

men applying to the Registrar for marriage licenses. Appreciative testimony as to the practical value of this has been received from all directions; and a further fifteen thousand copies of an enlarged and revised edition of the book are about to be published. Similar appreciations reach the Department and the Plunket Society in regard to the services which the society is enabled to offer the mother soon after childbirth as a result of the Registrar's being instructed to supply prompt reports to the Plunket nurses, giving the necessary particulars (date, address, &c.) regarding all notifications of childbirth. The effect of this provision has been to bring a very much larger number of young mothers with their first babies under care before serious mistakes are made.

SECTION 2.—INFANT-WELFARE WORK IN AUSTRALIA.

Work in the interest of mother and child, conducted more or less closely on New Zealand lines, is now being carried out extensively in Queensland, New South Wales, Victoria, and Tasmania; and at the request of the Australian Health Association I attended the annual conference of the association held in Sydney in September last year as Government delegate for New Zealand. Statements made on this occasion by some of the Australian health authorities, with a view to accounting for the low infantile death-rate in New Zealand compared with the Commonwealth, afforded striking proof of the desirability of greater facilities for discussion and interchange of ideas and experiences, from time to time, between Australia and New Zealand on matters of mutual concern affecting public health.

It was stated at the conference that the essential reasons for so few babies dying in New Zealand compared with Australia were as follows: (1) The initially low rate of infantile mortality characteristic of New Zealand; (2) our cool, temperate, equable climate; (3) the small size of our cities. Further, since the conference it has been asserted repeatedly in the Australian Press that, owing to some inherent natural difference between the two countries, serious infantile diarrhoea is, and apparently always has been, practically non-existent in New Zealand—just as malaria and yellow fever occur in some countries and not in others. Further, it has been stated, on apparent authority, that but for the radical differences in climate and microbes there would actually be a lower infantile-mortality rate at the present time in some of the Australian States than in the Dominion.

While appreciating the excellent general public-health work done in the Commonwealth, it seems desirable to set down the leading facts bearing on the relatively low infantile-mortality rates in New Zealand:—

(1.) Originally the infantile-mortality rates differed but little in the two countries.
(2.) That coolness and equability of the New Zealand climate is not the cause of the discrepancy is shown by the simple fact that the average infantile mortality rate for Queensland is considerably lower than the rate for Tasmania, which is climatically similar to New Zealand, and that in the Dominion the subtropical City of Auckland has a low rate.

(3.) That the relative sizes of cities is not the determining cause is shown by the fact that while New Zealand cities have been almost doubling their populations they have been nearly halving their infantile-mortality rates; and in 1920 the City of Auckland, with 200,000 inhabitants, lost a smaller proportion of babies than Wellington, Christchurch, or Dunedin, which average about half the population of Auckland. Further, in the States of the Commonwealth itself the infantile mortality is sometimes in inverse proportion to the size of the cities.

(4.) That New Zealand enjoyed no natural immunity to infantile diarrhoea and enteritis is proved by the fact that from fifteen to twenty years ago this form of disease killed annually from ten to twenty babies per thousand births. For the last five years, as shown on the accompanying graphs, the average rate for the Dominion has been only three deaths per thousand, as compared with thirteen deaths per thousand for the Commonwealth. More significant still is the fact that whereas formerly the deaths in New Zealand from infantile diarrhoea and enteritis occurred mainly in the cities, and are still regarded in Australia and elsewhere as almost inevitable concomitants of crowded city life, the position as between town and country has been reversed in New Zealand during the last sixteen years. Twice in the last five years not a single baby has died in Dunedin of diarrhoea and enteritis—and the average rate for the whole five years has been under one death per thousand births, compared with twenty-five per thousand in 1907. Almost equally striking is the fact that the rate in Christchurch, which was forty-five per thousand births for 1907, has averaged only three per thousand for the last five years. If the combined factors of subtropical climate and aggregation in cities were the essential factor of infantile diarrhoea, Auckland should have almost as high a death-rate from this cause as Sydney, and yet for the last five years the average rate for Sydney has been twenty per thousand births and for Auckland only four. The persistence in Australia and Tasmania of gastro-enteritis as the main cause of death among infants who survive their first month, and the extreme reduction of the disease in New Zealand cities of late years—as most strikingly illustrated in Dunedin—is to be attributed to one essential cause—viz., the systematic education and training in mothercraft which has been carried on throughout the Dominion for the last sixteen years. The seat of the earliest and most intensive work in this connection was Dunedin; and the following significant passage occurs in the annual report for 1919-20 of the Dunedin Branch of the Royal New Zealand Society for the Health of Women and Children.

“There has been scarcely any serious infantile diarrhoea during the summer months. In almost all incipient cases, the mother, knowing just what to do, was found to have taken the right course, rendering the essential first aid herself, before the arrival of the doctor or Plunket nurse. This is exactly as it should be, and (taken in conjunction with the knocking-out of summer diarrhoea as a cause of infantile mortality throughout New Zealand) it goes to prove, in the most convincing and gratifying way, the practical value and effectiveness of teaching and training the mothers. The society's aim has always been to interest and ground parents in the simple main essentials of early life, both in health and sickness, thus helping them to make them the competent executives in their own homes, instead of allowing them to remain (as in the past) ignorant, helpless, and frightened to act in the absence of ‘skilled assistance.’ The mother is always on the spot, always on duty in the home: the doctor or nurse is only an occasional visitor—a visitor who often arrives not quite soon enough, and who is liable to arrive too late!”