

ground water had risen on account of rains, to unusual height, it had fallen low.

But besides the above named diseases, and perhaps most important of all, moisture from the soil seems in some way to produce an unfavorable effect upon the lungs and mucous membrane of the air passages, giving rise to CONSUMPTION. Investigations and observations during the last eighteen years show that there is a close connection between this disease and dampness of soil.

In 1862, in an address delivered to the Massachusetts Medical Society, Dr. Bowditch, of Boston, stated that, "medical opinion in Massachusetts, as deduced from the written statements of resident physicians in 183 towns, tends strongly to prove, though perhaps not affording perfect proof of, the existence of a law in the development of consumption in Massachusetts, which law has for its central idea, that dampness of the soil of any township or locality is intimately connected, and probably as cause and effect, with the prevalence of consumption in that township or locality." Near about the same time, Dr. Middleton, of Salisbury, England, noticed that when the ground had been rendered drier by drains and sewers, there had been a diminution in the death rate from this disease.

Soon after this, the investigations of Dr. Buchanan, Health Inspector for the Privy Council, Great Britain, established, seemingly beyond doubt, as a general law, that there is a connection between the causation of consumption and dampness of soil. These investigations were made public in a report to the Privy Council, by Dr. Buchanan, "On the Distribution of Phthisis as Affected by Dampness of Soil." He had found that wherever the subsoil had been thoroughly dried by a complete system of drainage, the mortality from consumption decreased from near 50 per cent. downward. In Salisbury, the mortality from this disease had fallen 49 per cent. after thorough drainage; in Eby, 47 per cent.; in Rugby, 43; in Banbury, 41; and in thirteen other towns it had fallen in a marked degree. On the other hand, in certain towns where the soil had not been dried by a system of pipe-drains, though means were used to remove all excrement and filth, there had been no marked reduction in the death rate from consumption.

After observing these facts, Dr. Buchanan made further inquiries, adopting two separate lines of investigation, and established, as a scientific certainty, a connection between dampness of soil and consumption. It must be observed that dampness or dryness of a soil