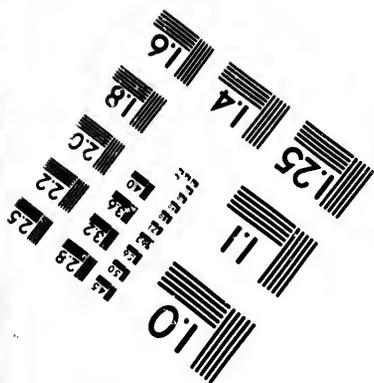
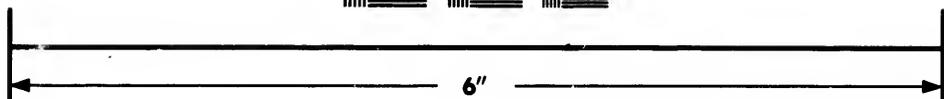
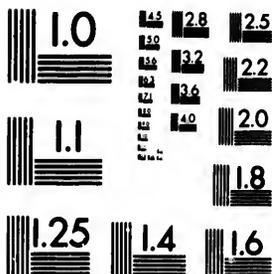


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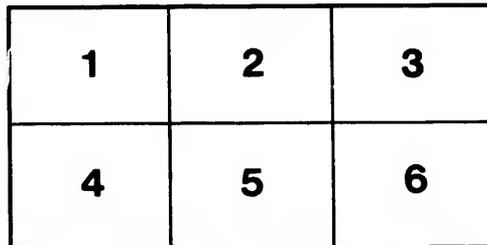
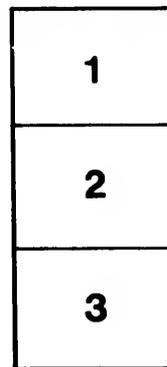
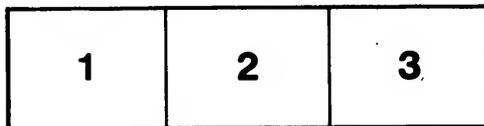
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A
COMPARATIVE SKETCH
OF
THE EFFECTS OF VARIOLOUS
AND
VACCINE INOCULATION,
BEING AN ENUMERATION OF FACTS NOT GENERALLY
KNOWN OR CONSIDERED,
BUT WHICH WILL ENABLE THE PUBLIC TO FORM ITS
OWN JUDGMENT ON THE PROBABLE IMPORTANCE
OF THE
JENNERIAN DISCOVERY.

BY THOMAS PRUEN.

“ Nolo virum, facili redimit qui sanguine famam :
Hunc volo, laudari qui sine morte potest.

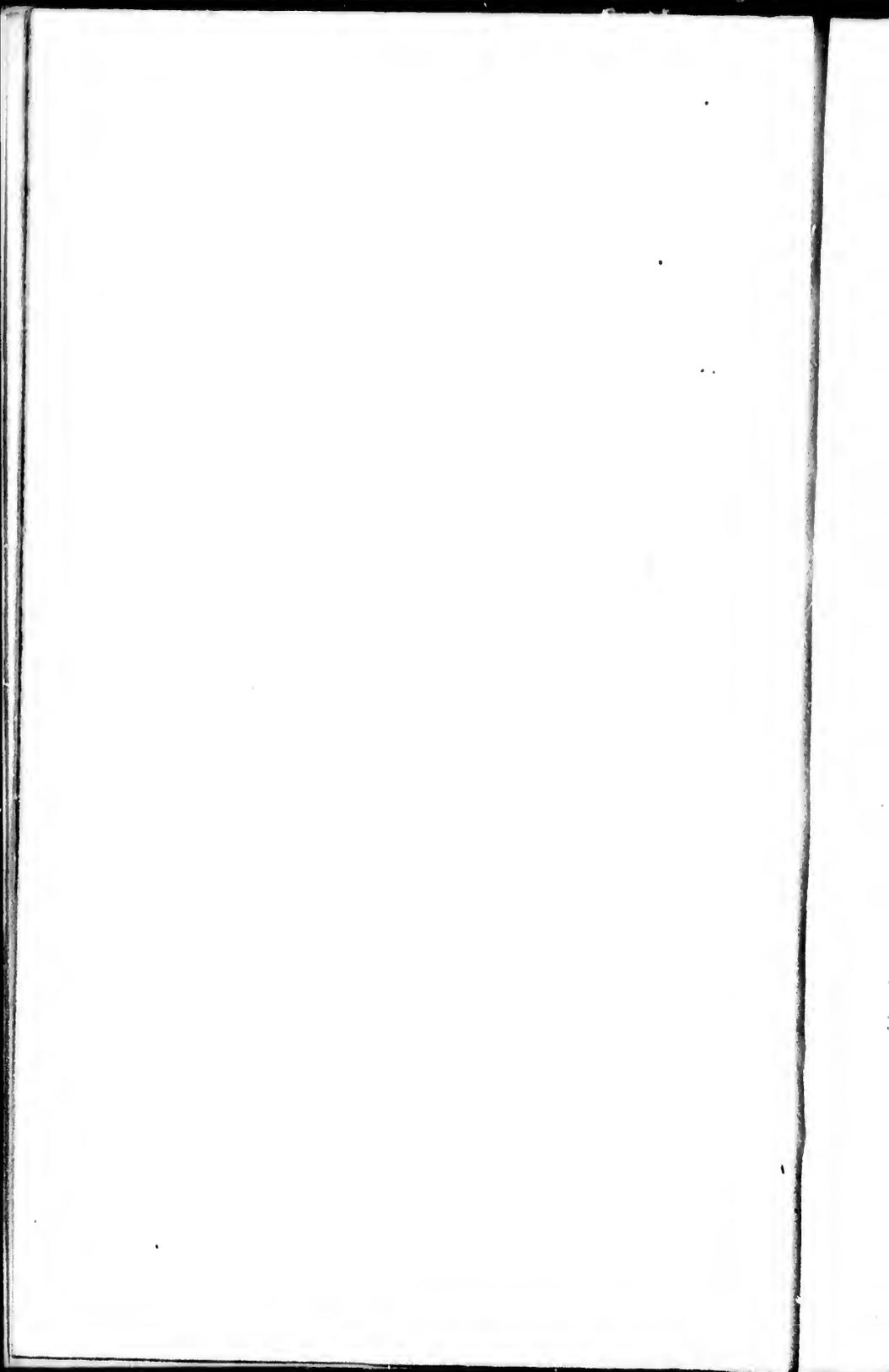
MART.”

PRINTED FOR PHILLIPS, CROSBY, MURRAY, DWYER, AND
OTHER BOOKSELLERS.

1807.

PRINTED BY H. RUFF, CHELTENHAM.

TO
THE RIGHT HONORABLE
LADY CREWE,
WHOSE CHARACTERISTIC BENEVOLENCE
HAS BEEN EMINENTLY DISPLAYED IN
HER LADYSHIP'S EXERTIONS TO PROMOTE
THE GENERAL PRACTICE
OF VACCINATION,—
A PRACTICE FROM WHICH HUMANITY JUSTLY
AUGURS THE MOST BENEFICIAL RESULTS,
THIS LITTLE COMPOSITION
IS RESPECTFULLY DEDICATED
BY HER LADYSHIP'S MOST OBLIGED
AND OBEDIENT HUMBLE SERVANT,
THE COMPILER.



ADVERTISEMENT.

THE Compiler of this little Work, having experienced in his own family some of the afflicting evils attending the Small-pox Inoculation, and the striking contrast afforded by the Vaccine, and having had frequent opportunities of knowing the widely-extended progress and success of the New Practice, is induced to lay before the Public, the result of a search that has riveted his confidence in it.

His original Plan embraced an Appendix of important documents, which, on consideration, he is induced to sacrifice to conciseness; and he cannot but indulge a hope that the humble task he has undertaken will not be without its benefits, trusting, as he confidently does, to those reflections, the aggregation of facts cannot fail to excite in every unprejudiced mind.

WOODBINE-LODGE, CHELTENHAM,
March 13, 1807.

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§ 1....ON THE MORTALITY OCCASIONED BY THE NATURAL SMALL-POX.

THE Lover of Science and the Friend of Humanity will equally regret, that in the discussion of a subject, confessedly of the highest importance to mankind, Prejudice should so far have infused itself, as to occasion a neglect even of common sense and common experience. Thus there are not wanting objectors to the JENNERIAN practice, upon the grounds, that the Small-pox, under the present well-understood mode of treatment, is mild and harmless—very rarely contagious—leaving nothing injurious to the constitution behind it—and requiring, therefore, nothing further of improvement; and the earliest opposer of Vaccination in this country, referring to the numbers inoculated by the Jennerian Society, viz. 19,471, does not scruple to say, “If these 19,471 persons had been inoculated for the Small-pox by proper people, I believe that not one of them would have died.”—*Commentaries on Cow-pox*, 242.

To advance authorities in denial of these assertions may, perhaps, appear perfectly unnecessary, since there are few families who cannot, in themselves, produce fatal proofs of the fallacy of such assertions. The authorities, about to be quoted, are incontrovertible; and

the most moderate computation is, that one inoculated patient dies out of 250, and that the mortality occasioned by Small-pox, under every advantage of treatment, was, before the introduction of vaccination, in the British isles alone, above 40,000 annually!

But it must not be lost sight of, that as the Small-pox is an infectious disorder, it is still to be dreaded in the casual or natural way, by all who have never undergone it, and the calculation is, that of those who take it naturally, *one out of six dies*.

Of the dreadful effects of this disorder, under both the most favourable and unfavourable auspices, the following will still furnish but an imperfect idea.

In 1520, when the Small-pox first visited New Spain, it is said to have proved fatal to *one half* of the inhabitants in those provinces where it made its appearance. In the province of Quito alone, it destroyed no less than 100,000.—*Woodville on Small-pox, p. 27.*

On its introduction into Greenland, in 1733, it almost depopulated the whole country. Even so lately as the year 1793, when the Small-pox was conveyed to the Isle of France, by a Dutch ship, 5,400 persons perished with it there in *six weeks*.—*Ibid.*

Some years ago, it made its appearance amongst a tribe of Esquimaux Indians, on the coast of Labrador, and raged with unprecedented violence. Many of the natives fled, to avoid the contagion; nor did they venture to return till three years had elapsed, when their country was become a desert: but they found the *skeletons* of 500 persons who had fallen victims to the horrible disorder.—*Ring's Treatise on the Cow-pox, p. 604.*

The Small-pox is said to have been so malignant in the Russian empire, as to have destroyed not much fewer than *two millions in one year*. *Woodville*, 292.—Guthrie (p. 129) thinks it not improbable that the population of these regions, “the *Officina Gentium*,” which formerly enabled them to pour such immense numbers over Europe, has been greatly lessened by this disorder. A nobleman, possessed of large estates there, informed Mr. Pitt, Chaplain to the English Factory, that throughout his villages, the ravages of the Small-pox were little inferior to those of the Plague.—7 *Med. Journal*, 292.

At Constantinople, before the adoption of inoculation, even *one half* of those infected have not unfrequently died.—*Woodville*, p. 66.

Capt. Turner, in the account of his embassy to Thibet, draws a melancholy picture of the ravages of the Small-pox, and its dreadful consequences. Its fatality is so well known, and so seriously apprehended, that whenever it appears, those who are not attacked, immediately abandon their habitations, and leave the miserable victims to perish. He says, he has himself seen many villages thus deserted; and that the capital once remained *three years without inhabitants*, who had fled from it, and did not return till it was supposed to be purged from the pestilence.

Percival, in his History of the Island of Ceylon, says, the Small-pox is a disease which particularly excites apprehension among the natives; for they look upon it as the immediate instrument of God’s vengeance, and therefore do not venture to use any charms against it, as they are accustomed to do in other disorders. If any one dies of it, he is looked upon as accursed, and his body is even denied the rites of burial; it is carried

out to some unfrequented place, and there left, with branches of trees scattered over it. Mr. Christie, the Chief of the Medical Staff at Ceylon, in a letter to Sir Walter Farquhar, dated Columbo, November 19; 1802, (*9 Med. Journal*, 457) says, that even its very appearance was often sufficient to depopulate whole villages, as it was not uncommon, in the remote parts of the country, for the whole of the inhabitants of a village to desert their houses on its breaking out, leaving their unfortunate friends either to perish by the disorder, by famine, or by wild beasts; and of one melancholy instance of this sort, in Sept. 1800, Mr. Christie was himself a witness. Inoculation for the Small-pox was introduced there in 1800, and these dreadful evils somewhat assuaged; but Mr. Christie says, that even then, notwithstanding the utmost care of the medical men, they lost somewhat above the proportion of *one in one hundred*, from the inoculated Small-pox; while of those who caught it naturally, *almost one third died*. It was, therefore, with the greatest gratitude that vaccination was received, when introduced under the auspices of the Governor, the Hon. Mr. North; and through the successful exertions of Mr. Christie, and other medical gentlemen, it was practised with such enthusiasm, that upwards of 7,000 persons were vaccinated in less than *three months*, and between Aug. 1802, and April, 1804, no less than 21,000.—*13 Med. Journal*, 122.

The mortality occasioned by the natural Small-pox in India has been immense; it has been said, that no less than *one out of three die of it*. The Bramins who practise inoculation aver, that they do not lose above *one in two hundred* by inoculation; but this statement is obviously partial, and there are abundant reasons for disbelieving it. It seems that the inoculated Small-pox is more severely felt in India, among children born there of Eu-

ropean parents, than in Europe, since it is fatal to *one in sixty or seventy*; and the terror and anxiety felt, during the months in which the disease prevails, are inexpressible.—*Shoolbred's Report of the Progress of Vaccination in Bengal*, p. 19.

At Kamschatka, 5,368 were carried off by it in the year 1768. And Dr. Rehmann, in a letter to Dr. Jenner, announcing the progress of vaccine inoculation in Russia, Tartary, &c. dated Siberia, the 25th Nov. 1805, asserts, that "in no part has the Small-pox made more horrible ravages than among the wandering inhabitants of these countries, viz. the Bucattese, the Tongusians, the Ostiacks, &c. 'Tis a fact well known, that the Kamschadale nation has been almost entirely destroyed by this disease, the number of individuals remaining at present not exceeding 600."

The Rev. Mr. Stansen, missionary at Halifax, in Nova Scotia, says, that in the course of the year 1801, he buried 181 persons, of whom 92 died of the Small-pox, viz. 71 in the natural way, and 21 by inoculation.

In the year 1749, 6,000, out of 32,000 inhabitants of Montpellier, died of the Small-pox.—14 *Medical Journal*, 142.

About the year 1757, the Small-pox broke out in Burford, Oxfordshire, occasioned, as was generally supposed, by some infected clothes being sent there from London. It raged with all the fury of a plague, from a short time after Michaelmas till near Midsummer following; during which time it was computed to have carried off upwards of 900 of the inhabitants. In consequence of the infection, the market was suspended, no one daring to attend it. The provisions were left at some distance

from the town, with the prices affixed, and the town-people fetched them, leaving the money, which was suffered to remain some time exposed to the air, to prevent the extension of the disease. It carried off, in many instances, whole families; so that, on a moderate calculation, considerably more than *one half* of the population was sacrificed to its destructive ravages.

Dr. Willan notices a strong instance of the fatality of this dreadful disease:—A child was inoculated in April, 1798, whose parents kept a shop, in a court consisting of about twenty houses. As the poor daily resorted thither, seventeen persons caught the Small-pox in the natural way, and *no fewer than eight of them died.*—*Ring*, 867.

Dr. Sims conceives that the natural Small-pox is fatal to *above one in six.*—*Rep. of Com. of the H. of C.* 25.

§ 2...ON THE EFFECTS OF SMALL-POX INOCULATION.

IT is not to be wondered at, that, labouring under so grievous a pestilence, mankind should eagerly embrace the opportunity of mitigating its fury by Inoculation; but, notwithstanding the sanguine hopes and expectations which this practice excited, and notwithstanding its apparent good effect in ameliorating what it could not eradicate, experience has proved that it has in reality rather increased than diminished the evil. Although it is indisputably true, that the number of individuals who perish by Small-pox, *out of a certain number infected*, is less than before the adoption of the remedy, yet it is also true; that the *aggregate number destroyed* is greater, since a greater number is infected;

and, paradoxical as this may at first sight appear, the reason is simple and natural. While the Small-pox was more fatal in appearance, caution was alive, and whenever the disorder appeared, it carried such terrors with it, that communication was cut off as much as was practicable, and every house, where its baneful effects were visible, was shunned as a pest-house. It was natural to fly from a plague that carried off one third or one fourth of those it attacked. When, however, by the introduction of inoculation, and an improved mode of treatment, the disease happened to be fatal to *one only in 150*, it gradually became disregarded; the horror which before attached to it vanished, since the former consequences did not apparently ensue; and the spreading of the infection was no longer attempted to be prevented. Lady Mary Wortley Montague, in one of her letters, remarks, "Every year thousands undergo this operation; and the French Ambassador says, pleasantly, that they take the Small-pox here by way of diversion, as they take the waters in other countries." Contagion, in consequence, spread widely around, and numbers, either voluntarily or involuntarily, underwent the disorder, and lost their lives, who, but for the supposed efficacy of the remedy, would have continually and sedulously avoided its effects.

To this purpose Dr. Capps, of York, speaks:—
 "The very *means* that save the lives of many who have this disease, increase the number of those who receive it; and it is now annually fatal to a greater number of persons than before the improvement in the treatment of it; and the increase of deaths is not merely in proportion to the increase of population: Free admission to the open air, though necessary for the sick, exposes those who have not had the disease, not merely to the chance, but almost to the certainty of taking the infec-

tion. Very few of the inhabitants of this island now escape it."—*Med. Jl.* 433.

The fact is substantiated by evidence. Dr. Lettsom delivered in to the Committee of the House of Commons (*Report*, 85, 147) a statement from the yearly Bills of Mortality, by which it appears, that in 42 years, between 1667 and 1722, the average number of deaths, occasioned by the Small-pox, was, to the whole number who died, as 72 to 1000; but that in 42 years after inoculation was in full use, viz. from 1731 to 1772, the proportion was no less than 89 in 1000, being an increase of nearly one fourth.

Dr. Blane also mentioned (*Report*, 32) a calculation of Dr. Heberden, making the numbers who died of it, in the last thirty years of the late century, 95 in 1000; while in the first thirty years the proportion was only 70 in 1000. Dr. Blane adds, that this is, perhaps, much more strongly exemplified in the country than in London; for there were certain districts into which the Small-pox, previously to the introduction of inoculation, was unknown for 20, 30, or 40 years, so that great numbers passed through life without ever having it; but now, from the reasons enumerated, and from the extended communication between the most distant parts of the kingdom, an adult who has not undergone the Small-pox is hardly to be found.

Dr. Blane stated, in evidence before the Committee (*Ibid*) that the deaths from Small-pox were, on an average, nearly *one tenth* of the whole mortality; and that it appears by the Bills of Mortality, about 2,000 die annually of it in London. But the number must in fact be much greater, as these Bills do not comprehend the whole of the metropolis. One parish, not included in

them, viz. Mary-le-bone, contains itself not less than 63,000 inhabitants. Pancras, another parish, is not included; and in these two are the Small-pox and Foundling Hospitals; it is estimated, therefore, that the whole number not reckoned is 117,802. *Report*, 33, &c.—In addition to which may be mentioned, that 6,000 of 7,000 persons are annually interred in the burying-grounds of the Dissenters; so that at least *one seventh* of the deaths is excluded from the Bills. *Ibid*, *Ring*, 605.—The total number in the United Kingdom, according to Dr. Blane's calculation, would be about 34,260; but he confesses that he thinks this is *under* the truth. It is supposed that the real number is not less than 45,000.—4 *Med. Journal*, 430.

