

The following statistics, compiled from the census returns 1901, are sufficient to show how closely Sydenham and Linwood approximate to Christchurch in density of population :—

Name.	Density.						Rooms.				
	Area.	Population.	Houses.	Houses per Acre.	Population per Acre.	Population per House.	One.	Two.	Three and Four.	Five and Six.	Over Six.
Christchurch	1,249	17,538	3,441	2·86	14·04	5·09	33	88	981	1,246	1,093
Linwood ...	659	6,737	1,389	2·19	10·22	4·85	0·95%	2·55%	28·48%	36·21%	31·76%
							None	25	346	None	328
Sydenham ...	1,190	11,404	2,315	0·2	9·57	4·9	1·79%	24·9%	49·67%	23·6%	
							5	46	902	1,036	324
St. Albans ...	1,500	6,607	1,370	0·94	4·4	4·09	0·21%	1·98%	38·96%	45·61%	13·99%
							2	35	384	566	381
							0·01%	2·55%	28·02%	41·31%	27·81%

The figures for St. Albans do not fairly represent the facts. Some portions are probably as densely populated as the other boroughs, but the inclusion of a large area within the borough which is very sparsely inhabited materially brings down the average.

Even with the inclusion of these boroughs there remain just outside the boundaries many areas so densely populated that from a sanitary point of view they require the same administration as the parts inside the boundary of such matters as nightsoil-removal, inspection, and disinfection of premises after infectious diseases.

When it is realised that there are no natural boundaries separating these districts, but that the streets are absolutely continuous, it is evident that, whatever may have been the objections to amalgamation from other points of view of local government, the sanitary interests of the districts were identical.

DRAINAGE AND DISPOSAL OF SEWAGE.

The by-laws of the Christchurch Drainage Board relating to the system employed of putting in house connections have been adversely criticized. As the matter is still *sub judice* further remarks are unnecessary.

SEPTIC TANKS.

A septic tank, constructed from plans furnished by the Health Department, has been installed at St. Mary's Home, and is working very satisfactorily, without any offensive smell being perceptible. A septic tank almost identical in size and construction put in at the Ashburton Hospital has not been very satisfactory, as the effluent and the filter-beds smell offensively at times. Precautions are taken against any large quantity of disinfectants being admitted into the tank, but possibly the small quantities that must enter from the Hospital are responsible for its imperfect action. As it has only been in use a short time, and the bacteriological action is often unsatisfactory and incomplete at first, time may, however, effect a cure.

I have seen septic tanks, so called, which cause more nuisance and purify the sewage less than a cesspool—in fact, the septic-tank principle, the success of which depends on a right construction and some knowledge of the circumstances which favour or retard the purification of the sewage, seems likely to be much abused by being used as an excuse for draining sewage into rivers, streams, ditches, and side channels. A properly constructed and worked septic tank with any self-respect would, I am sure, disclaim any connection with many structures which have been dignified with that name. In one case that I inspected there was a closed tank, but without any efficient filtering-beds, the effluent was allowed to flow on to the side channel, and naturally was offensive and a cause of complaint. In another case the plan of construction appeared to be satisfactory, but the gardener who attended to it was in the habit of flushing it out occasionally to the great detriment of the organisms on which the purification depends—the effluent from the filter-beds was extremely foul and offensive.

HUGH E. FINCH, M.B., D.P.H.,
District Health Officer.

OTAGO AND SOUTHLAND DISTRICT.

Department of Public Health, Dunedin, 16th July, 1903.

The Chief Health Officer, Wellington.

I HAVE now the honour to hand you a report on the sanitary work accomplished in the Otago-Southland District during the year ended the 31st March, 1903.

PLACES VISITED.

In addition to several special visits to parts of my district, I was enabled this year to make a more close survey of that part of it which lies in and to the west and north-west of Invercargill, and also of the town and suburbs of Invercargill. I further made a more minute survey of that part which may be roughly described as being served by the Tapanui-Heriot Railway. The townships to which I thus paid particular attention were—Invercargill and its suburbs, East, North, and South, Avenal, Gladstone, Waikiwi and Wallacetown, and Bluff, Nightcaps, Orepuki, Otautau,