

The Project Gutenberg eBook of Thoughts on General and Partial Inoculations, by Thomas  
Dimsdale

This ebook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this ebook or online at [www.gutenberg.org](http://www.gutenberg.org). If you are not located in the United States, you'll have to check the laws of the country where you are located before using this eBook.

Title: Thoughts on General and Partial Inoculations

Author: Thomas Dimsdale

Release date: July 18, 2015 [EBook #49476]

Language: English

Credits: Produced by The Online Distributed Proofreading Team at  
<http://www.pgdp.net> (This file was produced from images  
generously made available by The Internet Archive)

\*\*\* START OF THE PROJECT GUTENBERG EBOOK THOUGHTS ON GENERAL AND PARTIAL  
INOCULATIONS \*\*\*

THOUGHTS  
ON  
GENERAL AND PARTIAL  
INOCULATIONS.

CONTAINING

A Translation of Two Treatises written when the Author was at Petersburg, and published there, by Command of her Imperial Majesty, in the Russian Language.

ALSO

OUTLINES OF TWO PLANS:

One, for the general Inoculation of the Poor in small Towns and Villages.

The other, for the general Inoculation of the Poor in London, and other large and populous Places.

BY THE HONOURABLE

BARON THOMAS DIMSDALE,

First Physician and Actual Counsellor of State to her Imperial Majesty the Empress of all the Russias, and F. R. S.

LONDON:

Printed by WILLIAM RICHARDSON;

For W. OWEN, in Fleet-street; and T. CARNAN and F. NEWBERY  
jun. N<sup>o</sup> 65, in St. Paul's Church-yard.

M. DCC. LXXVI.

[Price One Shilling and Six Pence.]

---

TO THE  
LEGISLATURE  
OF  
GREAT BRITAIN,  
THESE TRACTS,  
ON A SUBJECT EXTREMELY INTERESTING  
TO THE COMMUNITY,  
ARE MOST RESPECTFULLY ADDRESSED BY  
THE AUTHOR.



## INTRODUCTION.

To preserve the lives and health of the inferior part of mankind has been an object carefully attended to in all civilized and well regulated states, not only from motives of compassion, but because it has been plainly demonstrated that it is the interest of the wealthy in every nation to encourage population, and provide for the wants of the poor.

One would indeed, on the first thought presume, that the unavoidable necessities of the indigent would be voluntarily relieved out of the abundance of their opulent neighbours; but the number of laws that have been made for the provision of the poor, are proofs of the futility of this expectation, and the necessity of compulsion.

Among the many objects that have been provided for, it seems matter of astonishment that no one has ever pointed out the Small Pox as a distemper, whose destructive consequences might be in great measure prevented by the interposition of Legislature, and the assistance that would be certainly afforded from private charity.

It is now above fifty years since Inoculation was introduced into this country, and like other new institutions was then opposed; but at present, though it may be impossible to define the numbers that are yearly inoculated, it is certain that most of the wealthy approve and avail themselves of the practice: yet we view the Bills of Mortality with unconcern, though they demonstrate that the number of deaths from this disease is considerably increased; and with the affecting circumstance, that they are probably of the younger part of the people.

Although this matter has not been attended to here, it did not escape the penetration of the Empress of Russia; who, with a regard to the happiness of her people that deserves much greater commendation than I am able to bestow, was extremely solicitous to render Inoculation general among her subjects: and it was with a view to this that soon after the recovery of the Empress and Grand Duke from this operation, her Majesty was pleased to command me to write their cases, with the principal occurrences during the Inoculation, from an idea that being published they would tend to the removal of prejudices, and the advancement of a practice she had much at heart to encourage.

Her Imperial Majesty also frequently did me the honor to converse freely on several points respecting the natural Small Pox and Inoculation; and having been pleased to approve of the manner in which her enquiries and doubts were answered, I was afterwards commanded at different times to give in writing the substance of what had been advanced on these occasions. These orders were obeyed, the tracts translated into the Russian language, and as I imagined, were only intended for the perusal of the Empress. But in the year 1770, my treatise on Inoculation, with the following tracts, was published at Petersburg by her Majesty's command:

- I. An Account of the Inoculation for the Small Pox of her Imperial Majesty, Autocratrix of all the Russias.
- II. An Account of the Inoculation for the Small Pox of his Imperial Highness the Grand Duke, the Heir of all the Russias, by Baron Thomas Dimsdale, first Physician to her Imperial Majesty.
- III. Remarks on the Book, intitled, The present Method of Inoculating for the Small Pox, written by the Author now at St. Petersburg.
- IV. A short Description of the Methods proposed for extending the salutary Practice of Inoculation through the whole Russian Empire.
- V. A short Estimate of the Numbers of those who die of the natural Small Pox, with a View to demonstrate the Advantages that may accrue to Russia from the Practice of Inoculation, &c.

A translation of these tracts, with some further remarks on Inoculation, and a relation of my journey to Russia, has been preparing for the Press; but on some accounts unnecessary to be entered on here, is deferred.

Indeed, my appearance as a writer now is earlier than I intended, on account of a plan that I have seen of a Dispensary for inoculating the poor of London at their own houses, in which some plausible reasons for such an establishment are advanced; but I think they are much more specious than substantial; and that the plan itself is fraught with very dangerous consequences to the community, and not like to answer any good purpose if put in execution. Wherefore I thought it a duty owing to the public to publish these sentiments on the subject, that none should inadvertently misapply their charity so as to do mischief when good was intended.

In pursuance of this design, it seemed not improper to begin with the two last of the tracts that were wrote at Petersburg in the year 1768, as my opinions on the subjects treated of remain the same as at that time. But I desire that what is advanced in them, or may be found in the sequel, that tends to discountenance the practice of Inoculation by persons who have not had a medical education, may not be construed as a design to affect any of the family to whose mode of practice Inoculation is indebted for some considerable improvements; nothing can be farther from my intention, for I have been at all times disposed to do them justice, and allow all the merit that is their due.

In fact, I am an advocate for Inoculation; and wish the design of extending the benefit to the poor may be so conducted, as to afford its enemies as few opportunities of objecting to it on any solid ground as possible; and that the affair may be so well understood, as to make it plain in what manner charitably disposed persons may most usefully employ their benevolence.



# A Description of the

## METHODS

### PROPOSED

For extending the salutary practice of Inoculation through the whole Russian Empire.

*Written at Petersburg by her Imperial Majesty's first Physician Baron THOMAS DIMSDALE.*

**I**n obedience to the orders received from her Imperial Majesty, I shall endeavour to demonstrate in a clear and concise manner the destructive effects of the Small Pox in the natural way, and the safety and advantage of Inoculation, even when performed after the old manner; and afterwards exhibit the improvement of the method, being the same which is now introduced into this great empire.

It will not be in my power to execute this plan with the accuracy I could wish, being engaged in an employment that demands much time and attention. But I will use my best endeavours to describe in the first place a method of propagating the practice of Inoculation, so that it may not be dangerous to those in the neighbourhood, who, either on account of bad health, age, prejudice, or other reasons, are unwilling to submit to the operation, and at the same time render it salutary to such as are proper objects and approve of it.

It is not to be supposed that the method now practised in England so successfully, can be received in Russia without some alteration. The experiments however which I have made in England, in order to ascertain the most commodious manner of conducting the affair, may be of use here; which I shall therefore describe as clearly as possible.

