw out the Poifon, fome make use of Onions roasted, and mixed with white Mustardfeed bruifed, and apply it after the manner of a Pultice; others, instead of Mustard-feed take Venice-Treacle, especially if the Buboes are painful, which also helps to ripen them. Dryed Toads foak'd in Wine are faid to be very serviceable for this End, if apply'd to the Buboes when they are fostened. Hog's-Grease, mixed with roasted Onions, has been used with Success. Some take the following Pultice to be very good.

Take white Lilly Roots and Roots of Marsh-Mallows, of each two Ounces; Figs no two or three; boil in a fufficient Quantity of Oil of white Lillies to the Confistence of a Pultice, add fine Soot an Ounce; Venice-Soap fix Drams; Oil of Frogs two Drams; mix and make a Pultice.

When,

When, by fuch means as thefe, the Buboe is ready to be opened, for it is dangerous to ftay for a perfect Suppuration, you must either make use of a Lancet, or a Potential Cautery; or, in the place of both, you may use the following Plaster from Hodges.

Take Emplastrum Oxycroceum three Ounces; ftrained Galbanum, Gum Caranna, of each an Ounce; Tar two Ounces; melt them together, and with Oil of Camomile, or Lillies, make a Mass for Plasters.

After the Buboe is opened any way, Balfam of Sulpbur with Turpentine must be used mixed with Unguentum Pasilicon and Venice-Treacle; over which put a Plaster of Diapompholygos, till the Ulcer be cleansed and healed.

A Carbuncle being a Mortification begun, the first Step towards the Cure, is to stop the spreading of it; for which purpose I need not mention any thing besides Butter of Antimony: for if a Circle be made round the Carbuncle with this, it will not only hinder its Progress, but cause the mortified Part to fall out; after which the Ulcer may be cleansed and healed as that of the Buboe. Some use ftrong Blistering Plasters both to Buboes and Carbuncles, and afterwards heal them as before.

As to any other Symptoms that may arife, they are feldom fo much attended to, as to require a particular Cure; nor indeed ought any thing to be given which interferes with the main Intention of Cure: for if that goes on fuccefsfully, the reft will all vanish of course; but if that be interrupted, relieving a prefent Complaint will be but a poor Satiffaction.

POST-

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POSTSCRIPT.



HO' I have, in the preceding Difcourfe, faithfully related what Authors have recommended to be of use in *Pestilen*tial Distempers; yet I would

not be thought to have faid every thing that is neceffary to be known in order to manage Perfons afflicted with Difeafes of this kind; nor indeed can any body fay fo much, as to render the Care and Advice of a Phyfician unneceffary in fuch Cafes : for according to the different Seafons of the Year, and the different Conftitutions of Perfons, Variety of Methods fhould be taken, which is always left to the Understanding and Prudence of Practitioners in prefcribing; and it would be happy for People in fuch Circumstances, if they could have honeft and able Phyficians, to attend upon them. But the Knowledge of the State of Things at fuch Times, in other Countries, and the Account that we have transmitted to us concerning them in our own, leaves us a great deal to fear, and but a little to hope in relation to that. Nor can it well be otherwife, confidering that Phyficians are obnotious to Infection themselves, and that there are vaft Numbers feiz'd with the Diftemper at a time. Upon these Confiderations, every one ought in fome measure, for fear of the worft, to be acquainted with the ufual Methods how to preferve or cure himfelf, or others, 12

others, in Cafe of neceffity: for this Reafor, I shall add something farther concerning the Nature of Contagion, and some general Remarks concerning the Prevention and Care.

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The Matter of Contagion, without doubt, confifts of fine and fubtile Particles, of whofe fpecifick Nature we are wholly ignorant. Hence it comes to pafs, that we can never be certain à priori, whether any two infectious Diftempers are precifely of the fame Nature; but where the Symptoms are alike, and the Effects not very different, we venture to conclude that their Natures are the fame, and their Caufes not much unlike; and confequently that their Cure ought to be the fame too.

