States. It includes Lake Superior, Lake Michigan, Lake St. Clair, Lake Erie, Lake Ontario and the St. Lawrence River, together with all the tributary rivers and streams which flow into the Basin, the chief of which are the Ottawa, the Saguenay and the St. Maurice Rivers.

What does the Great Lakes-St. Lawrence Basin consist of? It consists of five steps, which are its chief assets and its chief liabilities; chief assets, because, within the steps, lie tremendous amounts of waterpower awaiting development; chief liabilities, because, in order to circumnavigate these steps, side canals must be built at some cost to the Government.

The Five Steps

The five steps are: 1. St. Mary's Falls, lying between Lake Superior and Lake Huron, where there is a drop of 21 feet; 2. The St. Clair-Detroit Passage joining Lake Huron and Lake Erie, where there is a drop of 8 feet; 3. Niagara River, emptying from Lake Erie into Lake Ontario, with a drop of 326 feet; 4. The Upper St. Lawrence River, from Lake Ontario to Montreal, with a drop of 225 feet; 5. Montreal to the sea, a drop of 20 feet, entirely in Canada. These five steps will, it is estimated develop approximately 9 million horsepower divided as follows: At Niagara, 3,600,000 horsepower; in the International Rapids Section, 2,200,000 horsepower; in the Beauharnois or Soulanges Section, 2,200,000 horsepower; in the Lachine Section, 1,200,000 horsepower. All of this power is Canadian, with the exception of 1,800,000 horsepower at Niagara and 1,100,000 horsepower in the International Rapids Section.

There is no need to labour the economic significance of this white power in an area of Canada where no coal or black power is found.

To what extent have these facilities been developed? From a power point of view 1,000,000 horsepower have been developed at the Sault, 1,800,000 at Niagara, 93,000 at Massena, New York, and over 1,000,000 in the Soulanges Section. Therefore, out of a total potential of 9,000,000 horsepower, barely 3,000,000 have been developed, or about one-third.

For navigation, I have already mentioned the facilities that provide 25-foot channels past the first three steps, from the head of the Great Lakes to Prescott. The fleet of lake vessels using these facilities is said to provide the cheapest transportation in the world, the largest of them carrying over 20,000 tons.

From Montreal to the open gulf, the fifth step, the Federal Government has provided the St. Lawrence Ship Channel. It has been sufficient to make Montreal one of the busiest ocean ports of the world.

But at the fourth step, between Montreal and Prescott, there remains the 14-foot bottleneck. In other words, from Prescott to the head of the Upper Lakes are navigational facilities for 25-foot craft, and from Montreal to the sea are navigation facilities for 35-foot craft, but between the two is the neck of the bottle which should be made to disappear. The largest vessels that can pass the small locks of the present canals can carry less than 3,000 tons. These canals have served Canada well in their time, but their time is now past. They are obsolete, if judged by present day standards of traffic, method of construction and operation.

What new works are proposed with reference to this project? The new works proposed are those outlined at the time of the 1941 agreement. They are a matter of public record, so I need only refer to them here in general terms. However, attention centres chiefly on requirements in the Upper St. Lawrence River, and that for obvious reasons. This part of the river, from Kingston to Montreal, divides naturally into five sections: the Thousand Islands Section; the International Rapids Section;