

to endure more odium or to brave a greater torrent of abuse, not only from his medical conferees, but from society at large, than had Jenner, before the final triumph of his wonderful discovery.

The statement is made that the adoption of vaccination has resulted in the greater prevalence of other diseases constitutional in their character. We hesitate not to say that there are no statistics to substantiate this assertion. On the contrary, the most careful and conscientious investigations of scientific men everywhere have demonstrated, that it is impossible to communicate any constitutional disease through vaccine virus, unless it be syphilis; and even with regard to this, the information obtained from various sources renders it doubtful indeed whether, with proper precaution in the use of vaccine, such a result is possible. Dr. Curschmann, of Berlin, who has written very ably on the subject, and whom we must credit with having arrived at his conclusion after the most extensive and painstaking investigation, speaks in the following terms:—"The possibility of the transmission of a disease through vaccination has thus far been demonstrated in but a single instance, and that is *syphilis*. Could the opponents of vaccination show that this occurs with any degree of frequency, or is with difficulty prevented, vaccination would thereby receive a severe blow; but here, unfortunately, lies the weak point in our opponents' deductions. In the first place, those cases where the actual inoculation of syphilis has been verified are so exceedingly rare that the objections based upon them are consequently materially weakened. The force of these objections is still more impaired by means of the evidence, almost always present, that the unfortunate result was due to actual carelessness, or to an oversight easy to be avoided. *Nearly all of the unhappy occurrences of this sort are not the fault of vaccination, but of its improper performance.*"

These statements, admittedly strong, have not been made unadvisedly, or without their author's having demonstrated, to his own entire satisfaction by the most extensive research, their correctness. And hence, it is not unreasonable to assert that the opinion expressed by a few

that incalculable damage from this cause has been the result of vaccination, rests upon a very very insecure foundation. Another objection strongly urged against vaccination is that erysipelas, and in some few instances death, have followed its adoption. This would constitute a formidable argument if we were not quite certain that, even with such a risk, a vast number of lives are annually saved by the protection which vaccination secures. But in the presence of such a fact, no stronger objection can exist against this than any surgical operation which, while coupled with a like contingency, is nevertheless the only means of prolonging, or indeed saving, the life of the patient.

The all-important question in this discussion is, whether or not small-pox epidemics have, in the first place, been rendered both less frequent and less formidable by the principle of vaccination; and in the second place, whether or not those attacked after vaccination have suffered as severely as those not previously protected. That vaccination has fully met the most sanguine expectations of its original promoters, is a fact so abundantly shown by statistical information as to be beyond the shadow of a doubt in the minds of the great mass of the public. Dr. Aitken, in his admirable treatise on the Practice of Medicine, gives the following statistics, an examination of which will make it very clear that vaccination has proved a great boon. Assuming the deaths from all causes to be 1,000, he found the rates from small-pox to be, for—

London .....	16	Glasgow .....	36
Birmingham .....	16.6	Galway .....	35
Leeds .....	17.5	Limerick .....	41
England and Wales .....	21.9	Dublin .....	25.6
Perth .....	25	Connaught .....	60
Paisley .....	18	All Ireland .....	49
Edinburgh .....	19.4		

In the above named places, vaccination was voluntary; and an examination of the figures discloses the fact that, in proportion to the extent and thoroughness with which it was adopted was the exemption of the people from the ravages of small-pox.

Dr. Aitken then proceeds to give statistics showing the effect of vaccination in countries where its adoption was more or less compulsory. Out of 1,000 deaths in the Rhenish Provinces the death-rate from small-pox was 3.7; in