## A short discourse concerning pestilential contagion, and the methods to be used to prevent it / [Richard Mead].

#### **Contributors**

Mead, Richard, 1673-1754.

### **Publication/Creation**

London: Sam. Buckley & R. Smith, 1720.

#### **Persistent URL**

https://wellcomecollection.org/works/tnsws5zy

#### License and attribution

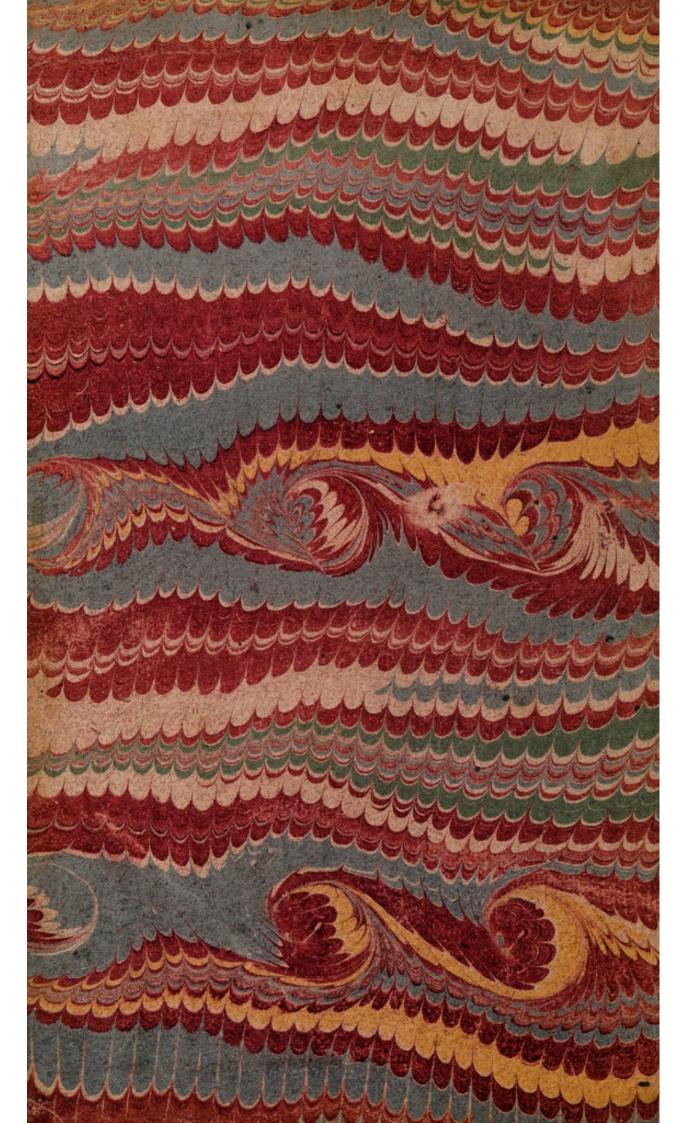
This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

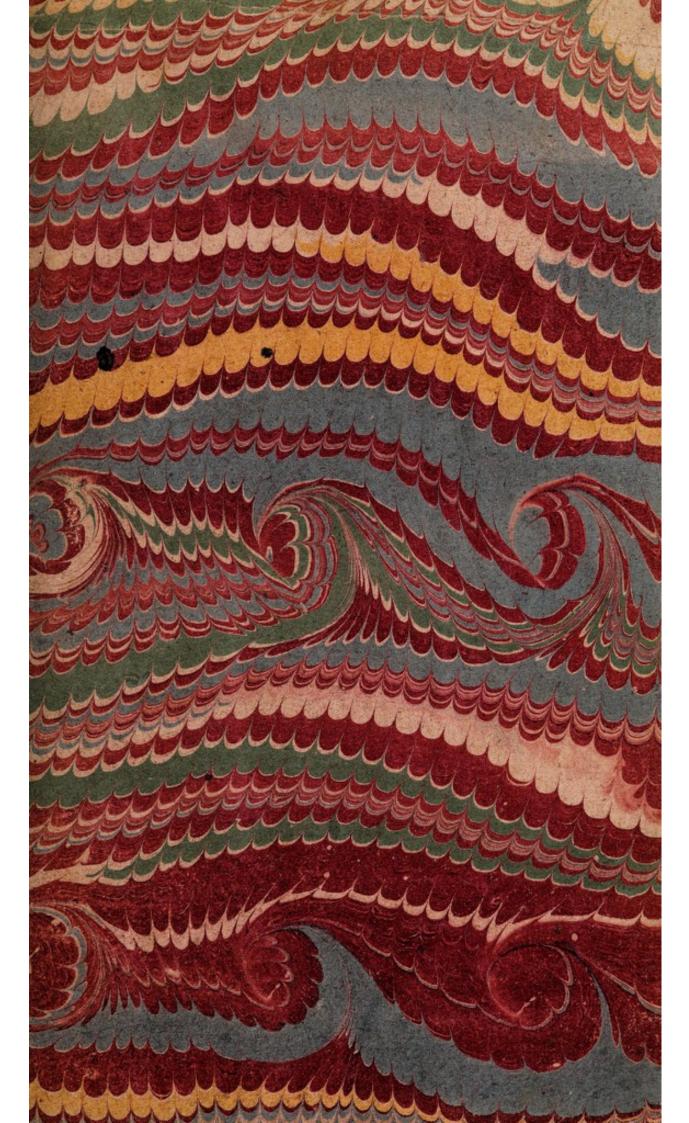
You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



