

which these small tanks work are in some respects different from the large installations for towns, and the literature on the subject refers chiefly to the latter. For some time I have been making experiments with a small tank, and the results are certainly encouraging. Various minor details require attention, such as the best means for distributing the tank-effluent equally over the filter-beds. It appears to be necessary, also, to provide septa in the tank to prevent the disturbance of the deposit which is produced by a large volume of water entering suddenly.

The plans issued by the Health Department have been sent, together with explanatory letters, to some twenty or thirty private persons, many of whom in the suburbs, and at Cambridge, Hamilton, and Rotorua, are acting on the advice. At Hamilton District Hospital, the new sanatorium at Cambridge, the Mount Albert Industrial School, and St. John's College, Tamaki, the system is being followed out. I have recommended also to various local bodies the adoption of the septic tank for portions of their districts where drainage is causing trouble or where a general sewage system would prove too expensive. The Remuera Board are, I understand, about to adopt the plan for one group of houses. Other places—Te Aroha, Birkenhead, Mount Eden, and Parnell—have not yet fallen in with the recommendation, hesitating, possibly, because the process is new to them. But the ever-increasing pollution of harbours and streams must result before long in the treatment of all sewage by this or similar methods.

Cemeteries.

Attention to the question of cemeteries was drawn by the disinterment of Chinese which took place in September, eleven in all being removed from Waikumete. The process was certainly objectionable. Inspector Winstanley attended, and directed the use of deodorants and saw that the bodies were properly sealed up for removal. The new regulation that a period of fifteen years must elapse before disinterment is allowed will avoid much of the unpleasantness.

Several cemeteries, owing to the growth of population, are now so situated as to make it inadvisable to permit any more interments. In the city the Symonds Street Cemetery should certainly be finally closed. In the Anglican and Wesleyan portions alone 117 burials have taken place in the last three years; to which must be added those in the Roman Catholic, Presbyterian, and Jewish sections, the figures for which I have not obtained. Burials here are restricted to relatives of those already interred, and naturally one feels a delicacy about a matter in which sentiment plays so strong a part. Under the present legislation burials will continue there for at least another five years, and it is a matter for consideration whether the danger to the health of the community is not sufficiently serious to warrant action even though it affects harshly a few individuals. The same remarks apply to the Anglican and Roman Catholic cemeteries in Onehunga, which are closed except to relatives. The positions of these in relation to the catchment-area of the water-supply and close proximity to the pumping-well make the matter more urgent. At Clevedon, Wairoa South, the Presbyterian cemetery is too close to the village.

Sanitary By-laws

In few districts are the by-laws in any way adequate or modern. They generally have a few regulations as to nuisances, but essentials, such as the distance of privies, stables, hen-yards, &c., from the dwellinghouse, or the regulation of plumbing and drainage work and nightsoil-disposal are unheeded. In one or two boroughs where an attempt is made to control such matters the systems are antiquated and faulty. In one case I was appealed to by a firm of plumbers, recent arrivals from Home, who had been prohibited from adopting the recognised modern methods of drain-connection by the local Inspector, armed with borough by-laws which might have been made in the early part of last century. The need for a set of model laws is very great—one adapted to country townships without drainage, and another to more advanced places. In the following instances I have made recommendations, and prepared a number of suggestions:—

The *City Council* have had new by-laws in hand for a considerable time, but they have not yet been finally adopted. I found several serious defects in the proposed laws—such as a 1½-gallon flush for closets, absence of provision as to house-foundations, and so forth—and I have forwarded a number of modifications which seemed necessary. I have also suggested by-laws regulating hen-yards, and the paving of yards and spaces round houses, and house-refuse collection. I have not yet heard whether these recommendations are to be adopted.

Mount Albert, Arch Hill, and One-tree Hill Road Boards have passed general by-laws adopting most of my suggestions.

For *Cambridge and Tauranga* I have prepared a series of by-laws regulating nightsoil; and for the *Thames* refuse disposal and collection. These have not been adopted by the Councils.

Epsom and Mount Roskill Road Boards have been approached as to by-laws *re* refuse and nightsoil-disposal, but no action has been taken.

The following alterations in the Health and Municipal Corporations Acts have suggested themselves to me as necessary:—

The minimum air-space round a house is given in the Municipal Corporations Amendment Act as 300 square feet. In a young country even a wider area might be insisted on, there being absolutely no reason for so low a standard where space is so easily obtainable. Again, in Road Boards even this small area cannot be insisted on—a serious matter in the suburbs, where building is going on so rapidly as to form streets as crowded as in the city. In one set of by-laws for a Road Board I suggested regulating the size of allotments on which building was permissible, but found on referring to the Solicitor-General that such a by-law would not be legal. The prevention of overcrowding being perhaps the most vital sanitary matter, this deficiency is to be regretted.

Removal of ruinous houses can only be effected in a borough, as the law on the matter is in the Municipal Corporations Act only. The powers of the Health Department in this direction are practically nil.