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inty rity of water supplied." Third. "Non-interference with present works or supply." Fourih. "Facility of future enlargement without interfering with works or supply then existing." Fifth. "Econo my." We will now endeavour to show how these advantages are attained.

1st. CERTAINTY OF SUPPLY .--- In the Superintendent's report (1866,) after giving an account of "the difficulties attending the working of the wheels since the beginning," and explaining how, by deepening the mouth of the aqueduct, he got rid of the trouble heretofore caused by "frasil" or "anchor" ice, he goes on to state that " the causes of the present embarrassment in the aqueduct are: 1st. "Low state of water in the St. Lawrence;" 2nd. "Formation of ice over the aqueduct;" and 3rd. "The sinking of this volume of ice, caused by the rise and fall cf water in the St. Lawrence and by the working of the wheels. " Now, as the soffit of the proposed conduit will be lower than the lowest known water leved in the St. Lawrence at the "entrance," and as the efficiency claimed (fifteen million gallons per day) is only its minimum capacity calculated for such lowest water level -a level at which the present works are nearly, if not entirely, useless-it follows then that we need fear no trouble from "low water;" and as all frasil and floating ice will be excluded by the position of the entrance, and the formation of ice and accumulation of snow in the aqueduct itself be effectually prevented by the supeincumbent covering of earth, &c., we think we may safely count on freedom from the other two "causes of embarrassment," and confidently predict that "the supply will be certain and irrespective of winter difficulties."

2nd. PURITY OF WATER.—On this head we think it unnecessary to enter into any elaborate argument to prove the advantages of the plan we propose over the present arrangement. The water obtained from the river, in the first place, being drawn from at least a depth of ten feet below the surface, will be free from the dirt and impurities of all kinds which usually accumulate on the surface, more particularly near shore; and being protected in its course from thence to the pumps from the many sources of impurity and defilement to which water in an open sluggish canal, five miles long, must nccessarily be exposed, it will be delivered in an equally pure condition into the reservoir.