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







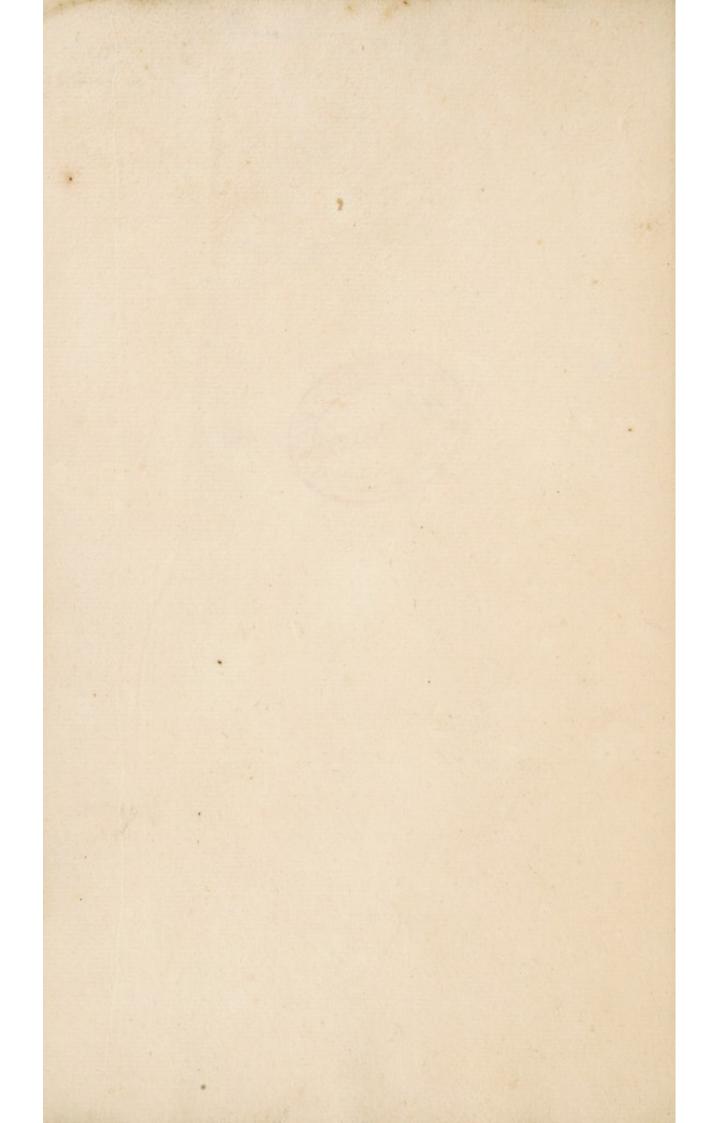
36133 B

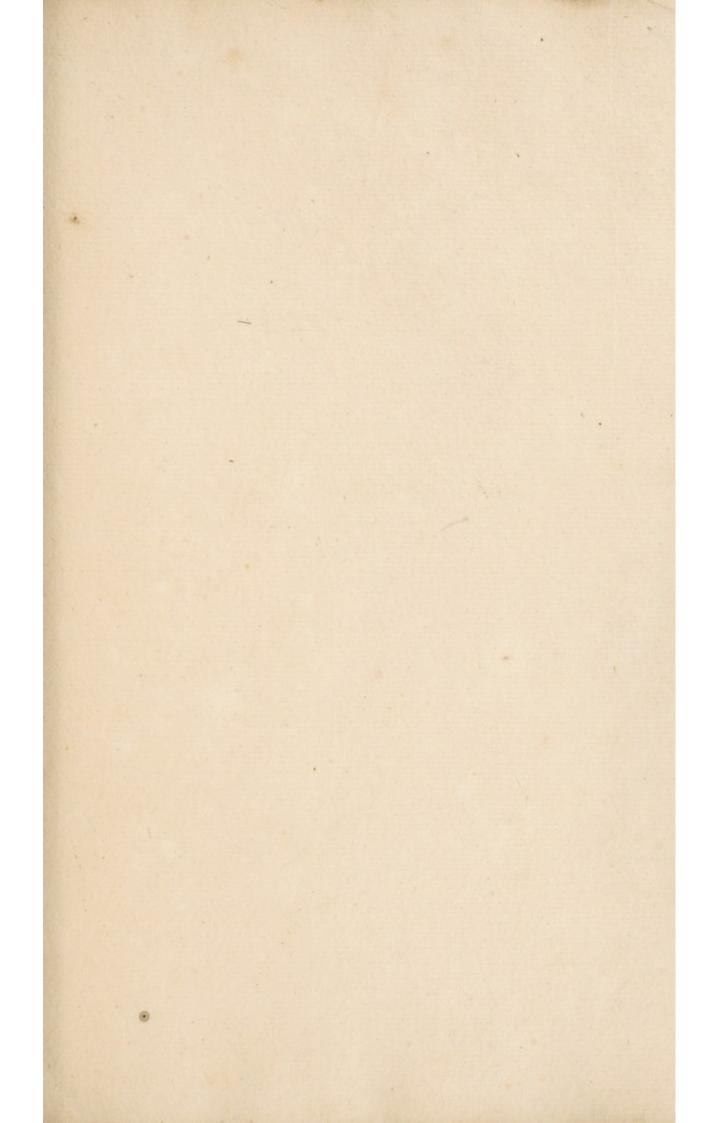
Cur. 36

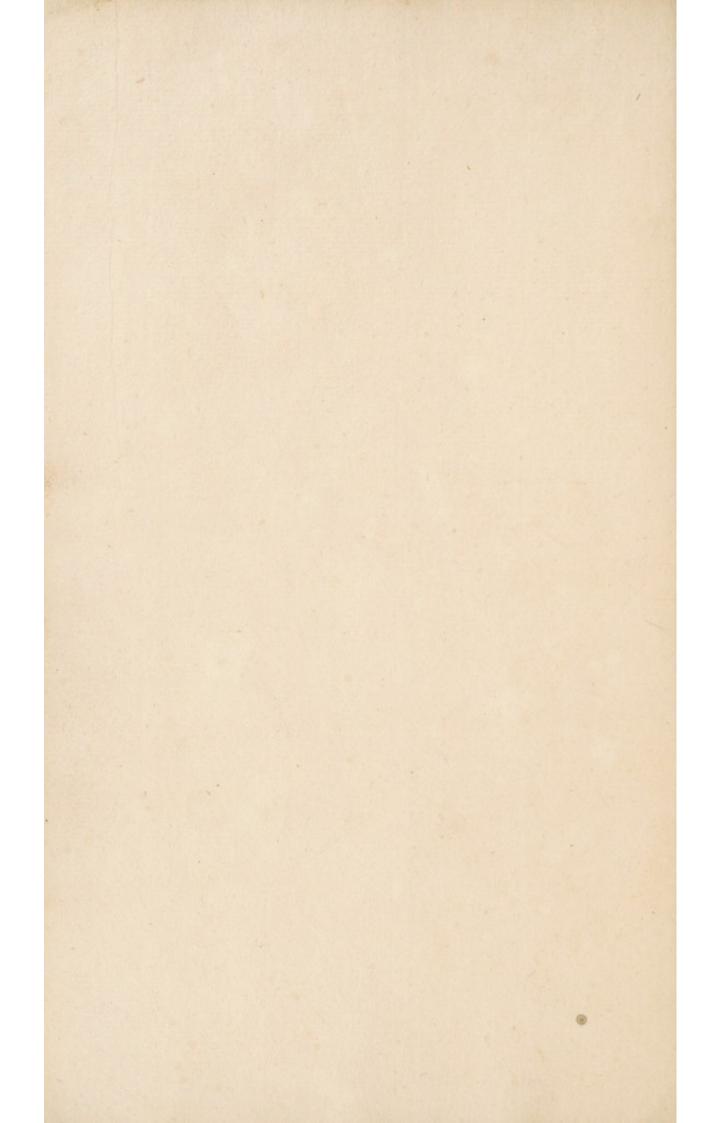
MEAD, R.

