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WATER CONDITIONS IN TORONTO—A PLEA FOR FILTRATION.

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TORONTO takes its water supply from Lake Ontario at a point about one-quarter of a mile out from the south shore of the Island about a quarter of a mile east of the lighthouse.

The depth of the water over the turned-up intake is fifty feet. A quarter of a mile further out the depth is probably 150 feet or over.

The intake pipe then traverses the Island and lies along the bottom of the bay to a point at the foot of John street, emptying there into the "pump well." The water thus reaches the well by gravity, and is pumped to the city without any change. There is no filtration of any kind.

Two-thirds of Toronto's sewage is discharged into the Don river and finally into the bay, or directly into the bay, without any treatment whatever. The other third is discharged directly into the lake west of the Island.

In the laboratory of the Provincial Board of Health during the last three years, 663 specimens of water on as many days were examined for colon bacilli and other sewage bacteria. One hundred and nine, or 16.4 per cent., of the specimens showed the presence of these intestinal bacteria in such small quantities of water as one cubic centimeter (severe infection). Normal Lake Ontario water does not show these. The presence of these bacteria are taken as evidence (the best) of sewage pollution of a water.

If intestinal bacteria are present it requires no stretch of the imagination to see where typhoid bacilli might go.

These infections were not usually on single days, but in groups of two or three successive days.

On referring to the meteorological reports for those years, it was seen that for twenty-four or forty-eight hours before these infections there were strong winds blowing either from the east or the west, driving the sewage either from the discharging bay at the eastern gap of the harbor or from the open sewers on the shore at the west of the Island, towards the intake between these points.