

nated, and the remaining four all sickened with small-pox in two days (two cases), three days, and six days respectively after vaccination. Thus these four cases were incubating small-pox at the time they were revaccinated, and though it may not be strictly correct to say that none of the vaccinated cases suffered from small-pox, it is certain that none of the cases who were revaccinated before infection contracted the disease, and all the cases who suffered from small-pox were either unvaccinated or revaccinated only during the incubation period of the disease. I may say here that vaccination within a short time after exposure to the infection of small-pox may be of some use in mitigating the attack, but that if delayed until the incubation period is advanced it may be expected to exercise little or no influence on the result.

A similar and very striking object-lesson may be learned from the records of the small-pox hospitals of the Metropolitan Asylums Board. During the year 1901, amongst the patients admitted to these hospitals were twenty-one persons who had been employed in disinfecting-work; not one of these had been revaccinated since infancy. I have made careful inquiries, and I am informed that not a single person engaged in work similar to that of the twenty-one persons mentioned above who had been properly revaccinated is known to have been admitted during this period (1891). And, further, that no official of the Board, all of whom are revaccinated when they commence their work, had suffered from small-pox during the year 1901. Nine other cases were admitted to the Board's hospitals suffering from small-pox contracted in the discharge of their duties as sanitary inspectors, dustmen, and undertakers; of these, five had not been revaccinated, one was said to have been revaccinated forty and one nineteen years ago, and one without success four years ago. Further, during sixteen years, 1884–1900, more than two thousand persons have been employed in the small-pox hospitals of the Metropolitan Asylums Board; of this large number—some few of whom, no doubt, were protected by a previous attack—only seventeen contracted small-pox, though constantly exposed to infection. Of these, four are known to have escaped revaccination, and the remaining thirteen are known to have been revaccinated after having been exposed to infection. From the dates at which the eruption appeared in these cases it is practically certain that every one of them had contracted small-pox before their revaccination could possibly have taken effect. Lastly, not one of the staffs of the hospital-ships has ever died of small-pox and not one has even suffered from the disease for the last eight years (1893–1901).

During twenty years 1881–1901, the Board's ambulance service has employed over 1,250 persons; of these four have contracted small-pox, one was unvaccinated and died, one had been unsuccessfully vaccinated and died, two only had been duly revaccinated—they both recovered.

These are remarkable facts, and do not seem to me to justify any other conclusion than that these persons, constantly exposed to infection in a virulent form, were protected from the disease not by sanitation, not by isolation, not by any of the various remedies which have been suggested, but by efficient vaccination and revaccination such as is open to every one to obtain.

In my departmental report to you I have carefully set out the valuable work done by the various officers of the Department in helping to stamp out what easily might have occasioned a very serious financial and physical loss to the colony.

In my last report I suggested that when a case of small-pox occurred the Governor in Council should have power to draw a circle round the infected area and require all within that zone to submit to vaccination. In the light of our recent experience I am quite content to trust the good sense of the people. Had we been armed with the most arbitrary powers, more could not have been accomplished than was done in Christchurch and most other parts of the colony. Short of powers which would enable us to fortify our people in times of peace nothing more is required. It would simplify our work very much if vaccination and revaccination could be conducted systematically at all times, but it would seem that in this, as in many other important matters, the danger of delay is not fully appreciated by a community which has long emancipated itself from the counsels of wisdom which were wont to adorn the headlines of our copy-books.

One very important result of the energetic measures adopted in the stamping-out of the disease was the fact that the health authorities in New South Wales removed all restrictions upon our shipping at the earliest possible opportunity, and the Chief Health Officer, Dr. Ashburton Thompson, thought fit to compliment the authorities here on the manner in which the outbreak had been dealt with.

When we compare the cost of dealing with this outbreak with what Tasmania had to pay, with its nine months' interference with traffic, loss of trade, and expenditure upon purely sanitary measures, and when we remember that it cost the Metropolitan Asylums District up till March of last year the gigantic sum of £280,000 in combating the outbreak in London, it will be seen that ours has been an exceedingly cheap campaign. That it has been so is due to the zeal and carefulness with which the officers have carried out their various duties, and in some measure to the organization and discipline which obtains throughout the whole Department.

CONSUMPTION.

During the past year considerable progress has been made in the direction of coping with this disease. The Sanatorium at Cambridge is fast reaching completion, and in the course of a month or so we shall be able to accommodate about sixty patients. Already over eighty (eighty-three patients) have passed through our hands—some quite cured, while a large percentage have markedly improved.

No sooner was it known that the Government had acquired a house and land at Maungakawa for