H.—31.

In coming to the above conclusion, evidence showed that the disease does not seem to spread unless 30 to 40 per cent. of the children have not previously suffered, and it ceases to spread when only 15 to 20 per cent. remain unaffected. The age of commencing school attendance in the Dominion is also two years in excess of that in Great Britain, and the conditions of home life, speaking generally, among the working-classes are better. We have no margin of the population of this country on the verge of starvation, nor has it been necessary to invoke either private charity or State aid to feed the children. School-teachers have unequalled opportunities for observation of the children under their care. It is highly desirable, especially in the absence of qualified medical attendants, that they should be acquainted with the early signs and symptoms of these diseases, so that they may take immediate steps to exclude any children suspected to be suffering from an infectious disease. Most of the headmasters of the district whom I have met both in their schools and in conference seem to have knowledge in this direction, and willingly exclude all children. I would suggest, however, that we District Health Officers might give two lectures and demonstrations on this subject to each of the training classes at the chief centres during the course of the session, and that any other teachers interested be asked to attend. The lectures given to Native Sanitary Inspectors on this subject during the Maori Sanitary Conference, together with the instruction on disinfection, certainly were the means of imparting information which was speedily put to practical use.

## Preventable Disease.

In reviewing the health of Auckland during the past year the feature which stands out most prominently is the unusual incidence of infectious or preventable diseases due to direct infection or as a result of insanitary environment.

With the exception of whooping-cough and influenza, at present largely beyond the control of sanitation, there has been an arithmetical progressive decline during the last three decades in the incidence of preventable disease, coincident with the development of preventive medicine, and the prompt and efficient execution of prophylactic and sanitary measures, such as disinfection, compulsory notification of infectious disease, hospital accommodation, and last but not least the awakening of the public conscience to a due appreciation of the value of health and of the facilities for its protection offered by an educated medical profession skilled in the knowledge of disease. Clinical instruction in infectious diseases and the important subjects of bacteriology and public health having now become a compulsory part of the medical curriculum, an ever-increasing power of combating these diseases is being evolved. Whilst the private medical attendant's first duty is to his patient, the next to the patient's family, it is seldom that he is wittingly remiss in his duty to the public, although this is the chief concern of the sanitary officials responsible to State and municipality.

Unfortunately, amongst the poorer classes especially, medical attendance is often restricted, for pecuniary reasons, to a brief period, ceasing with the acute stage of the disease, the subsequent but still infectious stages running their course without any skilled medical supervision or the

adoption of any precautionary measures.

An expansion of the system of medical inspection of schools by having medical attendants attached to each school, whose duties would also extend to visiting the homes of those excluded from school owing to infection, in cases where there was no family practitioner in attendance, and the compulsory requirement of medical certificates before attendance could be resumed in our public schools, would, in my opinion, considerably add to our power of checking the dissemination of disease.

Diphtheria, enteric or typhoid fever, diarrhœa, and phthisis are the diseases which call for most watchfulness on the part of the sanitarian.

In addition to the seasonal curves observed in the annual prevalence of most infectious diseases in certain months, due apparently to conditions of temperature, humidity, or the movements of the ground—water favouring bacterial development—e.g., of enteric fever and diarrhoea in the soil—or to those conducing to the diminished resisting-power on the part of man, now scientifically spoken of as "a lowering of the opsonic index," such as catarrhal affections of the larynx, pharynx, and bronchi, favouring infection of those tracts, there is a tendency towards a rapid increase in the virulence and fatality of a disease during the rise of an epidemic and to a diminution towards its close. There are also periodical recurrences of epidemics, especially well seen in the case of measles. The lesser curves are due to the reaccumulation of a young and susceptible population; the cause of the greater is more obscure.

Although even the most ideally administered towns are not yet immune from visitations of scarlet fever, measles, and whooping-cough, yet the high rate in the incidence of diphtheria, enteric fever, and infantile diarrhœa in Auckland is a warning that the sanitation of the district is not what it should be.

In April an outbreak of diphtheria at Devonport was traced to a camping party at Narrow Neck. From this focus the disease spread not only to the town but far afield. The schools were not closed. Had closure of schools been resorted to in the Auckland District on the occasion of outbreaks of epidemics many of the schools would seldom have been open during the winter months.

A circular and schedule embodying recommendations for dealing with outbreaks in schools allayed local opposition to the non-closure of schools. All schools affected were fumigated and thoroughly cleaned by order and at the expense of the Education Board. Wherever a water-carriage system is possible it has been introduced.

The occurrence of epidemic diseases being almost absolutely beyond the control of the headmaster, certificates indicating a fall in attendance of 10 per cent. owing to infectious disease were