

removed over one or two small areas in order that the surface exposed may be capable of absorbing the virus, and that there is the same element of danger in connection with this tiny wound that there would be in connection with any other wound if it were not properly cared for until it had entirely healed up. With the perfected vaccine that we have at present and our knowledge of the necessary precautionary methods to be observed in vaccinating, I do not think any Health Officer would hesitate to guarantee that there would be no complications following the operation of vaccination, no matter how large a number there might be, providing these cases would be under more or less constant observation, or would report at stated intervals for treatment such as in any minor operation. But inasmuch as there must be a large number in every municipality who will not take these precautions, there is always a possibility of an occasional sore arm developing. However, in the 7,000 cases which I vaccinated at the old City Hall in the epidemic of 1885, there was not one single fatal case.

Let us look on some of the facts in regard to recent experience. In speaking to the A. D. M. S. for this District on this matter, he advises me that among the first 50,000 of our boys sent out from Valcartier, who were vaccinated, there was not one fatal case, nor were there any serious complications, and that as far as he has been able to learn there was not a fatality in the way of a complication in over 500,000 of our boys that were vaccinated and sent overseas or retained for home service.

In the mobilization of the United States Army and Navy they have a record of 585,000 vaccinations, without a single fatality.

Then again Professor Rosenau of Harvard University quotes the experience of European nations in this connection, to show how seldom complications occur if proper care is used in the technic of vaccination. In 13 years from 1885 to 1898, 32,166,619 children were vaccinated. Of these 115 died within a few weeks or months after the operation, and further investigations show that one half did not die as a result of vaccination, and that the others were for the most part the result of wound infection, the same as might occur from carelessness in connection with even a pin scratch or a slight cut from a knife or a razor.

We have heard a good deal of talk about tetanus following vaccination. For years, since vaccines have been prepared under rigid precautions and government control, together with the more universal application of the principles of antiseptics and asepsis in the operation of vaccination, the number of such cases is practically negligible.

The American Public Health Reports from Washington show that from 1904 to 1913, inclusive, over 31,000,000 doses of vaccine virus were used in the United States, and while there were 41 cases of tetanus, yet when the histories of all the cases were obtained, there was no evidence to show that it had any connection with the vaccine.