\* \* \* \* \*  
\* \* \* \* \*  
\*

In the original published in Russia, there followed a circumstantial account of the house I had built for the accommodation of my patients in England, and the manner of conducting the process, &c. there; which, as it would be of no consequence or use to insert in this translation, I have omitted.

\* \* \* \* \*  
\* \* \* \* \*  
\*

One, and indeed no inconsiderable advantage derived from a plan of this sort is, that by collecting all the patients together in one house, the physician will be enabled to attend a great number at the same time in a proper manner, and also to pay particular attention to such as may more immediately require his assistance.

And it is of no small importance to those who have been inoculated, that the necessary regulations in respect to regimen, as well as every other circumstance that requires the physician's attention, may here be properly observed.

There is likewise another advantage obtained by this method, that, with proper caution, the Small Pox will not be communicated to others in the natural way of infection.

Notwithstanding all these conveniencies it will doubtless happen here, as it did in my neighbourhood, that many persons of distinction will rather prefer the inoculation of their families at their own houses. In this case it is submitted to the wisdom of government, whether it would not be proper to give orders that such persons should give public notice of their intention to inoculate, mentioning the time when the operation is to be performed, and also of their perfect recovery. By these means such as have not had the Small Pox, will have it in their power to avoid the infection.

So much with regard to the accommodation of persons of rank, who may be inoculated under one or the other abovementioned regulations. But the poor cannot enjoy those advantages. Humanity however and the interest of the state equally demand, that all possible attention should be bestowed for their assistance and preservation.

In order to attain this end, I know of no better or more certain method than that which I followed, on charitable motives only, in my own neighbourhood, by inoculating all the inhabitants of a village who had never had the Small Pox, on the same day: and, if this be performed in a proper manner, they might be all duly visited, and proper medicines administered at a moderate expence, and the whole be over in about three weeks: after which, this village would have nothing to apprehend from the Small Pox for some years. According to this plan, it will be unavoidably necessary that every child should be inoculated for the Small Pox soon after its birth, or that inoculation should be performed in every town or village once in five or six years. This last method I would rather recommend, and therefore, in order to make this proposal perfectly intelligible, I shall endeavour to explain it more particularly.

A list of the names and ages of such inhabitants of every town and village as have not had the Small Pox, is the first necessary step to be taken; and marks should be made against the names of those who on account of their ill state of health, or other reasons, are not thought fit subjects for the operation in the judgment of the inoculator; and such persons should be provided with a separate place of abode, where they may not be in danger of receiving the infection: the rest should be collected together in one place, inoculated at one time, and proper medicines, with directions specifying the time and manner in which they are to be taken, should be distributed to each individual. On the fourth day after the inoculation they should again be assembled together, the punctures examined, and such farther medicines given as the inoculator may think proper. After the seventh the patients should be

examined daily; for from that time to the eleventh, or perhaps fourteenth, is a period that requires more particular attention. During the whole of this time, and indeed throughout the whole process, the sick may continue at their own houses. And it may be reasonably presumed, that there will be a sufficient number of such as are but slightly indisposed, who may be able to assist the others, so as to make the expence and trouble of nurses unnecessary. But we must also suppose, that of the very great number inoculated there will be some who may have the disease severely, or whose cases may require more constant attendance than they can possibly have at their own habitations. To provide for such extraordinary instances, therefore, a proper house and other conveniencies should be previously appointed, to which they should be removed when thought necessary.

It will be impossible to determine precisely how many patients may want such attendance, and consequently difficult to provide exactly the necessary accommodations; but I imagine there will not be more than four or five out of one hundred.

The diet of all should consist of vegetables, milk, bread, and the like; and in some cases a little mutton-broth may be allowed. The drink should be nothing but water, unless by the particular direction of the inoculator.

But in order to secure the observance of this regimen more exactly, all salted provision and every kind of strong liquor ought to be removed from the place, and every necessary precaution taken to prevent the patients from procuring any. In respect to medicines, the prescriptions being agreed on by the faculty, a sufficient quantity should be prepared, and proper doses; agreeable to the different age and constitution, put up separately, and distributed by the inoculator among the patients, with directions in what manner they should be administered; and their recovery should be completed with some proper purgative.

A licence or exclusive permission ought to be granted to such physicians or surgeons as undertake to inoculate for the Small Pox; for the mischief arising from the practice of inoculation by the illiterate and ignorant is beyond conception<sup>[1]</sup>. Such persons, instead of confining the infection within narrow limits, too often, through want of skill or honesty, are the means of propagating it, to the great terror of many people, the fatal consequences of which, and the destructive tokens, remain in many places in England. For besides the dreadful mortality which the disease itself has occasioned, it has often proved the source of discord and contention among neighbours, and disturbed that harmony and friendship which had before subsisted among the inhabitants.

- 
1. To enumerate the instances that have happened within my own knowledge to confirm this assertion, would be almost endless; I shall only mention a few that are remarkable.

I was desired to visit a young woman about ten miles distant; I found her dying from the inoculation of a man, who, upon the credit of having been my coachman, had set up inoculator: he was gone on the pretence of procuring my assistance, but in fact had ran away; this was his thirteenth patient.

Another illiterate person in my neighbourhood began the practice; but a child he had inoculated happening to have a fit, he was so frightened as to elope till he was informed that his patient was out of danger.

I received a letter from a poor man who kept a school about eight miles from Hertford, to inform me, that not being able to pay a proper person, he had ventured to inoculate his own family himself, and begging a visit on account of one of his children who he feared was in danger: I complied with his request, and found one child dying of a confluent pock; but my compassion abated, on finding his house filled with some poor neighbours from whom he received a small gratuity for their inoculation, one of which had lost an eye under his care. This man's residence was in a small town, and from his patients several caught the Small Pox, and some died.

I saw a poor woman dying of a confluent disease; her husband had raised money for his own inoculation, and having had the disease favourably, was assured by a farmer who inoculated him, that he might safely go home to his family. The wife died, leaving five children, who all had the disease and recovered.

At a village not far from Hertford, the same farmer inoculated as many of the parish as could raise five shillings and three-pence, informing the others that the Small Pox was not catching from the inoculated; but the whole neighbourhood became infected, and several died.

---

To conclude, I beg this small treatise may be considered only as an imperfect sketch drawn up in haste; but if it should be approved of, and her Imperial Majesty be pleased to command me to enter into farther particulars, I will employ my utmost endeavours to render it more perfect, and also assist in the execution of any part of what has been therein proposed.

*A short estimate of the number of those who die of the natural Small Pox, with a view to demonstrate the advantages that may accrue to Russia, from the practice of inoculation.*

It is needless to expatiate upon the havock which the Small Pox makes in most parts of the known world: probably there is not a country, city, or smaller community, which has not experienced its devastations in its turn. The very idea of it is insupportable; but its real effects, in places unapprised and unacquainted with the proper treatment and remedies against it, are not less general and fatal than the plague itself.

Though this fact is generally allowed, yet many, I think, are ignorant of the immense loss mankind



sustains by this distemper. It may not be amiss therefore to shew, from well attested accounts, the proportion of persons who die of the natural Small Pox: for which purpose it will be necessary to chuse some country or city where an exact register of the births and deaths, as well as an accurate list of diseases, is regularly kept.

Dr. Jurin, secretary to the Royal Society in London, carried this into execution in 1722, soon after Inoculation had been introduced into England, being desirous of shewing the different effects of the natural and inoculated Small Pox.

I shall not here insert all that was published by this ingenious author, as the whole may be found in the Philosophical Transactions of the Royal Society, under N<sup>o</sup> 374. The following extract will be sufficient for my present purpose.

