

In the present instance, the first objection disappears with the unlimited abundance of the fountain head ; the second need not exist, inasmuch as the topography of the route admits of the whole line being " in excavation," avoiding embankments and their attendant risques.

With respect to the third—wash and surface drainage may be prevented by a thorough system of side ditches, and off-take drains, and by " sodding" the inner slope of the banks above water. By lining the sides and bottom of the Aqueduct with stone and gravel, no impurities will be absorbed—so that there only remains the single objection of exposure to impurities thrown in. The great volume of water is the best security against this remote contingency. Under any circumstances the Reservoirs and entrance to the Aqueduct cannot be covered, so that inspection and legislative aid must be relied on to protect the works from malicious injury.

On the other hand—the advantages of the open canal are :—

- 1st, It is much cheaper than any other conduit of the same capacity.
- 2nd, Water flowing freely in open channels, exposed to light and air, not only frees itself from impurities it may hold in suspension—but diminishes its hardness.
- 3rd, In this climate, for one-third of the year at least, an open aqueduct will be protected by a covering of ice, rendering it as secure as a covered one.
- 4th, It is susceptible of future enlargement.

From the position of this Aqueduct, and the highly favorable nature of the ground, it may be considered a practical extension of a branch of the St. Lawrence to the borders of the City at Gregory's,—where the water can be delivered in nearly as pure a state as when it leaves the river. The fears of injury to the water are