Dr. Cappe observes (4 *Medical Journal*, 432) that the annual number of burials for ten years, ending in 1742, in Pancras and Mary-le-bone, were 1041. But he conceives, that great as the number of deaths has been in London, it is much exceeded in the country; for it appears, that one fourth (or even one third) of the deaths in London is of strangers, who do not settle in the metropolis till the age of 18 or 20, and have therefore, probably, already gone through the Small-pox. So likewise many children, born in London, are inoculated in the country. He also says, it appears by the London Bills of Mortality, that for 75 years, ending in the year 1777, more than 2,020 have been swept off by the Small-pox *annually*. The total amount, in that period, was 151,570. 4 *Med. Journal*, 432.—Supposing the population within the Bills to be 1,000,000, the proportion of deaths from Small-pox is *one* out of every 500 inhabitants, and, as he conceives, not less through the whole island. The inhabitants of Manchester, Liverpool, and Chester, were enumerated, in the year 1773, at 78,271,

and the annual deaths from Small-pox, on an average, 381; so that one person died of it every year, out of 205.—*Ibid*, 436.

It appears, that when the number of births in London was, on an average, about 16,291, the number of those who died of the Small-pox was about 2,444, so that there were *two deaths* by this disease alone for every *thirteen births*. In Liverpool the mortality has been still greater; for there the proportion has been 2 to 11, *Ring*, 361, 4 *Med. Journal*, 437,—and about the same proportion in Manchester, according to Dr. Percival. But if from the number born be subtracted all who have been inoculated, and all who die of other diseases before they are exposed to the casual contagion, it will seem that not less than *one fifth* die, of those who are attacked.—14 *Med. Jl.* 349.

The following table shews the comparative deaths, as they appear by the London Bills of Mortality, subsequent to Dr. Cappe's calculation:—

Years	Total died.	Of the S. Pox	Years	Total died.	Of the S. Pox
1777	23,334	2567	1792	20,213	1568
1778	20,399	1425	1793	21,749	2382
1779	20,420	2493	1794	19,241	1913
1780	20,517	871	1795	21,179	1040
1781	20,709	3500	1796	19,288	3548
1782	17,918	636	1797	17,014	522
1783	19,209	1550	1798	18,155	2237
1784	17,828	1759	1799	18,134	1111
1785	18,919	1999	1800	23,068	2409
1786	20,454	1210	1801	—	1461
1787	19,349	2418	1802	—	1579
1788	19,697	1101	1803	—	1202
1789	20,749	2077	1804	—	622
1790	18,038	1617	1805	—	1685
1791	18,760	1747			

Ring, 605, 1030.

Dr. Bradley supposes, that on an average of the whole world, *one in one hundred and fifty* dies of the inoculated Small-pox.—*Report*, p. 21.

Mr. Ring, by whose accurate observations and unwearyed exertions in the cause of Vaccination, mankind has been essentially benefited, gave in evidence (*Ibid*, p. 49) as his opinion, that *one dies in every hundred*, inoculated in London, from the unwholesomeness of the atmosphere, and *the frequent necessity of inoculating children at an improper age*.

The Rev. Dr. Booker, of Dudley, says, that in his parish, which contains 14,000 persons, he has frequently buried seven or eight victims to Small-pox in a day; but that for two years after the introduction of Vaccine Inoculation, *only one* had been carried off by the Small-pox.—*11 Med. Journal*, 431.

The Rev. Wm. Finch, of St. Helen's, Lancashire, also says (*Report*, 164) that at the close and beginning of the years he resided there, he has sometimes interred, on the same day, two or three children of a family who died of it; and he declares, that since vaccination has been adopted, he has not had the sorrowful duty to perform of burying *one* that died of the Small-pox.

At Edinburgh, according to Dr. Munro, the proportion of deaths, by the Small-pox, was *one tenth* of the whole mortality.—*Ring*, 376.

It is calculated that *one in fourteen* is the proportion in France, between the number of deaths by the Small-pox and the total number. *Ib.* 700.—According to Dr. Colon, from 60,000 to 72,000 *fall annually* by this disease. *Ibid*, 928.—So lately as the year 1799, 15,000 perished

in Paris alone. *Ibid*, 929.—Dr. Moreau says, that in one particular year, no less than 20,000 died of it.—*Ibid*, 785.

By a report of the Central Committee at Paris, made Nov. 24, 1802, it appears, that in the four preceding months, out of 5,463, who died, 1,417, or upwards of *one fourth*, died by the Small-pox; and that, in those parts of the city where principally raged, no fewer than 923 deaths, out of 2,081, or above *one third*, were occasioned by it.

In Rome, 6,000 persons perished by the Small-pox in six months. *Ring*, 931.—In Naples, 16,000 in *one year*, *Ibid*, 785—and 8,000 died at Palermo, in Sicily, the year only before Dr. Marshal visited it.—*Report*, 66,

At the small town of Como, in the Milanese, in the two latter months of 1803, nearly 300 children, whose parents had obstinately refused their being vaccinated, died of the Small-pox; while all who had undergone vaccination escaped.—*Dr. De Carra*, 12 *Med. Jt.* 123.

Dr. Faust says, the Small-pox destroys, in Germany alone, 70,000 annually, or nearly 200 a day.—1 *Med. Journal*, 83.

Dr. Odier, of Geneva, calculates, that from the year 1661 to 1772, 2,538,450 died in London, of whom 139,432, or *one in fourteen*, died by the Small-pox; but, from what has been before remarked respecting the Bills of Mortality, it is very probable that the aggregate number was greater. In the same space of time 76,000 died at Geneva, of whom 3,972, or about *one in twenty*, fell victims to the Small-pox. At the Hague, from 1755 to

1769, they amounted to more than *one in thirteen*.—
Ring, 376.

Dr. Macdonald, of Hamburgh, calculates that the Small-pox proves fatal to 40,000,000 *every century*, or 400,000 *annually*; while Dr. Sacco, of Milan, conceives that not less than 15,000,000 are carried off by it every *twenty-five years*, or 600,000 *annually*. Dr. Lettsom calculates that 210,000 fall victims *annually* to it in Europe.

The following paper was given in to the Committee by Dr. Woodville:—

Mr. Dawson, a name well known to mathematical men, says, "Upon a supposition, that among 8,000,000 of people, the mortality of the Small-pox was in the same proportion as in Liverpool, Manchester, and Chester, there would annually die near 38,941 of this distemper. But, to make the calculation more easy, I have supposed 30,000 or 35,000 to enter annually at three years of age, and the decrements of life to be equable, the extent being 86 years. The reason of diminishing the number from 38,941 to 30,000 or 35,000, is, because a certain proportion of those who die of the Small-pox before three years of age, would, if this distemper were exterminated, die of other diseases. The allowance, I am sensible, is too great, and the extent of life supposed too short; upon both which accounts, the numbers given below are less than they ought to be, but surely sufficient to show our Rulers the amazing importance of such a measure."

<i>Period of Yrs.</i>	<i>Incr. of Inhabts. if 30,000 die.</i>	<i>Incr. of Inhabts. if 35,000 die.</i>
10	231,922	328,909
20	527,694	615,643
30	757,322	860,209
40	910,800	1,062,600
50	1,048,146	1,222,837
60	1,149,342	1,340,839

§ 3....ON THE DISCOVERY OF COW-POX INOCULATION.

NEARLY twelve centuries had Small-pox exercised a despotic dominion over mankind, extending its ravages universally, and maiming or disfiguring where it did not destroy. The barriers that were opposed to its progress were, as we have seen, ineffectual: while carelessness was destruction, caution was useless.—In such a situation," say the Editors of the *Edinburgh Review*, No. XVII. 35, "it will be allowed that there was a sufficient motive to seek for some further improvement, and that it was natural to prosecute with enthusiasm every suggestion which held out a prospect of finally disarming this cruel depredator on the lives and happiness of the community."

This prospect is now clearly laid open to us by our fellow-countryman, Dr. JENNER; and it would be doing injustice to him to give the account of his discovery otherwise than in an abstract of his own "simple and interesting narrative."—*Ibid.*

Dr. Jenner's inquiry into the nature of the Cow-pox commenced, it appears, about 1777. *Rep. p. 1.*—His at-

tention to this singular disease was, as he tells us, first excited by observing, that many of those he was called upon to inoculate resisted every effort to give them the Small-pox—having undergone, as he found, a disease they called the *Cow-pox*, contracted by milking cows affected with a peculiar eruption on their teats. This disorder, it appears, had been known among the dairies, time immemorial; and a vague opinion prevailed, that it was a preventive of the Small-pox; but this opinion seems to have been comparatively new, as the older farmers declared they had no such idea in their early days,—a circumstance which Dr. Jenner accounts for by the comparative rareness of the Small-pox inoculation at that time; in consequence of which the preventive powers of the Cow-pox could be but little called into action.

In the course of his inquiries a difficulty presented itself, which required all his industry and fortitude to overcome. Some of those who seemed to have undergone the Cow-pox, “nevertheless felt the influence of the Small-pox, on being subjected to it.” This occurrence led him to inquire among the practitioners in the country, few of whom were unacquainted with the disease; but “all” agreed in sentiment, that it could not be relied on as a preventive. “This,” says he, “for a while damped, but did not extinguish, my ardour; for, as I proceeded, I had the satisfaction to learn that the Cow was subject to some *varieties* of spontaneous eruptions upon her teats; that they were all capable of communicating sores to the hands of the milkers, and that whatever sore was derived from the animal was called, in the Dairy, the *Cow-pox*.” In surmounting this obstacle, he was induced to distinguish these diseases into *true*, and *spurious* Cow-pox. Great as this impediment was, another and more important

one followed:—Instances were not wanting to prove, that when the *true* Cow-pox broke out among the cattle; persons who had milked an infected animal, and had, apparently, gone thro' the disease, were still liable to the Small-pox. "This, like the former obstacle," continues Dr. J. "gave a painful check to my fond and aspiring hopes; but, reflecting that the operations of Nature are generally uniform, and that it was not probable the human constitution, having undergone the Cow-pox, should, in some instances, be perfectly shielded from the Small-pox, and in many others remain unprotected, I resumed my labours with redoubled ardour. The result was fortunate; for I now discovered that the virus of Cow-pox was liable to undergo progressive changes from the same causes, precisely as that of Small-pox, and that when it was applied to the human skin in its degenerated state, it would produce the ulcerative effects in as great a degree, as when it was not decomposed, and sometimes far greater; but, having lost its specific properties, it was incapable of producing that change upon the human frame which is requisite to render it unsusceptible of the variolous contagion: so that it became evident, a person might milk a cow one day, and, having caught the disease, be for ever secure, while another person, milking the same cow the next day, might feel the influence of the virus in such a way as to produce a sore or sores, and, in consequence of this, might experience an indisposition to a considerable extent; yet, as has been observed, the specific quality being lost, the constitution would receive no peculiar impression." In this particular he found a close analogy between the virus of Cow-pox and that of Small-pox, which, if taken at an advanced stage of the disease, or, though taken early, if exposed to such agents as cause its decomposition, is equally ineffectual. The not attending to this circumstance will, he conceives,

explain the source of those errors which have been committed by many inoculators.

“ During the investigation of the casual Cow-pox, I was struck,” he observes, “ with the idea, that it might be practicable to propagate the disease by INOCULATION, first, from the cow, and then from one human subject to another. I anxiously waited some time for an opportunity of putting this theory to the test.” His first experiment was made in the spring of 1796, on a lad, of the name of Phipps, with virus taken from the hand of a young woman who had been accidentally infected by a cow. As the indisposition that attended it was barely perceptible, he could scarcely flatter himself that security from Small-pox would follow; but, on the lad’s being inoculated some months afterwards, he proved to be perfectly secure.*

Inspired with confidence, he proceeded, “ not only with great attention,” he says, “ but painful solicitude,” and published his discovery and experiments in June, 1798.

Thus then was made, and liberally communicated to the public, by the ingenuous author of it (who, by interested management, might have realised a princely fortune†) a discovery termed, by our neighbours and rivals,

* He was again inoculated with Small-pox matter, in its most active state, nearly five years afterwards, *Rep.* 5;—again in the spring of 1804, *Ring’s Answer to Goldson*;—again, for the 4th time, and equally without effect, in May, 1805.

† See the opinions of Sir Walter Farquhar, *Report*, 19; Dr. Bradley, *ib.* 20; Dr. Sims, *ib.* 22; Mr. Ring, *ib.* 48; Dr. Saunders, *ib.* 63; Dr. Lettsom, *ib.* 88; Dr. Frampton, *ib.* 91; Dr. Balthie, *ib.* 92; Adm. Berkeley, *ib.* 184; Sir Henry Mildmay, *ib.* 185; Mr. Windham, *ib.* 187; Sir James Sinclair Erskine, *ib.* 189; Mr. Courtenay, *ib.* 196;—who thought

“the most brilliant and most important of the eighteenth century,” *5 Med. Jl.* 357;—a discovery, which we owe not to accident or any fortuitous circumstances, but (under Heaven) to the acuteness, the philosophical and persevering investigation of our fellow-countryman.*

Dr. Jenner was not unknown among the scientific, previous to his promulgating to the world his vaccine discovery. He had long been a Fellow of the Royal Society, and had published several interesting papers on subjects in Natural History, and those more immediately connected with his profession. Among the former is to be found in the *Philosophical Transactions*, and reprinted in the *Annual Register* for 1788, that which excited so much attention, on the Natural History of the Cuckoo.

that the fortune Dr. Jenner might have realised, had Gain been his object, would have been “immense”—“incalculable”—“10,000l. per annum”—“20,000l. per ann.”—“100,000l.”—that “he might have died the richest man in these dominions,”—&c. &c.

* Interesting as this part of the subject is, it has been gone rather more fully into, than the plan proposed allows, in order to refute the invidious calumnies of some, who, having early adopted the practice, endeavoured to impose themselves on the world as those to whom alone it was to be indebted for the extensive, and consequently universal, benefits of Vaccination,—most *strangely* asserting, that Dr. Jenner was only “the Gentleman who first set on foot the inquiry into the advantages of Vaccine Inoculation; but that the practice first promulgated by him had been established almost entirely by other practitioners; that the new facts had been disproved by subsequent observers; and that in consequence of these facts being disproved, together with the very extensive experience of other persons, we owe the present establishment of the Vaccine Inoculation.” *Rep.* 128.—Posterity will do ample justice to Dr. Jenner; they will see that his facts have *not* been disproved, and they will also see that the practice of these very “other persons” retarded, rather than promoted, the success of Vaccination.—See Observations on a late Publication of Dr. F. by Henry Hicks, and Observations on Dr. P.’s Examination, by Thomas Creaser, *passim*. See also *3 Med. Jl.* 97, 1. 9; *Ring.* 223, 768; *Rep.* 210.

The surprise this curious and important discovery created was soon followed by almost universal conviction. Experiments, made and repeated under every disadvantage, served but to prove the certainty of what was predicted of it. Its progress has been equally great and rapid, and it is supposed that as many persons have already been vaccinated as were ever inoculated for the Small-pox. Dr. Bradley estimated the number up to March, 1802, only, at not less than *two millions*.—*Rep. 20.*

Vaccination was quickly adopted, and diffused over the continent of Europe. France, in particular, disregarding national jealousy and individual envy, accepted the important benefit with ingenuous alacrity. Institutions and Societies were formed for its extension throughout all the Departments, and plans for the complete extermination of the Small-pox were drawn up and issued under the sanction and authority of the Minister of the Interior. The practice began in June, 1800; and so early as Feb. 1801, they declared it to be the most brilliant and the most important discovery of the eighteenth century; to which France, Europe, and the whole world, will be indebted for the annihilation of that most destructive scourge, which has ravaged and desolated it for so many centuries.—*5 Med. Jl. 357.*

The Central Committee, in a Report of Nov. 1802, says, “ There are scarcely any of the Departments, which, during the last two or three years, have not seen the Small-pox reign epidemically in a great number of towns, or in the country. There has not been one example to prove, that amongst 10,000 individuals, inoculated with the Cow-pox, a single one has been infected with the Small-pox, though living in the midst of the contagion.”

In an address of the Minister, prefixed to the Report of the following year, he says, "Your Report, and that which has just been made to the National Institute, reflect great light, and, it appears to me, ought irrevocably to fix the general opinion in its favour. In consequence of this, I invite you, in the name of the public welfare, to continue your experiments, and for this purpose I will afford you all the assistance of which you have occasion, by submitting to your disposal a place for Vaccination, whenever you desire it, and, if necessary, by appropriating certain funds for the Institution." He approves of the idea of a new subscription for the extermination of the Small-pox by means of Vaccination, and requests his name to be set down, with the sum of 2000 francs. The Committee declares, "that all which has been asserted of Vaccination is now confirmed, and that they are perfectly convinced of the reality of the advantages ascribed to it" They also declare, they cannot conclude without returning "a just tribute of acknowledgement to Dr. Jenner, being fully persuaded that he will hereafter be remembered among those who have reflected the greatest honour on Science, and rendered the most important service to mankind." *15 Med. Jl.* 314.

In a letter from the Minister of the Interior to the Prefects (14 Germ. Ann. 12) he notices the wish of the Central Committee of Vaccination, that a new society should be established "for the purpose of accomplishing the extermination of the Small-pox in France:"—"an object," says he, "of the highest concern; the practicability of which, already self-evident, was (thanks to their zeal) still further confirmed by striking examples and undeniable proofs." He expresses himself anxious to gratify this wish, and addresses a plan to the Prefects for that purpose. "If errors present them-

selves, or ignorance presume to make false allegations," he observes, "the former should be carefully corrected, the latter speedily and forcibly refuted."—"In order to obtain the object in view, we must dispute," says he, "every inch of ground with the enemy, whom we wish to exterminate, by a wise combination of efforts, and by an union of measures which embrace every part of France."—"No object calls more loudly for your attention; it is one of the dearest interests of the State, and a certain mode of augmenting our population."—"On my part," he adds, "I will second your efforts with all the power of Government, and, confident of your zeal, and that of the Society which devotes itself to the accomplishment of this good work in which we are all engaged, I doubt not but we shall, in a few years, annihilate the Small-pox in France."—13 *Med. Jl.* 419.

A Central Society of Vaccination was, in consequence, formed at Paris, near the residence of the Minister of the Interior, of which he was President, and others of the great Officers of State, and the most respectable Physicians and Members of the National Institute, &c. its members; with whom the Prefects of the Departments were to maintain a regular correspondence; and testimonials were to be granted, and rewards given to those persons who should display the greatest zeal in propagating the new practice. *Ibid*, 423.—The Society sets out by observing, that in the four preceding years the success of Vaccination was established by more than 100,000 facts, verified by the Central Committee; and that it had been proved "that all which had been written to the contrary had been the result of ignorance or of falsehood." *Ibid*.—It appears that, under such influence, no fewer than 60,000 persons were vaccinated in the space of three months.—*Ibid*, 419.

These zealous and energetic measures have been continued without intermission; for it appears, by their last Report, that in forty-two Departments only, no fewer than 125,992 had been vaccinated in the preceding twelve months, making, in the whole of France, 400,000 in the year; so that, supposing the births to be 1,088,157, the number vaccinated amounted to above one third of the whole number born. It also appears, that from all the experiments which had been instituted, no cases of subsequent Small-pox had occurred.

Dr. Colladon, of Lyons, in a letter to Dr. Marcet, says, "Since Vaccination has become general at Lyons, we no longer see any Small-pox whatever, and I believe that none could be found in this town, even if it were sought for. I saw many cases of Small-pox, when I first settled here, five years ago; but since the first year I have not met with a single instance of the disease. The population of Lyons must, no doubt, be much influenced by this circumstance; but, as there are no Bills of Mortality kept here, nothing positive can be said as to that point."

In the Italian Republic, upwards of 70,000 had been vaccinated by Dr. Sacco and others, previous to the year 1803. By the order of Government, a proclamation was read by the Clergy, from the pulpit, inviting the people to adopt this salutary practice; and at Milan Vaccine Inoculation was practised in every parish and in every church.—*Ring*, 1011.

