Mr. Maitland’s account of inoculating the small pox: vindicated, from Dr. Wagstaffe’s misrepresentations of that practice; with some remarks on Mr. Massey’s sermon. The second edition. To which is added, his first account of inoculating the small pox.

Arbuthnot, John, 1667-1735.

TO THE HONOURED Sir HANS SLOAN, Bart. PRESIDENT Of the Colledge of PHYSICIANS, &c.

ERMIT Me, Honoured SIR, to Inscribe these few Sheets to you. They are written in Vindication of the Practice of Inoculating the SMALL POX.

Your known Candour and Experience encourage me to submit them to your Censure, with Regard not only to the Safety of the Method; but like\wise to the Truth of the Facts here contested. I am under great and many Obligations,

Honoured Sir,

Your most Obedient Humble Servant, CHARLES MAITLAND.
Am very Sensible of the Respect that is due to the Profession, and 
Character of the Author of the Let|ter against Inoculating the Small Pox; but 
am no less sensible of the Obligation I ly under to vindicate my own 
Re|putation, which a violent Fit of Sickness hath hitherto hinder'd me from 
doing. And I can do it with the more Freedom, be|cause I am conscious to 
my self, that I be|gan this Practice in England with the same View to the 
Pub|lick Good, with which, I hope, the Learned Author condemns it. I must 
take the Liberty to say, that allowing the Doctor's Abilities to be as great as 
pos|sible in his own Profession, he seems not quite so well qualify'd to write 
upon this Subject; because of the Narrowness of his 

Experience (as far as appears by his Letter) and his partial Credulity, or 
Incredulity in Matters of Fact, which he takes from others; and lastly, 
because of strong Pre|judices, which impose upon his most excellent 
Understand|ing; and draw him into Reasonings, which either are 
inconsequent, or conclude strongly for the Practice of Inoculation, which 
they are brought to overturn. All these, I believe, will appear very plain to 
any Im|partial Reader, in the following Animadversions, in which I will 
endeavour to be as short as the Subject will allow.

The Letter pretends to be an Admonition to Physicians not to meddle in this 
Practice of Inoculation, 'till they are better ascer|tain'd, by Experience, of 
the Success of it: At the same Time, it is a most warm Dis|suasive, not only 
to Physicians, but to all Sorts of People, not to practise it at all; and 
consequently, to deprive them of all Possibility of coming by Experience. 
Wou|ld it not found somewhat absurd, if any one should say to a young 
Physician, Pray, Sir, don't Practise 'till you have Experience? But it is still 
more so in this Case, because in a Practice that is entirely to be laid aside, 
you can neither have the Benefit of your own, nor other Peoples Experience.

As to Physicians meddling with this Practice of Inoculation, I can only say, 
it may favour too much of Novelty to be bigotly 

zealous for it; and too much of a Faculty-Interest to be so violent against it. 
Physicians cannot ingraft People against their own, or their Parents Consent; 
and a Physician would be out of his Duty, who should persuade them to it 
contrary to their Inclinations: On the other Hand, If a Person, from the 
Experience of the Fatality of the Small Pox in gene|ral, or in his own Family 
in particular, should resolve to ingraft his Child, any Physician, who should 
dissuade him from it, might, in a great measure, be chargeable with the fatal 
Consequences of the Neg|lect of a Method, which the Parent had pro|pos'd, 
as the only Moans to save his Child's Life: And he would be still as much to 
blame, if when the Parent had resolv'd to ingraft his Child, he should refuse 
to attend him. It is very common with Parents, not only to leave their
Children in Houses infected with the Small Pox, but to bring them into the Room, where their Brethren or Sisters lye ill of them; and a Parent who does so, conveys the Infection to his Child as deliberately, and according to the Doctor, certainly more than he, who orders him to be Inoculated. Would it not then be equally, impertinent in the Physician to deny his Attendance in either Case?

I must put the Doctor in Mind, that there are very few of the most useful Discoveries in Physick, that have not been strenuously oppos'd by many of the Faculty upon their first Appearance. There is extant a Decree of the College of Physicians at Paris, against the Use of Antimonial Vomit's: It were easy to assign many Instances of the like Nature.

As the Doctor is surpriz'd, that an Experiment, practis'd only by a few ignorant Women, amongst an illiterate and unthinking People, should on a Sudden, and upon a slender Experience, so far obtain in one of the Politest Nations in the World, as to be receiv'd into the Royal Palace. I hope he has not forgot, that the Practice of Curing Intermittent Fevers by the BARK, was introduc'd of a Sudden, by a barbarous Indian, if not into the Royal Family, into the Family of a Viceroy; and thence transmitted to us.

Page 7.] The Blood of the English if we speak of it as National, is the Product of the richest Dyet, &c. Ergo, to bring 'em to a spare Dyet before they have the Small Pox, must be extremely dangerous and hurtful. This must be the Doctor's Conclusion: mine, I own, would be the direct contrary. If the Inflammatory State of the Blood, arising from the Richness of the Dyet, makes the Small Pox in England very mortal; That Practice, which either takes the Advantage of a contrary State of the Blood, or by a Spare Dyet introduces it, must be beneficial.

Page 8.] The finest, the most Volatile, and indeed, Insensible Particles of the Animal Juices, are the most penetrating, and consequently the most contagious. And for the same Reason, the most noxious: Does it follow therefore, To convey the Infection by the grosser and sensible Parts, must be extremely unfit and dangerous? I confess, I should have infer'd the contrary.

The Symptoms are more or less, and the Distemper appears in a greater, or a less Degree, according to the State of the Blood at the Time of Infection. Therefore the Practice of Inoculation is highly to be encourag'd, because it either finds, or puts the Blood into a good State, before the Infection; seems to be a more natural Conclusion, than the contrary One.

Page 10.] If we could be assur'd, that the Distemper would not be equally uncertain by Inoculation, according to the Nature of the Injected Matter, or the Disposition of the Fluids, in the Person who receives it; so that it would constantly prove of the mildest Kind, Inoculation would, no doubt, be a
very rational and useful Practice. The Doctor surely will not affirm, that a Person Inoculated is equally uncertain of the Circumstances mention’d, with one who catch’es the Small Pox by the common Way of Infection. First, He may be assur’d, if the Inoculation takes Place, of the Time when he shall have the Small Pox. Secondly, That he has not the Infection by the insensible Particles, which the Doctor owns to be the most contagious; or which is near the same Thing, convey the Contagion the strongest, Thirdly, He may be as sure, as his Operator is careful, that he is infected by a favourable Kind. And, Fourthly. He may be much more sure of the Disposition of his Fluids, than a Person who catches them by Chance, after a Surfeit, or a Debauch: And after all this, he may be assur’d, if he has not absolute Certainty, (which, I believe, one has hardly in Blood-letting) that he has a much greater Probability to escape, which is sufficient Ground for human Prudence to act upon: If the Doctor will deny those Things, I think it is Folly to reason upon this Subject any longer: And if, as the Doctor says, Inoculation may be a more uncertain Method to give the Contagion, than that which Nature has pursu’d; it may be, notwithstanding that, much more safe.

Page 11.] The very Choice that is made of a thick purulent Matter, to intermix immediately with the Blood, seems a little repugnant to our Reason, since we know, that the Particles have such a different Contexture, and such different Powers to Attract. It may proceed from my Ignorance, or Dulness, but, I confess, I do not easily apprehend the Meaning of this Sentence; Whether by the Particles he means the Particles of purulent Matter, or the Particles of Blood; or whether the Particles of purulent Matter have different attractive Powers, from those of the Blood, is not obvious from the Construction of the Sentence. I choose rather to understand him in the last Sense, because he has afterwards very sagaciously discover’d, that the blended Particles of Blood with Blood, may, in all Reason, be thought more likely to unite, and less liable to raise Commotions. But it happens unluckily in the Case of Inoculation, the Design is to raise a Commotion; and the purulent Matter, for the Reason mention’d by him, is fittest for that Purpose; And his Observation, that purging Medicines injected into the Blood will Purge, does not prove, that the Pus of the Small Pox, mix’d with the Blood, may not raise the Small Pox. What he says in this Paragraph, as likewise in the following, concerning the Experiment of the Mangey Dog, proves, that Pus is a more proper Vehicle to convey Infection than Blood; I cannot find any more in it.

Page 13.] It never came into the Heads of the Practitioners above-mention’d to raise Distempers by Art in a human Body. Then I will be bold to say, it never came into their Heads to practise Physick; which, considered in a true Light, is founded upon that single Principle of Curing Natural, by raising
Artificial Diseases. What is Bleeding, but an artificial Haemorrhagy; Purging, but raising an artificial Diarrhaea? Does the Vomiting produced by a Surfeit, and that produced by a Medicine differ so much, as that the One must be call'd a Disease, and the Other not? Are not Blisters, Issues, and Setons, artificial Imposthumations? I hope he has not forgot the great Master Hippocrates. The Wounds and Amputations of Surgeons, differ only from accidental Ones, by the Manner and Intention; Morbus est ille corporis status qui functiones Animales laedit: And it may be likewise observ'd, that Physicians produce those Diseases in their Patients often by Way of Prevention as well as Cure; and in this they do nothing but imitate Nature, which often attempts the Cure of one Disease by another.

