

New York last week was advised unreservedly by the commission of experts appointed to report on means to reduce their death rate from typhoid, and to increase their nearly already insufficient supply, to filter all their water, when the additional supply was got from the Catskills.

At the last meeting of the American Water Works Engineers, held in Boston, it was practically the unanimous opinion that the natural waters of this country and the United States were not hygienically safe without efficient filtration because of extensive pollution from closeness of population. It was also their opinion that however extensively in practice the sewage of large communities was treated by the sewage disposal methods now in vogue, it was cheaper and more uniformly safe to filter the water used for drinking purposes, if the effluents from these disposal works were discharged into the water source. In the thickly populated districts it is next to impossible to protect water sources from pollution. By proper filtration even badly polluted waters can be made as pure as such unquestionable ones as those derived from the snow caps of the mountains or from artesian wells bored into proper soil.

The disposal of Toronto's sewage by the construction of a trunk sewer, of a large receiving tank, a pump, and 300 acres of sand filter beds near Danforth road, at the east of the city, has been proposed as a method of protecting the water supply. The cost of this would run into the millions. The maintenance and management would be high. The results would be *perfect in uniform weather*. During extended rainy weather the treatment end of the plant would be practically put out of commission. The sewage then would necessarily be discharged untreated into the lake at great risk to the water supply. Again in practice it would be found that sections of the city would not be connected with the system, notably the Island. The shipping also would not be looked after, and this is not a visionary danger, either. Many of the outbreaks of typhoid in the north of the Province have originated from the sewage of boats carrying typhoid fever sufferers infecting water supplies. This happened undoubtedly once at Byng Inlet. In the summer months thousands daily, many of them convalescent cases, come in and out of the harbor.

If filtration of Toronto's water was adopted, we would be sure of its uniform purity. Much simplified and cheaper methods for the removal of the gross suspended matter in the sewage could be introduced. A series of catch basins and septic tanks, requiring almost nothing for maintenance, would remove the 200 tons of organic and inorganic solids now daily reaching and filling up the bay, and cost very little.

We could then for a cost much less than by the original plan, have water filtration and a good method of sewage disposal that would meet all our requirements from a hygienic, a commercial, and an æsthetic standpoint.