

intimate relations by interlocking directorates with Canadian companies which could have supplied enormously more power to the Messena plant than would have been required to make up the shortage of output caused by frazil ice. Instead of constructing the proposed dam or submerged weir to prevent the alleged shortage of 10,000 to 15,000 horse-power, it is understood that the required amount of power could have been purchased from the Cedars Rapids or Laurentide or other power-producing company. At the present time there are transmission lines from the Laurentide Company's plant at Grand Mere to Montreal, from Montreal to Cedars Rapids, and from Cedars Rapids to the St. Lawrence River Power Company's plant at Messena, N.Y. The Cedars Rapids Company has six wheel pits completed, but the turbines and dynamos are not yet installed. If completed, this company would have 64,800 horse-power to dispose of, although the Aluminum Company claim that they require only 10,000 to 15,000 horse-power.

Laurentide Could Supply Deficiency

The Laurentide Power Company, Grand Mere, Que., has a present capacity of 120,000 horse-power and a demand of only 75,000 horse-power, having a present available surplus of 45,000 horse-power, or three times the amount required to fill the alleged shortage at the Messena plant. In addition, this company has three wheel pits completed. If the dynamos and turbines were installed, the company would have a surplus power of 105,000 horse-power, or seven times the Aluminum Company's alleged requirements. The pole lines from the Laurentide Company's plant are already constructed, and the only possible new construction required would be a new wire and insulators.

Arthur Davis, of Pittsburg, the president of the Aluminum Company and the St. Lawrence Power Company, is also a director of the Cedars Rapids Power Company and of the Montreal Light, Heat & Power Company. A word from him that there was urgent need of power at Massena for war material production would have secured a supply on the Canadian side, and the Government of Canada would assuredly not have opposed the export of such power temporarily to aid our neighbors and allies. But that remedy for the power shortage would not have meant an extension of the franchise privileges of the St. Lawrence Power Company. What the concession granted by the International Joint Commission involves may be seen from the following statement of an expert in hydraulics to The Globe:

Big Profits for Company

"The St. Lawrence River Power Company's engineer stated that the dam and appurtenant works would cost \$350,000. Assuming that the penstocks, turbines and dynamos for the 114,000 horse-power, made available by these works, cost \$1,500,000, the total cost would be \$1,850,000, or a capital cost of about \$16 per horse-power, as compared with upwards of \$75 per horse-power at that specially favored power site, Niagara Falls. It is a fair assumption that power is as valuable to the Aluminum Company at Massena as at Niagara. If this be correct, and if the St. Lawrence River Company is permitted to keep its dam in the South Sault, it has been presented with a clear gift of about \$6,750,000 plus whatever 114,000 horse-power is worth at Niagara. It is not an unfair assumption that the St. Lawrence Company will make a profit of five cents per pound on its aluminum. On this assumption, the product from this 114,000 horse-power will yield a profit of over \$2,500,000 per annum."

The Globe believes the time has come to make an end of this sort of exploitation of the public domain. The waters of the St. Lawrence are the joint property of the people of the United States and Canada. They should be used at the Long Sault, and at the other great sources of power, for the production of power that will be available at cost to all who need the power in reasonable quantities instead of being put at the disposal of great corporations that take no thought of the power needs of the mass of the people. The Government of Canada cannot control the power policy of the United States, but it can control its own policy. Announcement should be made to the public on both sides of the border, and notice should be given to the authorities at Washington, that immediately after the close of the war the Dominion of Canada proposes to develop or to authorize the development by Provincial Hydro-Electric Commissions of the St. Lawrence water powers as a public enterprise, owned, controlled and operated for the benefit of the people. Let us have a national power policy as well as a national system of transportation. If we are to compete with success in the world's markets we must have both.

ENGINEERING SOCIETY STARTS SEASON

WINNIPEG, September 21st.—The opening meeting for the season of the Manitoba Division of the Engineering Institute of Canada was held in the Engineering Building of the University of Manitoba on Thursday evening, September 19th, with about 35 members present. W. P. Brereton, city engineer of Winnipeg, acted as chairman in the absence of W. A. Duff.

A letter was read from J. C. Holden, of the C.P.R., saying that on account of much absence from the city, he was forced to resign as a member of the executive committee. His resignation was accepted with regret.

M. A. Lyons, of the Provincial Highways Department, presented a report on "Good Roads," arising out of the discussions at the recent Saskatoon convention. (Mr. Lyons' report appears, practically in full, on page 291 of this issue.)

C.N.R. TUNNEL NOW IN USE

FORMAL ceremonies were held last Saturday afternoon to mark the opening of the new \$3,000,000 tunnel which was built at Montreal by the Mount Royal Tunnel and Terminal Co., Limited, a subsidiary of the Canadian Northern Railway. The first passenger train to pass through the tunnel carried a party of engineers and officials representing the Dominion Government and the C.N.R. From the divisional yards at Cartierville to the new modern depot at Dorchester Street, Montreal, the road is electrified. A daily train service between Montreal and Toronto, via Ottawa, will be inaugurated next month. There will be two trains daily each way. Connection from the Dorchester terminal to the water front at Montreal is planned by means of proposed overhead street crossings.

The first concrete ship built at the Barrow shipyards, in England, was successfully launched this week, being the first of the 1,000-ton barges now under construction for the Controller of Merchant Shipbuilding. The Barrow Shipyard did not begin operations until the beginning of 1918. Another 1,100-ton barge was launched last Saturday at the new shipyards at Barnstaple. Like that launched at the Barrow yards, its construction occupied four months. The site of the Barnstaple yards was a marshland last March.