Page 14.] His next Argument is taken from the fatal Consequences of this very Matter itself returning into the Blood, in the very Height of the Small Pox, where there seldom is a full and sufficient Discharge by the Skin, &c. One would imagine, that the natural Inference from this, would be to the Advantage of Inoculation; For if there are terrible Symptoms, which arise from Want of a sufficient Discharge of the purulent Matter in the Small Pox; Inoculation, which provides for such a Discharge, by artificial Out-lets, must needs be useful; and seems more proper than the Blisters, which the Physicians apply on that Occasion. As to the fatal Consequences arising for Want of a sufficient Discharge upon the Skin, I am afraid the Case is quite different from what the Doctor represents; for the more Matter is discharged upon the Skin, the more is often return'd into the Blood; witness the confluent Kind of Small Pox, where the Discharge upon the Skin, as well as the Symptoms arising from the Return of the Matter into the Blood, are both the greatest: And I believe it will be found, the less the Discharge upon the Skin, the less will be the Danger from these Symptoms. The Doctor says, That one may always observe in this artificial Method (even where the Distemper is the fairest and most kindly) that the Pustules scarce ever plump up to that Degree, or contain so laudable a Matter, as they do in the natural Sort. Here is an odd Jumble of the Words always, scarce ever: Suppose for scarce ever one put seldom, then the Sentence runs thus; One may always observe the Pustules seldom plump up, &c. What happens but seldom, happens some times; and to observe always That not to happen, which happens sometimes, is odd, or oddly express'd. I would be glad to know how many Cases the Doctor has observ'd, to frame this so general a Proposition upon;

of the contrary of which, Hundreds of Persons about this Town, who know the Disease perfectly, have been Eye-Witnesses.

Page 16.] The Doctor foresees some Inconvenience that must happen, from those viscid Particles intermixing with the Blood, without undergoing the
common Alterations of Aliment. But they have that in common with the *Volatile* and most *Insensible Particles*. But then they are *viscid*, and therefore, (according to the Doctor's Reasoning) don't convey the Infection so strong: But they *occasion* great Disorders; *Not* so great as the *Insensible* and *Volatile Particles*. At last, they *break through* the Glands of the Skin: If only the small Quantity of purulent Matter, that mixes with the Blood, break thro' the Pores of the Skin, the Eruption, indeed, would be very small; But to cause an *Eruption*, is the very Intention of the Operation; the *Small Pox* cannot be produc'd without it: And if the Doctor still insists, that it is *only like the Small Pox*; all I can say is, If he had been pleas'd to attend Multitudes of Cases of *Inoculated Persons*, here and else-where in England, since this Practice began, he must have been convinc'd, that the *Eruptions*, produc'd by *Inoculation*, are the *Genuine Small Pox*. If his Arguments so far prevail, as to hinder any future *Inoculation*, he must for ever continue in his Mistake; If the Patient recovers, then it was only some thing like the *Small Pox*; If any one dies, then to be sure it was the *Small Pox* catch'd by *Inoculation*, and of the worst Sort. In this Paragraph it is no *Small Pox*; by and by, it is a *Small Pox* so bad, that it is *capable* of spreading the *Small Pox* through a *whole City*; and an *artificial Way* of *depopulating* a *whole Country*. This Way of *Arguing* is a very plain Proof of the *Strong Prejudices* the Doctor lyes under; and that as he has taken up his Opinion early, he is resolv'd to defend it obstinately.

Page 20.] The *Inoculators* are charg'd with *Acting like Empirics*, because *they are not ascertain'd of the different Doses for Children and Adults*. There does not seem to be any great Matter in this *Nicety*, by *Experience*, as it stands hitherto; a small *Quantity* will communicate the *Small Pox*, and a greater has been found not to do hurt in *any* one *Instance*. If the *Inoculation* is *perform'd* by *Incision*, the different *Apertures* will answer that *Intention*: However, there is a great *Difference* between recommending *Caution*, and forbidding the *Practice*: It is still more strange to forbid the *Practice*, 'till that is determin'd, which can only be found out by *Practice*. According to this *Principle*, it had been impossible ever to have found out any *Thing* in *Medicine*; for he that gave the first *Dose* of a *Vomiting*, or *Purging Medicine*, or of any other, could

never be sure of the proper *Dose*; nay *farther*, according to this *Doctrine*, it is impossible to give any *Body* their first *Dose* of any *Medicine*: For who can tell what is the proper *Dose* for any particular *Person*, there being often *Singularities* in every one's *Constitution*: In all these *Matters*, Mankind generally govern themselves by *common Sense*, and strong *Probabilities*; there being *no* *absolute Certainty* in any human *Affairs*.

Page 25.] The Doctor returns to his *former Point*, that it is *not the Genuine Small Pox*, and consequently *no Security against that Disease*. The *Matters of Fact* I will answer by themselves; all I shall say at present is, that if the *Symptoms* of the *Ingrafted Small Pox* are more *mild*, than those of the *natural Sort*, I hope the Doctor will not bring that as an *Objection* against
the Practice. I believe the Patient, in this Case, has just as great Certainty for not having the Small Pox again, as any other Person who has had them; which is no absolute one. Those who are Infected by any Method, I believe, are much in the same Condition, as to their Security from the Disease for the future; for which, I will give the Doctor this one plain Proof, which is sufficient to establish a moral Certainty. This Practice of Inoculation has been continu'd for many Years in several Countries; if the Inoculated had been subject to catch the Small Pox a second Time, something of this Kind must have happen'd; and a very few Instances of this, must have put an End to the whole Practice. For can any one imagine, that People in their Senses would have continu'd a troublesome Experiment, which was not effectual for the Purpose for which it was design'd? I will take the Freedom to say, that this single Reflection is a stronger Proof of this Point, than all the Doctor's Doubts and Suggestions, who knows nothing to the contrary; as I shall shew by and by. May it not at least be advisable to allow a Truce in the Dispute, 'till an uncontrovertible Case of that Kind happens?

Page 28.] But, Innoculation does not always take Place and produce the Disease: is Therefore the Practice to be left off? There are some Persons, who by a Speciality of their Constitutions, seem hardly susceptible of the Distemper; and others, who have had the Disease, but it has been mistaken, or forgot. They go farther in Turky, and affirm, that the very running Sores are a Security against the Small Pox. There may be, indeed, a strong Presumption, that Persons, who have had so severe a Tryal as Inoculation, may not be susceptible of the Distemper. Besides, there are several Incidents in performing the Operation, which may not be carefully attended to; if the Patient has not the Small Pox, there is little Hurt done. There are some, whom a very strong Dose of Phy[sick]

will not purge: What then? must we never afterwards give a Purge?

If the Doctor's Aphorism, laid down, Page 36, That an Experiment, to make it useful, always must be nearly uniform; there must be no such Thing as the Practice of Physick; unless by the Word nearly he allows a very great Latitude.

I cannot allow it as a solid Argument against Inoculation, that the French and Italians have not begun it; no more, than that the House of Bourbon has never been inoculated. Were the Doctor's Letter publish'd in Italian too, as it is in very elegant French, both Nations, to be sure, will be sufficiently frighten'd from ever attempting this Practice: And to make the Antidote still more universal, let us have it in Slavonic and High-Dutch, Welsh and Irish also.

What the Doctor says, Page 44, of the Attention that is to be given to the natural Weaknesses of the Constitutions of the Persons Inoculated, is a
very proper Caution; and perhaps Miscarriages, if any such there be, may be owing to the Neglect of it. But, as I hinted before, if the least ill Success, even in the most innocent Branches of the Practice of Physick, arising from Want of Care, or Skill, should be a perpetual Bar to the Repitition of them, People must leave off to Purge, Vomit, Bleed, or even to cut Corns, of which Operation several die in a Year within the Bills of Mortality.

Page 45.] But it is possible, and even probable, the Matter of the Small Pox may communicate the Diseases of the People from which it is taken. This is hard! The Doctor will scarcely allow, that the Matter of the Small Pox will communicate the Small Pox; but it is probable, that it will communicate any other Disease. Que vive Thomas Diaphoinus, il n'a Jamais ete vaincu en dispute! How are we sure, that the Aliment, or Drugs, both for External and Internal Uses, don't communicate the Diseases; nay, the very natural Qualities of those Animals from which they are taken? I think, indeed, the Election of wholesome Subjects to Inoculate from, is a proper Caution; but the Doctor demands absolute Certainty, which cannot be found in any human Affair, and less still in any Medical or Chyrurgical Practice. Mankind in all those Matters govern themselves by the strongest Probabilities; and that these are on the Side of Inoculation, I shall plainly demonstrate.

