affected than the present city supply by temporary pollution due to heavy rainfall or melting snow.

II.—Examination of Local Conditions Affecting the Montreal Water Supply.

Tap Water.—In order to determine whether the water as supplied by taps was similar in quality to that of the mains, numerous samples were examined during July and August of 1891. The taps were in all cases allowed to run for at least 30 minutes before samples were taken and two or more samples were always examined, in order to make sure that the number obtained was typical for the day. Besides taking samples each day from one special tap which was allowed to run continuously, I made frequent examinations from taps in various parts of the city.

The tap water was found to contain practically the same number of bacteria as the water of the settling basin and, as a rule more than that of the reservoir. The number of bacteria was found as a rule remarkably constant, irrespective of the points from which the samples were obtained. Usually, but not always, the taps on the circuit supplied by the upper reservoir (the water from which is pumped up from the lower reservoir) contained fewer bacteria than those in the lower circuit. I have given the results in the following table.

Comparison of Upper and Lower Circuit

Date.	Number of Bacteria per cc.	
	Lower Circuit.	Upper Circuit.
1891.		
May 1		
" 8	306	117
" 14	210	66
" 22	146	105
June 23	50	48
" 30	30	22

As far as it goes this supports the view that the water is improved by standing in the reservoir.

During July the daily examination showed for the upper cir-