E Libris 9 Thoroto



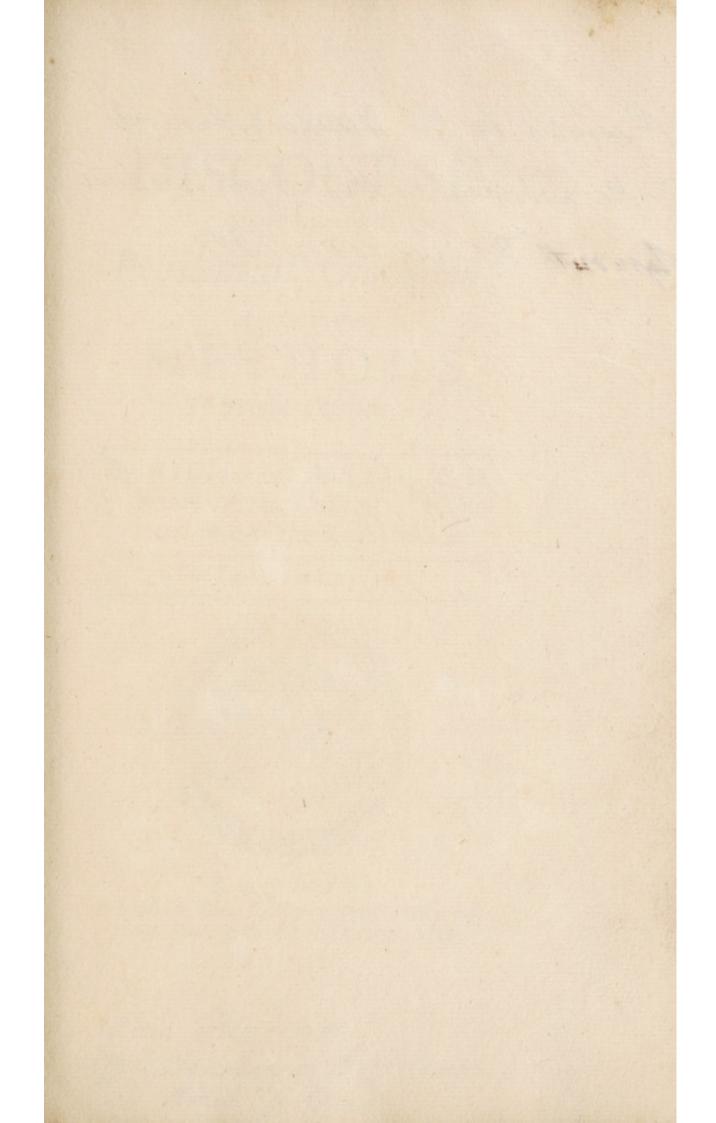






Digitized by the Internet Archive in 2019 with funding from Wellcome Library





Presented by Fir William Brownoth

To the Library of the Royal hospital

Olymoruth 31 August 1184

A SHORT

# DISCOURSE

CONCERNING

Pestilential Contagion,

ANDTHE

# METHODS

To be used to Prevent it.

By RICHARD MEAD, M. D. Fellow of the College of Physicians, and of the Royal Society.

The FOURTH EDITION.



## LONDON:

Printed for Sam. Buckley in Amen-Corner, and Ralph Smith at the Royal-Exchange, 1720.

Viro Planssimo D. Hormano Boothaave Sonat R. Mead. DISCOURSE

METHODS

To be Mid to Person to





Friend for Sain, Auction and Augustion Cown, and Raled Smith at the Royal Enchange, 1740.



TO THE

## RIGHT HONOURABLE

# James Craggs, Esq;

ONE OF

His MAJESTY'S Principal Secretaries of State.

SIR,



Most humbly offer to You my Thoughts concerning the Pre-

vention of the Plague, which I have put together A 2 by

by your Command. As soon as you was pleased to signify to me, in his Majesty's Absence; that their Excellencies the Lords Justices thought it necessary for the Publick Safety, upon the Account of the Sickness now in France, that proper Directions should be drawn up to defend our selves from such a Calamity; I most readily undertook the Task, though upon Short Warning, and with little Leisure: I have therefore rather put down the principal Heads of Caution, than a Set of Directions in Form. THE

THE first, which relate to the performing Quarentines, &c. You, who are perfectly versed in the History of Europe, will see are agreable to what is pra-Etised in other Countries, with some new Regulations. The next, concerning the fuppressingInfection here, are very different from the Methods taken in former Times among Us, and from what they commonly Do Abroad: But, I persuade my self, will be found agreable to Reason.

I most

I most heartily wish, that the wise Measures, the Government has already taken, and will continue to take, with Regard to the former of these, may make the Rules about the latter unnecessary: However it is sit, we should be always provided with proper Means of Defence against so terrible an Enemy.

May this short Essay be received as one Instance, among many others, of the Care, you always shew for Your Country; and as a Testi-

Testimony of the great Esteem and Respect, with which I have the Honour to be,

SIR,

Your most obedient,

Most humble Servant,

Novemb. 25.

R. MEAD.

Denico race race E.

Testimory of the great E.

Steem and Respect with
which I have the Honour
to be,

SIR

Your most obedient,

Moft bumble Servant,

GARM.SI



# PART I.

OFTHE

## NATURE

## CONTAGION.

HAT the Reasonableness of any Method, which shall be proposed to prevent the spreading of Con-

tagious Diseases, may the better appear, it is necessary to premise somewhat in general concerning Conta-

gion.

gion, and the Manner, by which it acts.

Contagion is propagated by three Causes, the Air; Diseased Persons; and Goods transported from infected Places.

We shall therefore first enquire what alteration of the Air it is, that makes it infectious; and then, by what Means it communicates its noxious Quality to other Bodies.

THE ancientest and best Authors of Physick, who lived in a Country more exposed to these Calamities than ours, observed the Constitution of the Air, which preceded Pestilential Fevers, to be great Heats attended with much Rain and Southerly Winds\*: And one of Them takes particular Notice, that no o-

e Vid. Hypocrat. Epidem. lib. 3.

ther than a moist and hot Temperament of the Air brings the Plague; and that the Duration of this Constitution is the Measure of the Violence of the Distemper\*.

THE Natural History of several Countries confirms this Observation; in Africa particularly, if Showers fall during the sultry Heats of July and August, the Plague ensues thereupon, with which whosoever is infected hardly escapes.

It has besides been remarked in all Times, that the Stinks of stagnating Waters in hot Weather, putrid Exhalations from the Earth; and above all, the Corruption of dead Carcasses lying unburied, have occasioned infectious Diseases.

B 2

<sup>\*</sup> Galen. de Temperament. lib. 1 cap. 4. & Comment. in Epid. 1. 3. † Vide J. Leon. Histor. Afric. lib. 1.

FROM hence it appears to be a Concurrence of Causes, that produces Diseases of this Kind; which must not only meet, but exert their Force together for a considerable time. And when this happens, their first Effect is a Degree of Stagnation in the Air, which is afterwards followed by Corruption and Putrefaction.

And upon this account it is, that those Countries are chiefly liable to these Calamites, where not only the Heats are very great, and the Weather continues long in the same State; but the Winds (the Use of which is by Motion to purify the Air) do not shift and change so often as they do in Northern Climates.