Page 51.] The Doctor's Argument from the jarring Opinions of the Innoculators; if all he says were true, is just as strong against the Practice of Physick in General: For if no Body was to take any Medicine 'till Doctors cease to differ, I believe the Faculty would starve: May we not with more Truth affirm, that the Anti-inoculators (a Word more sonorous, and longer by two Syllables than that of Innoculators) are as inconsistent and changeable in their Opinions? One while they asserted, that it was impossible to give the Small Pox by this Method; when Experience had convinc'd them, some of 'em at least, of the Untenableness of this Doctrine; then they allow'd, if it prov'd mortal, that it was the Small Pox; if they esca ped, to be sure they would have them again; If it was a favourable Sort, then there was some inveterate Distemper transplanted with it; If any Boils or Imposthumations appear'd at the going off of the Disease, those were the Effect of the Inoculation, not the Consequence of the Small Pox in General, or of the Constitution of the Patient. These are certainly, not the Reasonings of ingenuous and inquisitive Philosophers, but the Cavils of interested Disputants; and it would be ridiculous, for any Man to be determin'd by the jarring Opinions, either of the one Side or t'other.

There is nothing material in the Way of Argumentation, 'till we come to Page 62. There this Practice is condemn'd, as it tends to propagate and continue an Infection in any Place. Here again it is the Small Pox; else why
should it spread the Small Pox? I answer, if it be true, that the Generality of Mankind have the Small Pox; if they

are rare in some Years, they must be rise in others; because a new Stock of Subjects susceptible of the Distemper is produc'd; and the Operation of this Distemper upon the Mass of Mankind in any particular Place, is nearly uniform. When this general Run of the Small Pox happens, I take it to be indifferent to the Mass of the Inhabitants of any Place in general, except in this one particular, that when the Disease is produc'd by a bad Constitution of Air, as it is most Epidemical, so it is then most mortal. Now if this Distemper should happen to be propagated by an artificial Method in a favourable Season, would not this be rather an Advantage to Mankind than otherwise? For example, The Doctor alledgeth that hardly one of a hundred hath dy'd of the natural Sort this Year; would it not then have been highly profitable to Mankind, that a general Run of the Small Pox had happen'd in so favourable a Season; and this would still operate more strongly for the Benefit of Mankind, if not only the Season, but the Method of Propagation had ten to one of odds of producing a mild Sort. So that this Argument of the Doctor's has the Misfortune, with a great many of the rest, to prove the Contradictory of his Conclusion: But without taking the Advantage of the Doctor's hardy Assertion, that hardly one of a hundred have dy'd this Year of the Small Pox:

I will examine it a little by Numbers. I have not all the Bills of Mortality by me, but by a small Specimen, the Accompt stands thus:

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By which it appears that the single Branch of Mortality occasion'd by the Small Pox is some Years 1/12 and in a Circle of twelve Years about 1/12 of the whole Mortality in general; For 21,788 is near 1/12 of 274,615. During this Term of Years, London wanted an Addition of near 22000 People yearly to keep it equally full. If all Mankind had the Small Pox, then 22000 People, one Year with another had it; of which 1/12 dy'd; If

one half of Mankind had the Small Pox, then 1 out of 6, who had the Distemper, dy'd of it. Which, by the way, shows the Doctor to be out in his Calculation; for if only 1000 die this Year, as perhaps may appear by the Bills, 100,000 must have been sick of the Distemper, to make his Assertion true, that one only of a hundred dy'd: If he means it only of Children, it is a strong Argument for Inoculation, because it allows that to be a favourable Age.

By the Bills of Mortality of Breslaw it appears, that the Mass of Mankind lose above 25 per Cent, before they are a Year old; that is, of a 100 that are born, more than 25 die that first Year; I may say with great Probability that not 1/9 of those have the Small Pox at all; but die of other Diseases; and that in the Account, as it stands before us 8 of 9 of Infants may be reckon'd neither Subjects of the Distemper, nor of this Practice, but as it were non-Entities. Therefore out of the 22000 People, the yearly Recruits of London abovemention'd, subtracting 4000, there remains 18000, of which yearly there died above 1800 of the Small Pox; that is, 1/10; So that the Small Pox may be reckon'd to cut off 1/10 of Mankind above the Age of one Year. I wish the World is not malicious enough to say, that Physicians (like the Clergy) are now strugling for their Tenths. But to proceed, if, as I said, all Mankind above a Year old have the Distemper, I out of 10 dies of it; If one half, then 1 out of 5, which have the Distemper the natural way, dies of it: If ¼ of Mankind have the Small Pox once in their Life, then of them 2 out of 15 die; If 5/6, then 3 out of 25, which have the Distemper, die of it. According to D. Netleton's Calculation; out of 1245 who had the natural Small Pox in some Neighbouring Towns in Yorkshire there died 270, which is about 22 out of a hundred. As to the prudential Part of Inoculation, it is all one whether a greater or lesser Number have the Small Pox; for the Chance of not dying by the Small Pox the natural Way, is made up of the Chance of escaping the Distemper, and that of escaping in the Distemper. If ½ of Mankind have the Distemper, it is ½ of J or 1/10. If ¼ of Mankind have the Distemper, then it is ¾ x ¼ or 6/30 or 1/5 &c. Still all Mankind must be consider'd with the Seeds of a Distemper within them which has the Chance of 1 to 9 to cut them, off. Then surely they don't merit such hard Names, of Homicides and Spreaders of Infection, who do but attempt to lessen the Dread and Danger of this terrible Pestilence.

By the Accounts of the Inoculation in England and the Plantations, tho' it is an early Practice, and has not been manag'd with due Care and
Circumspection; out of about 500 on whom it has been perform'd, the Enemies of the Practice have not produc'd the Names of above 3 Persons that have died; allowing their Deaths chargeable on this Practice, which I believe is not in Fact true: A Practice which brings the Mortality of the Small Pox from one in ten to one in a hundred, if it obtain'd universally would save to the City of London at least 1500 People yearly; and the same Odds wou'd be a sufficient prudential Motive to any private Person to proceed upon, abstracting from the more occult and abstruse Causes which seem to favour this Operation. It is a self evident Proposition, that a Person who receives the Infection by Inoculation, has a much fairer Chance for his Life, than he who takes it the natural Way; unless it can be affirmed, that the having the Election of all the Circumstances of the Disease, is of no manner of Advantage. For Example, it must be of some Benefit, to know that one is to have the Distemper nine or ten Dayes before it comes, rather than to be surpris'd, or perhaps mistaken in it. To have it at an Age when it is not so mortal: To take it when the Body is in a temperate and cool State, rather than in a contrary one: When the Constitution of the Air is favourable, rather than malignant: After a cool Dyet and other due Preparations, rather than after a Surfeit or a drunken Bout. For if the principal Strokes towards the Cure, are in the Regimen, in the

Beginning of a Distemper; it must be still more so, in a Regimen before it begins. If the Doctor will deny these Truths, I have done. But if the having all the Circumstances abovemention'd in one's Power be of some Advantage, then the Practice of Inoculation cannot be hurtfull but beneficial to Mankind in general: Then why must an Experiment already practis'd with Success in an other Country, that bids fair to save the Lives of Multitudes, be entirely laid aside and crush'd in the Bud? Cannot the learned Physicians, who so zealously oppose it, have a little Patience, and Time will clear up many Things in it, which perhaps may be now doubtful? Therefore since this Practice cannot be hurtful but beneficial to Mankind in general, it ought not to be discouraged.

As to the Inconsistencies and Mistakes, the Doctor is pleas'd to charge me withall: I shall always be so ingenuous as to own such, as my Inadvertency or Want of Experience have subjected me to. What I wrote was according to the best Information or Experience I had at that Time. General Propositions, in practical Matters, are not to be understood in the Strictness of a Logical Universality. The Symptoms from which I exempted the Inoculated Small Pox, are to be understood in a Comparative Sense, with regard to those of the natural Sort; the Word usual will justify this Meaning, in
which any Reader, not quite Captious, will interpret them. If with all these Restrictions I cannot be favourably understood, I beg Par

don; and as I said before, I shall be always willing to recant any Mistake. But as on the one hand, I study to keep myself free from Prejudices, so as to be susceptible of any future Conviction, which may arise from Ex/perience; so I wou'd not submit a Point al-ready establish'd, to the silly Cavils of those who have none.

I am sure, I am not mistaken in the Account of the Inoculation at Newgate; but the Doctor is. I referr the Reader to my printed Journal; whereby it appea.rs, that the Operation was fairly and equally perform'd on all: And I can with great Truth, declare, that I had no Intention to make any Difference in the Incisions; nor was there, indeed, any made. The Doctor not having seen Evans, the Man who had had the Small Pox before, till next Day, when they were partly heal'd, this might occa-sion his Mistake. Nor was the Matter taken from a violent Flux-kind, but from a full distinct Coherent kind, and at the proper Time. Mrs. Tompions Boil (as he call's it) on her Arm; was not the same from the first Day of the Eruption; nor the only one she had: But was a fair, regular Pustule of the Small Pox, of which also she had others, if he had been pleas'd to examine. Alcock,

who had the Goal-Distemper, had also 60 Pustules, at least, of the Genuine Small Pox; with a gentle Fever before the Eruption. As to all of them, having had but few Eruptions; I hope, that is no Objection against the Practice. And as to the Time and Man-ner of their Pustules going off; they were much the same, as in the gentler Sort of Small Pox: Only that Alcock opening his with a Pin, made them fall off sooner. The Doctor might have taken Notice, that Eliz. Harrison, who had them as gently, at least, as any of them; has been employ'd since in Nursing above 20 People in the Small Pox, and never has catch'd them: Which any im-partial Person will judge to be a better Proof of the Genuiness of the Distemper, than all his Observations can evince to the contrary.

