embrace 13 districts in different counties of England and Wales, extend over three decades from 1840–1871, and concern about 600,000 people. They show the improvement in the annual rate of mortality during the thirty years. The first decade, 1841–50, the rate per 1000 averaged 26.54. The second decade, 1851–60, it fell to 24.75, and in the third it fell to 21.76, or nearly 5 per 1000 less, or an annual saving of 3000 lives.

The report says: "The district of North Witchford (Cambridge) affords a striking instance of the important results that can be attained through health administration. The average annual mortality fell from 27 per thousand in 1841–50 to 21 in 1851–60, and to 20 in 1861–70. In the four years 1871–4 the results are still more remarkable, the mortality being reduced to 17 per thousand"—a saving of 150 lives each year in a population of 15,000.

"In Whittlesey (same county) a steady improvement in the mortality is also discernible, from 25 per thousand in 1841–50, to 19 per thousand for 4 years, 1871–4."

"In Wisbeck (Cambridge), in 1866, the town was supplied with pure water, and extensive sewerage works are now completed. The annual death-rate of this district has been reduced from 25 per thousand to 19 per 1000 in 1871–4. The great land drainage works have had great influence in improving the health of the inhabitants of the city." In the death rate from phthisis the average annual mortality per thousand in the decade 1851–60 being 2, whereas in the ten years 1861–70 it was reduced to 1.6, nearly 25 per cent.

"In Orsetts (Essex) the remarkable reduction in the death-rate during the thirty years 1841–70 is partly due to sanitary improvements, but mainly to the drainage of the land and consequent

tics of different nations, and when these statistics differ an examination of the different conditions might throw light

dryness of the soil. * In the 4 years 1871–4 the mortality was only 17 per thousand, and phthisis decreased from 2.8 to 1.9 in 1861–70.

"In the district of Salisbury (Wilts) before any improvements were made the annual death-rate in 1841–50 was 28 per thousand. In 1855 an excellent system of drainage was in operation, and the district supplied with pure water, so the annual rate was reduced in 1851–60 to 24 per thousand, and in the following decade to 20 per 1000.

"In Wolverhampton the annual mortality has fallen from 28 in the ten years 1851–60 to 24 in the four years 1871–4. In 1865 the town was entirely resewered, and a more wholesome water-supply obtained, but much remains to be done to put Wolverhampton in a good hygienic state.

"Kingston-upon-Hull presents another example of the good effect of sanitary measures. The annual rate of mortality in the ten years 1841-50 was 81 per 1000."

An investigation shewed that the drainage was bad, and the water, derived from the river Hull, received the sewage of such places as Driffield and Beverly.

The local board incorporated in 1851 began sanitary improvements. From 1851–60 the mortality was reduced to 25. In 1864 the river water was abandoned and water from the springs of the Chalk-wolds introduced. The mortality from 1871–74 was 25 per thousand.

In the parish of Merthyr Tydfil, in South Wales, the results of sanitary works are thus recorded by Mr. Dyke:

1st. Before the works were begun, eleven years, 1845–55.	33 per 1000

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upon the causes of the difference, whether it comes from race, climate, food, clothing or social habits.

Richardson quotes statistics taken from a work titled "Effective Population of the World:"

"Of 10,000 children born in Norway 7,415 live to be 20 years of age. In England, 6,627. In United States boys have nearly as good a chance as in England, girls have not. In France 5,022. In Ireland 4,855, or less than one out of two attain that age." Out of the same 10,000 in Norway more than 1 out of 3 reach 70. In England 1 out of 4. In France 1 out of 8½. In Ireland 1 out of 11½.

"In Norway a larger proportion of infants survive than in any other country, and when grown up display the greatest power of endurance."

A 1000 years spent in the growing period produce 63 per cent. more of working life among the Norwegians than among the Irish, and 13 per cent. more than among American men.

—Richardson, Ministry of Health.

* Drainage, Moisture and Phthisis.

Three-quarters of all these (his own) patients have resided where dampness of the soil is a prominent characteristic. Somewhat less than one-quarter have resided in dry places. Cent. p. 458.

Moisture of the soil is the only known characteristic which, as far as our investigations have gone, is connected with the consumptive breeding districts, p. 460.

The same conclusion was arrived at by Dr. Buchanan in England, who suggested that dampness of soil is an important cause of phthisis to the population living upon the soil.