INDEED Plagues seem to be of the Growth of the Eastern and Southern Parts

Parts of the World, and to be transmitted from them into colder Climates by the Way of Commerce.

Nor do I think, that in this Island particularly there is any one Instance of a Pestilential Disease among us of great Consequence; which we did not receive from other Insected Places.

This I the rather mention, because it is a common Opinion, and propagated by Authors of great Name, that we are usually visited with the Plague once in 30 or 40 Years; which is a mere Fancy without any Foundation either in Reafon or Experience: and therefore People ought to be delivered from the Subjection to such vain Fears.

On the contrary, though we have had feveral Strokes of this kind, yet there are Instances of bad

bad Contagions from abroad being brought over to us, which have proved less malignant here by our Air not being disposed to receive such Impressions.

THE Sweating Sickness, called the Sudor Anglicus and Febris Ephemera Britannica, because it was commonly thought to have taken its Rise here, was most probably of a foreign Original, and no other than a Plague abated in its Violence by the mild Temperament of our Climate.

For, we learn from Histories, that the first time this was felt here, which was in the Year 1485, it began in the Army, with which King Henry VII. came from France, and landed in Wales\*; and it was then thought to have been brought

<sup>\*</sup> Vid. Caium de Febre Ephemera Britannica.

(7)

into France from the famous Siege of Rhodes by the Turks 3 or 4 Years before. And of the four Returns, which this has made fince that Time; two, viz. those in the Years 1527, and 1528, may very justly be suspected to have been owing to the Pestilence, which at those Times raged in Italy, particularly at Florence and Naples†. And the others were very probably from a Turkish Insection.

I call this Distemper a Plague with lessened Force, because the Symptoms of it were of that kind, though in a less Degree; as great Faintness and Inquietudes, inward Burning, Pain in the Head, a Delirium, &c. All which were accompanied with profuse Sweats, and the Disease lasted but 24 hours. And

<sup>†</sup> Vid. Rondinelli Contagio in Firenze, & Summonte Histor. di Napoli,
though

though for want of Care, and due Management many died of it; yet as a learned and wife Historian \* observes, It appeared rather to be a surprize of Nature than obstinate to Remedies, for if the Patient was kept warm with temperate Cordials, he commonly recovered.

AND I cannot but take Notice, as a Confirmation of what I have been advancing, that we had here the same kind of Fever in the Year 1713, about the Month of September, which was called the Dunkirk Fever, as being brought by our Soldiers from that Place; where it was indeed a Malignant Disease attended with a Diarrhoea, Vomiting, &c. and probably had its Original from the Pestilential Distemper, which some time before broke

<sup>\*</sup> Lord Verulam's Hiftory of Henry VII.

But with us was much more mild, beginning only with a Pain in the Head, and by very easy Means went off in large Sweats, after a Day's Confinement.

THERE being in every Air a greater Disposition to Contagion at one Time than another, we have indeed sometimes felt this Calamity with greater Fury; as particularly the last time in the Year 1665; when it continued in this City about ten Months, and swept away by computation 97306 Persons: But it was generally allowed, that the Contagion came by Cotton imported from Turkey\*; and the long Duration of it, I believe, may justly be charged upon the unhappy Management of infected Houses, which

<sup>\*</sup> Vide Hodges de Peste.

was then directed by publick Authority; as I shall shew anon.

AND the History of the most terrible of all the Plagues, that ever were in these Parts of the World, which was that in the Year 1349, gives a manifest Proof from whence all Europe may trace the Origine of these Evils, viz. from Asia: for † This taking its Rife in China in the Year 1346, advanced through the East Indies to Syria, Turkey, Ægypt, Greece, Africa, &c. In 1347 some Ships from the Levant carried it to Sicily, Pifa, Genoa, &c. 1348 it got into Savoy, Provence, Dauphiny, Catalonia, Castile, &c. In 1349 it seized England, Scotland, Ireland, and Flanders; and in the next place Germany, Hungary, and Denmark; and in all

thefe

<sup>†</sup> Vid. Histor. Florent. di Matteo Villani.

these Countries made most incredible Havock.

But to return to the Consideration of the Air, which we left in a putrid State: It is to be observed, that Putrefaction is a kind of Fermentation, and that all Bodies in a Ferment emit a volatile active Spirit, of Power to agitate, and put into intestine Motions, that is, to change the Nature of other Fluids into which it insinuates it self.

It were easy to shew from the best Theory of Fevers\*, how the Alterations made in the Blood this Way will favour Pestilential Diseases, by rendring the Body obnoxious to them: But the Digression would be too great.

<sup>\*</sup> Vid. Bellini de Febrib.

THIS is one step towards Contagion. The next, as it seems to me, proceeds after this Manner. The Blood in all Malignant Fevers, efpecially Pestilential ones, at the latter End of the Disease, does like Fermenting Liquors throw off a great Quantity of active Particles upon the several Glands of the Body, particularly upon those of the Mouth and Skin, from which the Secretions are naturally the most constant and large. These, in Pestilential Cases, although the Air be in a right State, will generally infect those, who are very near to the fick Person; otherwise are soon dispersed and lost: But when in an evil Disposition of This they meet with the fubtle Parts, its Corruption has generated, by uniting with them they become much more active and powerful, and likewife more

more durable and lasting, so as to form an Infectious Matter capable of conveying the Mischief to a great Distance from the diseased Body, out of which it was produced.

Attractions and Combinations are made by volatile Spirits will understand this Reasoning; especially if they consider, how easily all kinds of Effluvia are diffused in a warm Air, such as we have described an Infectious one to be; and surther, of how penetrating a Force the sinest Parts of Animal Juices are; of which the strange Stench of a mortised Limb, upon a Body yet living, will convince any one.

A corrupted State of Air is without doubt necessary to give these Contagious Atoms their full Force; for otherwise it were not easy to conceive conceive how the *Plague*, when once it had seized any Place, should ever cease, but with the Destruction of all the Inhabitants: Which is readily accounted for by supposing an Emendation of the Qualities of the Air, and the restoring of it to a healthy State capable of dissipating and suppressing the Malignity.

On the other hand it is evident, that Infection is not received from the Air it self, however predisposed, without the Concurrence of something emitted from Infected Perfons; because, by strictly preventing all Intercourse of Infected Places with the Neighbourhood, it may be effectually kept from spreading: Whereas the least Wind must necessarily convey whatever noxious Quality resides in the Air alone, even to a great Distance. Of this

we have had a fresh Proof in the present unhappy Plague in France, which, by keeping careful Guard, was confined for a considerable Time within the Walls of Marfeilles; so that none of the adjacent Villages suffered any thing by it; till at length some Persons sinding Means to escape carried the Infection along with them. And we find, they have been able, by the like Care, still to restrain it within moderate Bounds.

