

project for the combined development of the St. Lawrence for navigation and power has been repeatedly before a succession of National Advisory Committees and the like.

It has also received the attention of a series of joint Engineering Boards, where the design of the works required has been developed in great detail and to the point that there is no longer any significant question outstanding between the technical representatives of the two countries.

The project as it stands has recently been most completely described by Mr. Chevrier, the Minister of Transport, in a series of addresses to the public in Canada, but because of its far-reaching special importance to the members of this audience I venture to recall to your minds the salient features:

From the Atlantic through the Gulf of the St. Lawrence and up that river to a point near the city of Quebec the greatest ships which ply the oceans of the world have always had open passage during the season of navigation. And from the earliest times the successive governments of Lower and Upper Canada and more particularly the federal government of Canada, since it was established at Confederation, have made it their business to extend and improve these facilities of navigation for ocean shipping. Today the "St. Lawrence Ship Channel" provides safe passage to the harbour of Montreal with a minimum available depth of 32.5 feet at extreme low water and every care is being exercised to ensure that developments continue as may be shown to be desirable by progress in the art and science of inland navigation. In matters of channel width, alignment, freedom from obstructions, lighting, radio aids, harbours, wharfage, storage, loading, repair establishments and in the many other detailed requirements needed for, or to facilitate modern navigation, there is no other waterway in the world which is better provided; and it has been the constant concern of our Department of Transport to maintain this enviable position.

In my description of the St. Lawrence Waterway I pass next to its upper end at Lake Superior, where through Fort William, Port Arthur, Duluth and other great ports there passes a vast tonnage of commodities. The iron ore of Minnesota continues, despite the near exhaustion of the higher grades under the tremendous demand of two world wars and, increasingly, ore of premium quality flows in from the iron ranges in Canada to the west and north; the wood products of the adjacent regions and the grain from the Prairies add their quota in amounts measured in millions of tons. The traffic which each year passes in and out of Lake Superior through the five locks of the St. Mary's River which have been built, side by side and in parallel, to accommodate it represents an amount which exceeds the total combined annual traffic of the Panama, the Suez, the Manchester and the Kiel canals all put together.

This immense traffic is now mostly carried from Lake Superior to Lake Huron, Lake Michigan and thence to Lake Erie through Lake St. Clair and the Detroit River in vessels of a type peculiar to the Great Lakes which have a draft of about 22 feet. These special types of vessels have proved most efficient for lake transport and in cost per ton mile of bulk freight they are far more economical than any ocean-going craft.