

TYPHOID FEVER IN ONTARIO.

THE press has during the past month chronicled almost daily, the existence of typhoid in epidemic form in some one or other municipality in Ontario, and the Provincial Board of Health is being frequently applied to for assistance, in investigating the local causes to which such outbreaks are due, and asked for advice as to how remedies are to be obtained. Our physicians are rapidly ceasing to remain quiescent or adopt the expectant plan of treatment in such outbreaks, and they are in numerous instances demanding that some means be placed at their command for giving strength to their suspicion that water supplies and milk supplies, etc., are in most cases the vehicles for transmitting the poison. Almost every town and village where population is aggregating have been suffering this autumn severely. Everywhere the same story is told, an unusually low well-water, owing to the drought of more than a year, now being followed by a rising well-water with the copious rains of the past month. In other places public water supply is with reason suspected. In Philadelphia, where the Schuylkill river supplies the city, one hundred deaths are said to have occurred within the past month. In Cincinnati seven hundred deaths were reported to have occurred in 1887 from drinking Ohio river water. All will remember the 1,500 cases which occurred in Ottawa in two months of last year. What does it all mean? A few weeks ago we were asked to examine water from a suspected well. The water was perfectly clear and seemed wholesome. By a flask culture we found that in forty-eight hours 97 distinct colonies of a single species of bacillus were present in 15 drops of it, having the qualities of the typhoid bacillus. We doubt not that similar investigations would show that many waters are with reason suspected of having a micro-organism capable of developing with similar rapidity. The method of infection of the water in such instances varies but the result is the same. Commonly, the method is that decomposing organic matter contain-

ing micro-organisms contaminates the neighboring soil. The descending rain through soakage bears these with it to the deeper wells, where free oxygen aids their rapid multiplication in a water containing organic matter. Kingston pumps from a point suspiciously near that of the sewage pollution of her bay; typhoid prevails. Listowel, with a soil rich in organic matter, finds well-water polluted. Tilsonburg, with a sandy soil, makes soakage an easy matter. And thus the chronicle reads. Not a few of our smaller municipalities have introduced or are introducing public water. But let them beware of the head-waters. Local waters are admirable if not polluted with swamp and barnyard soakage, the latter of which is especially dangerous. We must, however, as physicians and Local Boards not be satisfied with general ideas in these matters. The health of two millions of our active population from the economic standpoint, and still more from the standpoint of life, demands that some systematic examinations of these questions be made. Many thousands are being annually spent to promote the prosperity of the country by encouraging agriculture; but to the individual farmer, the prevention, by preserving health, of the loss through time, medical expense, and anxiety are of more direct advantage than any general aid, however well-directed, to agriculture can be. Will our 2,500 physicians demand, and will our 600 Health Boards support the claim that special facilities be supplied by Government for the elucidation of these matters by experiment, in some such manner as is given to the problems of agriculture? Some eight or ten professors give their whole time to the education of fifty students of agriculture and to the study of experiments on animals and plants at our experimental farm. We have, as already stated, several hundred health officers all seeking exact information on health problems, and some six hundred Health Boards ready to put their conclusions into practical effect. The urgency of the case demands the remedy, and we call upon physicians and Boards everywhere to support the claim for Government aid to work of such unmeasurable importance.