This is the Manner by which Infectious Effluvia are generated: The Way, by which a found Person receives the Injury, I suppose most commonly to be this. These Contagious Particles being drawn in with the Air we breath, they taint in their Passage the Salival Juices, which being swallowed down into the Stomach presently six their Malignity

lignity there; as appears from the Nausea and Vomiting, with which the Distemper often begins its first Attacks. Though I make no Question but the Blood is also more immediately affected by hurtful Particles being mixed through Inspiration with it in the Lungs.

THE third Way, by which we mentioned Contagion to be spread, is by Goods transported from infected Places. It has been thought fo difficult to explain the Manner of this, that some Authors have imagined Infection to be performed by the Means of Insects, the Eggs of which may be conveyed from Place to Place, and make the Disease when they come to be batched. As this is a supposition grounded upon no manner of Observation, so I think there is no need to have Recourse to it. If, as we have conjectured,

(17)

jectured, the Matter of Contagion be an active Substance, perhaps in the Nature of a Salt, generated chiefly from the Corruption of a Humane Body, it is not hard to conceive how this may be lodged and preserved in soft, porous Bodies, which are kept pressed close together.

We all know how long a time Perfumes hold their Scent, if wrapt up in proper Coverings: And it is very remarkable, that the strongest of these, like the Matter we are treating of, are mostly Animal Juices, as Mosch, Civet, Sc. and that the Substances found most sit to keep them in, are the very same with those which are most apt to receive and communicate Infection, as, Furrs, Feathers, Silk, Hair, Wool, Cotton, Flax, Sc. the greatest Part of which are likewise of the

the Animal Kind; which Remark alone may serve to lead Us a little into the true Nature of Contagion.

FROM all that has been faid, it appears, I think, very plainly, that the Plague is a real Poison, which being bred in the Eastern or Southern Parts of the World, maintains it self there by circulating from Infeeted Persons to Goods; which is chiefly owing to the Negligence of the People in those Countries, who are stupidly Careless in this Affair : That when the Constitution of the Air happens to favour Infection, it rages there with great Violence; That at that Time more especially diseased Persons give it to one another, and Contagious Matter is lodged in Goods of a loofe and foft Texture, which being packt up, and carried into other Countries, let out, when opened, the imprifoned (19)

foned Seeds of Contagion: And lastly, That the Air cannot diffuse and spread these to any great Distance, if Intercourse and Commerce with the Place insected be strictly prevented.

PARTH



D 2 PAR



## PART II.

OFTHE

## METHODS

TOPREVENT

## CONTAGION.

s it is a satisfaction to know, that the Plague is not a Native of our Country, so this is likewise an Encouragement to the utmost Diligence in finding out Means to keep our selves clear from It.

THIS

This Caution consists of two Parts: The preventing its being brought into our Island; And, if such a Calamity should happen, The putting a stop to its spreading among us.

THE first of these is provided for by the established Method of obliging Ships, that come from Infected Places, to perform Quarentine: As to which I think it necessary, that the following Rules be observed.

NEAR to our several Ports, there should be Lazarettos built in convenient Places, on little Islands if it can so be, for the Reception both of Men and Goods, which arrive from Places suspected of Infection:

The keeping Men in Quarentine on board the Ship being not sufficient;

cient; the only Use of which is to observe whether any dye among them. For Infection may be preserved so long in Cloaths, in which it is once lodged, that as much, nay more of it, if Sickness continues in the Ship, may be brought on Shore at the End than at the beginning of the 40 Days: Unless a new Quarentine be begun every time any Person dies; which might not end, but with the Destruction of the whole Ship's Crew.

If there has been any Contagious Distemper in the Ship; The Sound Men should leave their Cloaths; which should be burnt; the Men washed and shaved; and having fresh Cloaths, should stay in the Lazaretto 30 or 40 Days. The reason of this is, because Persons may be recovered from a Distease themselves, and yet retain Matter

(23)

Matter of Infection about them a considerable Time; as we frequently see the Small-Pox taken from those, who have several Days before passed through the Distemper.

THE Sick, if there be any, should be kept in Houses remote from the Sound; and some time after they are well, should also be washed and shaved, and have fresh Cloaths; whatever they wore while Sick being burnt: And then being removed to the Houses of the Sound, should continue there 30 or 40 Days.

I am particularly careful to destroy the Cloaths of the Sick, because they Harbour the very Quintessence of Contagion. A very ingenious Author \* in his admirable

Description

<sup>\*</sup> Boccaccio Decameron, Giornat, prim.

(24)

Description of the Plague at Florence in the Year 1348, relates what himself saw: That two Hogs sinding in the Streets the Rags, which had been thrown out from off a poor Man dead of the Disease, after snuffling upon them, and tearing them with their Teeth, sell into Convulsions, and dyed in less than an Hour.

IF there has been no Sickness in the Ship, I see no reason why the Men should perform Quarentine. Instead of this, they may be washed, and their Cloaths aired in the Lazaretto, as Goods, for one Week.

But the greatest Danger is from such Goods, as are apt to retain Infection, such as Cotton, Hemp and Flax, Paper or Books, Silk of all sorts, Linen, Wool, Feathers, Hair, and all kinds of Skins. The Laza-

Delegiption

retto

setto for these should be at a Distance from that for the Men, and they must in convenient Warehouses be unpackt, and exposed, as much as may be, to the fresh Air for 40 Days.

This may perhaps seem too long; but as we don't know how much Time precisely is necessary to purge the Interstices of Spongy Substances from Infectious Matter by fresh Air, the Caution cannot be too great in this Point: Unless there could be a Way found out, without hazarding Men's Lives, of trying when Bodies have done emitting the Noxious Fumes; which possibly might be done by putting tender Animals near to them, particularly by fetting little Birds upon the exposed Goods; because it has been observed in Times of the Plague, that the Country has been forfaken by

by the Birds; and those kept in Houses have many of them dyed\*. But the Use of this Fancy Experience only must shew; for I am well aware, that all Plagues do not indifferently affect all Kinds of living Creatures; on the contrary, most are confined to a particular Species of them; like the Disease of the Black Cattle a few Years since, which neither proved Infectious to other Brutes, nor to Men.

I take it for granted, that the Goods should be open'd, when they are put into the Lazaretto, otherwise their being there will avail nothing. The Misfortune, which happened in the Island of Bermudas about 25 Years since, gives a Proof of this; where, as the Account

<sup>\*</sup> Demerbroeck de Peste, L. 1. C. 4.

has been given me by the learned Dr. Halley, a Sack of Cotton, put on Shoar by Stealth, lay above a Month without any Prejudice to the People of the House, where it was hid; but when it came to be distributed among the Inhabitants, it carried such a Contagion along with it, that the living scarce sufficed to bury the Dead.

