

It is unfortunate that for the purposes of comparison there are so few data regarding previous epidemics and their attendant mortality. It is true that carefully compiled vital statistics have been kept during the last forty-three years; but, as notification of infectious diseases has only been really compulsory for the last two years, it is impossible to correctly estimate the actual mortality-rates. There is also another great drawback in compiling statistics. The departmental year expires on the 31st March, and the Registrar-General's report is issued some six months after the expiration of the previous calendar year; consequently it is very difficult to obtain the necessary mortality-returns classified in age-periods. It is true that a report on the vital statistics of the larger towns and suburbs is issued monthly, but these reports are of little value to the Department. The statistics in this report therefore cannot be termed altogether reliable, as, until the publication of the Registrar-General's report for the year ending the 31st December, 1903, they cannot be actually verified.

The loose manner in which some practitioners fill in their death-certificates calls for some comment. The registration of a death as owing to "diarrhœa," "tuberculosis," "influenza," &c., does not convey sufficient information to be of much value for statistical purposes. Tubercular diseases might very well be transferred from the "Constitutional" group to that under the heading of "Specific Febrile" or "Zymotic" diseases, and "tetanus" should also be placed in the latter group instead of being recorded under "Local" diseases.

The Septic-tank System.

During the past year there have been numerous inquiries regarding this system. In this district no less than six boroughs have decided to instal septic tanks in connection with gravitation schemes. In one borough the system has been working well for the past two years. In addition to the above, many small tanks have been erected on the plans issued by the Department as suitable for hotels and private houses.

Owing chiefly to the exaggerated reports of certain interested persons, a section of the public labours under two great delusions as regards the efficacy of the system—viz., (1) as to the amount of sludge formed; (2) as to the nature of the effluent. The popular impression is that the amount of sludge likely to be deposited in the tank hardly requires consideration. This is a great mistake. I know of one tank, capable of holding 100,000 gallons, dealing with sewage of some two thousand persons, where, in the course of eighteen months, the sludge has accumulated to such an extent as to occupy certainly not less than a third of the total capacity of the tank. I believe it is the experience of authorities in the Old Country that the sludge accumulates in these tanks far more rapidly than was at first anticipated by the original exponents of the system. In one tank that came under my notice the accumulation of sludge was followed by a marked deterioration of the effluent. It would be interesting to know if this is the usual experience. As to the nature of the effluent, many persons imagine that the effluent issues from the filter-beds in such a condition as to be almost fitted for potable purposes, and almost every person believes that the effluent is devoid of all forms of pathogenic bacteria. It is almost unnecessary to say that exaggerated ideas like the above cannot but tend to bring the septic-tank system into disrepute. The public expects far too much of it. It was only the other day that I was showing some inquiring Councillors a tank-effluent which, in my opinion, came up to, if indeed it did not surpass, all expectation. Great was the disappointment on detecting a slight odour. "That fit to drink!" Similar disappointment will doubtless be felt by some local authorities when they find that their tanks have to be cleaned out every two years, if not more often.

The tanks erected on the plans issued by the Department are, with few exceptions, working well. The work of some has been greatly handicapped by the "local expert," who has endeavoured to improve upon them, not on all occasions with the happiest results. A better means is needed for distributing the tank-effluent over the coke-beds. There is no doubt, however, that where properly installed and carefully supervised the system produces a far better effluent than that obtained under the old precipitating systems. The working-expenses of the septic tank are comparatively small. It is therefore particularly adapted for the smaller towns of this colony, especially where the filter-beds can be dispensed with and the tank-effluent aerated and distributed by means of broad irrigation.

HOTELS.

Sixty-five hotels have been inspected during the year. Of these, five have been condemned as unfit for the accommodation of the public. Besides the usual sanitary defects in drainage, &c., the water-supply to many hotels is often of a very inferior quality. It is not unusual to find a privy, urinal, or slop-drain perilously close to the unlined well from which the water-supply of the hotel is taken.

Publicans on the whole have readily complied with the requirements of the Department. A few keep their houses very well indeed, and not many shut up their bath-rooms through fear of the water-supply to the bath falling short. On the whole a great improvement has taken place. At no less than six publichouses has the septic-tank system been introduced, and quite a number of proprietors are seeking information on the subject.

QUARANTINE STATIONS.

The inadequacy of the accommodation at *Somes Island* has already been referred to. The buildings were erected some twenty-six years ago. However suitable they may have been for the immigrants of the early seventies, they are scarcely fitted for the accommodation of the passengers of a modern liner. Indeed, under existing conditions a grave scandal would in all probability be the result of attempting to quarantine sick and healthy persons on the island. The hospital is only 40 ft. from the first-class quarters; it is out of date, and the sanitary arrangements are defective. The first-class are in fair repair, but, at the very most, could not accommodate more