In the summer of 1800, Dr. Marshal and Dr. Walker (*Rep.* p. 64) left England, with letters of recommendation from the Duke of York, to Gen. O'Hara, and the Honourable Arthur Paget, his Majesty's Minister at

the Court of Sicily, for the express purpose of introducing the Cow-pox into the Mediterranean. They began by inoculation on board the *Endymion*, and proceeded to Gibraltar, where the practice underwent a severe trial, the garrison being then subsisting on salt provisions and new wines, in consequence of the plague preventing the supplies from Barbary, and Spain being shut against them by the war; and the thermometer frequently stood at above 90°. Notwithstanding this, the soldiers performed their regimental duties as usual; no one single case occurred where medicine was required, nor was any application requisite to the inoculated part. Thence they conveyed it to Minorca, where it was introduced and practised with similar success; such seamen in the fleet, under Admiral Lord Keith, as had not undergone the Small-pox, were inoculated, and so extremely mild were the symptoms, that the Captain of the fleet (Philip Beaver, Esq.) declared he should have no objection to meet the enemy with the whole of the crew of each ship under inoculation:—a most important consideration at all times to these islands, since it is calculated, that no less than 10,000 of our seamen are unconscious of having had the Small-pox.—5 *Med. Jl.* 433.

Proceeding along the Mediterranean, the practice was introduced at Malta, both amongst the troops and the inhabitants; and an hospital, called the '*Jennerian Institution*,' was established by the Governor, Sir Alexander Ball, for the gratuitous inoculation of the poor. He also ordered a translation of Dr. Jenner's work into the Maltese language. The ravages of Small-pox had always been dreadful in this island, and at this time the inhabitants were under the greatest apprehensions of it, as some of the men of war in the harbour had the disease on board, and had buried several of their men. Lord Keith and Sir Ralph Abercrombie participated in

these apprehensions, and issued orders for those soldiers and sailors, who had not undergone the Small-pox, to be vaccinated; and the more effectually to perform this, Dr. Walker sailed with the fleet.—*Report*, 177; *5 Med. Jl.* 317.

At the time Dr. Marshal was at Malta, the armament there consisted of 100 King's ships, and about the same number of transports, on board of which a large army was embarked. Mr. Ring justly exclaims (p. 567) "Should the Small-pox happen to rage through such a fleet, in such a latitude, what havoc must ensue!"

The practice was received with enthusiasm in Sicily, where the Small-pox had been, if possible, more fatal than at Malta; in Palermo alone, 8,000 had died of it the year before Dr. Marshal's arrival. In this latter place an hospital was established, as was also one at Naples; and Vaccination was speedily adopted throughout the whole kingdom; his Majesty having commanded that some children should be sent from every province to the Hospital at Naples, to be vaccinated, attended by surgeons to be instructed in the practice. On Dr. Marshal's quitting Naples, the King presented him with a Gold Medal, and appointed him his Physician Extraordinary. Dr. Marshal then introduced it with similar success at Rome, Leghorn, and Geneva; and the Dey of Algiers desired its introduction into his dominions.—*Ring*, 595.

The number inoculated under Dr. Marshal's immediate direction was upwards of 10,000, about 2,000 of whom were afterwards subjected to every possible means of infection by Small-pox, but without effect.—*Report*, p. 68; *5 Med. Jl.* 315.

Dr. Odier, of Geneva, in a letter to Dr. Marcet, says, "During the last six years, Vaccine inoculation has gradually spread at Geneva, so as to become almost general, at least in the town itself, where vaccinations have succeeded each other without interruption; and from that period the Small-pox, which, on an average of more than 100 years, used to destroy annually at Geneva about 56 individuals, and to rage epidemically every five years, has gradually disappeared from our city, in which it is now almost totally unknown. During the last three years we have only seen two or three cases of Small-pox, which had been imported from the neighbouring Departments, but did not spread, because, no doubt, all those within reach were secured against its effects." This period was greatly accelerated by the physicians of Geneva, who drew up a strong address to parents, in favour of the practice; which was delivered by every clergyman to the godfathers, &c. on the christening of a child.—6 *Med. Jl.* 281, *Ring*, 431.

In the beginning of the year 1804, the Small-pox was very prevalent at Lausanne, and proved fatal to several persons; but not one of those who had been vaccinated was infected by it, notwithstanding many of them lived in the same rooms, and even slept in the same beds, with those labouring under the Small-pox. At Berne, Neufchatel, Basle, &c. the Cow-pox has superseded the Small-pox; "and it is only in the accounts from England," says Dr. Reeve, "that I hear of the ravages of this terrible malady."—*Letter from Dr. Reeve, dated Oct. 10th, 1805. Edinburgh Med. and Surg. Jl. for Jan. 1806.*

Dr. Sacco, of Milan, Director-General of Vaccination in the kingdom of Italy, having been sent for, in Sept.

1805, to Florence, where the Small-pox was epidemic, in order to vaccinate a child of M. Tassoni, Chargé d'Affaires of the French Government at the Court of Hetru-ria, vaccinated a considerable number of persons, in the presence of the principal physicians and surgeons of that city; and afterwards put to the test of variolous inoculation, not only those whom he had recently vaccinated, but also those who had been vaccinated two, three, and four years before, by the medical practitioners of that city. All these experiments were crowned with complete success. The Queen of Hetru-ria, to whom Dr. Sacco was introduced, presented him with a Gold Medal: on one side of which are the figures of her Majesty and the young King; and on the other the following inscription—' *Maria Louisa, Queen Regent, to Dr. Sacco.*'

From Florence he went to Parma, where he remained only four days; nevertheless, being seconded by the zeal and influence of M. Moreau St. Mery, he vaccinated 400 persons. On his return to Milan, from whence the Small-pox had been banished for three years, by means of Vaccination, he found that it had been introduced there once more, by a person from Florence. It quickly began to spread in the neighbourhood; but as there is a law, ordaining, that information should be given of any persons attacked with the disorder, only seven had it in the city; the rest, amounting to 26, were carried to a lazaretto, and kept in a state of seclusion. In the mean time a general inoculation of the Cow-pox was commenced, in town and country. The number vaccinated, on this occasion, amounted to nearly 5000, and was daily increasing, at the rate of from 130 to 160 a day. By these means the Small-pox was again speedily exterminated.—17 *Med. Jl.* 63.

Vaccination was introduced into the Austrian dominions in 1799, by Drs. De Carro, Ferro, and Careno, of Vienna. The latter translated Dr. Jenner's first two publications into Latin, which caused them to spread with inconceivable rapidity through Germany, France, Spain, Portugal, and Italy. *Careno sur la Vaccine*, 7.—Dr. De Carro's exertions in particular have been equally indefatigable and successful. In the year 1804, the Small-pox might almost be said to be extinct in Vienna, the deaths by it being only *two*, and those even of persons not belonging to the place. From 1791 to 1800, the mortality by this disease was, on an average, about 835. In 1801, it was 164 only; in 1802, 61; in 1803, 27; and in 1804, *two*:—an absolute demonstration of the power and beneficial effects of the Vaccine; and it is highly worthy of remark, that these effects were produced in the face of a strong opposition; for Dr. De Carro, in a letter to Dr. Marcet, dated June 18, 1803, speaking of the successful state of Vaccination at that period, emphatically exclaims, “What a difference between this and the time when I was compelled to appear before the Police,—when Vaccination was prohibited within the walls of Vienna, and confounded with the inoculation for the Small-pox,—when I was prohibited giving public notice of my intention of vaccinating the poor *gratis*,—when they had nearly turned out of the city a lady, come from Hungary to have her three children vaccinated,—when I was prohibited publishing in the Gazette the satisfactory result of twenty-one variolic inoculations, tried after Vaccination,—when the Court, the Ministry, the Police, all conspired against it! It is under such auspices that I have at last succeeded in introducing the Vaccine into this capital, and from hence into all the provinces. At Vienna we no longer hear of the Small-pox. For these two years and a half

I have not met with a single instance of it, and many other physicians will say the same."—10 *Med. Jl.* 243.

The Emperor gave silver medals to sixty parents in Alsace, who consented to have their children inoculated for the Cow-pox (*Ring*, 749) and submitted two of his own children to be vaccinated.—9 *Med. Jl.* 64.

Dr. Portenschlag, of Vienna, had his infant daughter inoculated by Dr. De Carro, four hours and a half after her birth, and she was immediately christened 'Mary Elizabeth Vaccinia.' Dr. De Carro suggests, that the thus including christening and vaccination in one ceremony would soon eradicate the Small-pox. 8 *Med. Jl.* 195.—This excellent idea also struck the celebrated Dr. Darwin, who, from opposing the practice at its commencement, became, before the year 1802, one of its warmest supporters.

Count Francon Hugues de Salm greatly distinguished himself in encouraging the practice at Brunn, the capital of Moravia, having made a journey to Vienna, to learn it. He offered two prizes to the two Moravian physicians who should inoculate the greatest number of children during the year, and wrote a history of the discovery, which he distributed amongst the clergy and schoolmasters.—5 *Med. Jl.* 251.

It was practised in Croatia, &c. in 1802 and 1803, and spread into Hungary, &c. with the greatest success. A highly flattering report was made to the Royal Jennerian Institution, and to Dr. Jenner, by Dr. Kraskovitz, Feb. 1, 1805.—13 *Med. Jl.* 479.

Vaccination was introduced into Hanover early in 1800, by Drs. Balhorn, Stromeyer, and others; the

former of whom first translated Dr. Jenner's "Observations" into the German language;—into Cassel, by Dr. Hunold; into Lunenburg, by Dr. Elbeling; into Hamburg, by Dr. Macdonald; into Brunswick, by Professor Wiedeman, and others; into Breslaw, by Dr. Friese; and into Berlin, by Dr. Sybel, &c.—*Careno*, 7, 8.

Dr. Davids adopted it in Holland (where, he says, "the name of Jenner is adored") at a moment when the Small-pox was making its ravages on every side; yet not one of those who had undergone the inoculation of the Cow-pox received infection. Dr. Davids also translated Dr. Jenner's Treatise.—*Ring*, 675.

The Medical Faculty at Keil proposed a prize of 200 dollars, for the best Dissertation on the true and spurious Cow-pox.—*Letter from Dr. Gumprecht to Dr. Jenner*, 4th Sept. 1804.

It is a curious coincidence, that inoculation for the Small-pox should have been first introduced into Germany through Hanover, and through Hanover likewise the Vaccine Virus.—*Ring*, 545.

The King of Prussia was the first Crowned Head who had the Vaccine inoculation performed on his own children. He established a Vaccine Institution in the capital of each part of his dominions, and appointed Dr. Bremer, of Berlin, Physician to the institution of that city, with a salary suitable to the situation. *Ring's Answer to Moseley*, 156.—In the year 1803, Dr. Bremer caused an appropriate medal to be struck, which he distributed, *gratis*, to those who were vaccinated by the Royal Inoculation Institute, and who returned on the seventh day, in order to afford matter to others.—The King ordered all those of his army to be vaccinated, who had not undergone the Small-pox.—*Ring*, 595.

Dr. Friese, the Director-General of Vaccination in Silesia, reports (Aug. 14, 1806) that notwithstanding the war in Germany, with the evils attendant thereon, had in some degree arrested the practice, 17,316 had been vaccinated in the year 1805—a less number than that of the former year by 7003; that the Small-pox had broken out early in the spring, and prevailed, more or less, during the whole year; but that those who had been vaccinated escaped its infection.

Dr. Friese was charged by the Medical Department to propose to Government a plan for prosecuting Vaccination on a large scale; which was agreed to, and certain regulations were, in consequence, published by the Royal Chamber at Breslaw (*see Appendix*). In addition to this plan, and in order to excite the greater emulation, Government granted the same premiums, as in the year 1804, to several clergymen, physicians, and surgeons, who had distinguished themselves in the practice.—17 *Med. Jl.* 57.

The King of Denmark ordered an Institute of Vaccination to be founded for Sleswig and Holstein, for the purpose of inoculating *gratis*, and instructing clergymen and schoolmasters, who are directed to make an annual return of the numbers they vaccinate, to the College of Health, in order to convince the King of its progress; and governors of public schools and orphan-houses are directed to send to the Institute all children who are to be inoculated.

In the first two years of its introduction into the Danish dominions, the numbers vaccinated were 20,891. In 1804, 6730; of whom 616 were in Greenland, whither were sent, from the Institute of Copenhagen, four

sheriffs and several clergymen, well instructed in the practice.—*Dr. Gumprecht to Dr. Jenner.*

The King of Sweden had his daughter inoculated with the Cow-pox, and established a Vaccine Institution at Stockholm.—9 *Med. Jl.* 64.

According to Dr. Gumprecht, the Elector of Suabia adopted the following measures, in order to secure the speedy good effects of Vaccination:—Having founded a Vaccine Institution, he punished the parents of those children who died by the Small-pox; and the Clergy were instructed to enter in the church-books, that the want of parental affection was the cause of their death. Such children, also, were to be interred on the second day, and all who had not gone through the Small-pox, were forbidden to assist at the funeral.—*Letter to Dr. Jenner, 5th Jan. 1806.*

In Spain, the practice has been introduced with the same enthusiasm. The King, on reading Dr. Careno's translation, directed his Minister to write to him, and inform him of his Majesty's intention to introduce Vaccination throughout his dominions. Dr. Piguellem (who published a Spanish translation of Dr. Colon's book, *Ring*, 797) began the practice in Dec. 1800, at Puigcerda, and Dr. Salva introduced it with success at Barcelona.—*Careno*, 10.

But the philanthropy of the Spanish Monarch was not satisfied with half-measures. In order effectually to convey and secure the blessings, which the discovery held forth, to his subjects in the New World, he ordered an expedition to be fitted out expressly for the purpose, which sailed from Corunna, the 20th Nov. 1803, under the direction of Dr. Francis Xavier Balmis, Surgeon Ex-

traordinary to the King, and several other Members of the Faculty, carrying with them 22 children, who had never undergone the Small-pox, for the purpose of keeping up a series of inoculations, and effectually preserving the vaccine virus during the voyage. The expedition made the first stoppage at the Canary Islands, the second at Porto-Rico, and the third at the Caracas. On leaving that province, it was divided into two divisions; one sailing to South America, under the charge of the Subdirecto Don Francis Salvani, the other, with the Director Balmis on board, steering for the Havana, and thence for Yucatan. There a subdivision took place: one part proceeding to Villa Harmosa, in the province of Tobasca, for the purpose of propagating Vaccination in the district of Ciudad Real of Chiapa, and on to Guatemala, making a circuit of 400 leagues, through a long and rough road, comprising Oaxaca; while the rest of the expedition, which arrived without accident at Vera-Cruz, traversed not only the Vice-royalty of New Spain, but also the interior provinces, whence it was to return to Mexico, the point of reunion.

This preservative against the ravages of the Small-pox was extended thro' the whole of North America, to the coasts of Sonora and Sinaloa, and even to the Gentiles and Neophites of High Pimeria. In each capital a Council was instituted, composed of the Principal Authorities and the most zealous Members of the Faculty.

The object of the voyage being thus far accomplished, it was the next care of the Director to carry his part of the expedition from America to Asia; which voyage he performed in little more than two months, carrying with him, from New Spain, 26 children (many of them in-

ants) destined to be vaccinated in succession, as before. The expedition having arrived at the Philippines, and Balmis, having concluded his philanthropic commission, concerted with the Captain-General the means of extending the beneficence of the King to the remotest confines of Asia.

In Macao and Canton he accomplished the introduction of fresh virus in all its activity, which the English, on repeated trials, had failed to effect, as they took out matter in the East India Company's ships, which lost its efficacy on the passage, and arrived inert.

After having propagated the Vaccine at Canton, as far as possibility and the political circumstances of the empire would permit, and having confided the further dissemination of it to the Physicians of the English factory at that port, Dr. Balmis returned to Macao, and embarked in a Portuguese vessel for Lisbon; where he arrived on the 15th August. In the way he stopped at St. Helena, where, he says, by dint of exertion and perseverance (as in other places) he "prevailed upon the English to adopt the astonishing antidote, which they had under-valued for the space of more than eight years, though it was a discovery of their nation, and though it was sent to them by JENNER himself!"

That part of the expedition which was destined for Peru, was unfortunately shipwrecked in one of the mouths of the River de la Magdalena. But the Subdirector, the three Members of the Faculty who accompanied him, and the children, were saved, with the virus in good preservation, which they disseminated in that port, and its province, with great activity and success. Thence it was conveyed to the isthmus of Panama, and

persons, properly provided, undertook the long and painful navigation of the River de la Magdalena : separating, when they reached the interior, in order to discharge their commission in the towns of Teneriffe, Mompox, Ocana, Socorro, San Gil y Medellin, in the valley of Cucuta, and in the cities of Pamplona, Giron, Tunja, Velez, and other places in the neighbourhood, until they met at Santa Fe: leaving every where suitable instructions for the Members of the Faculty, and, in the more considerable towns, regulations conformable to those rules which the Director had prescribed for the preservation of the virus ; which the Viceroy affirms to have been communicated to 50,000 persons, *without one unfavourable result*. In March, 1805, they continued their journey in separate tracks, for the purpose of extending themselves, with greater facility and dispatch, over the remaining districts of the Vice-royalty, situated in the road of Popayan, Cuença, and Quito, as far as Lima ; and in the August following they reached Guayaquil.

On Sunday, the 7th of September, 1806, Dr. Balmis had the honour of kissing the King's hand, on occasion of his return. His Majesty inquired, with the liveliest interest, into all that materially related to the expedition, and learned, with the utmost satisfaction, that its result had exceeded the most sanguine expectations that had been entertained of it ; and the particulars were published in a Supplement to the *Madrid Gazette*, dated 14th October, 1806.

“ The result of this expedition has been,” says the *Gazette*, “ not merely to spread the Vaccine among all people, whether friends or enemies ; among Moors, among Visayans, and among Chinese ; but also to secure to posterity, in the dominions of his Majesty, the

perpetuity of so great a benefit, as well by means of the Central Committees that have been established, as by the discovery which Balmis made of an indigenous matter in the cows of the valley of Atlixco, near the city of Puebla de los Angeles; in the neighbourhood of that of Valladolid de Mechoacan, where the Adjutant Antonio Gutierrez met with it; and in the district of Calabozo, in the province of Caracas, where Don Carlos de Pozo, Physician of the residence, found it."

The number vaccinated, during this expedition, was no less than *two hundred and thirty thousand*.

It is seriously to be regretted, that this important document, so highly honourable to our Neighbours, should contain reflections on our own countrymen, which must every where be read with surprise.. Britain has generally had a proud pre-eminence in introducing benefits amongst other nations; but, it must be confessed, we have here received a lesson from the noble, the generous Spaniard.

In the year 1801, Vaccination was introduced into Russia. The Court was at Moscow, on account of the coronation of the Emperor; and the child who was first inoculated by Mr. Lindstrohm, Surgeon to his Imperial Majesty, was patronised by that exalted and philanthropic personage, the Empress Dowager Mary, who gave her the additional name of '*Vaccinoff*;' sent her in one of her own coaches to Petersburg, to be placed in the Foundling Hospital, as a source of future inoculations, and settled on her a pension for life. Her Majesty likewise transmitted, through the hands of Lord St. Helen's, a valuable diamond ring to Dr. Jenner, accompanied by a very flattering letter, written with her own hand;

also a letter and a ring to Dr. Friese, of Breslaw, from whom the virus was received.—9 *Med. Jl.* 130.

The Emperor commissioned Dr. Bouttatz, who had visited London, to travel through the empire, for the purpose of extending the benefits of Vaccination (9 *Med. Jl.* 584) and who, it appears from the Report of Dr. Rehmann, vaccinated upwards of 20,000 persons.

Dr. Rehmann, being appointed Physician to the Embassy from the Court of St. Petersburg to China, made his observations on the progress of Vaccination in the countries traversed by it; a Report of which he transmitted to Dr. Jenner, from Kiachta, in Siberia, on the frontiers of China, 25th Nov. 1805.

By this Report it appears that Vaccination has been extended through all the districts of European Russia; that it particularly flourishes at Moscow, under Dr. Fennisch, who is continually transmitting virus to the physicians and surgeons in the most distant quarters of the empire. At Nigny-Novgorod, it had been greatly and successfully practised. Rehbindler, the Counsellor of State, had even vaccinated some children himself. The Prince of Georgia also assisted in extending the practice. At Casan, Mr. Walkott had greatly distinguished himself, and had taken pains to dispose the minds of the most enlightened Tartar merchants towards the practice: having caused to be translated into the Tartar language a work, compiled by the Medico-Philanthropic Society at Petersburg, which spread itself through every part of the empire. Dr. Rehmann remarks, that Vaccination is in these countries of even superior importance, as the population is thin, and the lives, therefore, more valuable. Through his means the virus was transmitted

to Kamschatka, where (as has been seen) the desolation by Small-pox had been so great, and also to the islands situated between Asia and America; so that it would soon be extended throughout the immense Russian empire, from England to the eastern extremities of Asia. He concludes his Report with a determination to exert his utmost ability to hasten the approaching extermination of the Small-pox, "that scourge of the human race."