INDEED as it has been frequently experienc'd, that of all the Goods, which harbour Infection, Cotton in particular is the most dangerous, and Turkey is almost a perpetual Seminary of the Plague; I cannot but think it highly reasonable, that whatever Cotton is imported from that Part of the World, should at all Times be kept in Quarentine; because it may have imbibed Infection at the Time of its packing up, notwithstanding no Mischief E 2 has

has been felt from it by the Ship's Company.

As all reasonable Provisions should be made both for the Sound and Sick, who perform Quarentine; so the strict keeping of it ought to be inforced by the severest Penalties. And if a Ship come from any Place, where the Plague raged, at the Time of the Ship's Departure from it, with more than usual Violence, it will be the securest Method to Burn all the Goods, and even the Ship.

Nor ought this further Caution to be omitted, That when the Contagion has ceased in any Place by the approach of Winter, it will not be safe to open a free Trade with It too soon: Because there are Instances of the Distemper's being stopt by the Winter Cold, and yet the Seeds of it not destroyed, but only

only kept unactive, till the Warmth of the following Spring has given them new Life and Force. in the great Plague at Genoa near 60 Years ago, which continued part of two Years; the first Summer about 10000 dyed; the Winter following hardly any; but the Summer after no less than 60000. So likewise the last Plague at London began the Autumn before the Year 1665, and was stopt during the Winter by a hard Frost of near three Month's Continuance; so that there remained no further Appearance of it till the enfuing Spring \*. Now if Goods brought from fuch a Place should retain any of the latent Contagion, there will be Danger of their producing the same Mischief in the Place, to which they are brought, as they

<sup>\*</sup> Hodges de Peste.

(30)

would have caused in that, from whence they came.

But above all it is necessary, that the Clandestine Importing of Goods be punished with the utmost Rigour; from which wicked Practice I should at this Time apprehend more Danger of bringing the Disease from France, than by any other Way whatsoever.

THESE are, I think, the most material Points, to which Regard is to be had in defending ourselves against Contagion from other Countries. The particular Manner of putting these Directions in Execution, as the Visiting of Ships, Regulation of Lazaretto's, &c. I leave to proper Officers, who ought sometimes to be affished herein by able Physicians.

THE next Consideration is, What to do in Case, through a Miscarriage in the publick Care, by the Neglect of Officers, or otherwise, such a Calamity should be suffered to befall us.

THERE is no Evil in the World, in which the great Rule of Resistance ing the Beginning, more properly takes place, than in the present Case; and yet it has unfortunately happened, that the common Steps formerly taken have had a direct Tendency to hinder the putting this Maxim in Practice.

As the Plague always breaks out in some particular Place, it is certain, that the Directions of the Civil Magistrate ought to be such, as to make it as much for the Interest of Families to discover their Mis-

(32)

Misfortune, as it is, when a House is on Fire, to call in the Assistance of the Neighbourhood: Whereas on the contrary, the Methods taken by the Publick, on such Occasions, have always had the Appearance of a severe Discipline, and even Punishment, rather than of a Compassionate Care: Which must naturally make the Insected conceal the Disease as long as was possible.

THE main Import of the Orders issued out at these Times was, As soon as it was found, that any House was infected, to keep it shut up, with a large red Cross, and Lord have Mercy upon us on the Door; and Watchmen attending Day and Night to prevent any one's going in or out, except Physicians, Surgeons, Apothecaries, Nurses, Searchers, &c. allowed by Authority: And this to continue at least a Month

(33)

Month after all the Family was dead or recovered \*.

IT is not easy to conceive a more dismal Scene of Misery, than this; Families seized with a Distemper, which the most of any in the World requires Help and Comfort, lockt up from all their Acquaintance; left it may be to the Treatment of an inhumane Nurse (for fuch are often found at these Times about the Sick;) and Strangers to every thing but the Melancholy fight of the Progress, Death makes among themselves; with small Hopes of Life, and those mixed with Anxiety and Doubt, whether it be not better to Dye, than to survive the Loss of their best Friends, and nearest Relations.

<sup>\*</sup> Vid. Directions for the Cure of the Pla ue, by the College of Physicians; and Orders by the Lord Mayor and Aldermen of London, published 1665.

IF Fear, Despair, and all Dejection of Spirits dispose the Body to receive Contagion, and give it a great Power, where it is received, as all Physicians agree they do, I don't see how a Disease can be more enforced, than by such a Treatment.

Nothing can justify such Cruelty, but the Plea, that it is for the Good of the whole Community, and prevents the spreading of Infection. But this upon due Consideration will be found quite otherwise: For while Contagion is kept nursed up in a House, and Continually encreased by the daily Conquests it makes, it is Impossible but the Air should by Decrees become tainted, which by opening Windows, &c. will carry the Malignity first from House to House; and

and then from one Street to another. The shutting up Houses in this Manner is only keeping so many Seminaries of Contagion, sooner or later to be dispersed abroad: For the waiting a Month, or longer, from the Death of the last Patient will avail no more, than keeping a Bale of infected Goods unpack'd; the Poyson will sly out, whenever the Pandora's Box is opened.

As these Measures were owing to the Ignorance of the true Nature of Contagion, so they did, I sirmly believe, contribute very much to the long Continuance of the Plague, every time they have been practised in this City: And no doubt they have had as ill Effects in other Countries.

IT is therefore no wonder, that great Complaints were sometimes F 2 made made here against this unreasonable Usage; which, when they prevailed so far, as to procure some Release for the Sick, were remarkably followed with an Abatement of the Disease. The Plague in the Year 1636 began with great Violence, but Leave being given by the King's Authority for People to quit their Houses; it was obferved, That not one in twenty of the well Persons removed fell Sick, nor one in ten of the Sick dyed\*. Which single Instance alone, had there been no other, should have been of Weight ever after to determine the Magistracy against too strict Confinements. But besides this, a preceding Plague, viz. in the Year 1625, affords us another Instance of a very remarkable Decrease upon the discontinuing to

<sup>\*</sup> Discourse upon the Air, by Tho. Cock.

shut up Houses. It was indeed so late in the Year, before this was done, that the near Approach of Winter was doubtless one Reason for the Diminution of the Disease, which followed: Yet this was fo very great, that it is at least past dispute, that the Liberty then permitted was no Impediment to it: For this opening of the Houses was allowed of in the beginning of September; and whereas the last Week in August, there dyed no less than 4218, the very next Week the Burials were diminuished to 3344, and in no longer time than to the fourth Week after, to 852 \*.

Since therefore the Management in former Times neither answers the Purpose of discovering the Beginning of the Infection, nor of put-

<sup>\*</sup> Vid. The shutting up of Houses Soberly debated.
Anno, 1665.

ting a stop to it when Discovered, other Measures are certainly to be taken; which I think should be of this Nature.

