PRELIMINARY REPORT.

TO E. ATWATER, ESQUIRE,

Chairman, Water Committee, Corporation of Montreal.

SIR,

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In compliance with your instructions of 15th June last, I have made the necessary Survey for ascertaining the practicability of bringing water from the head of the Lachine Rapids, for the purpose of affording—not only an ample supply for consumption, but also sufficient power to force this supply into the different wards of the City, and into suitable Reservoirs.

My instructions were directed towards this particular plan of supply—but as I have been requested to compare it with other proposed or possible ones, I will first allude to the subject of water supplies in general, and to the particular facilities available to Montreal, for securing an abundance of this invaluable element.

Three modes of water supply are usually open to the Engineer, the selection from which is to be determined by the positions of the city or town to be supplied.

The first is by "Gravitation,"—where water can be obtained at a high level, and be brought into the City in such manner as to supply its highest districts by its gravity alone. This is undoubtedly the best method, where sufficient head and volume of water are attainable at a justifiable outlay.

The second mode is,—by pumping from a river, springs, or wells, into reservoirs of sufficient height,—or without reservoirs, directly into consumption by the aid of stand pipes.