These fultile Particles floating in the Air, may either in breathing pass down into the Lungs, or by the Pressure of the Circumambient Atmosphere rush into the Stomach, and so feize upon the Mouth of it, where there is a confiderable Plexus of Nerves, or deprave the Stomach, or what ever is contained in it.

By either of these Ways, it is easy to conceive how the Matter of Contagion will reach the Blood ; where being enter'd, it may bring on new Cobefions, either by pricking and breaking the [mall Globules of the Blood merely by the Shape and Figure of its Parts, or by the Force of Attraction wherewith it may be endow'd; whence a fort of a Fermentation will naturally arife, attended with a Separation of the more fluid and viscid Parts, which we may call a Coagulation of the Blood. This State must inseparably be attended with a quick, weak, and unequal Pulfe, as well from a want of Secretion of the animal Spirits, as from the different Fluidity of the Blood as it pafles

passes through the Heart. The Blood being thus differently fluid, the groffer Parts, must of necessity stagnate in fome of the Capillary Veffels, which abounding more or lefs with the Matter of Contagion, which we cannot help supposing to be of a sharp corrosive Nature, a violent Inflammation of those Parts will naturally follow; whence again, a Gangrene and Mortification will enfue. If it fall on the Glands behind the Ears, in the Groin, or under the Armpits, then they will fwell and be inflamed, and are called Buboes; and if it falls on any other Part of the Body in particular, then a Carbuncle arifes: but if it be thrown upon the whole Surface of the Body in general, then livid Spots or Wheals are produced, which are accounted fo deadly.

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Befides the Way that I have mention'd, Perfons may be infected, by touching or wearing Clothes, or other things full of infectious Particles, which may pafs thro' the Pores of the Skin, and fo into the Blood, and produce the fame Diforders as before.

A Fermentation being thus induced into the Blood, as was obferved above, and new Cobesions confequent upon it, we may well fuppose the contagious Matter to be augmented in the fame manner as Yeast is in the Working, or Fermentation of Malt Liquors; which, in the last Stage of the Discase, flying off from the infected Body, the Distemper gains new Strength, and confequently encreases.

The contagious Particles thus increasing ad infinitum, let us confider how the Diftemper ever can have an End: Now this may be either by having these Particles join'd to others, which may hinder their Activity, [as perperhaps the nitrous Particles in Winter] or by having them difperfed wide and broad in the Air; or Mens Bodies may by degrees be fo ufed to them, as not to be capable of being difturbed by them, for fuch the Cafe feems to be when univerfal Plagues happen.

Conftant Experience teftifies, that the Winter will abate the Fury of a pestilential Diftemper; and that the active Particles of the Contagion are fome way or other clogg'd, I think, is beyond difpute; and why it may not be from a Quantity of Particles, which are thought to be of the Nature of Sal-Nitre, I cannot fee; efpecially finceCompositions with Gunpowder have been found to be fuccefsful in France, in which Powder, Nitre is a chief Ingredient. And why may not this be the Reason that Tournay was freed from a peftilential Diftemper, by the firing of Guns from the Caffle ? It has been related by one whofe Veracity I fee no reason to call in question, let his Skill have been what it will, that Sal-Nitre was an infallible Prefervative in the Time of the great Plague of London.

Whether my Reafonings upon thisSubject are true or falfe, cannot be abfolutely determin'd; but this I dare venture to fay, that they have the Face of Probability, and no way difagreeable to the Philofophy in vogue; which, of all, is the most confentaneous to Reafon.

I cannot but mention it again, as a Thing well worth our Obfervation, and deferving a ftrict Enquiry, why the Force and Violence of the Diftemper bears a fort of Proportion to the Seafons of the Year, as you may fee in the following Account from Melfaria, \* from the time it began at Vicentia in Italy, to the Time he wrote his Treatife upon the Plague.

\* Meffar. de Peste Tract. Prim.