INSTEAD of ignorant old Women, who are generally appointed Searchers in Parishes to enquire what Diseases People dye of, That Office should be committed to Understanding and Diligent Men, whose Business it should be, as soon as they find any have dyed after an uncommon Manner, particularly with livid Spots, Buboes, or Carbuncles, to give Notice thereof to the Magistrates; who should immediately fend skilful Physicians to Visit the Houses in the Neighbourhood, especially of the Poorer fort, among whom this Evil generally begins; and if upon their Report it appears, that a Pestilential Distemper is broke out among the Inhabitants,

habitants, They should without Delay order all the Families, in which the Sickness is, to be Removed; The Sick to different Places from the Sound; but the Houses for both should be three or four Miles out of Town; and the Sound People should be stript of all their Cloaths, and washed and shaved, before they go into their new Lodgings.

No Manner of Compassion and Care should be wanting to the Discassed; to whom, being now in clean and airy Habitations, there would, with due Cautions, be no great Danger in giving Attendance. All Expences should be paid by the Publick, and no Charges ought to be thought great, which are counterbalanced with the saving a Nation from the greatest of Calamities. Nor does it seem to me at all unreason-

reasonable, that a Reward should be given to the Person, that makes the first Discovery of Infection in any Place; since it is undeniable that the making known the Evil to those, who are provided with proper Methods against it, is the first and main Step towards the overcoming it.

When the Sick Families are gone, all the Goods of the Houses, in which they were, should be burnt; nay the Houses themselves, if that can conveniently be done. And after this all possible Care ought still to be taken to remove whatever Causes are found to breed and promote Contagion. In order to this, the Overseers of the Poor (who might be assisted herein by other Officers) should visit the Dwellings of all the meaner fort of the Inhabitants, and where they find them

them stifled up too close and nasty, should lessen their Number by sending some into better Lodgings, and should take Care, by all Manner of Provision and Encouragement, to make them more cleanly and sweet.

No good Work carries its own Reward with it so much as this kind of Charity; and therefore be the Expence what it will, it must never be thought unreasonable. For nothing approaches so near to the first Original of Contagion, as Air pent up, loaded with Damps, and corrupted with the Filthiness, that proceeds from Animal Bodies.

Our common Prisons afford us an Instance of this, in which very few escape, what they call the Goal Fever, which is always attended with a Degree of Malignity

Stench of the Place: And it would certainly very well become the Wifdom of the Government, as well with Regard to the Health of the Town, as in Compassion to the Pri-soners, to take Care, that all Houses of Confinement should be kept as Airy and Clean, as is consistent with the Use, to which they are designed.

THE Black Assize at Oxford, held in the Castle there in the Year 1577, will never be forgot\*; at which the Judges, Gentry, and almost all that were present, to the Number of 300, were killed by a poysonous Steam, thought by some to have broke forth from the Earth; but by a noble and great Philosopher†

<sup>\*</sup> Camden. Annal. Regin. Elizab.

<sup>†</sup> Lord Verulam, Natural History, Cent. 10. Num. 194.

more justly supposed to have been brought by the *Prisoners* out of the *Goal* into *Court*; it being observed, that they alone were not injured by it.

At the same time, that this Care is taken of Houses, the proper Officers should be strictly charged to see that the Streets be washed and kept clean from Filth, Carrion, and all Manner of Nusances; which should be carried away in the Night Time; nor should the Laystalls be suffered to be too near the City. Beggars and Idle Persons should be taken up, and such miserable Objects, as are neither fit for the common Hospitals, nor Work-houses, should be provided for in an Hospital of Incurables.

Orders indeed of this kind are necessary to be observed at all times,

G 2 espe-

especially in populous Cities; and therefore I am sorry to take Notice, that in these of London and Westminster there is no good Police established in these Respects; for want of which the Citizens and Gentry are every Day annoyed more ways than one.

If these early Precautions, we have mentioned, take Effect, there will be no need of any Methods for Correcting the Air, Purifying Houses, or of Rules for preserving particular Persons from Infection: To all which, if the Plague get head, so that the Sick are too many to be removed, Regard must be had.

As to the first; Fire has been almost universally recommended for this Purpose, both by the Ancients and Moderns; who have advised to make frequent and nume-

rous Fires in the Towns infected: By which Means, it is faid, Hippocrates preserved Greece from a Plague, which was entring into it from Æthiopia \*. And it is certain, that some evil Dispositions of the Air, particularly fuch as proceed from Damps, Exhalations, &c. may be corrected by Fire, and the Predisposition of it to receive Infection from these Causes fometimes removed. But when the Distemper is actually begun, and rages, fince it is known to be spread and increased by the Heat of the Summer, and on the contrary checked by the cold in Winter; undoubtedly, whateverincreases that Heat will so far add Force to the Disease. Whether the Service, Fires may do by correcting any other ill Qualities of the Air, will

<sup>\*</sup> Galen. de Theriac. cap. 16.

counterbalance the Inconvenience upon this Account, Experience only can determine; and the Fatal fuccess of the Tryals made here in the last *Plague*, is more than sufficient to discourage any surther Attempts of this Nature; for *Fires* being ordered in all the *Streets* for three Days together, there dyed in one Night following no less than 4000; whereas in any single Week before or after, not much above three times that Number were carryed off.

What has been said of Fires, is likewise to be understood of firing of Guns, which some have too rashly advised. The proper Correction of the Air would be to make it fresh and cool. Accordingly the

<sup>+</sup> Hodges de Peste, pag. 24.

Arabians\*, who were best acquainted with the Nature of Pestilences, advise People to keep themselves as airy as possible, and to chuse Dwellings exposed to the Wind.

For keeping Houses cool, they took to be the best Method of purifying them; and therefore to answer this End more fully, they directed to strew them with cooling Herbs, as Roses, Violets, Water-Lillies, &c. and to be washed with Water and Vinegar; than all which, especially the last, nothing more proper can be proposed: Though it be directly contrary to what Modern Authors mostly advise, which is to make Fumes with hot Things, as Benzoin, Frankincense, Asa Foetida, Storax, &c. from which I fee no reason to expect any Virtue

<sup>\*</sup> Rhazes de re Medica, lib. 10. c. 16.

to destroy the Matter of Infection, or to keep particular Places from a Disposition to receive it; which are the only things here to be aimed at. The Smoak of Sulphur, perhaps, as it abounds with an Acid Spirit, which is found by Experience to be very penetrating, and to have a great Power to repress Fermentations, may promife some Service this way. But it is of more Consequence to be observed, that as Nastiness is a great Source of Infe-Etion, so Cleanliness is the greatest Preservative: Which is the true . Reason, why the Poor are most obnoxious to Difasters of this Kind.

of Houses, is to consider by what Means particular Persons may best defend themselves against Contagion; for the effectual doing of which it would be necessary to put the Humours