The benefits of Vaccination have been more widely diffused through the Russian dominions, in consequence of the Nobles having themselves inoculated many thousands of their peasants with their own hands.—*Ring*, 1009; 8 *Med. Jl.* 480; 9 *Ib.* 296.

The Vaccine inoculation was introduced, at Constantinople, into the family of the Earl of Elgin, the British Ambassador, by virus transmitted from Vienna, by Dr. De Carro, and was practised by Drs. Hesse, Scott, and Pezzoni. Ld. Elgin had two infants of his own inoculated, The Turks, who had refused Inoculation for the Small-pox, submit their children to this mild process, and predestination itself begins to give way. Some of the most distinguished families of the Ottoman empire have been vaccinated, and, in 1801, an infant of the Favourite of the Grand Signior. 7 *Med. Jl.* 292.—All who have undergone it have escaped the fury of the Small-pox, which, it is said, raged with uncommon violence the whole of the succeeding winter.—*Ring*, 443, 905, 910, 1011; 8 *Med. Jl.* 95.

The Hospodar of Moldavia has, with unremitting zeal, spread the practice through his province, and loaded Dr. De Carro with presents.

Dr. La Font, a French physician, practised Vaccination at Salonica, in Macedonia, and had vaccinated 1132 persons, up to June, 1802. It was imparted to him by Lord Elgin and Dr. Scot, when travelling in Greece, who introduced it in March, 1802, at the once-celebrated city of Athens.—*Ring*, 1014; 12 *Med. Jl.* 448.

In March, 1801, the Hon. Jonathan Duncan, Governor of Bombay, wrote to Lord Elgin, requesting him to direct a supply of matter to be forwarded thither, by way of Bagdad and Bussorah; but it was not till after repeated failure, that the effective virus reached Bombay. On the 14th June, Dr. Helenus Scott inoculated Anna Dusthall, a healthy child, of three years old, from whom emanated the virus which has since pervaded the whole of India.

From Bombay, supplies were afforded to Poona, Surat, Hydrabad, Ceylon, Madras, and other places on the coast, and in the Decan. From Madras it was transmitted to Calcutta, by successive inoculations on board the *Hunter*, other methods of transporting the virus having failed. It was received there with the greatest satisfaction, Nov. 17, 1802; and a professional man of eminence was immediately appointed by the Governor-General, for the purpose of preserving a supply of genuine matter for the metropolis and subordinate stations, of vaccinating the children of such natives as should apply to him, and of instructing such of the Hindoo and Mahomedan physicians as wished to practise Vaccine inoculation. By him it was communicated to different parts of the country, and even extended as far as Prince of Wales's Island.

Subordinate superintendants were appointed at eight

different stations, so distributed as best to diffuse the practice; and the number vaccinated, up to Dec. 31, 1803, was 11,166.

Fourteen children were embarked on board the Company's ship *Carmarthen*, in order to convey the vaccine virus to Fort Marlborough, as the Small-pox, whenever it broke out in Sumatra, among the Malays, "raged with such devastating fatality, as often to depopulate whole tracts of country."

The Governor-General, in Council, signified his high approbation of the conduct of the different professional men concerned in disseminating the Vaccine inoculation, and ordered that a History of "the valuable and important discovery of Dr. Jenner;" of its essential advantages over the Small-pox inoculation, together with an earnest exhortation to the natives,—should be drawn up, and published in the Persian, Hindoo, Bengalese, and Shanscrit languages.—*Shoolbred's Report of the Progress of Vaccine Inoculation in Bengal.*

The Rajahs of Chintapilly and Tanjore adopted the practice in their dominions; and the Dewan of Travancore was himself vaccinated, Aug. 30, 1804. *13 Med. Jl.* 383.—Dowlut Row Scindia, the Chief of the Mahratta empire, had one of his children vaccinated.—*Ib.* 569.

The numbers vaccinated at Madras, and subordinate stations, alone, between Sept. 1802, and April, 1804, were 145,340.—*Govnmt. Advt. Ibid.* 283.

Mr. White, the Superintendant at Mysore, vaccinated upwards of 42,000 in the year 1804 (*15 Med. Jl.* 518) and Mr. Reid, the Superintendant at Delhi, vaccinated

a grand-son and grand-daughter of Shah Allum, June 6, 1605, and afterwards four more of the House of Timour.

Mr. Paull, in his speech in the House of Commons, July 2, 1806, mentioned, that in consequence of Vaccine inoculation, only 75 persons had been carried off annually, by the Small-pox, in the town of Lucknow, during the last three years he resided there; while the average number, before, had been from 670 to 800.

The extension of the practice has been so great and rapid over the whole peninsula, that the total number of the vaccinated is estimated at no less than 830,000. *Willan on Vacc. Inoc. p. ii.*—It has even triumphed over the religious principles of the natives; for, contrary to expectation, the Brahmins objected to it, though proceeding from the *Sacred Cow*; and a practitioner, of Errode, was, for a time, impeded in his progress by an old woman, who attempted to persuade the people that this was to be a means of enslaving them, and that they would be known by the mark in the arm, which she termed '*The Company's Chop.*'

The Chinese, like the Turks, have, with respect to Vaccination, consented to forego their prejudices,—thus affording one of the strongest proofs of the beneficial effects of it. At the request of Mr. Drummond, the Chief Supercargo at Canton, Mr. Pearson, a medical man there, drew up an account of Dr. Jenner's discovery; of its adoption in all the countries of Europe; and of the very great benefit likely to result therefrom to mankind in general, and the Chinese in particular. This was translated into their language by Sir George Staunton, and has passed through three editions; to the last of which is added an account of the expedition fitted out by the King of Spain, to propagate Vaccina-

tion in South America and the Philippines, as before noticed. This treatise has obtained such celebrity, and has been so universally read by the Chinese, that they have taken the practice into their own hands. It appears they have a particular aversion to the use of the lancet; but Mr. Pearson having introduced an ivory point, they adopted it without scruple.

The vaccine virus, transmitted by Mr. Ring, Oct. 14, 1803, reached New South Wales in the spring of 1804, where it was used, as well as at Norfolk Island, and all the other settlements, with the usual success. It is to be remarked, that these islands are twice the distance of India from hence, and that the virus preserved its active power (though in such a climate) seven months, viz. from Oct. 14, 1803, till May 8, 1804.—15 *Med. Jl.* 523.

Vaccination was introduced at the Cape of Good Hope, by means of a Portuguese ship from Mozambique. The inhabitants universally adopted it, and caused the whole of their slaves to undergo the operation.—15 *Med. Jl.* 524.

It was conveyed into the Isle of France in March, 1804, by Capt. Deglos, of the ship *Philippine*, who carried several children there, infected with the Vaccine, which he had kept up, by successive inoculations, during the voyage. Upwards of 3000 of the inhabitants were vaccinated, under the direction of the Government.—*Ib.* 523.

Dr. Milne has inspired the Portuguese, in the settlement of Goa, with such confidence in the practice, that nothing can surpass the eagerness with which they adopt it. His excursions can be compared to none but those

of Dr. Sacco, who goes from one town or village, in Lombardy, to another, and the children are assembled, in order to be vaccinated, *en masse*, by the ringing of the church bell.—*Dr. De Carro to Dr. Reeve, dated Vienna, Oct. 9, 1805.*

Mr. Christie, in a Report to the Government of Ceylon, dated Sept. 4, 1802 (9 *Med. Jl.* 538) recommends that the Small-pox Hospitals be shut up, as no longer necessary; and the Governor, the Honorable Frederick North, in a report made to Lord Hobart, dated Colombo, Sept. 10, declares, “ that the most important acquisition, which Humanity has gained in that island, was the introduction of the Cow-pox.”

Early in the year 1799, Dr. Waterhouse, who (from his exertions in the cause) has been honoured with the title of ‘ *The Jenner of America,*’ received a copy of Dr. Jenner’s Treatise. Struck with the importance of the subject, and the incalculable benefit which might accrue to his country, from its adoption, he immediately communicated to the public a sketch of the discovery, which was most favourably received by the then President, Mr. Adams. Dr. Waterhouse first inoculated four of his own children. The succeeding President, Mr. Jefferson, gave the practice his utmost assistance. Hospitals were founded; and it has been widely extended, not only through the United States, but amongst the Indians, who have received it as a blessing from Heaven.—*Waterhouse’s Hist. of the Prospect of exterminating the Small-pox, in Hist. of the Kine-Pock, 1st Pt. 1800, 2d Pt. 1802.*

The Small-pox had always been greatly dreaded in America, and rigid means adopted to prevent the extending of the infection. When a person was seized

with it, he was immediately sent, by the Municipal Authority, to a secluded hospital; but if the disease had proceeded too far for the patient to be removed, the street, where he resided, was closed up with a high fence, and a red flag was hoisted on the house where the infection prevailed.—*Ring*, 755.

The Canadian Indians came down the country, many hundred miles, to procure the matter; and their whole tribe escaped the Small-pox.—11 *Med. Jl.* 572.

In the island of Jamaica 10,000 persons had been successfully vaccinated up to March, 1801. Mr. Chester, a surgeon there, conceived the discovery to be of such importance, as to intend coming himself to England, for virus, and conveying it by successive inoculations during the voyage; but was prevented, by otherwise obtaining effective matter, with which he vaccinated near 1000 persons.—*Ring*, 746, 7.

About the year 1802, vaccine matter was transmitted to Demarara by Mr. Skerret, where it was used with the greatest success in the garrison, which almost entirely consisted of black people. It was also adopted in several plantations in Essequibo.—9 *Med. Jl.* 65.

The practice has been eagerly adopted in the Brazils, where the Small-pox was particularly fatal. The virus, first transmitted thither from Lisbon, failing, some boys were sent to that place, who, being inoculated with the Cow-pox matter in succession, imported it effectually. Between Dec. 30, 1804, and Jan. 26, 1805, 700 persons were vaccinated in the palace of the Governor, Mr. Menezes, who greatly exerted himself in extending the practice, and proposed sending matter to Rio Janeiro

and to Angola. The Viscount of Anadia, the Minister of the Marine and Colonies, had issued orders to all the Governors of Brazil on the subject.—*Dr. Barboza to Dr. Jenner, Jan. 26, 1805.*

The vaccine virus was also conveyed to Buenos-Ayres from Lisbon and Rio Janeiro, preserved in crystals and by the successive inoculation of slaves, and was received there about the month of July, 1805. The practice was encouraged by the Government, and disseminated over the country, and upwards of 1000 were vaccinated in the course of three months, with equal success as in Europe. Dr. Gorman published a Treatise in Spanish, which he had compiled from the English books sent to him, and by which a knowledge of the characteristics of the genuine pustule was generally diffused.

Virus was transmitted by the Rev. G. C. Jenner, to Mr. Clinch, of Trinity, in Newfoundland, in the year 1801, who began the practice by inoculating his own children, and afterwards 700 of his neighbours. At St. John's, where the Small-pox was making great ravages, the most convincing proofs were afforded to the inhabitants of the efficacy of Vaccine inoculation.—*5 Med. Jl. 401; Rep. 163.*

The natural Small-pox, which almost every year desolated Mexico and Peru, has lost its malignity to such a degree, through the practice of Vaccination, that the number of children, who fall victims to it, is reduced in the proportion of *nine to one*.—*15 Med. Jl. 311.*

Mr. Spalding, in transmitting the Bills of Mortality from Portsmouth, in New Hampshire (May, 1805) says

“ Since the introduction of the Kine-pock, the Small-pox has been unknown amongst us. We have now no disbelievers—all are satisfied.”

§ I....ON THE PROGRESS OF VACCINATION IN GREAT BRITAIN AND IRELAND.

THIS practice, though beneficial to all countries, since by all have the evils of the Small-pox been experienced, has taken more time to attain its height in this country than in others: a circumstance which, without attributing it to envy or jealousy, may probably be accounted for by that degree of liberty which every individual feels himself authorised to exercise. How far this ought to be under modification or restraint, it will not here be argued; but it surely can admit of no doubt, that if such liberty exist, it ought to be *reciprocal*, and that while any one has a right to introduce or propagate a plague in his own family, his neighbour ought to have an equally strong and equally maintained right of declining it. As the mode of Small-pox inoculation has been carried on for some years past, in this country, all choice is taken away. The insidious infection lurks in every corner, and the embracing the comparatively lesser evil of inoculation becomes frequently a matter of necessity, when infancy, dentition, pregnancy, or other causes, would desire its procrastination. The Americans, whose practical knowledge of liberty is so often quoted by us, have not hesitated to place inoculation for the Small-pox under very considerable restraints, enforcing a submission to them by pecuniary penalties. Whether their example is worthy of being adopted, and whether a restraint, perfectly consistent with rational liberty, cannot be framed, it seems well worthy the Legislature to determine.

It must not, however, be supposed, because the progress of Vaccination has been slower, *comparatively*, in these realms, that the practice has therefore been trifling, or is now much less universal than on the Continent. The opposition that has been excited against it, by prejudice operating upon ignorance and parental fears, has but little retarded its career, although, as a perusal of the few pamphlets, hostile to it, will evince, the means of alarm have been neither sparingly nor delicately used.

Vaccine inoculation was adopted by the Small-pox and Inoculation Hospitals as early as Jan. 1799. Between that time and Dec. 1, 1802, 11,800 patients were vaccinated; of whom 2500 were afterwards submitted to variolous inoculation, but without effect; and nothing adverse has been heard of amongst the remainder, though crowded in places where the Small-pox was prevalent.—*9 Med. Jl.* 194.

The various establishments that have been formed to disseminate it, and the societies that have adopted it, will appear in the list of Testimonies in favour of the practice. Dr. Willan, who is much looked up to, by his brethren, on the subject of cutaneous diseases, in his work on Vaccine Inoculation, published at the close of the year 1806, gives the following numbers, returned to him from the North of England, &c.

In Liverpool, and its vicinity	-	-	-	7280
Prescot	-	-	-	3000
Warrington	-	-	-	4000
Manchester	-	-	-	7724
St. Helen's (of which number 3000 were vaccinated by the Rev. Wm. Finch, mentioned before, p. 11)	-	-	-	6000

Wigan	-	-	-	-	-	1600
Ormskirk	-	-	-	-	-	500
Preston	-	-	-	-	-	3000
Lancaster	-	-	-	-	-	1900
Newcastle-upon-Tyne	-	-	-	-	-	3266
Vaccine Institution, Edinburgh	-	-	-	-	-	5371

Dr. Willan calculates (p. 13) that the number of persons vaccinated at Charitable Establishments in London, cannot be less than 50,000. And of those vaccinated by eighty-six professional men, named by him, more than 18,000. Among these are not included that indefatigable and successful Champion of Vaccination, Mr. RING, whose practice alone extends to nearly one fourth of this number.

In the country the practice of many professional men has been still greater. Dr. Jenner himself must not be forgotten; he and his nephews have vaccinated upwards of

Mr. Mainwright, of Dudley	-	-	-	-	20,000
Mr. Lawrence, of Cirencester	-	-	-	-	3600
Mr. Collins, of Swansea	-	-	-	-	2000
Mr. Jennings, of Chepstow	-	-	-	-	3500
Mr. Taylor, of Wootton-under-Edge	-	-	-	-	2000
Mr. Fewster, of Thornbury	-	-	-	-	1000

Three professional men at Derby (up to 1802) mentioned with approbation by Dr. Darwin, who (as before observed, p. 28) was at first an opposer of what he considered a visionary speculation, but who soon yielded to the force of successful experiment, and communicated to Dr. Jenner himself his most decided satisfaction - 1000

In addition to these there might be enumerated very many private individuals, female as well as male,

amounting, according to Dr. Willan, to 10 or 12,000, who, taking up the *Lancet*, have extended the benefits of the practice to almost every corner of the island. Among these stand conspicuous;—

The Rev. Rowland Hill	-	-	-	5000
W. Bramston, of Oakley Hall, Hants, Esq.	-	-	-	2100
Miss Bayley, of Hope, near Manchester,* (up to Nov. 1805)	-	-	-	2600
A female friend of Miss Bayley	-	-	-	2000
Mrs. Kingscote, of Hinton House, Hants	-	-	-	2000
T. Westfaling, of Rudhall, Herefordshire, Esq.	-	-	-	900
The Rev. I. T. A. Reed, of Leckhamstead (in two years)	-	-	-	1578
The Rev. W. Finch, of St. Helen's, Lancashire, (up to 1803)	-	-	-	3000
The Rev. Robert Ferryman (to 1803)	-	-	-	1000
W. Fermor, of Tusmore, Oxon, &c. &c. &c.	-	-	-	

Dr. Willan, whose candour is equal to his professional celebrity, makes a remark (p. 47) which it would be injustice to a liberal profession not to insert here:—"All the requisite knowledge and experience," says he, "may possibly be obtained by Clergymen, Ladies, and Country Gentlemen; but as many incidental circumstances will occur, requiring chirurgical attention, the management of Vaccination, with the responsibility, should be

* Th. y has carried on her extensive Vaccinations with a judgment and precision that would reflect credit on the oldest practitioner. She commenced by offering five shillings to any one who could produce an instance of the occurrence of Small-pox in any subject vaccinated by her. Out of the 2600, *one* claim only was made; but, *on her referring to her books*, she found, to her satisfaction, a remark made against the name, indicating a suspicion that the inoculation had not taken effect.

Mrs. Kingscote's inoculations have been attended with similar success.

generally left to Surgeons; who likewise deserve their reward, since, by adopting and encouraging the new practice, they abandon what has for centuries been the most lucrative part of their profession."

It cannot be denied that the Medical Profession has shewn a liberality in the present case that does it the highest honour. The very few instances that have occurred of prejudiced, self-interested, or malignantly-inclined individuals among them, will detract little from the general merit, and, perhaps, on investigation it will be found, that even of these, the majority might fairly exclaim, with their forlorn brother, in Shakespear,—

" My Poverty," &c.

Indeed the same disinterestedness appears to have existed with respect to Variolous Inoculation; "for," says Sir Geo. Baker, "it must be mentioned, to the honour of the physicians of this country, that, very early, the most respected part of them became its warm friends, and that (contrary to a well-known prediction) they had virtue enough to destroy such a considerable part of their revenue for the good of mankind."—*Inquiry into the Merits of a Method of inoculating for the Small-pox, 1766; taken by Mr. Meriman as his motto.*

The Vaccine practice in Ireland, under the active patronage of the present Lord Lieutenant, has become universal. A Jennerian Institution has been founded at Dublin; and Dr. Yeats, his Grace's Physician, observes, "That after a candid inquiry, from numerous correspondents, the investigation into the merits of the Cow-pox has completely confirmed the great and important fact, first published by Dr. Jenner,—that the zeal, ability, and industry, displayed by the medical gentlemen

in Ireland, have been exemplary, and much contributed to overcome prejudices, dissipate fears, and to establish a well-grounded opinion of the Jennerian discovery.

Dr. Clarke, of Dublin, also says, "That, captivated by the beauty and simplicity of Dr. Jenner's discovery, and deeply impressed with the pestilential nature and destructive tendency of Small-pox, he had recommended the practice of Vaccination with all his influence. He relates, that in the spring and summer of 1806, a very severe epidemic Small-pox prevailed in the metropolis, and in many parts of the country; but that in no one instance had any person, vaccinated by him or any of his professional brethren, taken it.

Dr. Barry, of Cork, adopted Vaccine inoculation in 1800; and he declares, that during six years practice, not a single case has occurred to stagger the general belief of the Faculty in the efficacy of the Cow-pox, as a permanent security against the Small-pox. "The leading circumstances," says he, in a letter to the Royal Jennerian Society, "brought forward by the immortal Jenner, have been confirmed by recent experience, and by a powerful mass of oral and traditionary testimony, which is to be met with in every parish in this county."

By the Mortality Bill of the city of Glasgow, and suburbs, for 1806, it appears, that owing to Vaccine inoculation, only 15 children died of the Small-pox during that year. In 1797, the number was 231.