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1576, Decem. died 1	In the Lazaretto and
1577, January - 2	Campo Martio.
February - 5	Feb 0
March - 5	March I
April 8	April 10
May 9	May 10
June - 10	June 3
July - 22	July 10
August - 156	Aug 121
September 340	Sept 303
October - 295	Octub 278
Novemb 75	Novem 182
December - 9	Decem 60
	and an a statistical statistical statistical

The Time that it raged most, as you may perceive, was in the Autumnal Seafon, particularly in the Month of September, and the Time that it very remarkably encreafed, was the Month of August: in which part of the Year, the Conftitution of the Air is more hot and moist than any other, which may not only add to the Maligni, y, and increase the Activity of the contagious Particles, as was obferved before; but by influencing our Bodies in a particular manner, may difpose the Blood and Humours to run into preternatural Cobefions : For by relaxing the Fibres, the Spring of the Solids will be lefs than is necessary to carry on a regular Circulation of the Blood, in which Life and Health confift: whence appears the Truth of what I advanc'd before, That to keep the Body in a due Temperament, is one great, if not the only Preservative against the Plague.

From this fhort Rationale of this Diftemper arife very natural Indications of Prevention and Cure, agreeable both to Reason and Experience. The

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The first Indication of Prevention, is to chase the contagious Particles out of the Air, and to keep it in a right State.

The beft State of the Air appears to be that which is cold and dry; whence Salt-Petre evaporated in a Room with Vinegar, does not feem the worft Composition: and the more fuch fort of Particles abound in the Air, the better it would probably be to hinder their Activity, which is equivalent to chafing them out of the Air.

The next Indication of Prevention is, to keep up the Action of the Solids upon the Fluids, and to hinder the Putrefaction of the Blood and Humours : Hence appears the Excellency of Vinegar, corrected with Stomachicks, fuch as Gentian, Lemon-peel, Zedoary, Juniper-herries, &c. which by a moderately aftringent Quality brace up the Solids, and help to prevent irregular Cohefions of the Fluids.

Another Indication is, to hinder contagious Particles from getting into the Lungs and Stomach; which shews the Usefulness of chewing Myrrb, Zedoary, smoaking Tobacco, smelling at Rue, Vinegar, Gc.

Again, another Indication is, to binder the Accumulation of fordid Humours in the Body, which fooner difpofes it to infectious Difeafes: whence is evident the Excellency and Ufe of Iffues, which, becaufe they have the Experience of great Numbers on their fide, and becaufe they have been fo earneftly recommended in a Latin Difcourfe before the Colledge of Phylicians; I thall thew the making of them, left a Surgeon thould not be at hand, to those that may need them.

To make them, indeed, requires fome Knowledge in Anatomy; fo fhould not be attemptod.

ed, but in cafe of absolute Necessity, unless by skillful Persons. The Place is between two Muscles, in feveral Parts of the Body; but commonly in the Arm, where, towards the outfide above the Elbow, by moving the Arm up and down, a Dent may eafily be perceived, which is the Place it is to be made in; mark it with Ink, take the Skin up in your Fingers, and divide it fo far that it may be big enough to hold a Pea, which you are to put in, and drefs as ufual; or, it may be made, with a potential Cautery, which is to be laid to the Place. After there has been a Plaster laid on, with a Hole in it of the Bignefs the Iffue is to be; over this, lay a Bolfter and another Plaster; and in about three Hours Time, more or lefs, take them off, and drefs the Eschar with Diapalma twice a day, that it may the fooner separate. Note, You may divide the Skin as above, either with a Lancet or fharp Pair of Sciffars.

It is not feldom that Evils are productive of good Effects; which is alfo very often experienc'd, by those that have running Sores in fuch calamitous Times, for these prevent Infection, by fupplying the Place of Iffues.

The only curative Indication is to destroy the contagious Particles in, or drive them out of the Body; which may be partly done by a Vomit, while the Sick is yet ftrong, and the Invation of the Diftemper but very lately made, which may be known by sivering and trembling, perhaps attended with Cold : But afterwards, when the Difease is confirmed, and the Blood in a Ferment, they may be very dangerous, but can be of no Service. For a Vomit, an Author whom I but lately hinted at,

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at, prefers two half Drams of *white Vitriol*, diffolved in as many Draughts of warm Water; or rather a Dram diffolved in the firft Draught, and half a Dram in the fecond; becaufe it is *cafily got*, is *mild*, and leaves an *africtive* Quality behind it, as well as ftrengthens the Stomach. He would not have the Patient in vomiting, to drink above three Pints of Water or Poffet-drink, at moft.