As to Mr. H____n's Case, it is true. But the Inference is only, that there was one Per-son, on whom the Inoculation did not take place. I hope the Doctor has not forgot that he own'd to me that Mr. Colt's Children had the true Small Pox; tho' their Case differ'd in nothing from those in Newgate; but in the Degrees of the Distemper.

As to the Experiment in St. Thomas's Hospital, after two vastly large Incisions, and an immoderate Quantity of the Matter ap-play'd; three Days and Nights Confinement of the Patient to his Bed, without opening his Bandage, a warm Regimen, in a hot Sea

son;

I visited him, (to know the Truth of the Noise that was made) on the sixth Day after the Operation, and saw no Eruptions, nor had he any; nor were his Incisions digested: I took the Freedom to ask Doctor Wadsworth then present, whether the Sores (pointing at them) were like those he saw at Newgate? And he fairly own'd, he cou'd not say they were. I again saw this
Patient a Week after, but still no Eruption; If any Eruptions happen'd between these Times, they could not be the Small Pox: And I believe, none who saw and attended both Experiments, can truly say, they were like those in Newgate.

I own that it seem'd probable that the six Persons in Mr. Batt's Family might have catch'd the Small Pox of the Girl that was Inoculated; but it is well known that the Small Pox were rife not only at Hertford, but in several Villages round it, many Months before any Person was Inoculated there: Witness Mr. Dobb's House in Christ's Hospital Buildings, where he himself died of the worst Sort with Purple; and his Children had it. Some other Families there, and particularly Mrs. Moss's, where the above-named Elizabeth Harrison, Inoculated in Newgate, attended several Persons under it, to prove whether she would catch the Distemper by Infection; Both Latin Boarding-Schools; Mr. Stout's and Mr. Loyd's Families;

Mr. John Dimsdale's Coachman and his Wise; and Mr. Santoon's Maid-Servant, who was brought to the same House, and died of the Confluent kind of the Small Pox; I took Matter from the said Coachman to Inoculate Mr. Batt's Daughter in the Country Farm House, the first Ingrafted in that Country. After this I took Matter also from Mr. Stout's Maid-Servant to Inoculate Mrs. Heath's two Sons; which were all Inoculated in that Town. Besides all these there were a great many more, whose Names I cannot at present call to mind both in Town and Country about it, who had the Small Pox, and several died of it, the Summer before I began this Practice: These are Matters of Fact, which the Doctor's Author can not disprove. To charge then the Spreading the Infection and the Consequences of it, upon two single Boys who were Inoculated in a Court in a manner separated from all the rest of the Town, which was fuller of the Small Pox before than after the Inoculation, is not agreeable to that Ingenuity which the Doctor seems to demand of his Adversaries.

The Case of Mr. De Grave's Daughter which fills up three or four Pages in the Letter, and upon which the Doctor lays the Foundation of his Hypothesis, the Reader may please to take from her Father's own Words in his Letter annex'd. From which it appears that the Girl had the Small Pox but once, of the favourable kind; and in all Probability by Inoculation. So far the Case is singular, that it did not take place till eleven Weeks after the Operation; and until the Blood was put into a Ferment by violent Motion. Here the Doctor triumphs in his Dilemma, Either she had, or she had not the Small Pox by Inoculation; If the first, then it is plain Inoculation is no preventive of the Disease; If the second, the Experiment is good for nothing. I think in this way of Argumentation, to make it conclusive, there ought to be a perfect Enumeration; but here is a Third Case, and the real one, not enumerated; which is, that the Girl had the Small Pox, and that but once, by Inoculation; tho' not at the same Time when the Doctor lays the Scene of his Dilemma. But to consider the Second Branch; allowing that this Small Pox was the natural Sort, and not produc'd
by Inoculation, of which, I think, the contrary is plain; sure it is a strange
Insence to say, that because Inoculation has not taken Effect in one
Subject, it is therefore good for nothing. The Doctor's excellent Judgment
will instruc him to reason with more Temper and Solidity in other Matters
of his Profession; and not make Use of his Aphorism, That one Instance is
as good as a thousand in Matters of Experience. What the Doctor says of his

Fears of a great Class of Hypothetical Diseases, is all vanish'd, and the Girl
is very well. I refer the Doctor upon this Head of the Preventive Power of
Inoculation, to the Letter which he lays so much Stress upon, from Boston;
where his Ally in this Dispute owns, That not one of the Inoculated (being
about three Hundred) during the Space of five or six Months, in a general
Run of the Small Pox, has had the Small Pox the natural Way, as far as we
know: But of this more afterwards.

As for his second Story of Captain Hus, it requires only a bare Reading
to make it ridiculous. For no unprejudic'd Person of common Sense can
believe that one, after having been Inoculated twice without any Effect,
would try it a third Time: But after a third Time, to try it a fourth, fifth, and
sixth Time, passeth all Degrees of Credibility. But it seems this Captain was
not very certain, whether it was five or six Times; one Inoculation had
quite slipped out of his Memory: he wanted one Quality, which the Proverb
demands in some Sort of People. Since the Doctor can give Credit to this
Story of Captain and at the same Time question the what is
said by eminent Physicians, who from their own and other Peoples
Observations on the Spot, where Inoculation is practis'd daily; I appeal to
my Readers, if I may not with Justice tax him of being partially

Credulous or Incredulous, as Facts make for or against his Purpose. And
with all due Respect to the Senate of Boston, I question whether a Bill, or an
Hypothesis, founded upon such a Fact, is more extraordinary. But alloving it to be true, what is the Inference? That a Person, who could not
catch the Small Pox by Inoculation, had them the natural Way: If that were
granted, will it prove, that one who has the Small Pox by Inoculation, may
afterwards have them the natural Way? If upon the same Authority, the
Doctor can believe the Story of the Muscovite Dragoon, or the Inoculated
Soldiers in the French Army; I wish him much Joy. I promise him I will
not (like the Gentry who went in quest of St. Alban's Trough) ride twenty
Miles to be able to disprove it. I should be glad to know, which Way the
Doctor supports so bold an Assertion, That [Page 17] by the Account Dr.
Nettleton gives, as also by the best Observation upon those who have been
Inoculated in this City, scarcely a fourth Part of them have had a true and
genuine Small Pox; I have read over carefully Dr. Nettleton's Account,
contain'd in his Letters printed in the Transactions of the Royal Society, No.
370; and for my Life I cannot find any Thing to justify this Assertion; on the
contrary he says, We have not yet found, that ever any had the Distemper
twice, neither is there any Reason to suppose it possible; there being no
Difference
that can be observ'd betwixt the natural and artificial Sort, (if we may be 
allow'd to call them so) but only that in the latter the Pu/stules are 
commonly fewer in Number; and all the rest of the Symptoms are in the 
same Pro/portion more favourable. I hope there is at least as much Credit 
due to an ingenious Pra/citioner, who writes from a very extended 
Experience, as to one who writes for the most Part by Hearsay.

As to those who have been Inoculated in London; to oppose my own, and 
other Per/sons Testimony from ocular Inspection, against his, who talks by 
Report, may seem perhaps too great Presumption. I therefore challenge the 
Doctor to name the Cases and Authori|ties whereby he supports such a wild 
Assertion.

As to Mr. Sp_+r's Case, I will not pre|occupy my Reader with any 
Reflection; but refer him to the Matter of Fact here subjoin'd, as it is 
testify'd by the Surgeon and Apothe|caries that attended him.

As to the Case of Lord B_+ts's Servant, I refer to the Account subjoin'd.

He is just as much misinform'd of the Case of Lord F_+s's Son, who had a 
favourable Sort of Small Pox, and was in no Danger of his Life; as the 
Physician who attended him will readily own.

As to the unfortunate Accidents which have happen'd to some of the First 
Rank by

this Ingrafting Method; if I guess right who he means, one of them is 
perfectly well without any unfortunate Accident; and the Im|posthumation, 
which had no Dependance nor Communication with the Incision, is 
perfectly cur'd without any Exfoliation of the Bone, or any Hectic Fever. 
But it is hard to charge the common Accidents of the Small Pox in general, 
upon this Method in par|ticular.

It is no less a Misinformation, that the Children of a Nobleman, understood 
in his Letter, were Ingrafted from a bad Sort of Small Pox. As to what he 
says of the poorer Sort of People of Scotland, running about with the Small 
Pox upon them, without et/ther Shoes or Stockings; the Doctor seems here 
to intend a Reflection, but I choose to avoid all Reflections, ether National 
or Do|mestic. I believe the People of England, as well as those of 
Scotland, for the most Part, neither wear Shoes nor Stockings in the Small 
Pox: As to their Custom or Ability of run/ning about, they are much in the 
same Con|dition, as they are here; some have them fa|vourably, some 
otherwise, and every one has Conveniencies and Helps according to their 
Circumstances.

