

great use of. All over the colony I have inspected tanks that have been put down, and most of them are working excellently. Apart altogether from its suitability for use by municipalities, this system has undoubtedly settled one of the most difficult problems in rural sanitation. With a small tank and aerating-bed a resident in the country can dispose of all his sewage cheaply, and without risk of creating a nuisance. Masterton has installed a system. Palmerston North has the question under consideration, and so has Nelson.

AMALGAMATION OF SANITARY BODIES.

As was pointed out in my last report, the necessity of, in the near future, urging local authorities with a community of interest from a sanitary point to join hands is a step without which no great progress will ever be attained. Dr. Makgill, in his report, draws attention to this. Local and interparochial jealousies make it almost impossible, unless with a great amount of personal canvassing, to get any great sanitary reform effected. Later I propose to submit for your consideration certain amalgamations which I suggest should be brought about whether the local bodies concerned agree or not. In many instances they will be quite agreeable; in fact, we have been often asked to exercise the power given us under the Act. So long as the pressure is applied by an agent not within the area, no great objection will, I think, be offered if the question of expense can be arranged.

INFECTIOUS DISEASES.

With the meagre data at our command, it would be rash indeed for us to attempt to make any general deductions. By another year we may be able to arrive at some accurate idea as to the case-incidence of the several infectious diseases as compared with the death-rate from them. At present our only data for exact comparisons are the records kept by the various hospitals. Scarlet fever of a mild type has spread over the greater part of the North Island; fortunately, there have been very few deaths. Diphtheria assumed the magnitude of an epidemic in Lyttelton during the latter part of 1901 and early part of 1902, some sixty cases in all occurring. That the non-ventilation of the sewers had not a little to do with this outbreak I am quite certain. This has in part been remedied. The main factor in the causation lies not in this, however, so much as in the pollution and dampness of the soil around the houses. Since the occurrence of several cases of glandular swelling among the children active steps have been taken by the Mayor (Mr. Grubb) in order to remove these agents for evil. Lyttelton, nestling as it does along the base and sides of the Port Hills, is necessarily cramped for room. Many of the houses are placed very close together, and some of them are very old. Owing to the angle of the ground upon which some of the houses are built, the front has to be supported upon piles 10 ft. or 12 ft. long, while the back of the house rests in a hollow cut out of the face of the hill. The result is that the surface-water from the hills runs down and soaks beneath the houses. To make matters worse, until lately it had been a common practice to keep fowls beneath the floor. In consequence of this the ground became quite sodden, and the emanations from it rose up through the kitchen-floor. Again, many of the floors were laid upon the bare earth, with no air-space beneath. A complete list of all such defective buildings is now being made out, and all will be condemned. The Council have recently passed a by-law prohibiting the keeping of fowls. I sincerely trust that we shall see no recurrence of what is assuredly a disease due to insanitary conditions. Several cases were reported from the West Coast, with, I regret to say, a few deaths. This outbreak was clearly traced to the insanitary condition of the house where the patients resided. Instructions were given and at once carried out, and since then no further cases have occurred. There have been recently notified in Wellington nineteen cases of diphtheria, which have been the subject of special inquiry by Dr. Valentine.

ENTERIC FEVER.

Out of a total of 338 for the whole colony, Auckland District, as will be seen, is responsible for 182. This is truly a deplorable state of matters. As Dr. Makgill points out, the general death-rate from zymotic diseases all over the colony is 10·26 per thousand, while the rate for Auckland is 30·8. While doubtless the warmer, moister climate may have something to do with it, the chief cause lies in the disgracefully insanitary condition of the city generally. That a great deal of sanitary work of much value has been done during the last year and a half cannot be denied; but while the system which they are pleased to call a drainage system continues I consider it not far short of culpable negligence to spend money on such things as tramways. "Evil communications corrupt good manners," so the copybook heading of old asserted, and it may be that the long presence of preventible disease has dulled the Auckland sense of the fitness of things. But, as Dr. Makgill points out, "what they have done to deserve the intervention on their behalf of a special Providence it is hard to see." I can only hope that the full disclosure of their shortcomings, as disclosed in the report on the Auckland District, will awaken them to a sense of their duty.

ANALYSIS OF FOODSTUFFS AND BEER.

On the 18th May Dr. F. T. King, Medical Superintendent of the Seacliff Asylum, advised Dr. Ogston, District Health Officer for Otago, that a patient had been admitted to the institution under his charge suffering from lead-poisoning, and suggesting that the poison had been introduced through the medium of beer. The following is Dr. King's description:—

"A patient named E. S. was admitted to the Asylum from the Hospital suffering from what were described as 'rheumatic pains.' He had delusions, and was violent and dangerous, but has now recovered as far as mental symptoms are concerned. The salient features may be summarised as follows:—

"*Patient's Account.*—'Four months ago I was treated at home for inflammation of the bowels. The bowels had been very bound for a long time previously, and I had been taking salts. The doctor had to give me an enema when I got the attack. I suffered from extreme pain in the lower part of the belly. It made me writhe and twist and beat my hands, and my brain was nearly