

fatal cases of smallpox occurring in persons who had been successfully revaccinated. Moreover, the majority of the cases of smallpox occurred in the maritime towns or in the vicinity of the frontier of the Russian Empire. Specially favorable results have been obtained in the German army, in which, even before the law of 1874, vaccination was compulsory. In twenty-five years there occurred in the Prussian army only two cases of deaths from smallpox. In summing up the statistical data on vaccination Kübler from whom we have borrowed the above statements, expresses himself as follows: "The history of smallpox must in all cases register the fact that this dreaded disease has, as the result of general vaccination, not only become rare in the German Empire, but it has almost completely disappeared." The example of Germany encouraged several other countries to introduce compulsory vaccination, and Roumania, Hungary, and Italy have in turn promulgated similar laws. Here also it was not long before satisfactory results were obtained. In Italy especially the mortality from smallpox has largely decreased in recent years. . . . *In France a law is being framed which will render infant vaccination compulsory. Up to the present this has not been the case, and smallpox from time to time causes considerable ravages, as we may see at this moment in Paris. During recent years the mortality from smallpox in France has been from 90 to 100 times greater than in Germany. It is greater amongst the female population than amongst the males; this constitutes a fresh argument in favor of vaccination. Although not compulsory for the whole of the French population, it is so for soldiers and for children who carry on their studies in schools, and it is for this reason that smallpox is rarer amongst males. The most complete demonstration of this is found in the incidence of smallpox in the French Army.

In spite of a less numerous contingent of troops, (451,941-457,677), the mortality from smallpox was greater during the period when vaccination was not yet carried out generally (1885-1887), than during the period 1880-1896, when it was vigorously enforced on a much larger number of soldiers, (524,733-564,643). From 13.6 fatal cases per year in the first period the annual figure fell to 6.

It follows, when we take into consideration the whole of the very numerous data at our disposal, that the usefulness of vaccination, followed by revaccination after some (5-7) years, cannot be seriously called in question.

Personal Experiences.

The experience of the Medical Health Officer of the City of Ottawa, as regards the outbreak of smallpox which occurred in that city in 1902, is, as given by Dr. Robert Law, "343 cases occurred in 269 houses; of these 343 only 29 showed a vaccination scar, all of many years' standing. Four (of these) claimed to have been revaccinated two years before, but showed a very faint scar." As to the effects of vaccination, this officer states, "the carrying out of a general order for vaccination soon showed its effects in the decline of the epidemic, not one person who complied with the law developing smallpox." Of the many thousands of vaccinations performed at that time, Dr. Law states there were no serious results reported.

*This law has recently been passed, making both vaccination and revaccination compulsory.