When the Difeafe is confirm'd, then Smeating takes place; which, when other means are wanting, may be manag'd by covering the Sick well, and fupplying with Sage-Poffet Drink pretty hot. But, above all things muft be avoided fuch Medicines which increafe the inflammatory State of the Blood, as your hotter fort of things do. When the Spirits are low, in the Time of Sweating, fome Drops of the Spirit of Harts-Horn may be ufed, with or without what was recommended before; or, for want of all, Canary or Wine of any fort.

For Buboes or Carbuncles, or any Part that is very much pained, the famous Plaster of Angelus Sala is very much recommended by Authors, for its Excellency in affuaging the Pain, and drawing out the Poifon; which take as follows.

Take Gum, Sagapenum, Ammoniacum, Galbanum, of each three Ounces; boiled Turpentine, white Wax, of each four Ounces and a half; of the Arfenical Magnet finely powdered, eighteen Drams; Powder of the Root of Arum, an Ounce; make a Plaster according to Art.

The Gums should be diffolved in strong White-Wine Vinegar, and then strained thro

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a linen Cloth; and afterwards boiled up to their former Confiftence, melt the Wax and Turpentine together by themfelves; take them off the Fire, and ftir them till they come to the Confiftence of an Ointment, and then add the Gums and Arfenical Magnet.

#### The Arfenical Magnet is thus made;

Take of white Arfnick, Brimftone, and crude Antimony in Powder, each alike; put them in a Vial, cover it with Sand, and apply Fire till they are melted, and appear of a dark red Colour; let it cool, and keep for ufe.

This lofes its poifonous Nature, as may be eafily try'd, by giving fome of it to a Dog. I could, with very little Labour to myfelf,

have fwelled thefe Sheets with great Numbers of Compositions and Formula's, if it would have answer'd any valuable Purpose; but I have contented myself with fuch as have been often experienc'd, and not very hard to be composed; and have given you a Method not very much differing from those of the most fuccessful Practitioners: But yet I am still willing to hope, that the Vigilance and Care of the Government, will make any such Directions as these unnecessary, by the preventing the specifier of this direful Distemper to this populous City, or any Part of this Island.

### HARMAR COMPANY & ? FAR HARMAN

N. B. Since this went to the Prefs, I have met with a French Book, entitled, Les Secrets du Seigneur Alexis Piemontois, translated from the the Italian, which has the following remarkable Paffage in it; which take upon its own Authority.

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Un Merveilleux Secret pour preferver la Perfonne de la *Peste*, & a este esprouve en Angleterre de tous les Medicins en icelle grand Peste de l'an 1348, qui envahit quasi tout le Monde, et ne s'est trouve Personne qui n'aye este preferve de la Peste, en usant dudict Secret.

Prens Aloe epatic ou cicotrin, Conelle fine, & Myrrhe de chacum trois drachmes, Clouz de Girofle, Macis, Lignum Aloe, Mastic, Bole Armenic de chacun demie Drachme. Toutes ces chofes foyent bien estampees en un Mortier net, puis messes ensemble & apres gardees en un Vaisseau bien ferre, & en mens toutes les matinees la Pesanteur de deux Deniers en un demy Verre du Vin blanc, ou il y ait quelque peu d'eau, & le bois du matin a l'aube du jour.

In English thus:

An excellent Prefervative against the Plague, which has been experienc'd by all the Phyficians in England, in that great Pl gue in the Year 1348. which, in a manner, invaded the whole World; and there was not one infected that used this Secret.

Take Aloes epatic or fuccotrine, Cinnamon, Myrrb, of each three Drams; Cloves, Mace, Lignum Aloes, Mastic, Bole Armoniac, of each half a Dram: Beat these well in a clean Mortar, mix them together, and keep them in a Vessel close stop for use. Take every Morning at break of day, the Weight of a two Pence, in half a Glass of White-wine mixed with a little Water.

Angollina sonos gllerompan put in to fark ine