It would be extremely difficult, if not absolutely impossible, to collect together the number of those who have undergone this beneficial remedy in the several parts of the globe. The following, compiled from various publications, &c. and generally before noticed, will give some *data* for calculation:—

Recapitulation.

In France, in <i>one year only</i> - - - - -	400,000
In the Italian Republic, previous to 1803, 70,000; from that time to Aug. 1805, 330,000; making together - - - - -	400,000
In the two Gallicias, in six months - - - - -	65,200
In Breslaw, and its districts, up to 1804, 34,000, and in 1805, 17,000—total - - - - -	51,000
In Denmark, in three years - - - - -	27,000
In Livonia, thro' the exertions of Dr. Huhn - - - - -	15,700
In Bohemia, in 1801 and 1802 - - - - -	10,100
In Calabria, in nine months - - - - -	7,000
In Florence, &c. - - - - -	5,000
In the Mediterranean, &c. by Dr. Marshal - - - - -	10,000
In the Isle of France - - - - -	3,000
In Jamaica, up to 1801 - - - - -	10,000
In Russia, by Dr. Bouttatz, &c. - - - - -	20,000
By the Spanish Expedition - - - - -	230,000
In India - - - - -	880,000
In the North of England, &c. collected by Dr. Willan - - - - -	43,600
Charitable Institutions in London, according to ditto - - - - -	50,000
Professional men, according to ditto - - - - -	18,000
Other professional men - - - - -	35,000
Ladies and private individuals - - - - -	20,100

Rep.—Med. Jts.—Shoolbred—Ring—Willan, &c. &c.

Of course it is not presumed that these numbers are accurate, much less that they contain the whole of the Vaccinated, even in the countries specified. And it must be observed, that in this list no notice is taken of Austria, Prussia, Spain and Portugal; Holland, Sweden, Swisserland, Turkey, &c. the greater part of Germany, the whole of America, the West India islands

(with the exception of Jamaica, up to the year 1801 only) and, above all, the very considerable practice in our own Empire, of which but a trifling portion has been enumerated. It must also be remarked, that in many of the countries noticed, the numbers are only stated of a particular year, or up to a comparatively early period.

Dr. Bradley (as has been before observed, p. 19) estimated that not less than *two millions* had been vaccinated *up to March, 1802, only*. Since which time the extensive practice in France, Denmark, Russia, the Mediterranean, Italian Republic, India, the Spanish and Russian Expeditions, &c. and the greater part of the practice of public societies and individuals in these islands, have taken place; so that the numbers vaccinated up to the present period must be vast indeed—perhaps not fewer than *ten millions*:—an amazing proof, surely itself, of the general opinion entertained of it, and the satisfactory results that have every where been the consequence of its adoption,

§ 5...ON THE COMPARATIVE MERITS OF VARIOLOUS
AND VACCINE INOCULATION.

THAT the Small-pox, whether natural or inoculated, is a *fatal* disease, has been sufficiently proved. That it is *loathsome, infectious, and painful*, requires no further proof than individual experience. That it oftentimes excites *Scrofula*, and other maladies, is asserted by the most eminent and most experienced in the profession. The authorities might be collected without difficulty; but as every writer on Vaccination has, more or less, dilated on this part of the subject, and as there

is scarcely a family which has not had occasion, and that at no remote period, to bewail a too-intimate acquaintance with it, little need here be recapitulated.

Mr. Moore, in his excellent pamphlet (*A Reply to the Anti-vaccinists*, 1806, p. 66) after remarking, that the numbers who suffer blindness from it are very considerable, refers to the Institution in the Borough for instructing the indigent Blind, "no less than three fourths of whom," adds he, "have lost their sight by the Small-pox!" He says (p. 64) that when a human being is once affected with it, the poison cannot be destroyed; but the disease, in spite of all medical aid, must go through its stated course; and (p. 66) that notwithstanding the mitigation of the disease by inoculation, and the present improved state of medicine, *it very considerably diminishes population, afflicts a portion of the remainder with blindness, and rouses Scrofula into action.*— See also 11 *Med. Jl.* 572.

Of this dreadful disorder, Dr. Beddoes has drawn an animated but horrible picture, in "The Rules of the extended Medical Institution for the Benefit of the sick and drooping Poor."

Dr. Cappe says, the Small-pox are severe and dangerous, in proportion to the number of pustules; and of 1000 persons, inoculated for that disease, generally more than 800 have pustules. The Small-pox are peculiarly dangerous to infants and very young children, and women in pregnancy, who very rarely escape abortion when they receive this disease casually.— "The natural Small-pox in pregnant women is fatal, in at least nineteen out of twenty cases, to the fœtus in the womb, and to three fourths or four fifths of the women," *Medical Comm.* 1794; and of those

pregnant women, whom personal safety has compelled to submit to inoculation, many have lost their own lives, and very few have borne living children." 4 *Med. Jl.* 433.—See some strong cases, 5 *Med. Jl.* 563; 6 *Ib.* 3. See also *Ring*, 772, &c.

Even the Grave itself destroys not the contagious principles of the Small-pox, of which many well-authenticated proofs could be adduced.

Not only are its depredations universal, but its approach is so insidious, as to render it almost impossible to be avoided. It is ascertained, that the Small-pox has been imported more than *one hundred* times in *seven years*, into the Channel; and *twenty* times in about *six months*, in the year 1800, by the grand fleet alone.—*Address of the Physicians and Surgeons of the Navy*, *Ring*, 687.

Observations lately made, and which formerly, when no alternative existed, were disregarded, prove, too, that inoculation for this disease, equivocal as it has been at the best in its benefits to mankind, did not always secure against a recurrence of it. This important circumstance was at first disbelieved by many very respectable practitioners; but a rapidly-increasing mass of evidence, called into existence by opposition and inquiry, seems now fully to establish the position.

Mr. Trye, the Senior Surgeon to the Gloucester Infirmary, and a man well known to deal little in hypothesis,—one, too, who does not scruple honestly to avow his dislike to Vaccination, “till such a mass of clear, undisputed, decisive evidence came forward in support of the newly-discovered preservative, as to be irresistible to a mind not hardened beyond the susceptibility of

conviction,"—asserts, *from his own experience*, which, in the Small-pox, he declares *has been ample*, "that whatever has been said against the sufficiency of Cow-pock matter as a security against variolous infection, may be also said with truth against Small-pox matter as a similar security." In support of this he relates instances of unequivocal Small-pox occurring a second time,—one in particular, in a case of his own operating. —12 *Med. Jl.* 395.

This letter, and one in the 15th vol. *Med. Jl.* 301, of Mr. Trye, are so replete with sound and liberal argument, and go so decisively to the superiority of Vaccine over Variolous inoculation, that they are touched on thus slightly with regret, but cannot be entirely left, without being strongly recommended to every one's perusal.

A child of Dr. Croft was inoculated with variolous matter, by Dr. Steigerthal, Physician to Geo. I. He had a severe confluent Small-pox, in consequence: and yet had it very full, in the natural way, 12 months after. "A striking fact," says Dr. Woodville, "which has never been contradicted." *Woodville*, 217; *Ring's Answ. to Moseley*, 43. In which latter work, at p. 208, are collected several cases of a similar nature.—See also *Ring's Treatise*, 56, 58, 222, 681, 684, 1034; and *Ring's Ans. to Goldson*.

Mr. Kite, in his '*Essays and Observations, Physiological and Medical*,' p. 253, published in 1795, previous to Vaccine inoculation, and without having the subject in view,—enumerates no less than *nine* cases falling within his own experience.

Mr. Dunning, in his '*Minutes*,' p. 62, 66, has some

similar cases. So also Mr. Merriman, in his '*Observations on some late Attempts,*' &c. notices many; among others, one of Lord Westmeath's son, *p.* 14—14 *Med. Jl.* 256; and the case of the Duchess of Boufflers, inoculated in 1763, by M. Gatti, Physician to the King of France, an Inoculator of great experience, and who pronounced her secure; *p.* 18.—*See also p.* 19, 30; and 15 *Med. Jl.* 218.

Dr. Lettsom mentioned in his evidence (*Report*, 89) that he had two relations inoculated for the Small-pox, both of whom afterwards took it in the natural way, and one of them died.

The celebrated Tissot had a favourite child inoculated, and was satisfied with the appearances; but the child afterwards caught the disease, and died. It is said, the unfortunate father was so affected by his loss, that he never afterwards omitted to carry a flower daily, and strew on its grave. *Ring*, 854.—*See further on this head*, 5 *Med. Jl.* 30, 403—11 *Ib.* 460—12 *Ib.* 317, &c.—13 *Ib.* 570—14 *Ib.* 7; 148, 9; 195, 251, 256, 401, 436, 511—15 *Ib.* 61, 234, 433—*Willan*, 75, *Note—4 Mem. Lond. Med. Soc. quoted Jenner's Inquiry*, *p.* 121; also *Griffin*, *Dunning*, *Merriman*, &c. &c.

In many of the cases, contained in the above-quoted pages, the patient died by the recurrence of the disease.

On this part of the subject much and forcible argument might be indulged in; but an alternative here obviously presents itself:—Either the former appearance in the above and similar cases was deceitful, and the Small-pox really occurred but once; or it must be acknowledged, that the disease may be twice undergone by the same person. Let us do justice to Vaccination.

If the former part of the alternative be chosen, why not suppose, when instances are suspected of Small-pox occurring after Cow-pox, that the appearances of Cow-pox have been not well understood, and that the patient has never undergone it? If the latter part of the alternative be preferred, why then offer, as an objection to Vaccination, the rare occurrence of Small-pox after it (*if such has appeared*) when a similar occurrence has so often been experienced after Small-pox?

But the penetration and perseverance of Dr. Jenner furnished such satisfactory means of explaining these anomalous appearances, and all that has yet occurred, or been reverted to, as well in Small-pox as Vaccine inoculation, so fully coincides with his hypothesis, that this seems only to require to be universally known, in order to be universally received.

His sentiments were first published to the world (tho' communicated to some friends about four years before) in the *Medical Journal* for Aug. 1804, Vol. XII. p. 97. Conceiving the information it contained to be of considerable importance, and that it had not been very generally circulated, he reprinted it in March, 1806,—declaring, that his inquiries into the subject had become much more extensive, and that the most ample testimonies had been given him, in support of his opinion, *that the herpetic and some other irritative eruptions are capable of rendering Variolous Inoculation imperfect, as well as the Vaccine.*—“ I do not mean to say,” he observes, “ that the pustule is always imperfect, and not effective, when the inoculated patient has this malady: on the contrary, it sometimes goes through its course correctly, and, I think, more frequently so when this affection of the skin has been of long standing, than when of short duration; but what is remarkable, in either

case, the disease is often quickly subdued by the vaccine influence on the constitution."

He then repeats his instructions respecting the spurious Pustule, and mentions a case that occurred in his own practice, to shew the efficacy of the mode of proceeding pointed out by him. He also notices another case, in which the Vaccine inoculation effected a complete annihilation of this disorder in its most serious form.

He concludes this paper, by observing, "that altho' Vaccine inoculation does not inflict a severe disease, but, on the contrary, produces a mild affection, scarcely meriting the term 'Disease,' yet, nevertheless, the Inoculator should be extremely careful to obtain a just and clear conception of this important branch of medical science. He should not only be acquainted with the laws and agencies of the vaccine virus on the constitution, but with those of the variolous also, as they often interfere with each other. A general knowledge of the subject is not sufficient to enable or to warrant a person to practise Vaccine inoculation; he should possess a particular knowledge." And he wishes strongly to inculcate, as the great foundation of the whole, "an intimate acquaintance with the character of the true and genuine Vaccine Pustule. The spurious Pustule would then be readily detected, whatever form it might assume, and errors known no more."—*On the Varieties and Modifications of the Vaccine Pustule, occasioned by an herpetic State of the Skin; by Edw. Jenner, M.D. &c.*

Mr. Courtenay, in the debate on Dr. Jenner's remuneration, noticed, that as it appeared 40,000 lives were preserved annually to these kingdoms, by Dr. Jenner's discovery, it might be said that no less than 200,000l.

was actually saved to the State, calculating on every man being worth to the Revenue 5l. a year.—*Rep.* 196.

It has been before noticed (p. 10) that the annual number of births in London was about 16,291—now, supposing the population of the metropolis to be (as has been calculated) one fifteenth of the whole of the United Kingdom, it follows, that the total number born will be 244,365; out of which, probably, 24,436, or one tenth, would die before the age of seven years, when they would become useful, both in agriculture and our manufactories. The survivors would be 219,929. According to Baron Dimsdale's mode of treatment, including necessary preparation, not less than twelve or fourteen days are occupied in going through inoculation, the whole of which is lost to the labouring man; and, calculating at only one shilling a day for twelve days, no less a sum than 131,957l. 8s. may be said to have been lost in labour to the State, annually.

Dr. Denman, bearing testimony to the merits of Vaccine inoculation (3 *Med. Jl.* 292) and exerting his influence, which is very considerable, in removing prejudice, says, it appears to him that none of the facts or observations, inculcated by Dr. Jenner, have been disproved or refuted, and that no new information has been gained on any material point, by all that has been written on the subject, since the publication of his first Treatise.

Dr. Willan (p. 11, 12, 13) gives lists of professional men of the first celebrity, and distinguished persons, who have patronised the Vaccine inoculation.

The Report of the Committee of the House of Commons affords a very strong body of evidence in favour

of Vaccination. All that could be brought forward against it, or against Dr. Jenner's claim to reward, was received and examined; and yet this, says the Chairman of the Committee (Admiral Berkeley) "has proved a matter of fresh triumph to Dr. Jenner: for, although we descended to sift out information from every anonymous letter—though we rak'd the very kennels for information against the practice,—all that we are enabled to get is pointed out at full length in the Report. And such were the explanations on those very cases—such were the testimonies against that evidence, that if Dr. Jenner's discovery could receive additional lustre from this sort of inquiry, it certainly has done so."—*Report*, 182.

Dr. Baillie declares the discovery to be "*the most important ever made in Medicine*" (*Rep.* 93) and Dr. Saunders, "*the most important ever made for the benefit of the Human Race.*"—*Ib.* 63.

Mr. Neyle, of Piddleton, Dorsetshire, proves the superiority of Vaccination, by a set of experiments well worthy the attention of medical practitioners.—See his account, 16 *Med. Jl.* 138.

Of the objections to Vaccine Inoculation, it is now almost unnecessary to speak. The Compiler of this little work cannot but believe that the *Facts* and Testimonials contained in it render Argument against such objections unnecessary. He does not, however, feel any inclination to depreciate it; on the contrary, he earnestly recommends a perusal of the keen and classical pages of RING—the refined satire of MOORE—the ingenious imagery of BLAIR—the acute reasoning of JONES—the indignant severity of HILL, &c. &c.

Two objections, however, have been made, which,

as they are, on the first blush, imposing, he is unwilling to pass entirely over. One is, that the Cow-pox, though allowed to be a preservative against Small-pox, is so for a limited time only; and the other, that whether vaccinated subjects are or are not preserved against the attacks of Small-pox, cannot be decided till that disorder rages epidemically, when, as it is implied, the security will be found insufficient.

Both these objections appear to take their stations on ground that they may occupy, for a time, without a possibility of being dislodged, since time and experience alone can effect it; but fortunately for the supporters of Vaccination, and surely now it may be permitted to say, for the sake of Humanity herself, this experience is no longer wanting.

Mr. Ring, in his '*Answer to Goldson*,' p. 35, &c. has adduced cases that effectually destroy the force of the first objection. On which head also see *Dunning*, p. 28, *Edinburgh Review*, No. XVII. p. 51—*Willan*, xxxvii.—*12 Med. Jl.* 12—*Ib.* 348—*Ring*, 809, &c. &c.

To the second objection a satisfactory answer is given in the returns made to a question put by Dr. Willan, p. xxvii. "Has the Small-pox been epidemic, so as to put to the test many of those who have been vaccinated?" Its frequent recurrence in Liverpool afforded sufficient proof to establish, "in the minds of all the most respectable practitioners, a firm conviction that Vaccination secures the human constitution from the infection of the Small-pox, as completely as Variolous Inoculation."—In Prescott, and its neighbourhood, a most malignant Small-pox prevailed, two years after the adoption of Vaccination. It carried off great numbers of persons, and spread a general panic; but, in every instance, the vaccinated patients escaped the infection. p. xxviii.—

In Warrington, Ashton, St. Helen's, Preston, &c. the same has been experienced.—See also p. xxvii. xlii. xlv.

One circumstance more deserves to be noticed. A pustule may be excited by inoculation with Small-pox matter on a person who has before undergone this disease, which, though *there be no constitutional affection*, may afford a matter that will produce pustules in others. The same thing may happen after Vaccination; and it is to be feared that occurrences of this kind have been adduced as proofs (sufficiently convincing to *parents*) of the persons, on whom such primary pustules were excited, actually having the disease.—(See the Report of the Jennerian Society given hereafter. Articles XII. and XIII.)—The most prudent part of the Profession now deprecate the practice of inoculating with Small-pox matter subsequent to Vaccination, as tending to no good, after all the satisfactory experiments that have been made, but being likely sometimes to excite so much inflammation in the inoculated part, that the constitution may, in some degree, participate in the effects. If any doubt of security exist, it may be effectually satisfied by exposing the vaccinated person to the contagious influence of the Small-pox.

Any one, who has gone through the leading publications of the Anti-vaccinists—has examined the *Cases*, and observed the industry with which every thing has been collected that could militate against the new Practice, will only be astonished that so few apparently “adverse cases” have been met with, particularly if he consider the diseases to which Infants are subject, and that eruptive appearances, &c. occur at an age when the practitioner would not adventure to perform inoculation of the Small-pox (though he would for the Cow-pox)—when even dentition has not commenced; so that all the common disorders a child has

to undergo may *follow* the Cow-pox, while they would actually have *preceded* the Small-pox. *Post hoc, ergo propter hoc*. An ample field this, for Ignorance or Malevolence to glean in!

The Physicians, Surgeons, and Apothecaries, of the Medical Hospitals at Manchester, in an Address to the Poor, (6 *Med. Jl.* 116) declare,—

1. Inoculation for the Cow-pox has been practised for several years, with constant success, in various parts of the kingdom.
2. It has never failed to prevent the infection of the natural Small-pox.
3. It may be communicated with safety to persons of every age and sex, and at all times and seasons of the year, with equal advantage.
4. The Cow-pox is much preferable to the inoculated Small-pox, as being a milder and safer disease, and not capable of infecting the persons living in the same family, or even sleeping in the same bed.
5. It does not produce eruptions, which scar and disfigure the face, and is seldom, if ever, attended with any other marks of the disease, than what appear on the arms from inoculation.
6. Neither swellings, blindness, lameness, nor any other complaints, which are known frequently to be the consequences of the natural Small-pox, and sometimes (though but seldom) of the inoculated Small-pox, have been observed to follow the Cow-pox.
7. Alarming fits frequently seize children when sickening of the Small-pox; and while cutting their teeth, this disorder often proves dangerous; but no such objections lie against the Cow-pox.
8. So far from proving hurtful, delicate and sickly children are often improved in health by having passed through this complaint.

9. Scarcely any remedies or attendance are required for the Cow-pox.

10. There is no necessity for a course of physic either before or after inoculation.

11. *The time of the parents will not be taken up in attendance upon the sick, to the injury of the support of the rest of the family; and, to poor families, this is an object of no small importance.*

The Finsbury Dispensary also published the following, Feb. 16, 1803, (*9 Med. Jl.* 274):—

The power of the Cow-pox, as a preventive of the Small-pox, seeming now fully established, the following well-authenticated facts are presented to the public, to encourage persons to embrace this favourable opportunity of avoiding the baneful effects of the Small-pox in their families, one of the most dreadful maladies that afflict the human race.

1. The Cow-pox, properly conducted, has not failed, in a single instance, of proving a certain preventive of the Small-pox.

2. The Cow-pox is a disease unattended by fever, and perfectly free from danger.

3. The Cow-pox is seldom attended with eruptions, and, therefore, cannot disfigure the skin.

4. As the Cow-pox is not infectious, it cannot be communicated in any other way than by inoculation: the mother, therefore, is not liable to disease from suckling her child.