The Doctor for forty-two years selected from the Bills of Mortality in London, such as died there of the Small Pox and other distempers. His observation may appear perhaps somewhat extraordinary: nevertheless he makes it plain, that out of 1000 infants, 386 die under two years of age, which is considerably more than one third. He then deducts such as he supposes die of the diseases natural to infancy; and afterwards proceeds to demonstrate, that if the whole bulk of mankind be taken at the age of two years, the eighth part will die of the natural Small Pox; and that of such as have it in the natural way, one in five or six dies.

With respect to my own calculations on this subject, I endeavoured to find out whether the Small Pox proved equally fatal after the time mentioned by the Doctor. With this view, before I left England, I procured the Bills of Mortality of the City of London for the last thirty-four years, excepting two, which could not be found. Of these I made a table, which I have added at the end of this treatise. I was surprized to find the number for these thirty-two years past tally so exactly with the observations made by Dr. Jurin.

On examining the table it appears, that within these last thirty-two years 760,098 persons have died, and of those 268,529 have been infants under two years of age, which agrees with Dr. Jurin's calculation, in being rather more than one-third of the whole.

I suppose, with Dr. Jurin, that the deaths of these were occasioned by different diseases incidental to infancy, and I deduct them out of the whole number, viz.

	760,098
	268,529
	<hr/>
The	491,569
remainder	
is	

It appears likewise that in the same course of time there died of the Small Pox 66,515, which confirms Dr. Jurin's account, and indeed exceeds the eighth part. Hence we may fairly conclude, that in general the Small Pox carried off the eighth part of those who died in London in the period abovementioned. I procured also the best accounts I possibly could of the whole number of those who had had the disease from places where the Small Pox had raged most, and found, that near one out of five died who had had the disease in the natural way. This also agrees with Dr. Jurin's observations. We see then that even in London, where the climate is temperate, the disease well known, and the treatment of the sick very ably conducted, this single disease destroyed more than the eighth part of the inhabitants.

But if we turn our eyes towards other dominions, and give credit to the accounts told us, we shall find the disease still more fatal, and in some cities it is almost as destructive as the plague.

It is impossible for me to ascertain with any degree of certainty, the precise number of persons who die annually of the Small Pox in Russia. I am persuaded however, both from good intelligence as well as my own observations, that it is exceeding fatal here. Though I cannot confirm this assertion by proofs, yet from some conversation with the learned I am credibly informed, that of those who have the Small Pox in the natural way one-half die, including the rich and poor.

It seems hardly necessary to shew, how much the riches and strength of states depend upon the number of inhabitants. But perhaps there is not any country in which the certainty of this position is more indisputable than in Russia; for not only the strength of the empire, but the riches of every individual also, must be in proportion to the degree of population. If therefore in London, which enjoys the many advantages already recited, more than 2000 persons die annually of the Small Pox, we may surely suppose, that the loss which Russia in its whole extent sustains by this distemper in the same space of time, amounts to two millions of souls. And this havock must greatly retard the increase of the human species.

There are some diseases peculiar to old age, which terminate a life almost entirely spent, and totally useless to the community.

Such diseases, considered in a political sense, are not hurtful to the state. But the Small Pox spreads destruction chiefly upon the younger part of the species, from whose labours in their several callings the public might otherwise have expected advantages beyond all computation. The disappointment and loss incurred is of course neither to be calculated nor conceived.

A discourse upon this subject might be extended to a great length; but it seems unnecessary to enlarge, especially when I consider to whose judgment this essay is with all humility submitted.

The public, I am persuaded, must be sufficiently convinced from fact and demonstration, that

Inoculation is the only means of preventing the mischiefs arising from the Small Pox.

In a former treatise I have laid down a plan for an effectual method of general practice, by which the spreading of the natural Small Pox will be prevented, and the cure of the inoculated rendered as easy and safe as possible to the patient.

I have therefore nothing more to add but my wishes, that the empire of Russia may meet with the utmost success from this discovery, under the reign of so illustrious and beneficent a Sovereign.

<b>Years.</b>	<b>General List of Deaths.</b>	<b>Deaths from Small Pox.</b>	<b>Under two Years of Age.</b>
1734	26062	2688	10752
35	23538	1594	9672
36	27581	3014	10580
37	27823	2084	10054
38	25825	1590	9600
39			
1740	30811	2725	10765
41	32169	1977	10456
42	27483	1429	9030
43	25200	2029	8621
44	20606	1633	7394
45	21296	1206	7689
46	28157	3236	9503
47	25494	1380	8741
48	23869	1789	7637
49	25516	2625	8504
1750	23727	1229	8204
51	21028	998	7483
52	20485	3538	8239
53	19276	774	7892
54	22696	2359	8115
55	21917	1988	7803
56	20872	1608	7466
57	21313	3296	7095
58	17576	1273	5971
59	19604	2596	6905
1760	19830	2187	6838
61	21063	1525	7699
62	26326	2743	8372
63			
64	23202	2382	7637
65	23230	2498	8073
66	23911	2334	8035
67	22612	2188	7668
	<b>760098</b>	<b>66515</b>	<b>268529</b>



## An objection to the practice of Inoculation considered.

From the time that Inoculation was introduced into this country one may date the opposition to its practice; many learned and ingenious men soon entered the field against it, and were encountered by others of equal abilities in its defence. The questions were warmly agitated, and in a short time foreigners of great name became authors on both sides. But the strength of argument on the part of the defenders of Inoculation, supported by the good success of the practice, hath almost silenced opposition; and the concurrence of the courts of Petersburg, Vienna, and France, who have submitted to the operation, and by their illustrious examples encouraged its progress in their dominions, will probably close the dispute in its favour.

One objection alone seems not to have been satisfactorily removed, which, although it does not relate to the safety or health of the patient, is yet of great importance to the community, and well deserves the most attentive consideration.

You have, say the objectors, produced accurate and satisfactory accounts and calculations of the alarming proportion of deaths that happen from the natural Small Pox, and also proved, that the loss sustained under Inoculation is inconsiderable. But admitting what you have advanced to be true, whence comes it that the same Bills of Mortality to which you appeal, prove also a certain increase instead of a diminution of deaths from the Small Pox, and that for such a series of years as to leave no room to dispute the fact? does it not naturally follow, that though almost the whole number of the inoculated recover, the disease must have been spread by their means, and a greater proportion having taken the natural disease, a consequent greater loss has been sustained by the public? If the above is admitted, it will be difficult to exculpate Inoculation from having been hurtful to society<sup>[2]</sup>.

2. Extract from the Bills of Mortality, and a continuation of the estimate from page 19.

	Total of Deaths.	Small Pox.	Under 2 Years.		
1768	23639	3028	8229	Total	178807
69	21847	1968	8016	Under	63056
				2	
				Years	
70	22434	1986	7994		_____
71	21780	1660	7617	18821)	115751 (6
72	26053	3992	9112		2825
73	21656	1039	6850		
74	20884	2479	7742		
75	20514	2669	7496		
	178807	18821	63056	Totals.	

By the above table it will be found, that with respect to the proportion of infants to the total number of deaths, there is still a surprising agreement with both the former estimates; the number of those under two years of age remains to be somewhat more than one-third of the whole.

But if we pursue the same method as before by subtracting the infants,

178807
63056
_____
the
number
will be
=====

which now amounts to somewhat more than one in six; whereas before it was about one in eight.

