

with an outlet in the neighbourhood of the city of Toronto. The Georgian Bay canal that we propose to-day was then known as the Ottawa canal or the Montreal and Lake Huron waterway.

The Royal Commission which was presided by Sir Hugh Allan, of Montreal, submitted to the Government on the 24th of February, 1871, an extensive report covering about 200 pages. I have read somewhere in a pamphlet that this commission had pronounced against the practicability and commercial utility of the Ottawa and French River route. I hasten to say that this is a deliberate false statement or a reckless declaration made by some one who has never read the report made by that Royal Commission. The Royal Commissioners divide into four classes the several public works and improvements to which their attention has been directed and they recommend an aggregate expenditure of \$19,170,000 for the works of the first class, which are detailed as follows:

- Sault Ste. Marie canal.
- Enlargement of the Welland.
- Improvements on lower Ottawa between Ottawa and Lachine.
- Enlargement of the Chambly canal.
- Deepening of channel between Montreal and Quebec.
- Construction of the Bay Verte canal.
- Enlargement of the St. Lawrence canal.

An expenditure of \$1,800,000 was recommended for improvements on the lower Ottawa included in those works of the first class, and although no expenditure was recommended for the upper Ottawa and the French river, still the enterprise was classed under the title of works of the first class. The report refers to it as follows:

Without classing the upper Ottawa canal among works of the second class, the commissioners resolved that the wide discrepancy between the different engineer's plans and estimates, one being as high as \$12,058,680 and the other \$24,000,600, leaves then in doubt, both as to the proper methods of improvements and their probable cost. The importance of this work to the whole dominion cannot well prospectively be over estimated and the commissioners are of opinion that further examination into the subject is necessary as early as possible, in order that it found advisable, action may be taken with regard to it.

In 1879, a survey was made by Mr. E. P. Bender, engineer, acting in accordance with instructions received from Mr. Sanford Fleming, then engineer in chief of the Canadian Pacific railway. This survey was limited to the French river from lake Huron to lake Nipissing. The report submitted the same year is very favourable, as is evidenced by the following passage:

[Mr. Lamarche.]

There is probably no river which presents so many advantages for canalization as the French river for there are always at least two channels; by damming one the water below the dam would assume a lower level, and works be carried on above which would otherwise have to be done under water; or a lock can be built in a favourable part of the river, and the channel permanently blocked, while the whole discharge passes through the other branch.

Four years before this, an engineer named Ridout had surveyed the harbour of French river on the north shore of Georgian bay, and with the aid of the latter's plans, Mr. Bender, after a careful examination and study of local conditions, was able to report that the outlet of the French river was easy of access, being sheltered from the winds and storms, and offering advantageous terminal facilities.

Another engineer, Mr. Marcus Smith, made a report in 1895. In his study of the question of water supply, he recommends raising lake Nipissing five feet and lowering Trout and Turtle lakes eighteen and seventeen feet respectively and raising lake Talon sixteen feet, so as to obtain a common level for the summit reservoir.

In 1893, Mr. T. C. Clarke, who had made a complete survey in 1860, made a supplementary report taking into consideration the new conditions existing along the route. His report differs from his first one in so far as it recommends locks 300 feet long, 45 feet wide and 14 feet deep and a different summit level, the surface of lake Nipissing being left at its normal level and the three upper lakes being lowered to the level of lake Nipissing.

In 1899, Mr. Henry F. McLeod, engineer, made an exhaustive survey of the summit section, lake Nipissing to lake Talon, and he recommends as summit reservoir lake Nipissing maintained at mean summer level, that is three feet above low water.

The last and most important as well as the most complete and accurate survey was that made by the engineers of the Government, Messrs. Lafleur, St. Laurent, Coutlee and Chapleau. Their report submitted in January, 1909, is so complete in every respect that no further preliminary work is necessary, and that the enterprise can be commenced at once if it is the wish of the Government. In order to gather such an amount of valuable and accurate information as this report contains, eighty-one people have been employed, some of them through the severe cold of winter and far from home in the wilderness, fulfilling their duties of good but poorly paid public