5. The Cow-pox is never productive of other diseases, or any blemish whatsoever.

6. The inoculation for the Cow-pox may be performed at any age, or under any state of the constitution; even in children during the time of teething.

JOHN REID, M. D.

THOS. JAMESON, M. D.

JASP. RICARDS.

MICH. BARTLETT.

A TABLE, SHEWING THE COMPARATIVE ADVANTAGES OF
VACCINE INOCULATION.

BY MR. RING...P. 1035.

The Natural Small-Pox.

I. The Natural Small-Pox is a loathsome, infectious, painful, and fatal disease. It is confined to no climate; but rages in every quarter of the world, and destroys a tenth part of mankind.

II. Those who survive the ravages of this dreadful distemper, often survive only to be the victims of other maladies; or to drag out a miserable existence, worse than death.

III. This cruel and lamentable disorder leaves behind it pits, scars, and other blemishes, and bodily deformities, which embitter life.

The Inoculated Small-Pox.'

I. The Inoculated Small-Pox also is loathsome, infectious, painful, and sometimes fatal, and, when partially adopted, spreads the contagion, and increases the mortality of the disease.

II. It sometimes occasions the same maladies as the natural Small-pox.

III. It frequently leaves behind it the same blemishes and deformities as the Natural Small-pox, which are the more deplorable, as they were brought on by a voluntary act.

The Inoculated Cow-Pox.

I. The Inoculated Cow-Pox scarcely deserves the name of a Disease. It is not infectious, and, in the opinion of the most experienced practitioners, has never proved fatal.

II. It occasions no other disease. On the contrary, it has often been known to improve health, and to remedy those diseases under which the patient before laboured.

III. It leaves behind it no blemish, but a blessing—one of the greatest ever bestowed on man—a perfect security against the future infection of the Small-pox.

Mr. Ring vaccinated a child immediately after its birth, in order to protect it against the Small-pox, under which another child of the family laboured. It proved successful, and the child was often afterwards exposed to the Small-pox with impunity. — *9 Med. Jl.* 65.

The Medical Committee of Norwich, in their Address to the Inhabitants, make use of the following sensible and liberal arguments :—

That this recommendation may receive every assistance that a candid and impartial inquiry can give it, we shall briefly examine the force of the objections brought against Cow-pox inoculation, and draw a parallel between its effects and the effects of inoculated Small-pox upon the human body. It is admitted, on all hands, that the Cow-pox is never fatal; whereas, in the inoculated Small-pox, one in 300 perishes,—a circumstance of no trifling consideration. It is asserted that Cow-pox is not, universally, a security against Small-pox, there being instances alleged of persons taking the Small-pox, after having been inoculated for the Cow-pox. To give this argument its full force, let us admit all the alleged cases to be true, and then proceed to ascertain the proportion they bear to the whole number of persons who have been inoculated for the Cow-pox. From this inquiry it appears, that of 250,000 persons, who have been inoculated for the Cow-pox, only 50 persons have been alleged to have suffered from subsequent Small-pox. Thus, even in this view, the Cow-pox is highly to be preferred to the Small-pox; as, from this estimate, *only one person in 5000 is liable to Small-pox; whereas, in inoculated Small-pox, it is admitted that one person in 300 perishes.* But a more minute investigation has shewn, that of these fifty alleged cases, only ten have been substantiated by evidence admissible and adequate; and that it is probable, among these ten cases, some deception or mistake may have taken place, on the same grounds as in some of the asserted cases of Small-pox, subsequent to Small-pox, and in which the Chicken-pox has been taken for Small-pox. Admitting, however, these ten cases to be established, the conclusion from such admission strongly proves the superior advantages of Cow-pox inoculation; as, in that case, instead of one person in 5000, only one person in 25,000 would be liable to Small-pox. And further supposing, in the 250,000 persons inoculated for the Cow-pox, that ten of them (as as-

serted) should be liable to Small-pox, and should actually take it, and in the casual way, and that of these ten, one in five should die (which is a greater proportion than really obtains) it would then appear, that of 250,000 persons inoculated for the Cow-pox, only two persons would have died, and those from subsequent Small-pox; whereas the deaths from the same number of persons (250,000) inoculated for Small-pox (taking the received proportion of one in 300) would be about 834. Thus it is proved, that the fatality of Small-pox inoculation, compared with that of persons taking the Small-pox in the casual way, subsequent to the Cow-pox, is, as near as may be, 834 to 2:—a fact, at once strongly exhibiting the superior advantages and mildness of the Cow-pox, when compared with Small-pox.

Memorial of the Med. Committee of Norwich, p. 9.

§ 6....TESTIMONIES IN FAVOUR OF VACCINE
INOCULATION.

THE Testimony, of all others the least equivocal and most satisfactory, has already been given in the enumeration of the Countries wherein the Jennerian discovery has been adopted, and the manner and degree in which it has been practised. The celerity with which it has made its way, in regions and amongst men, so opposite in manners and customs, could be the consequence of success only. Failures, in a few instances, would have been sufficient to have checked, if not entirely prevented, its extension; and professional pride would have combined with national prejudice and rivalry, to consign it to eternal oblivion.

But weighty as the argument is, which this general extension of the practice affords, there are positive tes-

timonials existing, which cannot but have great influence on the public opinion. These may, for perspicuity sake, be arranged under the following heads:—

I. Direct Testimonies of Societies, &c. professional as well as otherwise.

II. Diplomas, and other honours, conferred on the Discoverer.

III. Miscellaneous tokens of approbation, presents, &c. &c.

To which might be added, the energetic, the grateful testimonies of individual writers, as well foreign as domestic.

I....*Direct Testimonials, &c.*

Among these, the following stand conspicuous:—

Testimonial of the College of Physicians. April 13, 1802.—*Report*, 162.

Testimonial of the Medical Society of London. March 22, 1802.

Testimonial of the London Practitioners—4 *Med. Jl.* 187; 5, 103; 6, 239.

Testimonial of the Physical Society of Guy's Hospital.

Report of the Medical Council of the Royal Jennerian Society. Jan. 2, 1806.

Directions of the Governor of the Mary-le-bone Infirmary (*of which Dr. Rowley was Physician*) to discontinue Variolous, and adopt Vaccine, inoculation. Feb. 1806.—15 *Med. Jl.* 232.

Edinburgh Testimonial. June 9, 1804.—12 *Med. Jl.* 11.

Ditto. Jan. 25, 1805.—13 *Ib.* 286.

Finsbury Dispensary Address to the Poor. February 16, 1803.—9 *Med. Jl.* 274.

Address of the Royal Somerset Jennerian Society. 14 *Med. Jl.* 318.

Address of the Sussex Jennerian Society.—12 *Med. Jl.* 19.

A Testimonial of their approbation of Vaccine inoculation, by five Physicians and seventeen Surgeons, at Leeds. At Chester, by four Physicians and twelve Surgeons; and at Durham, by one Physician and seven Surgeons. Meetings of the Faculty were also held at York, Hull, Birmingham, and other places, where similar resolutions were adopted.—4 *Med. Jl.* 570.

Address of the Faculty at Manchester, to the Poor.—6 *Med. Jl.* 115.

Testimonial of the Plymouth and Plymouth Dock Practitioners, Jan. 7, 1801; signed by five Physicians and twenty-six Surgeons.—5 *Med. Jl.* 156.

Resolution of Thanks to Dr. Jenner, from the Benevolent Medical Society of Essex and Herts. June 8, 1801.—6 *Med. Jl.* 113.

Ditto. May 3, 1802.—8 *Ib.* 192.

Address of the Colchester Medical Society, established 1774. Nov. 10, 1801.—7 *Med. Jl.* 528.

Address to Dr. Jenner, from the Suffolk Society of Surgeons. April 19, 1802.—7 *Med. Jl.* 386.

Resolutions of the Sussex Grand Jury. March 19, 1804.—12 *Med. Jl.* 10.

Memorial of the Medical Committee of Norwich. July 29, 1805.

Nottingham Testimonial. Oct. 16, 1805.—15 *Med. Jl.* 251.

Ditto. July 9, 1806. 16 *Ib.* 182.

Liverpool ditto. April 29, 1806. —*lb.* 536.

Dr. Beddoes's Letter to Dr. Jenner.—*lb.* 43.

Testimony of the Governor in Council of Madras. July 28, 1804. — 13 *Med. Jl.* 283.

Complimentary Addresses from the French National Institute to Dr. Jenner.

Letter addressed by the Medical Committee for the Diffusion of the Vaccine Inoculation at Paris, to the Mayors of the twelve districts.—5 *Med. Jl.* 356.

Testimony of the Vaccine Central Committee at Paris, on Mr. Goldson's Book. 8 Mess. ann. 12.—12 *Med. Jl.* 348.

Address of the Jury of Health at Amiens, to Lord Cornwallis.—*Rep.* 171.

Address from the Medical Society of the Department de l'Indre et Loire. April 19, 1802.

Address, and Testimony of the efficacy of Vaccine inoculation, from the Physicians, &c. of Breslaw. Nov. 10, 1802.

Letter from Mr. Adams, President of the United States, to Dr. Waterhouse.—*Ring*, 868.

Letter from Mr. Jefferson, the President, to ditto. Dec. 25, 1800.—6 *Med. Jl.* 69.

Letter from ditto, to Dr. Jenner. May 14, 1806.

II....*Diplomas, &c.*

Diploma from the Physical Society of Guy's Hospital. Feb. 20, 1802.

Diploma from the Royal College of Physicians of Edinburgh. 1802.

Diploma from the Royal Medical Society of Edinburgh.
March 7, 1802.

Diploma from the University of Gottingen: —“ E. J. immortalis nominis Medicum, de omni humanitate meritissimum.” Sept. 24, 1801.”

Diploma from the University of Wilna. Nov. 16, 1801.—
13 Med. Jl. 428.

Diploma from the Royal Medical College of Stockholm.
March 31, 1806.

Diploma from the Medical Society of Paris. 25 Vent.
 ann. 10.

Diploma from the Medical Society of Tours. 2 Mess.
 ann. 10.

Diploma from the Medical Society of the Department du Gard. Dec. 1802.

Diploma from the Medical Society of Avignon. May 25,
 1803.

Diploma from L'Agogna, in the Italian Republic.

Diploma from the Royal Society of Economy at Madrid.
 Oct. 10, 1801.

Diploma from the American Academy of Arts and Sciences; signed “ John Adams, President.” May 25, 1802.

Diploma from the Philosophical Society of Philadelphia; signed “ Th. Jefferson, President.” April 27, 1804.

Diploma from the University of Cambridge, in Massachusetts, North America. Aug. 31, 1803.

The Freedom of the City of London presented in an elegant gold enamelled Box, with appropriate devices, and the fol-

lowing inscription:—"Presented to Edwd. Jenner, M. D. L.L. D. F. R. S. by the Corporation of London, 11th Aug. 1803, in the Mayoralty of the Rt. Hon. Chas. Price, M. P. as a token of their sense of his skill and perseverance in the discovery of, and bringing into general use, the Vaccine Inoculation."

The Freedom of the City of Dublin. Oct. 19, 1804.

The Freedom of the City of Edinburgh. Oct. 31, 1804.

III....*Miscellaneous Tokens, &c.*

The Report of the Committee of the House of Commons, March, 1802, and subsequent Grant by Parliament.

Letter from the Dowager Empress Mary of Russia, to Dr. Jenner, with a valuable Diamond Ring. Aug. 10, 1802.—*Ring*, 1011.

The Gold Medal of the London Medical Society, inscribed "E. Jenner, M. D. Socio suo exinio, ob Vaccinationem exploratam."

The Medical Officers in the Navy (Vaccine inoculation having been adopted) voted a Gold Medal to Dr. Jenner, with an appropriate address, signed by eighty-seven subscribers to the medal. Feb. 20, 1801.—*5 Med. Jl.* 432—(*where is a description of it*).

The Medical Society of Plymouth, Dock, and Storehouse, requested Dr. Jenner to sit for his picture, to Northcote.—*11 Med. Jl.* 40—*16 Ib.* 43.

A Subscription from the county of Gloucester, for a Service of Plate to Dr. Jenner.

A flattering Letter to Dr. Jenner, from some public-spirited individuals at Calcutta, accompanied by a very handsome present. 1806.

Letter, and present of an embossed Silver Goblet, from Dr. Reys, to Dr. Jenner, April 8, 1805.—16 *Med. Jl.* 37.

The Directors of the East-India Company voted a piece of plate, value 200 guineas, to Dr. De Carro, for his endeavours to introduce Vaccination into the British settlements in India.—12 *Med. Jl.* 123.

A Medal was struck, with the head of Dr. Sacco, of Milan, and this inscription :—“Aloysius Sacco. Mediol. Med. et Chir. Prof.—Jennerii Cœmulo, Amici Bononiensés, A. J. A. B. Ital. Rep. Cons.”

Instructions to Regimental Surgeons, published under the authority of the Commander in Chief. Jan. 1, 1806.

The Testimonial of the London Medical Society, before noticed.

At a Meeting of the Medical Society of London,* March 22d, 1802,—

Resolved unanimously,

That the Members of the Medical Society of London, taking into consideration the very important discovery made by Dr. Edward Jenner, are of opinion, that great benefit will accrue to the inhabitants of these islands, and to mankind in general, from the introduction of Vaccine inoculation; and that, from their own experience, as well as from the extensive and successful trials made in various parts of the world, it will, in all probability, ultimately eradicate the

* The Medical Society of London consists of above 150 members resident in the Metropolis, and more than double that number residing in other places. Of the whole body, more than one half are Physicians of the highest respectability, and in extensive practice.

Small-pox, one of the most fatal diseases to which the human species is liable.

Signed, by order of the Meeting,

JAMES SIMS, President.

Testimonial of the London Practitioners, before noticed.

Many unfounded reports having been circulated, which have a tendency to prejudice the public against the inoculation of the Cow-pox,—We, the under-signed Physicians and Surgeons, think it our duty to declare our opinion, that those persons, who have had the Cow-pox, are perfectly secure from the future infection of the Small-pox.

We also declare, that the inoculated Cow-pox is a much milder and safer disease than the inoculated Small-pox,

Signed by Drs. Babington, Baillie, Bancroft, Batty, Blackburne, Blane, Boys, Bradley, Clarke, Cooke, Crichton, Croft, Denman, Dennison, Eliot, Farquhar (Bart.), Fearon, Frampton, Fryer, Garnett, Garthshore, Gibson, Haighton, Hamilton, Hawes, Hayes (Bart.), Hooper, Hulme, Hunter, Latham, Lettsom, Lister, Maton, Mayo, Pemberton, Pincard, Pitcairn, Poignand, Saunders, Sims (Jas.), Sims (Jn.), Squire, Stanger, Thornton, Thynne, Vaughan, Underwood, Walker, Walshman, Willan, and Yelloly; Mess. Abernethy, Addington, Aikin, Anderson, Andree, Blair, Bliss, Brickenden, Brown, Bureau, Burrowes, Burrows, Cairncross, Chamberlaine, Charlton, Chilver, Cline, Clutterbuck, Coleman, Cooper, Cribb, Curtis (Jn.), Curtis (L. I.), Curtis (W.) Dale, Davis, Douglas, Dowers, Dunn, Dundas, Dyson, Farquhar, Fearon, Foot, Forbes (M.), Forbes (W.) Ford, Foster, Gaitskell, Gardner, Gib, Gilder, Good, Goodwin, Grenville, Griffiths, Cristock, Harris, Hayes, Higgins, Hill, Hoghen, Holle, Hollings, Holt, Home, Horsford, Hurlock, Jeaffreson, Johnson, Jordan, Key, Knight, Leese (L.) Leese (E.), Leighton, Lewis, Lewthwaite, Luxmore, Lynn, Mackinder, Maiden, Massie, Maule, Messiter, Millington, Moore, Morris, Moss, O'Conner, Owen, Parkinson, Paternoster, Paytherus, Pearson, Perfect, Phillips, Phipps,

Platt, Pole, Porter, Ramsden, Reid, Ricardo, Ring, Rolph, Rush, Seagram, Seares, Sharp, Sheldon, Shirley, Simmonds, Simpson, Smith, Steel (Jos.), Steel (R. H. H.) Strong, Thomas, Turnbull, Tuson, Ware, Warner, Wathen, Whately, Witham, Wood, Woodward, Woolriche, Wye, Young (G. W.), Young (J.)

The Testimonials of the Physical Society of Guy's Hospital, before noticed.

The Original, signed by the individual Members, was presented to Dr. Jenner:—

We, the Presidents and Members of the Physical Society of Guy's Hospital, deeply impressed with the importance of the discovery of Vaccine inoculation, are anxious to express our opinion of its efficacy, and our profound veneration for its Author.

We entertain a perfect conviction that this inoculation is a certain preventive of the Small-pox, and trust, the period is not remote, when that dreadful scourge of the human race will become totally extinct.

We are fully persuaded, that when Vaccination has been properly conducted, no instance has occurred of its having occasioned any dangerous consequence, or failed to produce those effects which its Discoverer has set forth.

We further state our belief that the Vaccine inoculation, from its superior mildness, will call forth those latent seeds of disease which occasionally arise from the Small-pox, even under the best management, and which might otherwise never have happened.

We feel the warmest sensations of gratitude and respect for the liberal manner in which the Author has communicated his discovery to the world, uninfluenced by any motive of self-consideration. We contemplate the discovery itself as a memorable epoch in the Annals of Medicine.

The Society presumes to hope, that the Author of this happy discovery will meet with that reward from his grateful

country, which he justly deserves, for having thus rendered himself the Benefactor of Mankind.

Signed by Drs. HAIGHTON, WALSHMAN, & CURREY; and
Messrs. COOPER, SAUMAREZ, & HARDY, Presidents,
And by one hundred and six other Members.

Report of the Medical Council of the Royal Jennerian Society, on the Subject of Vaccine Inoculation.

The Medical Council of the Royal Jennerian Society, having been informed that various cases had occurred, which excited prejudices against Vaccine inoculation, and tended to check the progress of that important discovery in this kingdom, appointed a Committee of twenty-five of their Members to inquire, not only into the nature and truth of such cases, but also into the evidence respecting instances of the Small-pox, alleged to have occurred twice in the same person.

In consequence of this reference, the Committee made diligent inquiry into the history of a number of cases, in which it was supposed that Vaccination had failed to prevent the Small-pox, and also of such cases of Small-pox as were stated to have happened subsequently to the natural or inoculated Small-pox.

In the course of their examination, the Committee learned, that opinions and assertions had been advanced and circulated, which charged the Cow-pox with rendering patients liable to particular diseases, frightful in their appearance, and hitherto unknown; and judging such opinions to be connected with the question, as to the efficacy of the practice, they thought it incumbent upon them to examine also into the validity of these injurious statements respecting Vaccination.

After a very minute investigation of these subjects, the result of their inquiries has been submitted to the

Medical Council; and from the Report of the Committee it appears,—

I. That most of the cases which have been brought forward as instances of the failure of Vaccination to prevent the Small-pox, and which have been the subjects of public attention and conversation, are either wholly unfounded, or grossly misrepresented.

II. That some of the cases are now allowed, by the very persons who first related them, to have been erroneously stated.

III. That the statements of such of those cases as are published have, for the most part, been carefully investigated, ably discussed, and fully refuted, by different writers on the subject.

IV. That notwithstanding the most incontestible proofs of such misrepresentations, a few medical men have persisted in repeatedly bringing the same unfounded and refuted reports, and misrepresentations, before the public; thus perversely, and disingenuously labouring to excite prejudices against Vaccination.

V. That in some printed accounts, adverse to Vaccination, in which the writers had no authenticated facts to support the opinions they advanced, nor any reasonable arguments to maintain them, the subject has been treated with indecent and disgusting levity, as if the good or evil of society were fit objects for sarcasm and ridicule.

VI. That when the practice of Vaccination was first introduced and recommended by Dr. Jenner, many persons, who had never seen the effects of the vaccine fluid on the human system—who were almost wholly unacquainted with the history of Vaccination, the characteristic marks of the genuine vesicle, and the cautions necessary to be observed in the management of it, and were, therefore, incompetent to decide whether patients were vaccinated or not—nevertheless ventured to inoculate for the Cow-pox.