But if the eight years are divided, it will appear that the deaths from the Small Pox in the first four years are 8642; the medium for each of those years will be 2160.

For the last four years the numbers are 10179, the medium for each 2544; an increase that is truly alarming, and well deserving the attention of the public.—For the *present* I shall forbear any remarks.

Several attempts have been made to obviate this objection, many of which I have perused; but consistent with my intention of brevity, and avoiding all controversy, I shall decline entering into particulars, or inserting any quotations from authors. It will be sufficient to say, that although the arguments advanced have been ingenious, and in some respects just, they do not in my apprehension remove the objection that has been mentioned.

Let us see then whether the practice may not be fairly chargeable with some blame; and this will appear more evidently, if we take a view of the usual conduct of families on such occasions; which however pertinent to the question, seems hitherto to have been avoided, or not attended to, by the

several writers on the subject.

In London it has been the general custom for those who intend to inoculate, to take into account all the circumstances that may be material for the conveniency of their families and friends, and these being settled to their minds, few precautions are thought necessary respecting the security of others: what passes previous to the eruptive fever, does not claim our consideration, since it is universally allowed that no infection can be communicated before that time; but it is after this period the danger begins, and the disease may be spread by the intercourse of visitants, trades people, washerwomen, servants, and others, and in a mild state of the disease, the frequent excursions of the sick by way of airings, and often in hired carriages of various kinds, contribute greatly towards spreading the infection. It would perhaps be deemed a designed omission, if the inoculators were not also supposed to be of the number of those that contribute to spread the disease.

When all these circumstances are duly considered, surely it will be allowed, that the Small Pox is frequently caught from the inoculated; and let it be remembered, that whoever takes the disease from an inoculated patient, has himself the natural Small Pox, with all the circumstances of danger in respect to his own life, and of spreading the contagion to others.

I know it has been said, and even publicly declared, that the Small Pox from Inoculation is so mild, as scarcely to be infectious to others; but if this was true, how comes it that matter, taken from inoculated patients, conveys the distemper with equal certainty, as if it was taken from the natural Small Pox? is it not morally certain, that the effluvia partake of the same infectious quality? No physician of any experience, I am sure, will ever countenance such an opinion. But lest it should prevail, and do mischief among the ignorant and credulous, I think it incumbent on me to contradict so dangerous and unwarrantable an assertion.

In fact, it is certain that the Small Pox is infectious, in proportion to the number and malignity of the pustules; so far there is usually less danger from the artificial disease, than from the natural. But let not this presumption make any one remit their care, or abate their concern for the community; for I can assert from my own knowledge, that<sup>[3]</sup> many fatal instances have happened from the disease having been spread by the inoculated.

---

[3](#). Vide note page 9.

---

Having considered the subject as fully as I am able, it shall be left to the consideration of the public without any comment; only entreating every family that may inoculate, to be extremely careful, and use every possible precaution to prevent spreading the infection during the illness, and to be also particularly attentive, that all furniture and cloaths be well aired. The persons concerned in inoculating should, on their parts, take great care that they do not contribute to the mischief.

If strict attention is paid to these particulars, it may be reasonably hoped, that the only remaining objection to the practice of Inoculation in London among persons of condition, may be much weakened, if not entirely removed.



## On general and partial Inoculations in the country.

The preceding translated treatises having been calculated for Russia, which in many circumstances differs from England, and in particular that the will of the Sovereign there is most implicitly obeyed, cannot be expected to contain all that may be necessary to be considered, and attended to in this country.

Nevertheless, the general principle of the regulation, so far as it relates to public Inoculation in towns and villages, may be attended to, and of such places I mean to treat first, and of London and other populous places afterwards, for reasons that will be sufficiently evident in the sequel.

In order to be fully acquainted with the subject, it seems necessary to take into consideration, the mode of conducting this affair in the country, which I do not remember to have ever seen circumstantially published; those who have wrote on the subject, having for the most part contented themselves with representations of their success only.

In the county of Hertford, there have been two methods of public or general Inoculation, one to inoculate, at a low price, as many of the inhabitants of any small town or village, as could be persuaded to submit to it, and at the same time were able to pay, refusing all those who had it not in their power to procure the money demanded.

The other method has been, where the inhabitants of a town, or district, of all denominations, have agreed to be inoculated at the same time, the parish officers, or some neighbouring charitably disposed persons, having first promised to defray the expence, and provide subsistence for such of the poor, as were unable to pay for themselves.

The partial method first mentioned has been attended by much mischief, and sufficiently refuted the absurd opinion endeavoured to be propagated by interested persons, that inoculated persons do not communicate infection; innumerable are the instances which have happened of the disease being caught from the inoculated, and too evident to be denied; and so many of these have died, that an opinion not less absurd than the former prevails in Hertfordshire, that those who take the Small Pox from the inoculated rarely recover.

The method of inoculating every one in the same neighbourhood together has succeeded so happily, that it seems only necessary to determine what is the most reasonable and frugal way of conducting the business; and if joined to this consideration proper attention is paid to airing and cleansing the patients, their cloaths and habitations, as much as possible, from the power of infection, all the benefit that can be derived from general Inoculation will be effected, many valuable lives will be preserved to the community, and the inhabitants made happy, on being released from the apprehensions of a visit from this cruel disease.

As I can from considerable experience speak with some confidence on this subject, I shall proceed to relate the observations that have occurred to me. Assisted by my learned friend Dr. Ingenhouz and my two sons, I inoculated, at different times, the neighbouring parishes of East Berkhamsted, Hertingfordbury, Bayford, and the liberty of Brickenden; in each of these places the whole number of poor were inoculated, with the exception of those who were objectionable. I do not at present remember the exact number, I believe they might be more than 600; but know that they succeeded happily, though there were several very old persons, and women in different periods of gestation; and this mode of practice, as I have been informed, has been also used successfully by many others in different parts of England.

So far as has come to my knowledge, general Inoculations have hitherto been confined to small towns and villages; yet as the further extension is very much to be wished, it may not be improper to relate some particulars of what passed in Hertford, which is doubtless the largest, and most populous town, that has submitted to the experiment of inoculating at the same time the whole number of its inhabitants.

In a former publication, I gave an account of the occasion and success of a general Inoculation at this place; from that time the town was released from any apprehensions of the disease, until the year 1770, when it appeared again, and two or three having died, a few persons were inoculated, and excited an alarm. On this occasion, the poor in my neighbourhood flocked in numbers, beseeching me to extend to them the same charitable assistance, they had formerly experienced; having then my two sons with me to assist, I complied without hesitation.

Nothing shews the increase and state of population so clearly, as an experiment of this kind; we had then upwards of two hundred and fifty patients, some of whom were new inhabitants, but the rest consisted for the most part of very young children. Necessity has often produced useful discoveries; the Inoculation was begun on Midsummer-day, and though the weather proved very hot, I observed no inconvenience from it; they had the free use of air, and seemed as much benefited by it as at any other season of the year; and every one recovered.

In the year 1774 the disease appeared a third time; the same request was renewed, and with the same assistance afforded, the whole town was inoculated once more, and now the number amounted only to about one hundred and twenty; from that time we have heard nothing of Small Pox, and I verily believe, that within these ten years not six persons have died in Hertford of this disease; whereas before the practice was so generally adopted, the Small Pox has frequently been epidemic and destroyed a great number of the inhabitants, besides injuring the market and trade of the town for a considerable time.

