

Africa, we approximate, though probably never quite attain to, conditions of absolute immunity. In India the disease is tolerably common, and very pernicious on the lowlands, while it is extremely rare upon the upper slopes of the Himalayas, the Ghaats, and the Nilghiris. At Bogota and Quito, in spite of the aggregation of large populations, the disease is excessively rare, and is practically limited to settlers from the lowlands or from other countries. Even at Potosi, among a population engaged in mining, and amidst conditions of very imperfect hygiene, phthisis can scarcely gain a footing. It is thus evident that the protective influence of high altitudes suffices to counteract other forces which usually occasion a widespread prevalence of the disease. The extremely low mortality from phthisis in Switzerland, namely, 1.85 per 1,000, is explained by the fact that so large a proportion of the people reside at a considerable altitude above the sea-level, although the sparseness of the population, no doubt, also operates in the same direction.

The influence of a damp soil in promoting phthisis is now well established, and suggests obvious practical conclusions.

The incidence of phthisis in the Australasian colonies is of much interest, in view of their popularity as refuges for the consumptive. The large towns of Australia have now a death-rate from phthisis of over 2 per 1,000, and present

little advantage to the phthisical sufferer over his own country. On the other hand, the large inland plains of Australia are almost exempt from phthisis, and constitute a genuine sanatorium. In New Zealand, phthisis has made frightful ravages among the Maoris, and is the chief factor in their approaching extinction; but the explanation of this fact is not to be sought in any adverse climatic influence, but rather in the miserable dwellings and wretched food of the native inhabitants of these islands.

Professor Hirsch's conclusions may be thus briefly summed up. Phthisis is everywhere prevalent, but it is rare in Polar regions, and rarer still at high altitudes. The main factor in its production is overcrowding and bad hygiene. Heat and cold *per se* have no influence. Damp, when conjoined with frequent oscillations of temperature predisposes to the disease; but humidity of the air is less important than dampness of the soil. Occupation is extremely important, but mainly indirectly, as tending to good or bad hygienic conditions.

No reference is here made to the contagiousness of consumption, in which most physicians now believe. It is generally believed too that contagion has had much to do with the spread of the disease in New Zealand. If it had not, why did it not so spread before the free intercourse with Europeans?

#### RECENT EXPERIMENTS WITH DISINFECTANTS.

AT a meeting of the Cambridge Branch of the British Medical Association, Dr. Elliston, the president, after detailing the experiments of Koch gave the following:

After testing various substances, Koch arrives at the conclusion that the only reliable disinfectants are chlorine, bromine, and corrosive sublimate, and that, to arrest development, only cor-