

(after one or two trials) to successfully inoculate with the vaccine virus, adults who had previously been vaccinated, is a certain index that the system is still saturated by, and under the protecting influence of the lymph introduced, it may have been, many years before. This is a grave error which many persons have had cause to regret they had ever entertained. The returns furnished by the Wirtemberg army are strongly confirmatory of what I now state.

Result of Re-vaccination in the Wirtemberg Army.

Degree of success of Re-vaccination.	Of cases in the number of vaccination there were 7,346, and among those the results per 1000 were:	Of cases in the defective equilibria of vaccination there were 3,846, and among these the results per 1000 were:	Of cases with no circulation of vaccine infection or small-pox there were 2,922, and among these the results per 1000 were:	Of cases bearing marks of previous small-pox there were 2,400, and among these the results per 1000 were:
Perfect	310.04	290.7	337.3	319.5
Modified	280.5	230.	191.1	201.1
None	40.2	460.4	471.6	482.8

Mr. Simon, speaking of the above figures, says: "It is evidently impossible to argue that all who on re-vaccination yielded perfect vaccine vesicles would, on ordinary exposure to small-pox infection, have become infected with small-pox" for "inoculation of lymph, whether vaccinia or varioloid, is, so to speak, a finer and more delicate test of susceptibility to the small-pox poison than is the breathing of an infected atmosphere. On the other hand, there could be little reason to doubt that they would have been distinctively the endangered class. Not that all or nearly all of them would have suffered, but that, from among them, more than from among other vaccinated persons, the occasional sufferers by small-pox would have come." The statistics of other continental States are not less confirmatory. I regret I am not possessed of figures relating to the army of that country—ever foremost in all that science can elucidate or humanity prompt—France; but with the following, taken from the statistical report of the British army, sufficient will be obtained.

RESULTS IN 1000 RE-VACCINATIONS.

	Number of Re-vaccinations.	Perfect success.	Modified success.	Failures.
Prussian, 1836-40.	216 428	456.3	213.0	328.7
Bavarian	46 083	367.3	290.6	432
British Recruits	71.688	366.1	220.9	433
Wirtemberg	14 384	360.2	248.3	411.5

Professor Heim states that in Wirtemberg, during the five years, 1833-7, though small-pox infection had been sixteen times imported into different regiments of the army, there had ensued among the 14,384 re-vaccinated soldiers, only — in the person of one whose re-vaccination, two years before, had been followed by "modified success,"

a single instance of varioloid. In the Prussian army previous to the adoption of re-vaccination there were (taking the average of ten years,) 104 annual deaths by small-pox; now the annual deaths for the re-vaccinated army is 2! And analysing the 40 fatal cases of small-pox which, during the last 20 years have occurred in the Prussian army, says Mr. Simon on the authority of Professor Heim, "we find that only four of the number were persons who (it is said) had been successfully re-vaccinated." During the past 20 years, the period during which re-vaccination has been compulsory in the Bavarian army, not one death nor even a case of unmodified small-pox has occurred in that body of nearly fifty thousand men! Denmark has, during the same period, presented a like immunity; though like her sister kingdom she has been exposed to small-pox contagion during several epidemics.

I cannot permit myself to encroach at greater length on the columns of the Journal; and moreover, sufficient has been written to render it at least desirable, that some law should be enacted, and when enacted, enforced, for the universal practice of vaccination, and the more general practice of re-vaccination. In the mean time I should suggest that the Councils in the different cities mentioned in the Act, give greater publicity to, and enforce the observance of the law *as it is*, until we possess a law *as it should be*; and that the public vaccinators be invited to re-vaccinate the adult population, and be compensated therefor, as for primary vaccination. And might we not secure the co-operation of the many thousand volunteers and militiamen throughout the Province by inviting them to imitate the practice now followed by their brethren in voluntary service in Great Britain, and in compulsory service on the continent of Europe, and submit to be re-vaccinated. The example, attended with but little inconvenience, and, where public vaccinators are to be found, no expense, would have many imitators in those who would not fail to perceive the comparative immunity from small-pox which the practice would have afforded. This, no doubt, will already have suggested itself to many of those who peruse the statistics furnished in this hastily written paper. To my own mind the subject has been suggested, most painfully, by observing, in the bed room of an able bodied young man dying of small-pox, a suspended bayonet and cartouche box, whose owner, by a little timely and trifling act, might have been spared to his country. To my professional brethren throughout the Province, I should urgently recommend the duty (as I clearly conceive it is a duty), of apprising the non-vaccinated among their patients, of the danger of the neglect; and the vaccinated, that the scar upon the arm is a guarantee of immunity from small-pox, which has its limit in duration. Not that we may ever hope to witness the entire disappearance of this loathsome malady—but reasonably to expect to limit, at least, and to deprive of its virulence, a disease which is frightfully common amongst us.

Montreal, 9th Dec., 1863.

Dr. Strak in the *Archiv der Heilkunde*, states that he has noticed that the heart becomes enlarged in some cases of chlorosis, diminishing again on recovery, and calls the attention of the profession to the subject.