VII. That many persons have been declared duly vaccinated, when the operation was performed in a very negligent and unskilful manner, and when the Inoculator did not af-

erwards see the patients, and therefore could not ascertain whether infection had taken place or not; and that to this cause are certainly to be attributed many of the cases adduced in proof of the inefficacy of Cow-pox.

VIII. That some cases have been brought before the Committee, on which they could form no decisive opinion, from the want of necessary information as to the regularity of the preceding Vaccination, or the reality of the subsequent appearance of the Small-pox.

IX. That it is admitted by the Committee, that a few cases have been brought before them, of persons having the Small-pox, who had apparently passed through the Cow-pox in a regular way.

X. That cases, supported by evidence equally strong, have been also brought before them, of persons who, after having once regularly passed through the Small-pox, either by inoculation or natural infection, have had that disease a second time.

XI. That in many cases, in which Small-pox has occurred a second time, after inoculation or the natural disease, such recurrence has been particularly severe, and often fatal; whereas, when it has appeared to occur after Vaccination, the disease has generally been so mild, as to lose some of its characteristic marks, and even sometimes to render its existence doubtful.

XII. That it is a fact well ascertained, that in some particular states of certain constitutions, whether vaccine or variolous matter be employed, a local disease only will be excited by inoculation, the constitution remaining unaffected; yet that matter, taken from such local vaccine or variolous pustule, is capable of producing a general and perfect disease.

XIII. That if a person, bearing the strongest and most indubitable marks of having had the Small-pox, be repeatedly inoculated for that disease, a pustule may be produced, the matter of which will communicate the disease to those who have not been previously infected.

XIV. That, although it is difficult to determine pre-

eisely the number of exceptions to the practice, the Medical Council are fully convinced that the failure of Vaccination, as a preventive of Small-pox, is a very rare occurrence.

XV. That of the immense number who have been vaccinated in the Army and Navy, in different parts of the United Kingdom, and in every quarter of the globe, scarcely any instances of such failure have been reported to the Committee, but those which are said to have occurred in the Metropolis, or its vicinity.

XVI. That the Medical Council are fully assured, that in very many places, in which the Small-pox raged with great violence, the disease has been speedily and effectually arrested in its progress, and in some populous cities wholly exterminated, by the practice of Vaccination.

XVII. That the practice of inoculation for the Small-pox, on its first introduction into this country, was opposed and very much retarded, in consequence of misrepresentations and arguments drawn from assumed facts, and of miscarriages arising from the want of correct information, similar to those now brought forward against Vaccination, so that nearly fifty years elapsed before Small-pox inoculation was fully established.

XVIII. That, by a reference to the Bills of Mortality, it will appear, that to the unfortunate neglect of Vaccination, and to the prejudices raised against it, we may, in a great measure, attribute the loss of nearly 2000 lives by the Small-pox, in this Metropolis alone, within the present year.

XIX. That the few instances of failure, either in the inoculation of the Cow-pox, or of the Small-pox, ought not to be considered as objections to either practice, but merely as deviations from the ordinary course of nature.

XX. That if a comparison be made between the preservative effects of Vaccination, and those of inoculation for the Small-pox, it would be necessary to take into account the greater number of persons who have been vaccinated within a given time, as it is probable, that within the last seven years, nearly as many persons have been inoculated

for the Cow-pox, as were ever inoculated for the Small-pox since the practice was introduced into this kingdom.

XXI. That, from all the facts which they have been able to collect, it appears to the Medical Council, that the Cow-pox is generally mild and harmless in its effects, and that the few cases, which have been alleged against this opinion, may be fairly attributed to peculiarities of constitution.

XXII. That many well-known cutaneous diseases, and some scrofulous complaints, have been represented as the effects of Vaccine inoculation, when, in fact, they originated from other causes, and, in many instances, occurred long after Vaccination; and that such diseases are infinitely less frequent after Vaccination, than after the natural or inoculated Small-pox.

Having stated these facts, and made these observations, the Medical Council cannot conclude their Report upon a subject so highly important and interesting to all classes of the community, without making this solemn declaration:—

That, in their opinion, founded on their own individual experience, and the information which they have been able to collect from that of others, mankind have already derived great and incalculable benefit from the discovery of Vaccination; and that it is their full belief, that the sanguine expectations of advantage and security, which have been formed from the inoculation of the Cow-pox, will be ultimately and completely fulfilled.

Signed by—Drs. Jenner, *President*; Lettsom and Ring, *V. Pres.*; Adams, Babington, Baillie, Blane, Buxton, Clarke, Croft, Denman, Fraser, Hamilton, Hooper, Lister, Marcet, Myers, Rees, Squire, Walshman, Willan, and Yelloly.

Messrs. Addington, Aikin, Blair, Chamberlaine, Cooper, Cordell, Dimsdale, Field, Ford, Fox, Gaitskell, Hingeston, Home, Hurlock, Jones, Key, Knight, Leese (E.), Leese (L.), Lewis, Parkinson, Paytherus, Pearson, Ridout, Upton, Wachsell, Williams, and Wilson.

John Walker, *Secretary to the Council.*

Jan. 2d, 1806.

7...Conclusion.

THE Testimonials of the London Practitioners—of the London Medical Society—and of the Society of Guv's Hospital—were given between the years 1800 and 1802,—Testimonials, decisively expressing the opinion of the most respectable and brightest ornaments of a liberal and learned profession. It is since their appearance, and with these documents before them, that the Anti-vaccinists have published (or re-published) their objections. The motives, the temper and disposition, of these opposers and *rivals* of a Baillie, a Farquhar, a Vaughan, &c.—an Abernethy, a Cline, a Cooper, a Ring, &c.—will best be learned from their works: a few specimens of which are therefore here added.

Dr. Moseley, the first opposer of the new practice, starts thus:—

“ The *Cow-pox* has lately appeared in England. This is a new star in the *Æsculapean* system. It was first observed from the Provinces. It is so luminous there, that the greasy-heeled hind feet of Pegasus are visible to the naked eye. The hidden parts of that constellation, which have puzzled astronomers, as to the sex of Pegasus; and which Hipparchus, Tycho, Hevelius, Flamsteed, and Herschel, could never discover. The reason now is evident.

“ The medical Pythonissas are divided in their opinion respecting this phenomenon.

“ Great events are foreboded.—Some pretend that a restive greasy-heeled horse will kick down all the old gally-pots of Galen.—Others, that the people of England are becoming like the inhabitants of a wilderness, beyond the land of Cathay, seen in 1333, by the rare and inimitable Sir

John Mandeville,—who, he says, were “ wild, with horns on their heads, very hideous, and speak not ; but rout as swine.”

“ Can any person say what may be the consequences of introducing a *bestial* humour—into the human frame, after a long lapse of years ?

“ Who knows, besides, what ideas may rise, in the course of time, from a *brutal* fever having excited its incongruous impressions on the brain ?

“ Who knows, also, but that the human character may undergo strange mutations from *quadrupedan* sympathy; and that some modern Pasiphaë may rival the fables of old ?”

“ I flattered myself that either my ridicule, or my reasoning, in the preceding publication, had some effect for a while; but I deceived myself. The indecorous became more so. Reason was dethroned, and trampled under foot. The tempest raged. The press groaned dreadfully; and the English language expired under the load of Cow-pox Pæans ! ”

“ It is a lamentable reflection, that men of learning should have joined in this *diabolical conspiracy*. But much more lamentable is the reflection, *that such men should persevere in it.*”

“ From this Cow-pox medley of *weak* Philosophers, and *strong* Fools, the world will form some estimate of the state of Physic in England.

“ The Medical tribe in London, must be viewed in an extraordinary light by people of understanding; when they see *what havoc Dr. JENNER, and his COW, have made in their intellects.*”

“ One bewildered soul, starting in his phrenzy, vows that ‘ the sweet influence of the Pleiades, and the bands of Orion, ’ are nothing but Jennerian pustules; then decorates VACCINA with moons and stars,—worships the divine Beast in Pythagorean relationship,—sends her to the Heavens as a Constellation,—and swears he will have a Cow, instead of a BULL, in the Zodiac.

“Another *cut-throat*, *Smithfield scelerat*, drags VACCINA to the slaughter-house; and, in *carnivorous hymns*, sings the praises of her divisibility on the shambles, in Beef-steaks, Rounds, and Surloins,—like a savage of New Zealand.

“But these ravers are not the men, who alone have carried the Cow-pox disastrous practice, into its widely-extended effect.

“*The culprits, who keep out of sight, and prompt the mischief*, and have not honour enough to renounce, nor courage enough openly to defend, their conduct, will not be forgotten. They may skulk behind the curtain, and keep the stage occupied, by bringing forward one silly Buffoon after another,

‘*To feed contention in a lingering act,*’

and blind the publick,—but they will not escape.

“It will be remembered,” the Edinburgh Reviewers remark, (No. XVII. p. 14,) that Dr. Benj. Moseley is here speaking of such men as Baillie, Vaughan, Farquhar, &c. &c.—in fact, of the whole practising Physicians of London, with the exception of his facetious friend Dr. Squirrel.”

Again, he says, “It is certain I should have been more flattered in this victory over the Cow-poxers, *had the Flocktons themselves, the Chiefs of the pantomimic war*, attacked me *in propria personâ*; and not to have had their parts undertaken by their Buffoons, who know nothing of the Farce but what they are taught from day to day, by their prompters.”

In one of the *dreadful* cases, introduced by Dr. Moseley, he says,—

“On all the places where the ulcers have been, after they were dried up, patches of hair appeared; some as large as a six-pence or a shilling. On the parts where the first scabs were, the hair is longest; *and some of it is very much like Cow's hair*. If the ulcerations continue to come out as others dry up, and the hair continue to grow in proportion as it has done, this poor child must be, in a few years, *inclosed in a sort of Cow's hide*.”

“*Comment.*—ROWLAND HILL may tell people, there is no harm in as haggly skin; and may say, the heart of Aristomenes was hairy, and that he was not the worse for it. So the fact certainly was. But then he never had the Cow-pox. Besides, the case is not similar in other respects. Aristomenes was an Athenian General; this poor child is not an Athenian General.”—&c. &c.

“A mind that has had the *genuine* Cow-pox, is fitted to perpetrate the deeds of a Clement, or a Ruvauillac. It has made good men bad, and bad worse. *The beastly subject has generated beastly morals.*”

It must be acknowledged that this is “sufficiently com-miserable; but if we would sound, the very base sting of humility, we must turn to the Doctor’s separate chapter, addressed to the said Rev. Rowland Hill.” (*Edinburgh Review*, 46.)—The first of which begins thus:—

“ROWLAND,

“I bought your Pamphlet, entitled, ‘*Cow Pock Inoculation Vindicated;*’ dated the 25th of March, 1806.

“I paid a shilling for it. ROWLAND,—it is not dear. The same quantity of Folly, Falsehood, and Impudence, could not have been bought for twice the money of any other Cow-poxer;—from the Ganges to the Mississippi.”

A Dialogue then follows, which must not be passed over inasmuch as it furnishes a criterion of the talents of a man, extolled by his friends as one of exquisite wit and humour,—one who “dazzles their astonished sight by the *refulgent shield of wit*; and while the *justice of his cause*, the *force of his arguments*, and the *powers of his language*, combine to form a *complete Panoply*, the feeble darts of his weak assailants, like old Priam’s javelin, scarcely reach the mark, or glance harmlessly against *his impenetrable armour.*”—*Lipscomb’s Dissertations.*

“ROWLAND. Madam, you are an Otter. A thing to thank God on. You are an animal. Nay, you are a com-

pound of all sorts of animals. The flesh of fish, fowls, and beasts of different sorts, has been incorporated into your animal frame; even from that most filthy creature the hog."

"I believe it is nothing but custom that makes you prefer the well-fed hog, to the well-fed horse; or to a roasted puppy; or to a slice of a dead man."

"By no means then quarrel with the Cow."

"Madam, I tell you her very Dung is a fine poultice for Horses feet, and greasy-heels. Kings and Princes eat it, by way of Mustard; and Dr. MOSELEY knows it, if he were candid enough to confess it.

"ROWLAND,—I do confess it. You are very right. Truth sometimes surprises me, but never offends me. I have seen many Kings and Princes eat voraciously of this Cow-pox Mustard. Try it, ROWLAND; and you will never eat Durham Mustard again. I will give you the Receipt for making it, from a work of the highest authority.—Mind, ROWLAND.—'Take the finest part of the filth in the guts of the COW; and season it with salt and pepper. Mix the ingredients well together.

:"I know my credit has long stood very low with Cow-poxers; but I hope this will raise it; and, as a further confirmation of your correctness, I refer scrupulous readers to the learned work itself; where they will not only find the above Receipt, but the following interesting remarks on it:—

"This Mustard, made with Cow-dung, is reckoned a most curious Sauce by the Æthiopians,—mind, ROWLAND—by the Æthiopians;—and they call it *Manta*. But only Princes, and very great persons, can attain this Royal Dish; because it requires much Pepper, which all men have not."

"Mind, ROWLAND. It requires much Pepper; an article, luckily for Cow-poxers, not dear in England."

"How, ROWLAND,—ought a boy to be whipped for the usurpation of an *e* for an *a*; making the word *men* instead of a *man*?

"Suppose this same impertinent letter *e* should escape from a boy's hand, and take the place of *i*, in your name, and make it appear that HELL was to be seen in Surrey Cha-



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pel,—would you apply the birch? No, ROWLAND, certainly not.—That would be *Hellish*, I mean *Hillish*, severe indeed.”

“ Vaccinators now, of every class,—from Cow-pox Apollo himself, down to Cow-pox Men-midwives, and Methodist Parsons,—*have had a fair and impartial trial*; and after an obstinate perseverance in propagating a new disease, among their fellow-creatures, *are fully convicted of having failed, in the presumptuous enterprise, to perform what no earthly power can atchieve,*”

“ It was natural for all sober, reflecting people to suspect a cause, where, Dr. PEARSON excepted, *there has not appeared one man famed for experience, or renowned for science, in Medicine, —either in England, France, or Germany, that has given it any practical support.* In every country the subject has seized the ‘heat-oppressed brain,’ of extremists only.”

The Reader is recommended to compare this ‘*refulgent shield of wit*’ with ‘*the feeble darts of his weak assailants,*’ of which a quiver full may be found in *Ring’s Answer to Moseley, &c.*

Thus much for Dr. Moseley,* Of those who follow him in his labours, less may suffice. Dr. Rowley begins by remarking, that

“ *To investigate and expose imposition, to refute many medical errors, and to establish demonstrative truths in the theory and practice of the art, have occupied the attention of the author through a long life, incessantly dedicated to the study and practice of physic.*”

* “ I smile when I read that the pompous Dr. Mosely has inoculated thousands of people in the West Indies, with the Small-pox, without losing a patient. Dr. Moseley practised at Kingston, in this island; and it is a well-known fact, that his practice was extremely limited, and that he was much more devoted to Music than Medicine.”—*Letter from Mr. Weston, St. Anne’s Bay, Jamaica. 17 Med. Jl. 61.*

The nature of his investigations may be judged of by the following sentence :—

“ Indeed, no other questions are admissible in Vaccination than, Have the parties been *inoculated* for the *Cow-pox*? Have they been vaccinated? *Yes*. Have they had the Small-pox afterwards? *Yes*. As to how, when, where, whether the Cow-pox *took*, was *genuine* or *spurious*, or any arguments, however specious, as pretexts for doubt or failure, they are evasive and irrelative to the question. They may confound fools, but not illustrate the credit of Vaccination.

“ After such a declaration,” say the Edinburgh Reviewers, “ it certainly cannot be worth while to refute Dr. Rowley’s cases. It would be little less absurd to tell a jury, in a trial for murder, that the only question was, whether a pistol had been fired or not, and that it was of no consequence to inquire, whether it was loaded with ball, or whether the sufferer had died by a pistol-shot!”

The compliment he pays to his friend’s *penetration* may, fairly, be added :—

“ Dr. Moseley, who sensibly first *exposed the errors of Vaccination*, saw this case of the ox-faced boy by my desire. He observed to me, that the boy’s face seemed to be in a state of transforming, and assuming the visage of a Cow !”*

* Dr. Rowley’s public advertisement is worth preserving.—“ Four Hundred and Forty Proofs of the Inutility of Vaccination. The Second Edition. This Day is published, price 3s. COW-POX INOCULATION NO SECURITY AGAINST SMALL-POX INFECTION. By WILLIAM ROWLEY, M. D. Member of the University of Oxford, the Royal College of Physicians in London, Physician to the St. Mary-le-bonne Infirmary, Author of *Schola Medicinæ Universalis Nova*, (the Rational and Improved Practice of Physic), and Public Lecturer on the Theory and Practice of Medicine, excluding false Systems, &c. &c.—To which are added, the Modes of treating the Beastly New Diseases produced from Cow-Pox, explained by two Coloured Copper-plate Engravings,—Cow-pox Mange—Cow-pox Ulcers—Cow-pox Evil or Abscess—Cow-pox Mortification, &c. With the Author’s certain, experienced, and success-

“Dr. Squirrel’s book, however,” the Edinburgh Reviewers remark, “is the most entertaining of the whole. We will venture to say, though we know it to be a bold assertion, that there never was any thing so ill written, or so vulgar and absurd, produced before, by a person entitling himself a Doctor of Medicine. There is a certain nimbleness and agility about him, however, which keeps us in good humour, and he whisks about with such a self-satisfied springiness and activity, that it is really enlivening to look on him.”

Dr. Squirrel dedicates his work to the King, assuring his Majesty, that

“Although but a few years have elapsed since the Small-pox Inoculation has been so *unnecessarily and unjustly forsaken*, and Vaccination adopted in its stead; yet, in the short period of seven years, this practice has, in numberless instances, proved ineffectual, and *undermined the health*; and *destroyed more lives of the most innocent and infantile part of his majesty’s dominions than can be imagined*.

“The Cow-pox is *unnatural* to the human frame; and whatever operates contrary to the law of nature, can seldom boast of long inheritance; for nature detests an enemy as well as abhors a *vacuum*, and she endeavours with as strong efforts to destroy the one as to fill up the other. *Providence never intended that the Vaccine Disease should affect the human race, else why had it not, before this time, visited the inhabitants of the globe?* Notwithstanding this, the Vaccine Virus has been forced into the blood by the *manufacturing* hand of man, and supported not by science or reason, but *by conjecture and folly only*, with a pretence of its exterminating the Small-pox from the face of the earth, and producing a much milder disease than the Variolus Inoculation; yet, after these bold and unqualified *assertions*, the

ful mode of Inoculating for the Small-pox, which now becomes necessary from Cow-pox Failure, &c.—‘*Audi candide alteram partem.*’—Sold by J. Harris, corner of Ludgate-street; Ebers, Old Bond-street; Grace, Smithfield; and by all Booksellers and Newsmen in Town and Country.—Information of Cow-pox Disasters is received by Mr. Tinkler, Prince’s-street, Leicester-square.

natural infection has exerted its own right, and the Small-pox, subsequent to Vaccination, has made its appearance; for 'nature will be nature still:' hence the puerility and the impropriety of such a conduct, viz. of introducing Vaccination with a boasted intention not only to supplant, but also to change and alter, and, in short, to *pervert the established law of nature. The law of God prohibits the practice; the law of man, and the law of nature, loudly exclaim against it.*"

The Doctor has drawn up the following comparative statement:

2. "The Cow-pox Inoculation produces malignant effects, vitiates the blood and other juices.

"The Small-pox Inoculation produces no ill consequences whatever.

3. "The Cow-pox produces very ill health to children, which is mentioned under the third class of consequences, page 18 and 19.

"The Small-pox Inoculation improves the health and constitution, and carries off many complaints which are very uncomfortable, both to the parents and children. This circumstance I have experienced many hundreds of times.

4. "The Cow-pox matter is taken from an animal diseased, and is of a specific scrophulous kind, as is proved from its effects.

"The Small-pox matter is taken from a healthy subject, and produces no disease whatever but the one for which it was intended.

5. "The Cow-pox was introduced into this country in the year 1798, since which time experience has proved that it produced many bad consequences.

