

It will be seen from the table, that the waters of the St. Lawrence are already mingled with the Ottawa at Lachine, for the water at the head of the Lachine Rapids near the shore of the Island of Montreal, has the composition of a mixture of two parts of St. Lawrence with one of Ottawa water. In that from the City Water Works the admixture of St. Lawrence water is much greater, the proportions being about five to one. It must be remembered that the volume of the Ottawa varies greatly with the season, the water being lowest in February and September. In June and October when its volume is very much increased, the proportion of St. Lawrence water near the shore of the Island, will doubtless be much less than at the time when these specimens were taken.

It is important to remark that the amount of chlorids contained in the water at present supplied to the City, is greater than in the St. Lawrence water. Another sample drawn from a hydrant on the 11th of April, gave .284 of chlorine, and a partial analysis of the water from the same source, made in the Spring of 1850, showed a similar excess of chlorine. The results calculated for 100,000 parts were :—

Carbonate of Lime,.....	7.550
Carbonate of Magnesia,.....	2.044
Chlorine,.....	.297
Sulphuric Acid,.....	.447

This constant excess of chlorids shews that there is a local source of impurity, probably the drainage of the City, which always affords a large supply of such salts.

The whole amount of solid matter, left after heating to redness the residue from the evaporation of the different waters, will enable us to make some comparisons with the water supplied to other cities. I give the results obtained by Prof. Silliman, with the Croton Water of New York, the Schuylkill of Philadelphia, the Cochituate water of Boston, and that from the River St. Charles above Indian Lorette, at the point where it is taken for the supply of Quebec.

The results are calculated so as to shew the amount of fixed residue in an imperial gallon of ten pounds avoirdupois, or 70,000 grains :

Ottawa, Ste. Anne,.....	3.73 grains.
St. Lawrence, Cascades.....	10.76 “