The inferences one may fairly draw from these premises are, that in small towns or villages, if some are inoculated and others excluded, unless more precautions are used than may reasonably be

apprehended, the consequence will be, that the disease will spread through the vicinage, and be fatal to many.

On the contrary, if by general consent a public Inoculation is agreed on, and the poor are supplied with necessaries, the happiest consequences may be reasonably expected; and further, the good effect of repeated general Inoculations in the town of Hertford demonstrate, that large towns may with great advantage avail themselves of the same means, and, by occasionally repeating the practice, be secured from the ravages of this justly dreaded disease.





## On general and partial Inoculations in London, or other large and populous places.

It should be remarked, that what has hitherto been said relates to the conduct of this practice in villages and small towns, who are capable of uniting in a general plan for their common benefit. What I next propose to consider is, how far a practicable method can be adopted for general Inoculation in London, or in other large and populous places, where it is impossible to obtain the consent of all the inhabitants to be inoculated at one and the same time.

To be the more clearly understood, I desire the distinction in the former part of general and partial Inoculations may be remembered; and that by the first I mean, where the whole number of inhabitants of any town or place are inoculated at the same time, with the exception only of such as are not in a proper state of health, and those who may not chuse to submit to that mode of receiving the disease. By the second, where a part only of the inhabitants are inoculated, and the remainder left to take their chance of catching the disease from their inoculated neighbours.

The possibility of performing a general Inoculation on all the inhabitants of this city and suburbs at one time, will scarce bear a moment's consideration, so many and so insuperable are the difficulties which would occur in a free country. I shall therefore decline entering upon the subject; and quitting all thoughts of a general practice, shall consider how far the inoculation of such poor persons as may make application for this purpose, can be complied with in London, consistent with the safety of themselves and others.

It may reasonably be presumed, that the greater number of these will be persons in narrow circumstances, or in a state of poverty, having nothing beforehand to support an illness, and yet the whole family who have not had the disease are to be inoculated. Whoever has visited the abodes of the poor in and about London, must allow the scene to be truly miserable; their habitations in close alleys, courts, and lanes, generally cold, dirty, and in great want of necessaries, even of bedding itself, a requisite of the greatest use in time of sickness; there are frequently several families under one roof; the men, if industrious, employed in daily labour, the women in washing and assisting in different families, or waiting at markets to carry little burdens as porters, and other unavoidable employments abroad. None of these can remit their occupations to attend the sick, without exposing their families to the distress which the want of the little money their industry earned would infallibly occasion; how or in what manner are patients to be nursed and supplied with food and necessaries during the illness, or who is to be relied on, that the medicines and diet enjoined by the person who attends, shall be regularly complied with?

Can any one be so inconsiderate as to bring disease into a family before healthy, without having first a reasonable expectation, that what their situation may require will certainly be provided? no one acquainted with the general temper of parish officers, will much depend on their assistance; on the contrary, they will most probably oppose the plan to the utmost of their endeavours, from an apprehension that the disease will be spread by these means, and occasion a consequent increase of expence to the parish.

But admitting these objections could be removed, one very important point, that more immediately respects the security of the patients and the public, should be attended to.

One great cause of the success that attends the present practice, is supposed to be the exposure of patients to fresh air; and the more alarming the symptoms, the greater is the necessity of administering this salutary relief. The poor who are inoculated in their own confined dwellings, with perhaps many in family, will assuredly require this reviving ventilation. They have no gardens, areas, or the convenience of carriages; are they to be carried or led about the streets when ill, to the terror and danger of the neighbourhood?

Having suggested a few of the difficulties that must ensue to the patients, it will not be improper to consider, how far the community will be likely to be affected by the practice.

To conduct the business of the Inoculation, some place or places centrally situated must be provided, at which the patients should assemble in order to be inoculated, and to which the several families of the sick must have recourse for the necessary medicines and directions during the distemper. To find one or more such places in the whole city, where the neighbourhood would suffer an office of this kind to be established, at which a great number of the poor must be assembled at noon-day, to receive an infectious and dangerous disease, is hardly possible to conceive; and if we consider that these persons must intermix with others, who are attending to procure the necessary medicines for their diseased families, and who have been obliged to make their way on foot through the public streets, from every quarter of the metropolis, in their infected apparel, the public danger becomes great and inevitable.

But should the poor who are proper to undergo the operation be inoculated, and means for their subsistence be provided, questions will arise respecting the fate of their neighbours, some of whom will be precluded from the same advantage, by being affected with other diseases, and others, who have strong prejudices against it, will be totally averse to the practice. Is it reasonable to bring the Small Pox to the doors of persons thus circumstanced, against their consent? one shudders at the thought of such an insult to humanity! But it is not only the immediate neighbours that would be endangered; to be well informed how far the mischief might be extended, one must take into account the situation and conduct of the patients, and it may safely be asserted from experience, that the following would be found to be a true representation.

The inoculated may be divided into two classes. One in whom the distemper is so mild as to admit the

parties to go abroad; the other, where the number of pustules is so considerable as to confine the patients at home; by far the greater number will be of the first sort; and whatever orders may be given to the contrary, it will be impossible to restrain them from taking undue liberties; the children who are of an age for it will be found in the streets with their former playfellows, and the men and women who are able, will be endeavouring to get into their former employments to earn a little money, without regarding the injury they may occasion to others. The few who may be confined with a less favourable disease, will infect the house and their family, and the infection will be spread from the gossiping disposition of the poor, who are generally troublesome visitants, to their sick neighbours, and after all is over, the first sallying forth in their infected cloaths is certain to add to the mischief.

It is unnecessary to dwell any longer on the consequences of such a conduct to the residents in such alleys; but there are others who claim our regard.

Country people who are obliged to come to town to transact their business, and others who bring their families to visit relations, or to entertain them with the pleasures of the town, are generally under dreadful apprehensions of the Small Pox; how would their fears and danger be increased, if the poor were continually under inoculation?

Another thoughtless, but most useful race of men, are well entitled to our best endeavours for the preservation of their healths and lives: I mean, sailors and sea-faring men, of our own and other countries; it is well known that our shores, on both sides of the river, are continually crowded with these, during their stay in this country.

Many of them have not had the Small Pox, and their mode of living is the reverse of due preparation; if Inoculation should be practised in the houses of the poor, it cannot be doubted that many of these would catch this distemper?

Is it possible to reflect without horror on the situation of such of those unhappy fellows, who should fall ill of the Small Pox in the miserable lodgings they usually inhabit, perhaps without a friend to take the least care of them? or of the still more calamitous state of others, who being infected on shore should fall sick at sea, where neither medicine nor proper attendance can be had, and carry likewise with them in their unwashed cloaths, the fatal distemper into distant climates?

I have been informed, that a child who had received the infection was taken on board an East Indiaman many years ago. The disease was violent; the linen, &c. were put into a box, and carried to the Cape of Good Hope: it was sent on shore; the Small Pox immediately broke out in the place, and carried off vast numbers of the inhabitants.

In the foregoing pages, some of the objections to partial Inoculations of the poor in this city have been stated; but the possibility of extending the practice to any good purpose, even if those objections were removed, has not been taken notice of: to elucidate this point, which is certainly a material one, the following remarks are submitted to consideration.

The number of those who died of the Small Pox in each of the last four years, on an average is 2544. To suppose that one dies out of every six who have the natural distemper, will be allowed a moderate estimate: it follows then, that the number of those who have passed through the disease in each of the last four years will be 15,264. It will be impossible to determine how many may remain uninfected; but if we suppose that every year one out of eight who have not had the disease is seized with it, the remaining number who have not had the Small Pox will be 122,112; and it must be taken into account, that the annual recruits by births will probably be about 20,000, besides others that are continually arriving out of the country to seek employment.

