AN EPIDEMIC OF WATER-BORNE TYPHOID. 107

By the kindness of Prof. Goodwin I am able to give the foliwing information regarding the currents in the harbor, (Weter supply of Kingston. Canadian Record of Science, April, 1802). It might be well to add that previous to 1893 the water was taken from within 20 feet of shore at point A on map.

CURRENTS.

- 1. From the Asylum to near the point D, there is a steady current down the lake outside of a line averaging 700 or 800 feet from the shore.
- 2. Inside this line there is a variable eddy current up the lake.
- 3. The dividing line between the currents moves towards the shore with westerly, and away from it, with easterly winds.
- 4. From a point near D the dividing line runs in a general direction towards Cedar Island. It must often pass very near the crib (B), but its position is very much influenced by the direction and velocity of the wind.
- 5. Between the dividing line and the shore, the water of the harbor is comparatively still. The feeble currents are largely controlled by the wind. In quite calm weather there is however, near the waterworks, a slow current up the lake. On the whole, the harbor water may be considered to be, in comparison with the lake water, still-water.

These results explained the unexpected character of the water over the crib (B). The point is on the dividing line between the dead water of the harbor and the water moving down the lake. The water at this point is not so clear as that nearer shore, and has nothing to recommend it above the present city supply, (20 feet off shore).

Professor Goodwin has also furnished me the figures of the chemical analysis of our city water at various dates including some series made late in April, 1903, when the epidemic was practically at an end. These figures will be found in Table III.