As for the three Letters from Boston in New England, printed by Way of 
Appendix to the Doctor's, It might suffice to say, that they are only a severe, 
and perhaps a just In|vective,
against the Clergy and others, for meddling in this Branch of the Physicians Practice: Upon which Encroachment, some of the Faculty invoke the Vengeance of the Civil Magistrate; and threaten the Offenders, as Poisoners and Spreaders of Infection, with Prisons and Gibbet's. And if the Laws in being are somewhat deficient, modestly call, as some others have done, upon the Legislature for new Ones. This general Consideration is sufficient to invalidate the Credit of any Thing that is said by a Person so strongly interested: But so great is the Force of Truth, that it has extorted enough from this partial Complainant to justify the Practice, which he so bitterly inveighs against. For first he owns, that the whole Practice of Inoculation was managed by unskillful Persons; and that many who dy'd or suffer'd much under Inoculation, if they had had better Management, might have had better Fate. That the Practitioners neglected as trivial both the Advantages of a suitable Season, and a well prepared Body: That they Inoculated all Ages and Constitutions from the Beginning; That they Inoculated Women with Child, and Hysterical people: And after all, They practis'd it at first with indifferent good Success: That it had been practis'd, since the Middle of June to the Date of his Letter, Dec. 20. upon above two hundred Subjects with various Success. He tells you in his second Letter,

That they had at that Time the Experience of two or three Hundred Inoculated: And after all this, in all his three Letters, he gives you only two Letters of the Name of one Inoculated Person who dy'd, Mrs. D._l. He says at Random, that others dy'd of it, whom Time may bring to Light. Were the Bodies of those Inoculated Persons hid under Dunghills? Had they not Christian Burial? It is wondrous strange, that in a Place, where the Practitioners in Physick and the Magistrates both were against Inoculation, he could not come at the Knowledge of a Mortal Case but one, the Inoculated Mrs. D._l, who is trump'd up upon all Occasions: He says, many of the Inoculated suffer much, Page 2. What then? A Person that has the Small Pox, even in the gentlest Sort, must suffer, And at last, Page 10, he ingenuously acknowledges, That the Small Pox (acquir'd by Inoculation) is frequently more favourable than in the common Way, and not altogether so mortal.

Secondly, That not one of the Inoculated during the Space of five or six Months has had the Small Pox in the natural Way, so far as we know; that is, of about three hundred People Inoculated, some of which, no doubt, had only those Eruptions, which they will not allow to be the genuine Small Pox; In a Time, when the whole Town and Country was an Hospital of People sick of the Distemper, and few Persons exempt from its Rage, for the Space of five or six Months, not so much as one had the Small Pox, for ought they knew: I say, if such a Case had happen'd, it is not probable it could have been conceal'd; and that this Acknowledgment from one, who is so zealous
an Enemy to the Practice, is a stronger Proof of the Efficacy of it, for the Purpose intended, than all the Ifs and May-be's of this or any other Letter-Wr iter.

It had been fair in this Gentleman to have given in the Numbers that dy'd of the natural Sort of Small Pox, during that Season; or to have stated the Case fairly between two or three Hundred sick of the natural Sort, and as many of the Inoculated Kind, both under the Care and Direction of unskilful and unexperien'cd People: And then, perhaps, as in the Inoculated Kind, he could instance, by Name, only One that dy'd; In the other Sort he would have been puzzled to find the Names of those who escap'd.

But to this he will say, that the Inoculated Small Pox propagated the Mortality of the natural Sort. There is a full Answer given to this Objection of spreading Infection before. I think it is hard to exclude Men from the Means of securing themselves from a great Pestilence, upon a meer Suggestion: The Influence of the natural Small Pox upon Mankind, in any Place, in a Circle of

Years, may be affirm'd to be uniform with strong Probability; and if the Air of any Place, in a contagious Season, is such, as renders the Distemper very mortal, it is a strong Motive for People to take the Advantage of a good Season, and secure themselves in Time from a Plague, which is so likely to destroy them: And if Prudence only were to be consulted, it would perhaps be much more the Duty of the Legislature to order, than to forbid this Practice. And no doubt, according to the Acknowledgment of the Enemies of this Practice, they would, by this Method, diminish the Mortality, and encrease the Number of their People; and the Magistrate is forc'd often upon more arbitrary Proceedings in any Pestilence: But as that would seem too great an Encroachment upon the natural Rights of Mankind, I should not approve of it. But on the other Hand, it would be a most Tyrannical Encroachment upon the same Rights, to debar Mankind from the lawful Means of securing themselves from the Fear and Danger of so terrible a Plague.

As for the particular Factor, that, according to the Letter, attends the Sores of the Inoculated; it is much of a Piece with the Story of the Kentish Long-Tayls: It shews him to be an utter Stranger to the whole Practice; and makes one doubt, whether he ever saw a Case of Inoculation quite through. And the Pointing at the Inoculated in the Streets, is as great an Instance of Barbarity, as the other is of Ignorance.

There is a Letter in Town from the Revd. Mr. Mather at Boston of a later Date, which has several remarkable Passages in it. The Distemper (meaning the Small Pox) has lately visited and ransacked the City of Boston; and in little more than half a Year, of about five thousand Persons, that have undergone it, near nine hundred have died.
But how many Lives might have been sav'd, if our unhappy Physicians had not poi
son'd and bewitch'd our People with a blind Rage, that has appear'd, very like a Satanick Possession, against the Method of Relief and Safety in the way of the Small Pox inoculated? I prevai
ld with one Physician (and for it, I have had bloody Attempts made upon my Life by some of our Energumens) to intro
duce the Practice; and the Experiment has been made upon almost three hundred Subjects in our Neighbourhood, young and old, from one Year to seventy; weak and strong, Male and Female, white and black; in Mid/summer, in Autumn and Winter: And it suc
ceeds to Admiration.

I cannot learn that any one has died of it, tho' the Experiment has been made under various and marvellous Disadvantages. Five or six have died upon it or after it; but from other Accidents.

He mentions afterward that Cats had it; and takes notice of the same thing in Doctor Leigh's History of Lancashire; and subjoins,

That it was generally complain'd that Pigeon-houses of the City continu'd unfruitful; and the Pigeons did not lay or hatch, as they us'd to do, all the while that the Small Pox was in its Epidemical Progress: And it is very strongly affirmed, that our Dunghill Fowl felt much of the like upon them.

At last concludes; with the great Benefit they have found by Blisters early apply'd and continu'd in the natural Small Pox, and is sorry it was so late before they fell into this Way; but it has constantly prosper'd: I know not, says he, that it has once miscarried since we came into it. I refer the Reader to his Letter annex'd.

It appears by this Letter, that somewhat more than one out of five, and less than one out of six died of the Distemper. And likewise, by the Effects mention'd upon Animals, that the general Contagion was owing to a bad Disposition of the Air; and not char
geable upon Inoculation.

And lastly, notwithstanding the unfavourable Constitution of the Air, the Inoculated did well.

I doubt not but the impartial Reader is now satisfy'd that this Practice of Inoculation may be still beneficial to Mankind, notwithstanding any thing that the Doctor has adduc'd to the contrary, either by way of Argument or Fact. And that by the same zealous Partiality, it had been easy to have crush'd any, the most useful Practice in Medicine in the Beginning. It is pretty remar
kable, that in a Neighbouring Nation, where Agues are the best Branch of the Physicians Practice, the Use of the Bark has been, and is still in a great Measure, suppress'd by Methods not much unlike what we use'd against Inoculation; and indeed every one of the Doctor's Arguments would have concluded more strongly against the Use of the Cortex, than against this
Practice. I will suppose any Stickler against the Bark to have reason'd thus in the Doctor's Strain. A Drug that has been only us'd among Slaves, an illiterate unthinking People, who have the Advantage of a warm Climate, and a Spare Dyet, is not fit to be immediately dispens'd to the English, whose Blood, speaking of it as National, is the Product of the Richest Dyet: Is it not plain by the Diseases that it often leaves behind it, that it spoils the Constitution? Witness the Jaundice, Tumours of the Legs, and other Cachexies that are often subsequent upon it. Besides none but Empirics can give a Medicine of which they are not sure of the Dose; Is it not plain that it will not answer the Design of preventing the Disease for the future? For notwithstanding the Use of this Drug, the Patient suffers many a Relapse. Besides

there are not only one or two, but innumerable Instances of People who have died after the Use of it; and others, who have had a diseased Constitution all the rest of their Lives. The Dispensers of this Medicine disagree widely among themselves, both as to the Manner of its Operation and the Dose; Some give it in Tincture; some in Substance; some in greater, some in lesser Quantities, &c. In fine, there are three Letters from a Friend in New England, which inform me that many who have taken the Bark have suffered very much; and Mrs. D philosophical, who had taken great Quantities of it, actually died, &c. Tho' I have not myself made Use of this Medicine, nor seen much of the Effects of it; I am well assured, that not a fourth part of the Diseases it pretends to cure, are Genuine Agues: Before I had seen the Practice of this Medicine, I affirmed, that it was impossible, it would cure an Ague; but I am willing to retract that Opinion, being convinced by an Experiment, that it does so sometimes. It were easy to carry this Parallel reasoning thro' the whole Letter, not only with equal, but more Strength in most Places.