To form a scheme, however beneficial to a few, that would probably spread the disease, and involve so great a number of others in a danger that they would otherwise be much less exposed to, is an object of great moment; and most certainly the Legislature ought first to be consulted.

Great liberty may be taken in our free state; but we ought not to endanger the public safety, because no legal provision is made against it.



## Of an Hospital for Inoculation.

If the objections that have been noticed should be deemed of sufficient force to set aside all thoughts of partial Inoculations of the poor in London, what is to be done will next become the question? It would be cruel and unreasonable to refuse the benefit of this discovery to the necessitous, who on that very account are most intitled to our assistance; yet how to provide for them, consistent with the safety of their neighbours, seems difficult, though I hope not impracticable.

A desire to see some expedient for this purpose succeed, induces me to submit to the consideration of the public, a proposal that is in my apprehension liable to few objections, and would best answer the purpose.

It is to establish an Hospital for the purpose of Inoculation only.

I am aware that Hospitals have been stigmatized as unhealthy, from the idea that a number of sick persons confined together corrupt the air, and generate contagious putrid diseases. This charge has, I think, been inconsiderately made, so far as relates to Hospitals in and near this metropolis; but as it is no part of my undertaking to dispute the point, I shall confine myself to what concerns an Hospital for Inoculation, which, if every circumstance is duly attended to, will be as little unhealthy as any house in the kingdom.

Let us for a moment drop the offensive name of Hospital, and suppose a large house is provided in a healthy situation, with convenient and airy apartments for the reception of any given number of persons capable of being commodiously contained in it; that to be in a good state of health would be the necessary qualification on the admission of every person, and about three weeks the time of the residence; and that the disease they are to undergo is usually so mild, as to permit most of the patients to be abroad in the open air almost every day, and of a nature not to communicate any putrid injury to others, except its own specific poison. If to these circumstances we add, that the patients will in general be children and young persons, that their cloaths and apartments will be clean, and their food wholesome and such as is proper for their condition, surely one may boldly assert, that a family thus circumstanced will have the fairest prospect of enjoying good health.

Having endeavoured to remove the prejudice that is apt to accompany the idea of an Hospital so far as relates to health, I shall proceed to enumerate the advantages that will most probably be obtained by an institution of this kind; some of these have been already mentioned in the translation, and I shall take the liberty of introducing them again in this place, with little variation, as they relate to the subject.

One, and indeed no inconsiderable advantage to be derived from a plan of this sort will be, that all the patients being collected together in one house, the physician will be enabled to attend a great number at the same time in a proper manner, and can be particularly attentive to such as may more immediately require his assistance.

And it is of no small importance to those who are inoculated, that the necessary regulations in respect to regimen, as well as every other circumstance that requires the physician's attention, will be there properly observed, and the necessary medicines always at hand, with an able person to direct the manner in which they ought to be administered.

There is likewise another advantage obtained by this method, that with proper caution the Small Pox will not be communicated to others in the natural way of infection.

It is also an encouraging circumstance, that an establishment of this sort will be attended with less expence, in several particulars, than any other Hospital.

One physician will be able to superintend the process of Inoculation in a very great number of patients, provided he is assisted by a resident apothecary to receive his instruction, and to be at hand to assist on extraordinary emergencies.

Few drugs or medicines will be wanted; the expence therefore on these articles will be very trifling.

Few attendants on the sick will be necessary, and not so much as one under the character of a nurse; for there will always be a sufficient number of patients in so good a state of health, as to be able to attend on those who may require assistance; and it should be one condition of their admittance, that they should be willing to assist others when able, as they would wish to be attended themselves when they stand in need of it; and if this injunction is complied with, it may be expected that there will be a sufficient number in a state of health to perform this office for one another. The doing the heavy and dirty part of the work, the care of the children, the attendance of those who may have the disease more severely, and the business of the kitchen, will doubtless require a proper number of healthy maid-servants.

In respect to diet, as it will be chiefly of the vegetable and least expensive kinds of food, this will be a very moderate article in the œconomy of such an establishment.



## On the Hospitals at Pancras.

The Hospitals for Small Pox in the natural way and Inoculation were instituted in 1746, and have been supported by voluntary subscription.

These Hospitals consist of two houses at a sufficient distance from each other, and in airy situations.

That for preparing the patients for inoculation at Pancras contains 100 beds; and that for receiving them when the disease appears, and for admitting those who are seized with the Small Pox in the natural way, in Cold Bath Fields, 130 beds.

All who are destitute of friends or money and are attacked with this disease, or are desirous of being inoculated, if seven years old or upwards, are proper objects of this charity.

Patients in the natural way are received every day, if there is room for them; and to prevent the danger and expence of a disappointment, enquiry should be first made. Patients for Inoculation are also received every day at Pancras before nine in the morning.

Strangers are forbid to visit the patients.

Cloaths are provided for the patients, while their own cloaths are freed from infection before their discharge.

As the first outline of every attempt towards a new institution has for the most part been imperfect, it is not to be wondered at if the plan and regulations of these Hospitals should admit of improvements; and the following remarks will perhaps point out some regulations that deserve attention.

It is now near thirty years since the first establishment of this charity; at which time it was the received opinion that a strict regimen ought to be observed, and a course of medicine complied with, by way of preparing the most healthy previous to their Inoculation. It was also believed, that there was some risque of taking the natural infection injuriously at the time of being inoculated, and danger of accumulation by residing with others who had the disease; and the inoculators of that time who made use of infected thread and lint, sometimes failed infecting on the first trial, and in such case the patient would probably catch the natural distemper by cohabiting with the sick.

These opinions, it is presumed, joined with the design of admitting patients in the natural Small Pox, determined the first Governors to have two Hospitals; one, to contain all such who were actually undergoing the disease in either way, and in a state to infect others: the other to be appropriated to such only who were under preparation, or having been inoculated had as yet no appearance of the usual eruptive symptoms, and were not in a condition to infect one another. But these opinions have not been verified by experience; on the contrary, it has turned out that the precautions were not necessary. Experience assures us, that a person in good health may be safely inoculated without any preparation, and that all the regulations in respect to diet and the necessary course of medicine, may be sufficiently complied with in the week that intervenes between the operation and the commencement of the disease. With respect to a double infection, that is, by Inoculation and in the usual course of communication, or an accumulation of the distemper afterwards by living with those who are actually labouring under it, no ill consequence need be feared; for I am perfectly satisfied, that after Inoculation is effectually performed, no injury can be sustained by living with others in the most infectious state. And even if the first Inoculation should fail infecting (which if proper care is taken will scarce ever happen) the failure may be discovered on the third or fourth day, and the patient may be inoculated again; and even then, should there be a moral certainty that the natural infection has been taken, it will be in time to prevent any ill effects; the inoculated disease will as it were supercede and annihilate the former infection, and the patient have the Small Pox from Inoculation only.

I am aware that some apology is necessary on publishing opinions that may be deemed improbable in so laconic a manner; this is no place to pursue the subject: but I mean soon to support these assertions by relating certain facts on which they are founded. It is probable, that from a deliberate consideration of these circumstances, some considerable improvements may be made in the regulations of the Hospital.

