

after incubation has commenced; and also, that revaccination often produces grave constitutional disturbance very undesirable in emigrants on the point of sailing.

Let me not be understood in these brief and hurried remarks as ignoring the necessity of taking every precaution—as advocating a *Laissez faire, a douce far niente* system—for I am really showing the absolute necessity of adopting all known precautions, while contending at the same time that no precautions you can possibly take will always be effectual; a certain amount of risk is inevitable.

I have, &c.,

I. E. FEATHERSTON.

The Hon. W. Gisborne.

Enclosure in No 8.

EXTRACT from the REPORT of the REGISTRAR-GENERAL of ENGLAND.

STATE OF THE PUBLIC HEALTH; DEATHS.

England.—In the first or winter quarter of 1872, ending the 31st of March, 131,992 deaths were registered in England and Wales: after making due allowance for increase of population this number was considerably below the average number in the corresponding quarter of recent years, notwithstanding the epidemic of smallpox, which showed a somewhat increased and more general fatality.

The annual death-rate was equal to 23·5 per 1000 of the estimate population, against 25·3, the average rate in the first quarters of the ten years 1862-71; the rate in the first quarters of those years ranged from 22·1 in 1868 to 27·6 in 1864. Temperature exercises a more direct influence upon mortality in the first quarter than in other parts of the year. A severe winter invariably produces a high death-rate. The effect of temperature, however, is partly disturbed by the varying fatality of epidemic diseases. In the ten years, 1862-71, the temperature of the three coldest first quarters averaged 37·5 Fahrenheit, and the annual death-rate 27·0 per 1000; while in the three warmest first quarters the mean temperature was 41·8, and the average death-rate did not exceed 24·0 per 1000. The mean temperature last quarter averaged so much as 43·6, and but for the somewhat counteracting influence of the smallpox epidemic the death-rate would have been unusually low.

In the 11 Registration Divisions of England and Wales the annual death-rate ranged from 19·2 and 20·8 in the south-eastern and south midland to 26·6 and 27·3 in the north-western and northern divisions. The deaths registered in each of the divisions were below the average number in the three previous corresponding quarters, except in Yorkshire and the Northern and Welsh counties; the excess in these three divisions was principally due to the smallpox epidemic.

In the principal town districts of the country, comprising all the large towns, and a population of about 13,000,000, the annual death-rate last quarter was equal to 25·4 per 1000. The remaining or rural population is about 10,000,000, among whom the death-rate did not exceed 20·9 per 1000. The urban rate was 2·0, and the rural rate 1·7 per 1000 below the average rates in the corresponding quarter of the 10 years 1862-71. If from the entire urban population be excluded 68 of the largest towns, it will be found that the death-rate in the smaller towns, last quarter was equal to 24·6 per 1000. Allowances being made for the excessive mortality from smallpox last quarter in town districts, it will be seen that the remarkably mild weather which prevailed during the first three months of this year more favourably affected the town than the country death-rates. This result further confirms a fact which has previously been proved from these returns—namely, that it is town populations which suffer most from the rigours of a severe winter.

The 134,992 deaths from all causes, at all ages, in England and Wales during last quarter included 31,123, or 23·0 per cent. of infants under one year of age, and 32,452, or 23·9 per cent. of persons aged 60 years and upwards. The infant mortality showed a slight increase upon that prevailing in the first quarter both of 1870 and 1871, which was 22·6 per cent., while measured by the proportion of deaths under one year to births registered it was 14·9 per cent. last quarter, against 15·8 and 14·9 in the two previous corresponding quarters. The mild weather exercised a direct influence upon the proportion of deaths of elderly persons which as above stated, did not exceed 23·9 per cent., while in the first quarters of 1870 and 1871 it had been 26·3 and 25·6 per cent. respectively.

To the seven principal diseases of the zymotic class 24,794 deaths were referred in England and Wales during the first three months of this year against 26,997 in the last quarter of 1871; these deaths were equal to an annual death-rate of 4·5 per 1000 of the estimated population, while in the first quarters of 1870 and 1871 the rate from these seven diseases did not exceed 3·6 and 3·8 per 1000 respectively.

The 24,794 deaths from these diseases including 7,720 from smallpox, 3,121 from measles, 3,385 from scarlet fever, 586 from diphtheria, 4,699 from whooping cough, 3,544 from different forms of fever, and 1,739 from diarrhoea. The fatal cases of smallpox were considerably more numerous than in any quarter since the present epidemic broke out in the latter part of 1870. The deaths from measles were 642 less than the number in the last quarter of 1871 but considerably exceeded the average in the seven previous quarters. The fatality from scarlet fever was lower than in any recent quarter, the deaths from this disease having showed a steady decline from 11,746 in the last quarter of 1870 to 3,385 in the first three months of this year. The deaths from diphtheria have varied but slightly in the past nine quarters. Whooping-cough is usually most fatal in the winter quarter of the year, but was exceptionally fatal in the three months ending March last, causing 4,699 deaths, against 4,451 and 2,632 in the corresponding period of 1870 and 1871. The 3,544 deaths referred to fever, principally of the enteric or typhoid type, declined from the numbers in the corresponding quarters of 1870 and 1871, which were 4,177 and 4,073 respectively. The deaths from diarrhoea are never numerous in the first three months of the year.

The continued fatal prevalence of the smallpox epidemic calls for more detailed notice. The deaths from this disease in the first three quarters of 1870 averaged only 450, but in the last quarter