

tween Montreal and Georgian Bay there are 410 miles of navigation. Natural channels are available for 80 per cent. of this distance. To reach the summit level, 659 feet of lockage will be necessary. By the Welland Canal route only 534 feet of lockage are necessary. The Georgian Bay route has also to be compared with the proposed deepening of the Mississippi River as well as with the artificial waterways projected to connect Georgian Bay with Lake Ontario. The proposed deep waterway from Lake Michigan to the Gulf of Mexico would give a route of 1,625 miles. It is true that the estimated cost of a deep waterway by this route does not call for more than \$40,000,000. But there must also be considered the nature of the stream, its tortuous course, which is 60 per cent. longer than the direct distance, and the large amount of silt carried down by the river. These conditions will necessitate a continuous expenditure for dredging which will not be present in the case of the Ottawa River route. In addition, the longer ocean voyage from the mouth of the Mississippi and the higher ocean freight rates prevailing by way of the Gulf of Mexico are disadvantageous to this route. The voyage from Chicago to the Gulf of Mexico is 274 miles shorter than from Chicago to the Straits of Belle Isle by the Ottawa River. From such an Upper-Lake point, however, as Duluth the Ottawa River route is 600 miles shorter. In both cases there must be remembered the disadvantages of the longer ocean voyage from the mouth of the Mississippi.

Brief mention may be made of the two competing Canadian projects. The proposed Huron Ontario Canal from Georgian Bay to Lake Ontario has had almost as long a history as the Georgian Bay Canal project. It is not clear, as was pointed out by the United States Deep Waterways Commission, whether there is a sufficient supply of water at the summit level to feed the locks both ways. The Trent Valley Canal, which is partially constructed, affords a tortuous water connection between Georgian Bay and the eastern end of Lake Ontario by a route which is six times as long as the direct land route. The canal is being constructed as a barge route. From an engineering standpoint it has attracted attention by the construction of two large hydraulic locks, one of which has a lift of sixty-five feet. The lockage by this route is about 500 feet greater than by the Welland Canal.

While the Georgian Bay Canal is feasible from an engineering