A principal one should be, to quit the practice of bringing the inoculated patients to reside with those who have the natural disease; a circumstance that could not have been consented to but from the former mistaken opinions which have been noticed. A considerable advantage will also be gained to the œconomy of the Hospital, on account of the time of the patients residence being shortened; by which means a greater number may be inoculated at the same expence.

I hope to stand excused from having made these remarks here, as in the sequel I mean to propose an enlargement of the Hospital at Pancras.

Having taken notice of the most material articles that have occurred relative to this subject, I shall venture, though with much diffidence, to submit some outlines of an Hospital for Inoculation to the public, premising, that in respect to situation, the environs of London do not seem to afford a better spot than that on which the inoculating Hospital at Pancras is built, which, with the ground adjoining to it being four acres, is sufficient for the accommodation of any number of patients for the benefit of the air; in short, every local advantage would be there enjoyed in great perfection: the present building is not however capacious enough for such a purpose, but it may be enlarged, and the whole extent of ground ought to be walled in, to prevent all intercourse with others, or giving any offence to the public; and I have not the least doubt of the acquiescence and assistance of the present governors, to any scheme for the extension of this noble and useful charity, as they have, with a most distinguished application and disinterestedness, employed their best endeavours to promote the

interest of the present establishment.

But previous to every other step, an application to Parliament for encouragement, and proper powers to carry this design into execution, seems necessary; for it will not be sufficient to open an Hospital for Inoculation, without offering something as an inducement to invite those who are proper objects to accept of the benefits intended. Amongst the lower classes of people in the metropolis, as well as in many other places, the voice of the generality is against Inoculation; prejudices are not easily removed; nor is it to be expected that the many will attend to the advantages that will result to their children, unless some present benefits were to be connected with them<sup>[4]</sup>.

- 
4. While the Empress was under Inoculation at Sarsco-celo, some of the poor of the adjoining village were also, on the encouragement she had given, inoculated.

I remember the Empress said to me, with that vivacity and liberality of sentiment for which she is remarkably distinguished, "If I was to order the poor of this neighbourhood to be inoculated, it would be complied with, and be beneficial to them; but I love to use persuasive means, rather than authority; on this account I have advanced a rouble (about four shillings) to each that would consent, and several have accepted it and recovered; but I find they now talk of raising the price to two roubles, which I must consent to as a further encouragement, for I wish the practice may be advanced by the mildest methods."

---

If parish officers were obliged by Act of Parliament to apply to the Hospital for the admission of every man or woman who should either on their own account, or on behalf of their children, express a desire of being inoculated, and on their being taken in to supply each with two new shirts or shifts, and sign an obligation to provide decent new cloathing for every one on their receiving notice of their recovery and time of dismission, and also to give a small gratuity (suppose half a crown) to every person of the age of            and to the parents of every child, on producing a certificate of their having behaved decently, and complied with the rules of the house, signed by the physician, it would probably be a sufficient inducement, and at the same time the fresh cloathing would effectually prevent the spreading the disease to others. And this could not be reasonably deemed a hardship, since some of the most respectable old Hospitals exact as much on admission of parish patients<sup>[5]</sup>.

- 
5. At St. Thomas's Hospital, every patient on admission pays 2s. 6d. if clean, or 10s. 6d. if venereal; and the overseer or churchwarden of the parish signs an obligation that he will find clean body linen every week, and pay four pence a day so long as he continues in the Hospital, and receive him when discharged, or take away the body, or pay the burial fees to the steward of the Hospital, in case of death.

---

It is scarcely to be doubted but that Parliament would cheerfully embrace a plan of this nature, which has for its object the preservation of the lives of the poor, and carrying them and their children safely through this terrible disease, without endangering their neighbourhoods.

Parishes would likewise find their account in it: by a known moderate charge they would be released from the contingent great expence of maintaining many sick families, occasionally afflicted with the Small Pox in the natural way; oftentimes to the great injury of trade and manufactures: and this by a trifling advance to be bestowed but once during the life of an individual, who would be maintained about three weeks without any further expence, and return home to wear the cloaths they had bestowed on him.

Thus much I have thought necessary to state, from a moral certainty that some provision of this sort should be made; to proceed, would be entering into minute matters that would more properly belong to the governors, who will be best able to make such regulations as may be for the general benefit of the charity.

So much has already been said on general Inoculations in the country, that it seems unnecessary to enter on the subject again in this place. But such is the obstinacy of some parishes, and the parsimony of others, that it is impossible for the poor who are desirous of being inoculated, to persuade them to advance the small sum that would be necessary to defray the expence; and they are therefore obliged to wait the event of the natural disease, while the principal inhabitants are securing their own families by Inoculation.

Another unjustifiable piece of frugality that deserves attention and to be remedied is, that in many places where the whole number of poor have been inoculated at the expence of the parish, illiterate fellows, totally unacquainted with diseases or remedies, have been employed on account of cheapness only; when at the same time the families of the wealthy have been under the care of medical gentlemen of good reputation. To insert all the instances that might be produced of parochial meanness would be tedious; I shall mention the following only, which may be relied on as an indisputable truth. The inhabitants of a certain parish had a meeting to agree on inoculating all the poor; some medical gentlemen in the neighbourhood offered to undertake the business at a very low price; but as cheapness was the only object of consideration, the parish was about to agree with a blacksmith at eighteen pence a head, when one of the most frugal started this objection: It is very probable that under this man's care we may have some die, and the expence of their burial may cost the parish so much, that it might be as well to agree with a better man. This objection was thus removed by the smith:—"Come, I'll tell you what I'll do with you.—Give me half a crown a head, and them that die I will carry to the church-yard without putting the parish to any further expence."

Thus to trifle with the lives of their indigent fellow creatures, must be an indelible reproach to any



people. I know it will be said, that many instances can be produced, where whole parishes of poor have been inoculated, and have succeeded very well, under the care of persons who were totally unacquainted with medicine.

I will not here dispute the truth of this assertion; and indeed, if it was not an easy matter to procure more able help, it might be better to continue the practice in that way than to neglect inoculating entirely; but this is not the case. Gentlemen of the profession of good abilities will go very low in their price; and when it is considered that the sum is to be paid but once in the life of each person, surely parishes ought to be compelled to employ one who has had a medical education, and others should be restrained to their own proper business.

But it happens not unfrequently that irregular and dangerous symptoms appear, and at other times a different disease attacks the patient at the same time, with some unusual complaints while under Inoculation; these situations would certainly require the assistance of a person who could judge well of the symptoms, and distinguish the diseases properly, and know how to treat them, which a man unacquainted with the principles or the practice of physic could not pretend to, and consequently the patient would be exposed to great danger. Should an Act of Parliament be procured, it would be necessary to provide for the following circumstances.

That every parish (with the exception of such large places as should be thought too populous to be included) should be enjoined to offer Inoculation to all their poor who should be willing to admit of it<sup>[6]</sup>; that the patients and their families should be maintained during their illness; that the person employed to inoculate should have had some education in medicine as physician, surgeon, or apothecary; and that once in five years the same offer should be renewed, leaving the time of year and other circumstances to the option of the parish.

---

<sup>6</sup>. Vide Page 3, &c.

---

If these obligatory clauses were obtained, general Inoculations in the country might be carried on at a very moderate expence.



## CONCLUSION.

On a review of what has been advanced it will appear, that the practice of Inoculation has been upon the whole rather hurtful than advantageous to the city of London, and that the mortality from Small Pox has lately increased to an alarming degree: that it may be presumed this loss has not been sustained by the wealthy, who have availed themselves of their easy circumstances, and by timely Inoculation have secured their families; but that the loss has fallen principally among those who are not the least useful members of the community, viz. on young persons, the offspring of inferior trades-people, and the labouring poor.

