

some experiments with the matter of the cow-pox, the results of which he published in 1798.

The morning of the 14th of May, 1796, was a glorious one for *preventive medicine*, for that may be taken to have been the birth-day of vaccination. On that day virus was taken from the hand of a milk-maid named Sarah Nelves, who had been infected while milking her master's cows, and inserted by two superficial incisions into the arms of a boy named James Phipps or Philips, aged about 8 years. He went through the disease in a regular and satisfactory manner. The most agitating part of the trial still remained to be performed, for the point of greatest moment to Dr. Jenner was to ascertain whether he was free from the influence of the contagion of small-pox, which was put fairly to the issue on the 1st of the following July, or nearly three months later. Small-pox virus, taken immediately and direct from a small-pox pustule, was carefully inserted by several incisions, without producing infection. By this one experiment a law was established, which the experience of millions upon millions of the human family in subsequent generations has only served to strengthen. And yet, notwithstanding that these experiments have since been repeated upon about 4,000 vaccinated individuals by Dr. Woodville, and upon about sixty by Dr. Pearson in England, and on a smaller scale by Dr. Duncan Stewart in India; by M. Chaussier, Pinel, Hasson, Salmade, Jadelot, and others in France, with the same negative results, in every instance, that were originally obtained by Jenner; there are those among our French compatriots, and in our profession, who affect to disbelieve, or fail altogether to see, the truth, simplicity and beauty of that beneficent pathological law. But, as has been said, "There's none so blind as those who will not see."

The special advantages of cow-pox over small-pox inoculation claimed by Jenner were: *First*. Its uniform mildness, "that, out of two thousand vaccinated with the cow-pox, not one died, and therefore might be practiced in all ages with safety.

*Second*. It is not communicable by effluvia. Therefore any part of the family may be infected without affecting the rest.

*Third*. It does not disfigure the skin; and

*Fourth*. Requiring no medical attendance, it may be practised by any intelligent person—advantages of great value as compared with the dangers attendant upon the old practice of inoculation. Jenner was very explicit in directing that special care should be used in the details of the operation in order to ensure success details it would be well if many

modern practitioners would take the pains to follow. He says, for instance, "Care should be taken that matter be collected from *genuine cow-pox pustules* only, and before it begins to scab, or the matter becomes opaque and thick and the system be affected; for, if the matter does not enter the system, the patient will be liable to small-pox—," a result which I have little doubt frequently follows. In such cases there is little or no constitutional disturbance or fever, and the vesicle exhibits an imperfectly developed or abortive character.

"From inattention to these particulars," observes Jenner, "it has been suspected that the reports of the small-pox succeeding the cow-pox inoculation have arisen; for, *unless the matter be genuine* and the *constitution be infected*, the person cannot be secured against the small-pox contagion. It may happen that the inflammation excited by the inoculation with genuine cow-pox matter may remain local, *i. e.*, the inflammation may go on so as to form a pustule, without any portion of the matter being taken up into the system, when, of course, the subject must still be liable to small-pox infection. The same may occur from inoculation with small-pox matter."

The whole subject resolves itself under three pertinent queries:—

*First*.—Has vaccination, as a protective measure against small-pox, established a claim to confidence?

*Second*.—Is it an operation so harmless as to commend itself to our acceptance, or is it encompassed with dangers?

*Third*.—Have we any means that will guard us against the dangers attended upon vaccination, or secure to our patients the fullest measure of the prophylactic power conferred by it, equal or superior to a resort to the exclusive use of vaccine lymph obtained by direct transmission of spontaneously occurring cow-pox from heifer to heifer, or in other words by *animal vaccination*?

The best reply at our disposal to give to the first question is an appeal to facts, and the experience of the profession for the past 75 years.

The 539 replies received by Mr. Simon in 1856, including the names of the most eminent men of the day, as to the general value of vaccination, are sufficient to establish the favorable opinion entertained by the profession on this subject.

The bare fact alone, that confidence is generally imposed in vaccination by the most enlightened, the best educated, and best informed classes and communities; people whose faculty of observation is too astute to allow of their being misled by sophistry, or deceived