

plate cultures for quantitative results, while for qualitative I use a Pasteur filter, which is fixed to some supply-pipe and allowed to run till 20 to 30 gallons have passed through, when the resulting deposit is collected and brought to the laboratory at Wellington for more detailed research.

So far I have examined the following: Dunedin (Caversham), Lyttelton, Wellington, Wanganui, Auckland (City), Christchurch (main), Nelson, Masterton, New Plymouth, Auckland (Manukau Trust). In all but two the results were very satisfactory.

SANITATION OF THE VARIOUS DISTRICTS.

Wellington City.

Population, 58,552. Infectious diseases reported: Scarlet fever, 113; enteric fever, 33; diphtheria, 55; tuberculosis, 37; blood-poisoning, 4.

The general sanitary condition of the city proper is excellent. Of 10,000-odd houses all but seventy-two are now connected with the sewerage system. The house-connections are subjected to rigid inspection, and the errors which still remain from the older system are being rapidly eliminated. A certain amount of sewerage still finds its way into the storm-water drains, and there is some reason to suspect that to some of these outfalls—in the Oriental Bay direction especially—a few cases of diphtheria and typhoid may be traced.

The lack of drainage facilities at Roseneath, Kilbirnie, Island Bay, and Kelburne continues, to the danger of the residents in these districts. It is satisfactory to learn that at the latter place sewerage is now to be laid.

With so many important works in hand the Council can scarcely be expected to tackle the drainage of all the outlying parts of the city immediately, but the rapid growth of the population which the tramway extension is producing in the suburbs is quickly making this work one of necessity.

The money necessary for the reorganization of the refuse destructor having been voted, and the contract signed, we may look forward to seeing during the present year this important branch of sanitary work brought up to modern requirements. It is to be hoped that its benefits will then be extended to such suburban districts as Roseneath, Kelburne, and Kilbirnie.

Improvements in the water-service are being organized, and the mains are now being extended to the suburbs of Roseneath and Kilbirnie. The preliminaries are in hand for the construction of a new reservoir at Karori, after which it will be possible to include the high-lying districts of Kelburne and Brooklyn, and also Island Bay.

A report having gained currency that the water was not all that it should be in quality, at the request of the Engineer an elaborate examination both chemical and bacteriological was undertaken by the Department. The result showed that these rumours were unfounded. Some improvement, however, is needed at the intakes to eliminate by filtration or sedimentation the silt which washes down after very heavy rain. At present the water is sometimes unsightly, though the pollution is of a character not likely to be injurious to health.

Of the thirty-three typhoid cases, the highest proportion arose in the city proper. Although the figures are reassuring in point of numbers, it would be more satisfactory to see them still further reduced, but this cannot be expected until the storage and sale of milk and other foodstuffs is put on a sounder basis.

The diphtheria-rate remains disappointingly high. Possibly the promised improvements in refuse-removal may assist in lessening this return; also the elimination of the too-numerous decrepit, ill-drained stables, which is being gradually effected. But I believe the greatest factor in the reduction of diphtheria cases will be found in the improvement of the milk-supply.

Another defect common in the city, which must have an influence towards increasing the diphtheria-rate, is the lack of control in the matter of house-foundations. As a result of the overcrowding, houses are built on all sorts of unsuitable positions, such as over old watercourses or partially reclaimed hollows, or on land which in winter is nothing more or less than a swamp. Sometimes after the house is built the land round it is raised, leaving a hollow below the house which cannot be drained. A by-law is required prohibiting the erection of a house on damp or polluted soil unless the foundation be asphalted or in some way rendered impervious to damp.

Some slight improvement has been effected in the smoke nuisance during the year, some of the principal offenders having introduced special methods of minimising the trouble; but until the legislation is altered to conform with the regulation in force in England, this trouble cannot be effectually dealt with.

As I have said elsewhere, the principal sanitary defect in Wellington is the overcrowding, the best remedy for which the Council is now supplying—i.e., the extension of the tramway to the suburbs.

I gladly take this opportunity of thanking the officers of the City Council for their unfailing courtesy and co-operation in all matters in which the Health Department is concerned.

Karori Borough.

Population, 2,194. Infectious diseases reported: Diphtheria, 1; tuberculosis, 1.

The nightsoil service is being carried out in a satisfactory manner. A new depot was approved, but it has not been found necessary as yet to move the one originally chosen.

At the city end of the borough the growth of population is such as to demand an early establishment of sewerage—a matter which, owing to the broken character of the ground, presents considerable engineering difficulties.