It has been shewn, that to encourage partial Inoculations among such of the poor as might be willing to accept the offer, and should be found in a proper state of health, would be to increase the evil, by spreading the disease in a destructive manner among their neighbours, and be on other accounts dangerous and intolerable. An hospital for the purpose of Inoculation *only* has been rescued from the unjust charge of being unhealthy, and has been proved to enjoy superior advantages in that respect, and many others; and that a well-regulated plan of this kind would effectually answer the purposes of abating the mortality, and securing the community from being infected by the patients.

An application therefore to the Legislature for approbation and assistance seems highly expedient; and it is not to be doubted but the generous and humane would readily be induced to raise by subscription a fund sufficient to carry these good designs into execution; so that as we are the first European nation who received and encouraged Inoculation, we may also have the honour of being the first who have generously diffused the benefit of it to the community at large, and transmitted it to posterity.

We have thus far only taken into consideration what respects the two extremes of society, the opulent and indigent; but there still remains a numerous and respectable part of the community unnoticed, I mean, persons who are in but moderate circumstances, yet above accepting the charity of an hospital.

Persons thus circumstanced seem to have a claim upon the humanity of such practitioners as are eminent in their profession; who, from that motive, we doubt not, will cheerfully give their attendance on such terms as families can afford. By this well-timed generosity, the minds of the middle rank of people will be made easy, and it will be a great inducement for them also to inoculate their families.

To conclude, I have used my best endeavours to represent the whole that has been treated of in its true light, and recommended the methods that have seemed to me to answer the purposes most effectually. It may probably happen, that zeal in the cause may have carried me too far, or that through inadvertency some errors may have been made. If they are pointed out, I will acknowledge them with thanks to the informer, having nothing more in view than the good of the public, and that the practice recommended may be so conducted as to afford its opposers as few objections, on any solid ground, as possible.

It is so truly the cause of humanity, and so certain of answering the purpose, that I most earnestly recommend a liberal support to all charitably disposed persons, and more especially to such in affluent circumstances, who may have experienced the happy effects of Inoculation in their own families, concluding with the words constantly used by a beggar in Turkey,

WHAT THOU DOEST, THOU  
DOEST TO THYSELF.

FINIS.



## ERRATA.

Page 1. *before* Methods, *read* A Description of the.

1. 9. *for* Agreeable, *read* In obedience.

20. 1. 11. *for* have, *read* hath.

26. 1. 4. *dele* one.

48. 1. 4. from the bottom, *dele* the inverted Commas.

49. 1. 13. *after* manner *dele* that, *and read* in which.

50. 1. 8. *for* the, *read* these.

49, 50, 51. *dele* the inverted Commas.

Transcriber's note:

All items in the Errata have been applied.

Page 29, 'subsistance' changed to 'subsistence,' "and provide subsistence for such of"

Page 60, space following 'age of' present in original.

Page 60, 'cheerfully' changed to 'chearfully,' "Parliament would chearfully embrace a"

Errata, '49' changed to '48,' "48. l. 4. from the bottom, dele the inverted Commas."

Errata, '50, 51' changed to '49, 50, 51,' "49, 50, 51. dele the inverted Commas."

\*\*\* END OF THE PROJECT GUTENBERG EBOOK THOUGHTS ON GENERAL AND PARTIAL  
INOCULATIONS \*\*\*

Updated editions will replace the previous one—the old editions will be renamed.

Creating the works from print editions not protected by U.S. copyright law means that no one owns a United States copyright in these works, so the Foundation (and you!) can copy and distribute it in the United States without permission and without paying copyright royalties. Special rules, set forth in the General Terms of Use part of this license, apply to copying and distributing Project Gutenberg™ electronic works to protect the PROJECT GUTENBERG™ concept and trademark. Project Gutenberg is a registered trademark, and may not be used if you charge for an eBook, except by following the terms of the trademark license, including paying royalties for use of the Project Gutenberg trademark. If you do not charge anything for copies of this eBook, complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away—you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

START: FULL LICENSE  
THE FULL PROJECT GUTENBERG LICENSE  
PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK

To protect the Project Gutenberg™ mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase "Project Gutenberg"), you agree to comply with all the terms of the Full Project Gutenberg™ License available with this file or online at [www.gutenberg.org/license](http://www.gutenberg.org/license).

**Section 1. General Terms of Use and Redistributing Project Gutenberg™  
electronic works**

1.A. By reading or using any part of this Project Gutenberg™ electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg™ electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg™ electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. "Project Gutenberg" is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg™ electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg™ electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg™ electronic works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation ("the Foundation" or PGLAF), owns a compilation copyright in the collection of Project Gutenberg™ electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg™ mission of promoting free access to electronic works by freely sharing Project Gutenberg™ works in compliance with the terms of this agreement for keeping the Project Gutenberg™ name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg™ License when you share it without charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this

work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg™ work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg™ License must appear prominently whenever any copy of a Project Gutenberg™ work (any work on which the phrase “Project Gutenberg” appears, or with which the phrase “Project Gutenberg” is associated) is accessed, displayed, performed, viewed, copied or distributed:

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at [www.gutenberg.org](http://www.gutenberg.org). If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg™ electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase “Project Gutenberg” associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg™ trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg™ electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg™ License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg™ License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg™.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg™ License.

1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg™ work in a format other than “Plain Vanilla ASCII” or other format used in the official version posted on the official Project Gutenberg™ website ([www.gutenberg.org](http://www.gutenberg.org)), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original “Plain Vanilla ASCII” or other form. Any alternate format must include the full Project Gutenberg™ License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg™ works unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg™ electronic works provided that:

- You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg™ works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg™ trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, “Information about donations to the Project Gutenberg Literary Archive Foundation.”
- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg™ License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg™ works.
- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.
- You comply with all other terms of this agreement for free distribution of Project Gutenberg™

works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg™ electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg™ trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg™ collection. Despite these efforts, Project Gutenberg™ electronic works, and the medium on which they may be stored, may contain “Defects,” such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the “Right of Replacement or Refund” described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg™ trademark, and any other party distributing a Project Gutenberg™ electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you ‘AS-IS’, WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg™ electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg™ electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg™ work, (b) alteration, modification, or additions or deletions to any Project Gutenberg™ work, and (c) any Defect you cause.

## **Section 2. Information about the Mission of Project Gutenberg™**

Project Gutenberg™ is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg™’s goals and ensuring that the Project Gutenberg™ collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg™ and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at [www.gutenberg.org](http://www.gutenberg.org).

## **Section 3. Information about the Project Gutenberg Literary Archive Foundation**



The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation's EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation's website and official page at [www.gutenberg.org/contact](http://www.gutenberg.org/contact)

#### **Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation**

Project Gutenberg™ depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations (\$1 to \$5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit [www.gutenberg.org/donate](http://www.gutenberg.org/donate).

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: [www.gutenberg.org/donate](http://www.gutenberg.org/donate)

#### **Section 5. General Information About Project Gutenberg™ electronic works**

Professor Michael S. Hart was the originator of the Project Gutenberg™ concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg™ eBooks with only a loose network of volunteer support.

Project Gutenberg™ eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: [www.gutenberg.org](http://www.gutenberg.org).

This website includes information about Project Gutenberg™, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.