42

larger portion of the adult population is susceptible to scarlet fever than those of similar age in the Old Country.

### Scarlet Fever and School Attendance.

One hundred and ninety cases, or 34 per cent. of the total cases, occurred in children of school age—from four to fourteen years of age. There is, however, nothing to show that the disease was spread by school attendance. In fact, the notifications actually increased during the summer holidays. The records of cases during the winter holidays were not kept so exactly, but very few cases were being notified about that time, and many medical men did not fill up the ages in the notification forms.

#### Dissemination of Infection by Milk.

Throughout the year attention was paid to the possibility of this means of disseminating the disease, and the dairies supplying milk to the city were carefully watched. It was not until the 24th December that anything happened to show suspicion on milk as the means of carrying infection. On that date seven cases were notified in houses which were all supplied with milk from the same dairy. Inspector Watson was accordingly despatched to the farm, where he found that one of the employees who had been milking until quite recently had been ill with a sore throat—he was subsequently found to be "peeling." Another employee developed a rash and sore throat on the following day. The milk was seized, and the dairy closed that afternoon. Altogether fourteen cases were subsequently traced to this dairy.

## "Return Cases."

Scarlet fever has reappeared in fifteen houses after disinfection, a proportion of 3.09 per cent. to the total of houses infected. It would be misleading, however, to term all these sixteen cases "return cases," as in no less than four instances infection was evidently derived from the primary case, the second case having developed within a week of the removal of the first patient to the hospital. In six instances the second cases have been reported within the first month, and before the first patient returned from hospital, so that infection may have been obtained from the same source. The five remaining cases may undoubtedly be termed "return cases" in the true sense of the word, for they developed within a few days of a patient's return from hospital—a proportion of 1.3 per cent. of the total cases.

#### Mode of Dissemination.

There is no doubt that a great deal of scarlet fever was spread by ignorance, and in many cases by the carelessness of persons who should have known better. Allowances must be made for ignorance, but nothing can be urged on behalf of educated persons in charge of infectious cases who allow the latter to be exposed in public places or vehicles, or on behalf of a dairyman who supplies milk from an infected dairy. Nor is there any excuse for medical men who do not inform their patients when they are suffering from infectious disease. A few judicious prosecutions have had a very salutary effect.

### MEASLES.

Between the 1st August and the 30th November 1,689 cases of measles were notified in the Since 1893, when nearly one thousand cases were reported, the city has been singularly free of this disease, and there is no doubt that a sufficient proportion of susceptible persons had accumulated in this interval to favour the spread of the disease when once introduced. In this country, unfortunately, there are no data to show how often these epidemic cycles recur, but from what I can gather from some of the older practitioners of the colony, measles assumes epidemic proportions about every seven years.

The course of the epidemic may be conveniently followed in the accompanying chart.

In another part of this report mention is made of the probability that the original infection was duced by returned troopers. Of this there is little doubt, but at the same time it must be introduced by returned troopers. noted that four cases of measles were reported in the city during the second week of August, which could scarcely have derived infection from the disbanded troopers. It is possible, therefore, that the city was on the eve of an epidemic independent of the arrival of the troopships. In the third week of August, however—three weeks after the arrival of the "Britannic"—thirty-two cases were notified. On the fourth week the cases notified were only seven. The "Orient" troopers were released from quarantine on the 13th August; three weeks afterwards the cases rose to sixtyeight. From that date (4th September) onward cases gradually increased, with two slight intermissions, until the third week in October, when 248 cases were notified in the city. From that date the epidemic declined very rapidly. During the last week in November only sixteen cases date the epidemic declined very rapidly. were reported.

# Mortality.

The heavy mortality among the "Britannic" troopers (21.6 per cent.) occasioned much m. It was feared that the disease was of an extremely malignant type, and that considerable mortality would be occasioned in the city and district. Fortunately, however, such did not turn out to be the case—in fact, the mortality-rate as compared with that of the United Kingdom goes to prove that the epidemic was an extremely mild one, the death-rate at all ages being only 2.6 per 1,000. The total deaths in the city recorded between the 1st August and the 31st December Throughout the whole colony 134 deaths were registered, as against 525 amounted to forty-six. in 1893.