Humours of the Body into such a State, as not to be alterable by the Matter of Infection. But fince this is no more to be hoped for, than a Specific Preservative from the Small-Pox; the most that can be done, will be to keep the Body in fuch Order, that it may fuffer as little as possible. The first Step towards which, is to maintain a good State of Health, in which we are always least liable to suffer by any external Injuries; and not to weaken the Body by Evacuations. The next is, to guard against all Dejection of Spirits, and immoderate Pafsions; for these we daily observe do expose Persons to the more common Contagion of the Small-Pox. These Ends will be best answered by living with Temperance upon a good generous Diet, and avoiding Fastings, Watchings, extreme Weariness,

ness, &c. Another Defence is, to use whatever Means are proper to keep the Blood from Inflaming. This, if it does not secure from contracting Infection, will at least make the Effects of it less violent. The most proper Means for this, according to the Advice of the Arabian Physicians, is the repeated Use of acid Fruits, as Pomegranates, Sevil Oranges, Lemons, tart Apples, &c. But above all of Wine-Vinegar in small Quantities, rendered grateful to the Stomach by the Infusion of some such Ingredients as Gentian Root, Galangal, Zedoary, Juniper Berries, &c. Which Medicines by correcting the Vinegar, and taking off some ill Effects it might otherwise have upon the Stomach, will be of good Use: But these, and all other hot Aromatic Drugs, though much recommended

## (51)

mended by Authors, if used alone, are most likely to do hurt by over beating the Blood.

But fince none of these Methods promise any certain Protection; as leaving the Place infected is the furest Preservative, so the next to it, is to avoid, as much as may be, the near Approach to the Sick, or to fuch as have but lately Recovered. For the greater Security herein, it will be advisable to avoid all Crouds of People. Nay it should be the Care of the Magistrate to prohibit all unnecessary Assemblies; and likewise to oblige all, who get over the Disease, to Confine themselves for some time, before they appear abroad.

THE Advice to keep at a Distance from the Sick, is also to be understood of the Dead Bodies: H 2 which which should be buried at as great a Distance from Dwelling Houses, as may be; put deep in the Earth; and covered with the exactest Care. They should likewise be carried out in the Night, while they are yet fresh and free from Putrefaction: Because a Carcass not yet beginning to Corrupt, if kept from the Heat of the Day, hardly emits any kind of Steam or Vapour.

As for those, who must of necessity attend the Sick; some surther Directions should be added for their Use. These may be comprehended in two short Precepts. One is, not to swallow their Spittle while they are about the Sick, but rather to spit it out: The other, not so much as to draw in their Breath, when they are very near them. The reason for both these appears from what has been said above concerning

cerning the Manner, in which a found Person receives the Infection. But in case it be too difficult constantly to comply with these Cautions, The holding to the Nostrils a Sponge wet with Vinegar, may in some measure supply their place.

THIS is the Sum of what I think most likely to stop the Progress of the Disease in any Place, where it shall have got Admittance. If some few of these Rules refer more particularly to the City of London, with small Alteration they may be applied to any other Place. It now remains therefore only to lay down some Directions to hinder the Distemper's spreading from Town to Town. The best Method for which, where it can be done, is to cast up a Line about the Town infected, at a convenient Distance; and by placing a Guard, to hinder

der People's passing from it without due Regulation, to other Towns: But not absolutely to forbid any to withdraw themselves, as they have now done in France, according to the usual Practice abroad; which is an unnecessary Severity, not to call it a Cruelty. I think it will be enough, if all, who defire to pass the Line, be permitted to do it, upon Condition they first perform Quarentine for about 20 Days in Tents, or other more convenient Habitations. But the greatest Care must be taken, that none pass without conforming themselves to this Order, both by keeping diligent Watch, and by punishing with the utmost Severity, any that shall either have done so, or attempt it. And the better to discover such, it will be requisite to oblige all, who travel in any Part of the Country, under the same Penalties, 100

## (55)

Penalties, to carry with them Certificates either of their coming from Places not Infected, or of their paffing the Line by permission.

This I take to be a more effectual Method to keep the Infection from spreading, than the absolute refusing a Passage to People upon any Terms. For when Men are in fuch imminent Danger of their Lives, where they are; many, no doubt, if not otherwise allowed to escape, will use Endeavours to do it fecretly, let the Hazard be ever fo great. And it can hardly be, but some will succeed in their Attempts; as we see fell out in France notwithstanding all their Care. But one that gets off thus clandestinely, will be more likely to carry the Distemper with him, than twenty, nay a hundred, that go away under

der the preceding Restrictions: Especially because the Infection of the Place, he flies from, will by this Management be rendered much more intense. For confining People, and shutting them up together in great Numbers, will make the Distemper rage with augmented Force, even to the increasing it beyond what can be easily imagined; As appears from the Account, which the learned Gaffendus \* has given us of a memorable Plague, which happened at Digne in Provence, where he lived, in the Year 1619. This was so terrible, that in one Summer out of ten thousand Inhabitants, it left but fifteen bundred, and of them all but five or fix had gone through the Disease. And he affigns this, as the princi-

<sup>\*</sup> Notitia Ecclesiæ Diniensis.

pal Cause of the great Destruction, That the Citizens were too closely confined, and not suffered so much as to go to their Country Houses. Whereas in another Pestilence, which broke out in the same Place a year and half after, more Liberty being allowed, there did not dye above one bundred Persons.

For these Reasons, I think, to allow People with proper Cautions to remove from an infected Place, is the best Means to suppress the Contagion, as well as the most humane Treatment of the present Sufferers: But though Liberty ought to be given to the People, yet no sort of Goods must by any means be suffered to be carried over the Line, which are made of Materials retentive of Infection. For in the present Case, when Infection has seized any Part of a I Country.

Country, much greater Care ought to be taken, that no Seeds of the Contagion be conveyed about, than when the Distemper is at a great Distance; because a Bale of Goods, which shall have imbibed the Contagious Aura when packt up in Turkey, or any remote Parts; yet, when unpackt here, may chance to meet with so healthful a Temperament of our Air, that it shall not do much hurt. But when the Air of any one of our Towns shall be so corrupted, as to spread and maintain the Pestilence in it, there will be little reason to believe, that the Air of the rest of the Country is in a much better State.

FOR the same Reason Quarentines should more strictly be enjoined, when the Plague is in a bordering Kingdom, than when it is more remote.

Country

I have

I have now gone through the chief Branches of Preservation against the Plague. And shall only add, that if the Burning of Goods, which has been proposed, be thought any Way offensive or inconvenient, The Burying of them six Feet, or more, under Ground may answer the Purpose as well.

What has been said of the Nature of Contagion, upon which the foregoing Directions are grounded, may also be of Use towards establishing a better Method of Cure, than Authors have commonly taught: But to engage in this is beyond the present Design.

## FINIS.

chief Branches of Preferences are gainst the Player. And shall only add, that if the Burning of Goods, which has been proposed, be thought any Way offendre or inconvenient. The Burning of them six seet, or more, under Ground mey answer the Purpose as well.

What has been faid of the Nature of Contagion, upon a leich the foregoing Directions are grounded, may also be of Use towards entablishing a better Method of Gare, than Ambors have commonly taught: But to engage in this is beyond the present Delign.

## FINIS