The Doctor, in appearing with so great Zeal against this Practice, is not the Representative of the whole Faculty. For there are many of them who from their Disinterestedness and Innate Love to Mankind, are willing, that an Experiment should go on,

which, in Proportion to the Extensiveness of the Practice, must necessarily diminish the Mortality of the Small Pox in general: This is a candid, as well as decent Way of proceeding. At the same Time, I only blame the Author of the Letter, and those who take part with him, for their too early and strong Prejudices; being unwilling to Censure their Intentions, which I hope, are for the Good of Mankind, as well as my own.

But there is still a stronger Objection against this Practice; That it is unlawful, and first introduc'd by the Devil, who ingrafted Job of the Confluent Sort of Small Pox.

From useful Discoveries, there can always be drawn important Consequences. First, Hence learn we, that the Small Pox is an ancient
Disease; for if it was convey'd to Job by some such Way as Inoculation, the Matter must have been taken from some Body Infected with the Distemper. Secondly, That Sydenham was not the first that began the cool Regimen; for Job sat down upon the Ashes in the open Air; his Friends saw him afar off. Thirdly, That his Friends were tardy, above three Weeks before they came to see him; for in the Genuine Confluent Kind of Small Pox, it will be that Time before they can bear scraping with a Potsherd.

Fourthly, Beloved, this confluent Sort of Small Pox were more gentle, to be sure, than the common natural Ones; for he seems neither to have had Delirium, sore Throat, nor Shortness of Breath; he talk'd distinctly and good Sense.

Now here a Question ariseth, Whether an honest Man can do that which the Devil has done? I answer in the Affirmative; there are three things mention'd; of the Devil's Assemblying himself (as in this Place) with the Sons of God; Believing, and Quoting of Scripture. All these Things a good Man may not only do, but is bound to do.

I readily agree with this Reverend Divine, that if Inoculating the Small Pox be an unlawful Action, it cannot be justify'd by the Good which may ensue from it; but that it is unlawful, must be prov'd, either by some natural or positive Law: That this Reverend Gentleman has brought no such Proof, either from natural or reveal'd Religion, will appear plain upon a very short Review of his Discourse.

Page 13.] He says he will attempt to prove, That Diseases are utterly unlawful to be inflicted by any who profess themselves Christians: He terms it very right; for it is an Attempt to Prove, and no more. By restraining the Prohibition to Christians, one would think, there was some positive Command in the Gospel against it; but he has brought none, which, by the most forc'd Construction, can prove Inoculation to be prohibited by the Christian Dispensation. I know of no Immorality that is forbid to a Christian, the Practice of which is allow'd to an Infidel. Indeed Morality is more clearly taught and more strongly enforce'd by Rewards and Punishments amongst us; but it does not change its Nature amongst the rest of Mankind. He does not wonder, that the Practice of Inoculation should obtain, where the Doctrine of Fatality is believ'd; but the Misfortune is, that the Matter of Fact is quite otherwise: For if he had carefully perus'd Dr. Wagstaffe's Discourse, which he so much commends, that would have inform'd him, That no Body pretends to give us an Instance of an Inoculated Turk. And why? Because their Belief of a Fatality makes them neglect very much the ordinary Helps of Medicine for preserving their Lives.

Page 14.] The Instances which he gives of Almighty God's having given a miraculous Power to Mankind to inflict Diseases for their Punishment, does not prove, that He has not given them an ordinary one for their Benefit.
And his saying, [Pag. 15] That no Man was ever yet condemn'd to an immediate Sickness, for Want of sufficient Authority; is, without any Proof. Diseases are External, and In••••; the Magistrate very often inflicts both: That Criminals are lawfully punish'd with the

Mutilation of their Body, I suppose he will allow to be common. Is not that inflicting a Disease with a Witness? And are there not many Executions perform'd by Poison, which is inflicting an Internal mortal Disease? And here his own Argument turns upon him; for if Diseases are sent for the Punishment of our Sins. then it would seem to follow, that the Magistrate, who has a Power from God to punish our Crimes, has likewise a Power to inflict Diseases, for Sins that are manifest to him and all the World. The greater Power of inflicting Death, certainly includes the less in the Choice of the Means: If, for Ex|ample, there should be a Law made to punish the Inoculators with the Inoculation of some Disease, I fancy this Reverend Divine would not think it sinful or unreasonable.

Page 16.] He spends a long Paragraph, to prove what no Body ever deny'd; That a Man cannot lawfully do all that is in his Po|wer to do: And another as evident, That the Means, as well as the Intention, must be law|ful; but these are only general Propositions; The Subsumption, that inflicting Diseases for a good Purpose is unlawful, is only suppos'd, not prov'd.

Page 18.] He doubts whether the Life of Man be a Good or not. If the Life of Man is no Good, then, indeed, to act for the Preser|vation of it, is not to act for any good End; and consequently, not only this Pra|ctice,

but all others in Medicine, and many other charitable Actions, must be given up. The rest of the Argument of this Paragraph, is grounded upon the Insufficiency of this Method for the Purpose intended. The Doctor might have remember'd, from his Ex|position of his Text, Job had the Small Pox by Inoculation from the Devil, even of a fa|vourable Sort; that he recover'd of them, and never had them again. But in this he must forgive me, if I put him in Mind, that he is out of his Sphere; and that notwithstanding his Professions to the contrary, he lays aside the Divine, and takes upon him the Phys|ician. The Question here is, Whether giving a Disease with a good Intention, be in it self an unlawful Action.

Page 20.] Another Argument is, That a Law which forbids the Evil, forbids also e|very thing that has a Tendency to it; therefore all causeless and voluntary Mutilations are for|bid: And yet, notwithstanding this Law against Mutilation, more express than any against Inoculation, Surgeons cut off Peoples Limbs. Here the Intention hallows the Action, which is in itself expressly forbid; and which is more, I believe no Surgeon will affirm, that in all Cases, where Limbs are cut off, there is a direct Impossibility to save the Patient's Life otherwise; or that the Operation is always successful. A Surgeon who cuts a Person for the Stone, even if his Patient dies of the Operation,
does not think he has committed a mortal Sin, in inflicting a mortal Disease; and yet the Patient perhaps might have liv'd many Years, and not dy'd of the Distemper at last. The Difference of the two Cases, the one being for Cure, the other for Prevention, does not change the State of the Question; which, in general Terms, is this, Whether Mankind have a Lawful Power of inflicting Diseases for good Purposes? A Person who has not had the Small Pox, may be very justly consider'd, as having the Seeds of a mortal Distemper within him; and the Dread of it is surely a Suffering, that will justify the Lawfulness of using Means, which have the greatest Probability of saving him from a Danger, which, for ought he knows, may be nearer and greater, than that of a Stone in the Bladder. Anxiety and Bodily Pain, don't differ so much, as to make an Action lawful in one Case, sinful in the other.

Page 21.] But it seems it is a Tempting of Providence. And there is no great Difference between the Devil's Proposal to our Saviour, to cast himself down headlong, and that of Inoculation. It is wonderful, into what Absurdities, Zeal for an Opinion, will drive a Man, even to assert that there is no Difference between a Man's running into a Danger absolutely unnecessary, and from which nothing but a direct Miracle can save him; and a Venturing on a small Hazard to avoid a much greater. The Case put it as disadventagiously as possible, more resembles that of a Person who leaps out of a Window for fear of Fire, and surely that can never be reckon'd a Mistrust of Providence, even if he did it before he was much in Danger; for no body can say that God Almighty may not save a Man from Fire in the ordinary Course of his Providence; And if a Person, who being prompted by his too early Fears had taken this Course, and lost his Life by the Fall; no body will arraign him of Self-murder: He might have done an imprudent, but not a sinful Action. The Parents who suffer their Children to converse with their infected Relations; which differs in no Moral Point from the Case of Inoculation, would think it very hard to be treated as Holymurderers or Murderers of their Children, when the very Action proceeds from, the contrary Principle, extreme Tenderness.

Pag. 22.] In the former Page, it was a presumptuous Trust; in this, it is an intire Mistrust of Providence. He is sure to have the Inoculators some way or other.

Pag. 23.] They cannot pray for a Blessing upon their Endeavours; because Prayer supposes the Use of lawful Means.

I believe the contrary is true, for as a Person, who is Inoculated, puts himself more immediately into the Hands of God, if he has any Sense of Religion, cannot avoid
praying for a Blessing upon the Means, which, to be sure, he thinks lawful, and has not yet been prov'd to be otherwise.

