Now, one would suppose, as Capt. Cole evidently supposed, that this proposition of his would have been carried out; but it was not. Mr. Geddes, who was also consulted by the engineers, speaks of this plan, too. He says:

"The lower level leaves the upper, by locking down 17 feet to the surface of Brownell's Bay : said bay being raised 51 feet by a dam at Mille Roches, holding up the water 13 feet above its present surface at that place, thus producing a depth of 10 feet water through the bay.

"The artificial lake thus produced, would afford a fine piece of navigation for three miles, but destroy the valuable water power of Moulinette, and what is more serious, produce, in the canal line to be carried from Mille Roches onward in much of the distance for the first threequarters of a mile, cutting 17 feet deeper than by pursuing the upper

level, beyond which there is 9 feet between the two levels.

"Few localities equal this in the facility of making said dam, or founding a water lock, at the head of Brownell's Bay: a low embankment shuts all the water from the north aside at Sheik's Island, leaving dry land to build the water lock on at the head of Brownell's Bay, and the dam at Mille Roches. This embaukment at the head of Sheik's Island, Mr. Mills values at but \$450; a canal from the head of Brownell's Bay to Mille Roches he estimates at \$103,980.

"The value of three miles of an artificial lake, instead of a canal, would be the set-off against some excess of expense which probably will

be incurred by following the lower level."

## Mr. Floming also reported in the same way. He says:

"On considering the first of these, namely, an entire canal, as now laid down by the engineers mentioned, it appears to me to have been adopted under the impression of avoiding apprehended hazard from ice to any works which might be placed in the river between Brownell's Bay and Mille Roches, for, on the left lank of this branch of the river, the canal route is necessarily very circuitous, and would be expensive to construct from the steepness and the brokenness of the ground, whereon much deep side-cutting with heavy embankments must be made towards the river, for the level of the base of the canal must be from 13 t) 23 feet above the surface of the river, which, in consideration of the magnitude of the canal proposed, becomes the more hazardous in point of stability by being thus supported by new embankments. At the upper side of Mille Roches village, the same route leaves the bank of the river and proceeds about one mile further on the same level to the first lock. On the last part the cutting is very deep, and through a soil of a quality, as indicated by several places here, much disposed to slip, and which may require, I would fear, somewhat more than the estimated expense, although this might be sufficient to accomplish the same quantity of excavation of better ground. The continuation of this route to its debouche into the St. Lawrence presents nothing remarkable but the deterioration of the lands and the town of Cornwall, which it passes through.

"Such being the features of this proposed route of an entire canal, I regard that part of it which extends from Brownell's Bay to Mille Roches as unnecessary and expensive, and which, in my opinion, should be entirely superseded, by adopting the river here in its stead, which

brings me to consider the second route mentioned above. "It now will appear on this route, there would be a great saving in expense by the mere construction of the dam proposed at Kille Roches, instead of forming a canal along the bank of the magnitude proposed. As additional to this dam is only required a stop gate in the entrance here of the canal. It would also be advisable to throw a dam of small height across the stream at a point above the position of the lock at Brownell's Bay, by which the waters from the Long Sault may be