

fibres were usually present in traces, and were most constant in the samples from the reservoir.

From the above results it will be seen that while the waters contain small amounts of the non-bacterial organisms common to all surface water, these were never found in sufficient quantity to affect the odor, taste, or hygienic quality of the water. Of the organisms, the diatoms *Melosira* and *Asterionella* were the only ones occurring constantly in any appreciable quantity.

The green organism (*Anabœma* or *Aphanizomenon*) which abounds in the water of Lake Ontario and the Bay of Quinte during the summer, was scarcely detected at Montreal, though owing to the infrequency of the periods of collecting samples it may have been missed. Though present in the reservoir during August and September very little appeared to enter the supply pipes.

The results of examination of sediments, on the whole, were decidedly satisfactory from a hygienic point of view.

*Starch Grains.*—The only anomalous features presented by the sediments was the constant occurrence of starch grains in the sediment of most of the samples. These I first noticed in the May samples, they being present in the water from the reservoir, settling basin and St. Cunegonde, but not in that from the St. Lawrence.

These grains were usually round or slightly oval, or in some cases presented blunted angles. They measured 12 to 30 microns in diameter, stained blue with iodine solution and polarized with a central cross. Some showed a central fissure in the form of a slit or cross, and often lamination could be distinctly made out.

I was at first disposed to regard them as an accidental contamination, due to the entrance of dust into the samples, but this was shown not to be case by the fact that upon filtering water directly from the tap through glass wool, compressed into a small strainer, the starch was invariably detected, while the materials employed as well as the glass-ware used, showed no signs of it.