Page 24.] His Argument to prove that Inoculation tends to promote Vice and Immorality is the most extraordinary of all. This it does, by taking off the Dread of the Small Pox, and consequently the Re|straints of Sobriety that Mankind lie under upon that Account. This Reverend Gentleman has very justly found fault with one Ma|xim, to do Evil that Good may come of it: But he has establish'd one, just as dangerous in the room of it, not to do Good least Evil come of it. For if the Diminishing the Fear of Dying of Diseases catch'd by Irregularity, is an Evil, then an able Physician is a common Nuisance. We have reason to be thank|ful, that there are a sufficient Number left, who cannot be charg'd with being Encouragers of Vice and Immorality, upon this Score. This Principle in its full Extent would destroy all Works of Charity and Mercy; for the Hope of Forgiveness is an Encouragement to do Injuries; and the Hope of being re|liev'd in Want is a Discouragement to In|dustry.

I am touch'd with the devout Reflections upon Providence, that are all along spread thro' his Sermon, to which I subscribe with all my Heart; but I cannot so much com|mend the Distorting those great and solemn Truths of our Holy Religion to maintain lit|tle Party Interests and fashionable Opinions. The Text that is quoted Pag. 22. that the very Hairs of our Head are numbred; I take to be a stronger Argument against Periwigs and Shaving; than all that the Sermon contains against Inoculation: Our Hairs of our Beards were given us for an Ornament by Providence, and it is know|n, that many have catch'd great Colds with mortal DisEases ensuing upon them by Shaving. Is not a Man answerable for all the bad Effects that follow upon an unwarrantable Action that con|tradicts the very Intention of Providence?

The Peroration Page 29, is equal to any Piece of the whole Performance, Let the Atheist and the Scoffer, the Heathen and the Unbeliever disclaim a Dependance upon Pro|vidence: Let them Inoculate and be Inoculated, &c. I think this clinches the whole Matter; and this Reverend Gentleman has furnish|d us with a new, sensible and religious Test, an Atheist or Infidel can be found out, as a Witch, by the Marks upon his Body: And that, as it has been intimated already, that the Devil was the first Inoculator; I think, it is not impossible that the next zealous Preacher upon this Subject may prove the Cicatrices of Inoculation to be the Mark of the Beast. Thus it appears, that the Doctors Position, of the Unlawfulness of inflicting Diseases for good Purposes, is groundless, and contrary to the common Usages of Mankind.

I have been oblig'd to be the more parti|cular in answering this Sermon, because the Charge in it against the Inoculators, is hea... than that in the Letter, in as much as immorality is a greater Fault than bad Practice in Physick.
From all that I have said, I will draw this one Conclusion; that there does not appear as yet any Objection of Weight enough to stop the Progress of the Practice of *Inoculation*. But if upon future Trials, it should be found that the Inconveniencies do overbalance the Advantages of it; I shall then be as ready to condemn, as I am now to justify it.

**Certificate of the Honourable Mr. WILLIAM SPENCER's DEATH.**

April 22, 1722.

UPON Examining the Body of the Honourable William Spencer, Son of the Right Honourable the late Earl of Sunderland; We found the *Small Pox* of a mix'd Sort, distinct in some Parts, and confluent in others; almost dry'd and seal'd through out the Body: All the Inward Parts were in their natural State, and free from any Mark of the *Small Pox*. In the Right Ventricle of the *Heart* there were two *Polypus's*, where of one was branch'd out into the *Arteria Pulmonalis*. In the Head, we found the Surface of the Brain full of Water; and the Substance of it flabby; the Ventricles of it being as full of Water as they could hold; The *Plexus Choroides* being white by soaking in that Water: The *Basis* of the *Brain* was also full of Water. In the *Longitudinal Sinus*, there was a long and pretty large *Polypus*; and likewise one in the *Lateral Sinus*. The *Cerebellum* was in its natural State.

Apr. 22. 1722.

Sign'd thus,
- Claudius Amyand,
- Isaac Garnier,
- Apothecary
- Thomas Garnier,
- Apothecary
- John Reilliez,
- John Dolignon.

*N. B.* The Child seem'd to be in a fair Way on Saturday the 21st, 'till Two a-Clock in the Afternoon, when he was seiz'd with a Convulsion Fit, of which he dy'd in a Quarter of an Hour.

This is also Sign'd thus,
- Claudius Amyand,
- Isaac Garnier,
The CASE of Mr. DEGRAVE'S Daughter, in a LETTER to Mr. MAITLAND.

SIR,

I Find my Daughter's Case has made some Noise in Town; and has been misrepresented. It was thus: She was Inoculated the 23d of Febr. 1721-2; and as I saw her daily during the three Weeks that she was confined after the Inoculation, so I can affirm, no Small Pox ever appeared upon her during that Time, but only Heats and Flushings, attended sometimes with Heaviness and Pain in her Head, and a little more Quickness of Pulse than usual, and oftentimes without any Disorder at all: None of those Heats and Flushings ever came to Perfection, or to any thing like the Small Pox, which gave my Daughter some Uneasiness; and the rather, that the other Persons, who had been Inoculated at the same Time, and in the same House with her, had a very fair distinct Small Pox, and yet had less Sickness than She: Nor did the Incisions in her Arms discharge so much and so long as theirs did; and therefore were compleatly heal'd in less than three Weeks.

Time, when the Sores of the other Person, were yet large and running. Thus all Expectation of her having the Small Pox by the Inoculation being over, she was purg'd once or twice, and then discharge'd from her Confinement, the 17th of March following: Nay, it was believ'd, she never would have that Distemper; for having been very much expos'd to the Infection, when she was but two Years of Age, and yet more when the was about Eight, without contracting it, this last Tryal being unsuccessful, seem'd to give a tolerable Ground for this Opinion. However my Daughter continu'd discompos'd, and out of Order, when she came Home; the Heats and Flushings abovementioned still subsisting on her, though in a lesser Degree; her Stomach loathing Flesh-meats, and her Rest disturb'd with Dreams and Horrors. She had likewise two small Boils, one under her Arm, and another on her Side: But none of these Accidents were troublesome enough to hinder her Attendance on her accustom'd Business within and without the House: However these continuing for about two Months after she came Home, the was purg'd once or twice, in order to remove them; but still
they subsisted upon her, not to any Degree, 'till the Small Pox broke
out upon her, which happen'd in this Manner: Three Days before, she
had heated herself extraordinarily; the first, by going to the Camp and
back again,

on Foot, in a very warm Day; the second, by walking heartily to the
Charter-House, to see her Brother and returning Home; and the third
Day in going and sitting at the Play-House in Lincolns-Inn-Fields: As
she sat at this last Place, the Small Pox broke out upon her; at least, I
never perceiv'd it upon her, 'till her Return; at which my Daughter was
surpriz'd, she having no Illness whatever, that could hinder her
Pleasures at the Play, and her walking Home; or any such precursory
Warnings of that Distemper, which I hear have been divulg'd Abroad.
As soon as the Small Pox had appear'd, she recover'd her Stomach for
those Flesh-meats she had loath'd before; and came to that natural
compos'd Sleep, of which she had been priv'd since the Inoculation;
And she having gone through the most favourable Periods of that
Distemper, she got well in Eight Days from That I perceiv'd the first
Eruption; so that I must conclude, from the Symptoms which my
Daughter was by Times afflicted with, during Eleven Weeks after she
had been Inoculated, that it appear's evident to me, the Small Pox she
had then, was the Effect of the Inoculation, although it has shew'd itself
much later than is usual, after that Operation. As to the Itch, that
appear'd upon her about the same Time with the Small Pox: I can only
account for it thus; She had been Infect'd by her Brother, about

three Months before she was Inoculated, and I thought her cur'd of it
by the same Means that were Efficacious for the Cure of her Brother. It
is certain that when she was, there was no Appearance subsisting of
that Distemper, nor any Shew of it, 'till that Time the Small Pox
appear'd upon her. However, she is perfectly cur'd of the Itch, by the
same Means that were us'd at first: And I thank God, my Daughter is at
present as well, if not better, in every Respect, than ever she was in her
Life.

I am, SIR, Your most humble Servant, ISAAC DEGRAVE.

August 23, 1722.

A Letter from Dr. NETTLETON, at Halifax in Yorkshire, to Dr. JURIN,
R.S.Secr.

SIR,
IN Answer to what you require from me, as to what has been farther done, I have only to add, that since I writ to Dr. Whitaker, I have made the Inoculation upon about fifteen Persons, who have all had the Distemper very favourably, and got thro' it with a great deal of Ease. As nothing uncommon or extraordinary did happen in any of these Cases, it will not be necessary to trouble you with a particular Account of any of them: They were most of them at some Distance; the Small Pox being, in a great Measure, gone from this Town and Neighbourhood.

