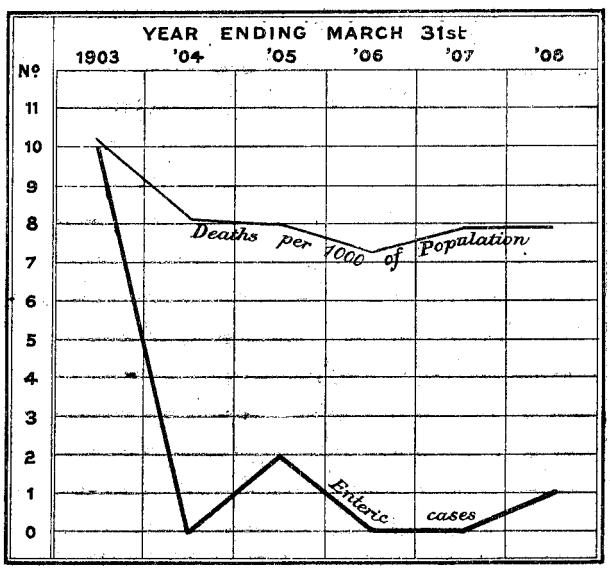
blame the elements. As Dr. Makgill states in his report for 1901–2, "the climatic differences between Auckland and the more southern towns are not sufficient to warrant the belief that these are solely, or indeed much, to blame for the high typhoid-rate. In a district like this in which typhoid or enteric has been endemic for many years, it must follow that there is a considerable degree of pollution with infected matter of the soil." Lack of drainage, local sanitary defects, isolated instances of infection of milk and oysters, and pollution of the foreshore have all been called upon to explain at different times the exceptional incidents of enteric in Auckland. As instancing how much people are at the mercy of their plumbers, Dr. Makgill records an outbreak of five cases in a boardinghouse in 1902: "All the classic faults—untrapped wastes connecting with unventilated house-drains and leading directly to the sewer, leaking soilpipes, ill-flushed closets, and so forth."

A parallel case occurred last year in a boardinghouse at the Thames. Built on an old duck-pond, this house, from which six cases were notified, had a drain directly underneath the floor. Possibly, however, the source of immediate infection arose from "a typhoid-carrier" associated with the preparation of food for the boarders.



The chart illustrates the reduction in the enteric case-rate, also in the general death-rate, following upon the adoption of a general drainage system.

The number of cases of enteric in each year is shown by the thick line; the thin line shows the number of deaths in each year per 1,000 of the population.

Dr. Makgill also traced in 1902 some thirteen cases directly to the at-one-time-common practice of bathing and fishing near the present sewage-outfalls. Other small outbreaks, such as that at St. Helier's in 1902–3, were associated with camping-parties on the beach. So far Devonport—ever zealous to maintain the reputation of the self-styled "model borough"—is the only local authority sufficiently concerned to impose any sanitary supervision or requirements on casual campers. As the regulations are the same as for householders, there have been only two campers in Devonport during the past year, both of whom have been forced to decamp.

As to the fall in the incidence of typhoid during 1904–6, Dr. Frengley attributes this "in some measure to the very favourable meteorological conditions" prevailing over that period.

At this time the installation of water-closets became obligatory in Parnell, since when the oldest suburb of Auckland has been a good second from a health standpoint to Devonport, the latter having enjoyed absolute immunity from typhoid—striking object-lessons to their neighbours of the benefits of modern drainage. On the completion of the comprehensive drainage scheme for Auckland, however, both these suburbs will have to discontinue the discharge above low-water mark of sewage into the harbour.

A "spot map" illustrating the local incidence of the disease in Auckland and suburbs shows even more prominently than in previous visitations that the recent epidemic has attacked certain well-defined areas, some of which had so far come under the ban of suspicion as regards sanitation as to have caused our Department to institute a house-to-house inspection, necessitating in one small borough the issue of 107 notices, sixty-three for the remedy of structural and drainage defects and forty-four for the removal of refuse in ill-kept back yards, privies, spaces under houses, fowl houses, and runs. A fortnightly nightsoil service in this area, inefficiently carried out by a contractor, with as a rule wooden boxes instead of pans as receptacles, many leaking and in a filthy condition calling for instant cremation, showed a condition of apathy and lack of a sanitary conscience by no means peculiar to this borough. Of four drains taken up, two of which belonged to dairies and one to an hotel, all had clay joints—the last had the sockets laid the wrong way. In spite of the zeal shown by the local authority to remedy this state of affairs, Providence, previously said to have been kind, singled out Newmarket as the primary focus of infection.*

* This district is now much improved. Once drainage is completed, as is the intention of the Council, this area may be as healthy as any in Auckland.