"The Small-pox Inoculation has been practised nearly a hundred years in this country, and no ill effects can with truth be attributed to it!!!

6. "The Cow-pox is a disease unnatural to the human constitution. Providence never intended that it should

affect or pester the human race; consequently, Vaccination must be repugnant to nature.

“The Small-pox is a natural disease, which was sent to us by Providence, and has afflicted mankind according to the law of nature. The inoculation was no doubt discovered by accident, and has been improved by the reason, inventive faculties, and active industry of man, so far as to lessen the violence of the variolous disease, and to render it mild and harmless.”

Should any further comments be desired on Dr. Squirrel's labours, they will be found in a work intitled, “Vaccination Vindicated against Misrepresentation and Calumny, in a Letter to his Patients, by Edward Jones.” A sensible Address written by a most respectable Practitioner, but whom Dr. Squirrel, losing his patience with his argument, calls (in a second edition) *surgeon, apothecary, manmidwife, bone-setter, tooth-drawer, electrician, scarifier, cupper, &c. &c.* He recommends to Mr. Jones a few doses of his Tonic powders, which will “evacuate the crudities of the stomach, lessen furious heat, diminish morbid sensibility, and will most effectually remedy the Cow-pox insanity.”

These are “the three graduated champions who have openly taken the field against the patrons of Vaccination, and boldly challenged the rest of the medical world to defend that abominable practice against them.” The others are, Messrs. Goldson, Birch, Rogers, and Lipscombe.

“Mr. Goldson's theory,” say the Editors of the Edinburgh Review, who have devoted 35 pages to this subject, in an admirable critique on some of the most recent publications, “need not detain us very long. It exhibits, we think, as perverse an application of scepticism and credulity, as we have ever met with. There are, perhaps, one hundred authenticated cases of natural Cow-pox, in which the patients

have been found to resist variolous infection ; and, upon this scanty testimony, Mr. Goldson implicitly believes that natural Cow-pox is an infallible preventive of Small-pox. There are more than one hundred thousand cases of inoculated Cow-pox, in which the patients have equally resisted all subsequent infection ; and yet he refuses to believe that the inoculated Cow-pox can be depended upon as a preventive ! This is almost as absurd, as it is in Mr. Birch first to tell us that Cow-pox is nothing but Small-pox transmitted through a cow, and then to maintain that it is in the highest degree hazardous and improper to substitute the Cow-pox Inoculation for that of Small-pox. Yet these are the two most rational antagonists of Vaccination."

" It would, however," say they, " be injustice to Messrs. Goldson and Birch to confound them with this triad of Doctors, whom they have submitted to follow in this contest. They both write, especially the former, like men of some sense and moderation ; and we entertain good hopes of seeing them converted from their present heresy to the faith of the majority of their brethren. They neither of them join in the absurd clamours of the genuine Anti-vaccinists ; but, admitting the greater part of what the advocates for the new practice have asserted, they think it necessary to enlarge upon difficulties and discouragements to which we shall proceed to say something immediately. In the mean time, we may surely be permitted to observe, that from the specimens we have already seen of the talents and disposition of the Anti-vaccinists, there would be some reason to wonder if it should turn out that they had discovered a truth which had escaped the researches of the rest of the medical world."

Mr. Lipscombe declares himself to be " an open, constant, and consistent enemy to so unnecessary, so injurious, so dangerous, so unwarrantable, so destructive, a practice :— in direct opposition to all the mighty names of those replendent constellations in the medical hemisphere, whose malignant aspect has been so greatly dreaded, and so awfully described :—in direct opposition to all the flimsy and all the

fulminating efforts of sycophancy on the one hand, and arrogance on the other:—in direct opposition to “all the laughable, and all the loathsome,” effusions of distempered brains:—in direct opposition to all the pomp of declamatory eloquence, and all the pageantry of professional dignity; all the menaces of impotent disappointment, infuriate rage, or infatuated enthusiasm:—in a word, in direct opposition to the opinions, arguments, and clamour, of all the multitudinous host of Vaccinators, their adherents, and admirers.”

Those who have lost children by the Small-pox, or who, if somewhat less unfortunate, have preserved them, though with the loss of eye-sight, and features cruelly disfigured, will feel a difficulty in believing that Mr. Lipscombe is speaking of any other disease in the ensuing paragraph, so chaste and correct a picture does it present of the horrible operations of that fell ravager.

“The Cow-pox,” says Dr. Thornton, “never destroys life! Glorious tidings! Happy annunciation!” Sufficiently so, it seems, to have wiped away the tears for the loss of a beloved child. But, alas! how vain the illusion! how futile the confidence! *Heu spes abreptas breves!* Others have to mourn the melancholy consequences of the practice here applauded with emphasis so striking, and pathos so energetic and affecting. Others can tell with what heart-rending disappointment they beheld the fair form of their lovely infants disfigured and polluted; those eyes which beamed in native innocence, and raised the tenderest emotions in a fond parent’s heart, obscured in putrid night; those downy roseate cheeks roughened by horrid and disgusting scars; those little hands, whose playful activity was wont to afford so much amusement and delight, clasped in feverish and convulsive agony; and that pure breath which heretofore might rival the fragrance of the evening zephyr, or the breezy incense of the morning, now converted into streams of offensive exhalation!”

The Reader cannot fail to compare the following para-

graphs of Mr. Lipscombe with the Testimonials and signatures to them before given at pages 73 and 80.

“As several years have elapsed since *the promises and vows* of the Vaccinators were made to extirpate Small-pox from among mankind, without affording even the smallest degree of probability that the object would be accomplished, it may be presumed that, by this time, they are sensible what kind of spirit it was, which engendered the *spes incerta futuri*, and ‘persuaded them to prophesy one after this manner, and another after that manner,’ on the subject.”

“From what has been said it must appear very evident that the judgment which has been pronounced in favour of Vaccination *was premature, and is indefensible*: that the inoculated Cow-pox is sometimes a severe and dangerous disease, and sometimes even fatal: that it is productive of many horrid and loathsome symptoms, tedious, distressing, and destructive; unknown in the human constitution until the unfortunate and incautious introduction of the *Jennerian practice*:*—I therefore conclude, that the safe, excellent, and well-understood practice of Small-pox Inoculation, which always affords a permanent security against future contagion, is degraded even by a *comparison* with the Cow-pox, and that VACCINATION ought to be *immediately, and for ever, ABANDONED*.”

The Edinburgh Reviewers say, No. (XVII. p. 32,)

“The question now before us is nothing less than, whether a discovery has actually been made, by which the lives of *forty thousand* persons may be annually saved in the British islands alone, and double that number protected from lengthened suffering, deformity, mutilation, and in-

* “It has been asserted, that cutaneous diseases of a *new and singular* kind are often the effects of Vaccine Inoculation.” “I have carefully examined with different physicians and surgeons various cases of cutaneous eruptions *attributed to Vaccination*. Instead of the Mange, or any eruption communicable from quadrupeds to the human skin, *we constantly found diseases, which were known, and have been fully described, by medical writers, more than a thousand years ago.*”—Willan, 80, 81.

curable infirmity." "To the bulk of mankind, wars and revolutions are things of infinitely less importance; and even to those who busy themselves in the tumult of public affairs, it may be doubted whether any thing can occur that will command so powerful and permanent an interest, since there are few to whom fame or freedom can be so intimately and constantly precious, as personal safety and domestic affection."

Though the subject is, perhaps, not entirely exhausted, yet they declare it appears to them that there has been "evidence enough already produced to determine the opinion of all impartial judges."

After noticing the fatal ravages of the Small-pox, and the inadequacy of the Variolous Inoculation as a remedy, on the grounds before given, they proceed with an account of Dr. Jenner's discovery, and the objections that were started against it. They then give the Testimonial of the London Practitioners, and notice the evidence laid before the House of Commons; an "ample and public testimony that seemed for a while to set the question at rest."

Of Dr. Moseley's work they speak, as of one "in which the ravings of Bedlam seemed to be blended with the tropes of Billingsgate. Dr. Rowley," too, they say, "followed on the same side, and in the same temper, with 500 cases of 'the beastly new diseases produced from Cow-pox,' and attracted customers, by two coloured engravings at the head of his work, of 'the Cow-pox, ox-faced boy,' and the Cow-poxed, mangy girl."

The Reviewers* mention with regret the scenes of

* The Reviewers apply an epithet to Mr. Ring's principle work, which, if its nature and intention be considered, cannot but appear too harsh. Mr. Ring has been, from a very early period, the zealous and indefatigable champion of a Cause, which accurate and unprejudiced observation convinced him was the cause of truth and science. Prompted by motives which cannot be mistaken by those who know his honest

controversy which ensued, and then make the following judicious observations :

“ Before entering into the particulars of the controversy which has been thus warmly maintained, or endeavouring to lead our readers to form any opinion from the evidence produced in the course of it, we think it proper to make one or two general remarks on what may be called the external character of the debate, and on the circumstances which may impress us with a favourable or unfavourable opinion of the respective disputants, independent of the intrinsic weight of their proofs and reasonings. There are some cases which cannot be reached by argument or evidence, in which we must trust to the decision of authority ; and there are others still more numerous, in which the preponderance of conflicting authorities must be determined by what we can learn of the character and motives of those who bring them forward.

“ Now the first circumstance which seems calculated to make an indelible impression upon an ordinary mind, in a question of any difficulty, is where there is a decided majority of competent judges in favour of one side of it. In any disputable point of law or medicine, most people would be pretty well satisfied with an opinion adhered to by nine-tenths of the profession ; and,

independance, Mr. Ring, from time to time, exhibited to the public for their information and conviction, the progress and benefits of the new discovery ; opposing also *bis* impenetrable shield to the *feeble darts* that were hurled against it.

“ — *Nullis fesse laboribus,*
— *Nullis victæ calumniis.*”

His treatise on the Cow-pox (*chaotic*, if it must be so termed) could not in its nature but be, in some significations, *unconnected*. It noticed every thing worthy of note as it occurred. It is a valuable collection, to which every writer and compiler on the subject will feel himself indebted ; and its utility is complete from the very copious and lucid Index which terminates it.

imputing the dissentient of a small minority to caprice or ignorance, would probably never think it worth while to make any further inquiry. Now the bitterest enemies of Vaccination will not deny, that more than nine-tenths of the medical world are decidedly and zealously in favour of it, and that all their demonstrations of its dangers and terrors have been insufficient to convert a single one of their brethren from so damnable and dangerous a heresy.

“ But testimonies, it may be said, should be weighed, and not numbered ; and a few judicious voices should outweigh “ a whole theatre ” of others. Here, again, we are afraid, the Vaccinators will have a splendid and indisputable triumph. The only physicians, we think that have publicly combated the doctrines of Dr. Jenner, are Drs. Moseley, Rowley, and Squirrel. Now, without intending the least disparagement to these three ingenious gentlemen, we certainly may be permitted to doubt, whether they stand quite so high in the public opinion as some of those to whom they have opposed themselves, or even whether an opinion, signed by all three, would have so much weight, with competent judges, as the single judgment of Baillie, Heberden, Willan, Farquhar, Pearson, or Vaughan. As for the authority due to Messrs. Birch, Rogers, and Lipscomb, we should humbly conceive that it might be fully balanced by that of Cline, Abernethy, Ashley Cooper, and Home. If the mere mention of these names were not sufficient to decide the question of authority, it would be easy for us to match each of the Anti-vaccinists with at least ten London practitioners of higher name than himself, and of learning and opportunities as unquestionably superior. We confine the parallel to London, to give the Anti-vaccinists all the advantage in our power ; for, in the country at large, we believe, they have not one respectable practitioner on their side in five hundred. In this

great seat and school of medicine, we are assured, they are without a single public adherent. If the question is to be settled by authority, therefore—by the number or the respectability of those who have taken part in it—the Anti-vaccinists can have no pretensions to be listened to. If a clear opinion be given by all the leading Counsel at the Bar, and an unanimous judgment be pronounced, in conformity to it, by the twelve Judges of the land, what should we say of a few Old Bailey pleaders and jobbing attornies, who should appeal to the public in behalf of an opposite conclusion ?

“ But eminent men may have interests and passions as well as other persons, and these may bias their judgments, or suborn their testimony ; and it is right that a popular appeal should be allowed, to controul or expose those who might otherwise overbear every thing by their combination. This, no doubt, is a very important consideration, and it may help to explain some things that would otherwise appear very unaccountable in this controversy, though, we are afraid, not much to the advantage of the Anti-vaccinists. It is a fact universally admitted, that the Small-pox has, for a very long period, been the most lucrative of all diseases to the medical faculty in general ; and that, whatever benefit the world at large might derive from its extirpation, the consequences, in a pecuniary point of view, would be extremely unfavourable to them. This has not escaped the sagacity of Dr. Willan, when, probably with a view to abate the rancour of the Anti-vaccinists, he recommends that the inoculation and subsequent cure of the patient should always be left to a regular practitioner.”

They here introduce a quotation from Moore to the same purpose, and then draw this conclusion :

“ It appears, then, that the great multitude of learned

and judicious men, who have given their sanction to this practice, have done so in direct opposition to their own pecuniary interest, to their known dislike of rashness and innovation, and to that natural jealousy with which they must at first have regarded a discovery so simple and important, in the merit of which they could claim no share. The few who have opposed Vaccination, have acted, it must be admitted, exactly as those principles, with which the others had to struggle, would have induced them to act; and, in estimating their comparative authority, it is impossible not to impute something to the operation of such powerful agents. We are unwilling to urge this consideration very far; but it cannot be forgotten, when prejudice and bias are spoken of, that the medical advocates for Vaccination give their testimony in opposition to their own interest and vanity, and that its opponents give theirs in conformity to the dictates of those principles."

It does not escape them, likewise, that almost all those who still oppose Vaccination, opposed it with equal vehemence and confidence, before they pretended to hear of its failure, or any ill consequences attending it; and they justly remark,

"An avowed enemy is rejected as a witness in every court of law; but if it appears that he is not only hostile, but necessarily ignorant, we may well ask what weight can be given to his testimony in opposition to that of impartial persons, who must have known much more of the circumstances."

All the presumptions then they affirm, are against Dr. Moseley and his adherents.

"His opponents are confessedly many, and learned, and judicious; and, as he differs from their concurring opinion, the natural inference is, that he is not judicious and learned, and that he cannot be safely relied on as an accurate observer, a sagacious expounder, or a correct reporter of the phenomena. It is possible, however, that this inference

may be erroneous ; Dr. Moseley and his friends may be persons of transcendent genius and exemplary candour. Reputation may be unmerited, and multitudes may be deceived. If the opposers of Vaccination give indisputable proofs of superior talents and better temper than their adversaries, there will be a certain presumption in favour of their conclusions, from the admitted character of the men, independent of the reasons which they may urge in their support. On the other hand, if, from their writings, it be manifest that they are men of weak and uncultivated understanding ; that their passions are vehement, and their judgment infirm ; that they are ignorant or negligent of the first rules of reasoning, and incapable of stating their opinions in intelligible language, it probably will not appear too much to affirm, that they are entitled to little credit, in a controversy which confessedly requires much accuracy of discrimination, much nice observation, and patient and persevering research."

As Dr. Moseley is at the head of those who "set themselves thus boldly against the opinion of their most celebrated brethren," a specimen is first given of "this learned person's temper, modesty, and taste, in composition;" examples of which have been already adduced. The Reviewers then proceed to judgment on the *arguments* of the Anti-vaccinists, which they combat with much skill, quoting as they go on from the excellent Pamphlet of Mr. Moore, so often before noticed.

After drawing a comparison between the opposers of Vaccination and those of Inoculation for Small-pox at its first introduction, they conclude,

"These, and similar expressions, which abound in the writings of that day, will go far, we fear, to deprive Drs. Moseley and Squirrel of any claim to originality in the style of eloquence they have exerted themselves so meritoriously to revive. We beg them, however, to believe, that it was by no means for this invidious purpose that we have referred to their prototypes, but merely with a view to set the

minds of those readers at rest, who might be inclined to doubt, whether men of education could possibly be so positive and so angry in support of what was certainly wrong. Drs. Wagstaffe and Hillary, with their faithful squires and followers, have been effectually confuted by the experience of little less than a century; and their forgotten carils and rhapsodies now excite no other emotions in the reader, than those mild sensations of contempt and wonder with which the next generation will look on the lucubrations of Squirrel and Moseley, if any accident should draw them from the shelter of that oblivion to which they are rapidly descending."

The sentiments of the Anti-vaccinists would certainly have appeared less strange, and have had less effect, had the Public been fully aware of the nature and extent of the opposition which Variolous Inoculation encountered on its first introduction. It was declared by some to originate with ignorant old women, and was therefore held by them in the utmost contempt. In the middle of the year 1722, about a twelvemonth after the experiment was first tried in England, a Pamphlet was published, intitled, "The new Practice of Inoculation considered, and an humble Application to the approaching Parliament for the Regulation of that dangerous Experiment." The Author declares the practice to be founded in *atheism*, *quackery*, and *avarice*, which "push men to all the hellish practices imaginable." "Men murder fathers, mothers, relations, and innocent children, and any that stand in the way of their wicked desires."

Mr. Massey's sermon, so often quoted, was preached at St. Andrew's, Holborn, on Sunday the 22d of July 1722, and afterwards printed under the title of "A Sermon against the dangerous and sinful Practice of Inoculation." He considers, that as diseases are inflicted by the Almighty, they are to be borne with resignation, and are not to be avoided by the infliction of other dis-

cases, which he calls "a diabolical operation," utterly unlawful to any who profess themselves christians; and even allowing the effect it has to prolong life, (which, though, he positively denies, for he asserts that "the confessed miscarriages in this new method are more than have happened in the ordinary way,) he argues that the security this holds out would tend to promote vice and immorality, by removing from man, that, than which he says "it will be readily granted there is no one thing so universally dreaded," and that the fear of it is a happy restraint upon many who, but for this providential destruction, would give loese to extravagance and licentiousness.

The Rev. Theodore de la Faye likewise, (Woodville, p. 258,) in a sermon intitled, "Inoculation an indefensible Practice," published even so long after its introduction as 1753, viz. 31 years, asserts, "that it will be hard to produce out of the huge systems of hurtful inventions, ever an instance big with more infidelity and atheism than this of inoculation."

But the most redoubted Champion, says Dr. Woodville, who appealed to the public against inoculation, was Dr. Wagstaffe, a man of extensive professional practice, and who, as a Fellow of the College, and Physician to St. Bartholomew's Hospital, could not fail to influence the minds of many to a considerable degree, especially as his "Letter, shewing the danger and uncertainty of inoculating the Small-pox, was addressed to the learned Dr. Friend. He objects to it 'that it may differ from itself as practised in another country; that it is not agreeable to reason; that the positions of the favourers of inoculation are false, and their practice precarious.'" The other writings Dr. Woodville declares (p. 130) to contain little more than unfounded conjectures on the practice, with fanciful conceits concern-

ing its effects, and the place of argument is supplied by *obloquy* and *abuse*.

With such warmth was this warfare carried on, that attacks, answers, replies, and even rejoinders, were published before the expiration of the year 1722.

The Compiler has nothing more to add to the copious Extracts he has given. The few remarks he has made in the course of the work, have been forced by opportunities too strong to be resisted. To dilate on all the beneficial consequences of Vaccination, to offer instructions as to its practice, or to combat all the objections of the Anti-vaccinists, is what he himself did not propose to do. It has been done, most ably and most successfully, by a number of disinterested individuals—Messrs. Addington, Aikin, Bell, Blair, Bryce, Creaser, Dunning, Hill, Jones, Labatt, Lettsom, Macdonald, Merriman, Moore, Paytherus, Ring, Thornton, Trye, Willan, &c. &c. whose generous warmth in a Cause, by the success of which a portion of their most lucrative practice has been annihilated, can never be forgotten, or disregarded by their liberal Countrymen.

Should doubt exist in the mind of any one who combines the arguments of these writers with the evidence now before the Public, the Compiler freely acknowledges he is at a loss to conceive what is the nature and extent of that evidence that will dispel it.

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- N. B.* Wherever the word "Practice" occurs in the Index, it means exclusively *the Practice of Vaccination.*

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