I am very sensible of the Favour done me by the Royal Society, who were pleased to take Notice of my Letter to Dr. Whitaker, which you had nothing to move you to, beside a generous Disposition to encourage the smallest Attempts towards any thing, that may tend to publick Advantage. I must own that all the Information I had concerning this Affair, which I have happen'd to be engaged in was entirely from the Philosophical Transactions. 'Tis now about six Years since the Royal Society did communicate to the World some Letters from two very considerable Physicians residing in Turky, whose good Sense or Integrity we had no reason to call in question; these Gentlemen did so solemnly assure us, that the Method of Inoculation had been for many Years practis'd in those Parts of the World, with almost constant Success. I had, as well as all others who have been engaged in, the Practice, with sufficient Sorrow and Concern, been called to many in the Small Pox, whose Cases were so deplorable, as to admit of no Relief. And therefore I could not but be very thoughtful about this Method, which promised to carry Persons thro' that cruel Distemper, with so much Ease and Safety. I was so far from knowing that it was a Crime, that I always thought it the Duty of our Profession, to do what we could to preserve the Lives of those who commit themselves to our Care. And I know no Reason, why we ought not, with all humble Thankfulness to Almighty God, to make Use of any Means, which his good Providence shall bring to Light conducing to that End. This Matter, tho' of so great Importance, lying dormant so long after it was known, is, I presume a sufficient Proof, that none have been very forward to try Experiments. But when we had the Account in the publick Papers, that it had by their Royal-Highness's Command been done with Success at London, I could not be satisfy'd with not trying it here. I was soon convinced, that it would be of very great Use; and the more Experience I have had of it since, the more I am confirm'd in the same Opinion. I believe all others, who have seen any thing of this Practice, are in the same Sentiment, and there is no doubt, but in a few Years the World will acknowledge the Service, which the Royal Society have done to Mankind, in first revealing to this Part of Europe, a Thing so beneficial as it will certainly prove; for tho' some
few unfortunate Accidents may sometimes happen, yet these will be very rare

in comparison of the many sad and disastrous Events, which this Distemper has been, and ever will be very fruitful of, while it is left to rage in its full Force and Violence.

Sir, I doubt not but when you Love collected a sufficient number of Observations for it, you will be able to demonstrate, that the Hazard in this Method is very inconsiderable, in proportion to that in the ordinary way by accidental Contagion, so small, that it ought not to deter any body from making use of it. In order to satisfy my self, what Proportion the Number of those that die of the Small Pox, might bear to the whole Number that is seized with the Distemper; in the Natural way, I have made some Enquiry hereabouts, and I shall take the Freedom to transmit the Accounts to you, because I believe you may depend upon their being taken with sufficient Care and Impartiality. In Halifax since the Beginning of last Winter, 276 have had the Small Pox, and out of that Number 43 have died. In Rochdale, a small Neighbouring Market Town, 177 have had the Distemper, and 38 have died. In Leeds, 792 have had the Small Pox, and 189 have died. It is to be noted, that in this Town, the Small Pox have been more favourable this Season than usual, and in Leeds they have been more than usually mortal; but upon a Medium in these three Towns, there have died nearly 22 out of every hundred, which is above a fifth

Part, of all that have been infected in the natural way. I have in these Accounts con|fin'd my self to the Limits of the Towns. The Numbers that have had the Small Pox in the Country round about, is vastly greater; but the Proportion of those that die is much the same. I have made the Enquiry in several Country Villages hereabouts, in some I found the Proportion to be greater, in others less, but in the main it is nearly the same.

I am, &c. THOMAS NETTLETON.

Halifax, June 16. 1722

Mr. MATHERS Letter from Boston in New England

March 10th 1721/2.

SIR,
SO considerable a Part of Mankind fear|fully perishing by the Small Pox; and many more of us grievously suffering by that miserable Distemper, you will allow me to entertain you with a few more Communications, and writ (I think it's) a fourth Letter upon it.

The Distemper has lately visited and ran|sack'd the City of Boston; and in little more than half a Year, of more then five thousand Persons that have undergone it, near nine hundred have died. But how many Lives might have been saved, if our unhappy Physicians, had not poison'd and bewitch'd our People with a blind Rage, that has appear'd very like a Satanic Possession, against the Method of Relief and Safety in the way of the Small Pox Inoculated.

I prevail'd with one Physician, (and for it I have had bloody Attempts made upon my Life by some of our Energumens) to introduce the Practice; and the Experiment has been made upon almost three hundred Objects in our Neighbourhoud, Young and Old; (from one Year to seventy) weak and strong; Male and Female, White and Black; in Mid|summer, in Autumn, in Winter, and it succeeds to Admiration.

I cannot learn that any one has died of it; tho' the Experiment has been made under various and marvellous Disadvantages. Five or six have died upon it, or after it, but from other Diseases or Accidents; chiefly from having taken the Infection in the common way, by Inspiration, before it could be given them in this way of Transplantation. However at present I need say no more of this, having already given you some Report of our Proceedings in it.

To them who are under the Inoculation of the Small Pox, we commonly give a Vomit, in the time of their Decumbiture, a Day or two before the expected Eruption. One of our Patients not vomiting so freely as he would have done, thrust a Finger or two into his Throat, which fetch'd up, what was to be discharg'd from his uneasy Stomach; He had but a few of the Small Pox, and the Pustules were sufficiently of the distinct Sort, as it uses to be where they have the Small Pox Inoculated; but the Fingers that had been thus employ'd, prov'd as full as they could hold, of the confluent Sort, which he now thought his whole Body would have been, if we had not in this Way prevented it.

Doctor Leigh in his Natural History of Lancashire, counts it an Occurrence worth relating, that there were some Catts known to catch the Small Pox; and pass regularly thro' the State of it, and then to die. We have had among us the very same Occurrence.

It was generally observ'd and complain'd, that the Pigeon-Houses of the City continu'd Ḵ ṫt and the Pigeons did not hatch or lay as they used to do, all the while that the Small Pox was in its Epidemical Progress:
And it is very strongly affirm'd that our Dunghil Fowl felt much of the like Effect upon them.

We have so many among us, who have been visited with the Plague in other Coun|tries many Years ago, and who have never been arrested with the Small Pox after it, tho' they have been exposed as much as any other People to it; that it now begins to obtain a Belief with us, that they who have had the Plague, will never have the Small Pox after it.

I will add but one Thing more. For Suc|cour under the Small Pox, where Life is in Danger, after all the Methods and Medicines, that our Sydenham and others rely upon; I can assure you, we have yet found nothing so sure as this; Procure for the Patient, as early as may be, by Epispastiks a plentiful Discharge at the Hand-writs, or Ancles, or both, (I say as early as my be) and keep them running till the Danger is over. When the Venom of the Small Pox, makes an evident or violent Invasion on the Nobler Parts this Dis|charge does wonderfully. I am sorry it was so late before we fell into this Way; but it has constantly prosper'd: I know not that it has once miscarried, since we came into it.

March 10. 1721-22.

My Lord B_+s Servants Case, by one that constantly attended him.

MY Lord B_+s Six Children were Inoculated the 18th April: Five of them had got thro' the Small Pox before the 30th, when his Servant was Inoculated. He came from Cirencester to My Lord's House in London about the Time that his Children had the Small Pox on them, with an Intent to be Inoculated; but Matter could not be found so soon as desired, and the Fellow in the mean time liv'd among the Servants that attended on My Lord's Children: Whether he had contracted any Infection by that Commerce is not determin'd; or whether the Disorder he had on him three or four Days before he was Inoculated, may be ascribed to that, as some have thought, or to a Change of Dyet and Air, or only to a Cold caught; 'tis most certain he complain'd then of Pain in his Head and Bones; and was feverish. Doctor Mead was consulted, and order'd him to be blooded, vomited, and other Medicines for his Relief; and that the Inoculation should be Postpon'd till after his Recovery: For this End he was remov'd out of My Lord's House to a Nurse, who takes People in for the Small Pox. He got well of his Complaints the 28th April; and 'twas thought proper to Inoculate him the 30th Ditto. He kept well till the
5th May, and then had no other Disorder on him than what is usual before the Eruption of the Small Pox after Inoculation. On the 6th the Eruptions were plain of the distinct large Kind, and he was relieved on that Account; but at Night his Complaints returned on him, and were rather more severe than they had been, he having then a kind of Dilirium, frequent Vomiting and Stools; These continuing the 7th, Doctor Arbothnot was call'd to his Assistance. Doctor Mead saw him also the next Day. They prescrib'd several things, which had the desir'd Success; but at this Time his Body was cover'd with Small Pox, and most of it of the confluent Sort. He continu'd in a tolerable good Way till the 11th of May, when his Fever was sharper on him, with a Dilirium and Difficulty of Breathing. He was then blooded and blister'd, but without any Effect. He died the 12th, and was open'd the 13th. Then upon Inspecting the Outside of his Body, the Face and Limbs were found as full of Small Pox as they could hold; as were also two Places in his Breast and Shoulders, they all appearing of the Confluent Sort. Nothing Material was observ'd in the Dissection of his Body, saving that the Lungs were Inflamed and mor'dified; and that in the Cavities of the Thorax there was a pretty large Quantity of bloody Matter extravasated.

I Here think fit to declare, that whatever Pamphlets, Advertisements, or Queries are, or shall hereafter be publish'd in News Papers or otherwise, as some have lately been with unknown or fictitious Names of Persons Inoculated; and false in Fact, malicjously intended to Discredit this Practice and impose upon the Publick; I will not take any Notice of them, except the Author wi... own his Name, and bring sufficient Vouchers for what he advances.

FINIS.

ERRATA.

Page 3. line 26. r. more certainly. Pag. 24. line 30 r. applied.