

## SESSIONAL PAPER No. 230

United States and the fourth in Canada by the award, dated the 18th June, 1822, rendered by the commissioners appointed under Article VI of the Treaty of Ghent. On both sides of these islands are the rapids known as the Long Sault, and the international boundary runs along the main channel of the St. Lawrence river north of Croil island and of Long Sault island, and along the channel separating Sheek island from Barnhart island, locally known as the Little river. This latter channel carries however only five per cent of the water of the whole river, while the rest of the water flows south of Barnhart island, so that the main channel of the St. Lawrence river at this point is entirely in United States territory. Between Croil island and Long Sault island is a passage in which there is a small island called Delaney island, the water passage bearing the name of Little Sny and Big Sny, and the current flows north through the Big Sny towards the north channel of the river. Four-fifths of the water of the St. Lawrence river flows north of Long Sault island in the main or north channel, and one-fifth south of Long Sault island in what is known as the South Sault channel, and it is here that the proposed weir is to be built, a short distance to the east of the intake of the power canal of the applicant. This power canal was excavated several years before the Waterways Treaty was made, and runs in southeasterly direction to the power-house at Massena, some three miles from the intake, where it discharges into the Grasse river, which thus forms the tail race, and through this river the diverted water flows easterly to the St. Lawrence river near Cornwall island. On the north side of the St. Lawrence river is the Cornwall canal, the intake of which is at lock 21, north of Long Sault island, and further down stream than the intake of the power canal of the applicant on the south shore. The applicant has a jetty, to the east of the inlet of its power canal, which was built in the South Sault channel under a permit obtained in 1903 from the United States Government, and it is proposed to extend this jetty to Long Sault island by means of the submerged weir. It may be added that the power canal has a depth of thirty feet and the Grasse river below the power-house has been dredged to a depth of sixteen feet.

## PERMITS OBTAINED BY THE APPLICANT FROM THE UNITED STATES GOVERNMENT.

The applicant, it appears, made one application to the Secretary of War of the United States covering three things:—

1. The dredging of the South Sault channel to a width of 150 feet and a depth of 20 feet at Dodges shoal, which is about 4,000 feet above the intake of the power canal;

2. The construction of a removable ice boom supported by permanent stone filled timber cribs between Delaney island and Talcott's point on the south shore of the river at Dodges shoal, with a wing dam extending from the main shore above Talcott's point to the upstream margin of the dredged channel for the purpose of directing the flow of water and ice across for ice diverting channels which will connect deep water with the channel to be dredged;

3. The construction of the submerged weir.

These three things really formed but one proposition, the object of which was to remedy the ice troubles, but the War Department engineers, Mr. Kroonce, says, decided to separate them. Consequently two permits were granted by the Secretary of War, one dated September 10, 1917, covering the dredging of the channel at Dodges shoal and the construction of the ice boom (filed as Exhibit 10), and the other, also dated September 10, 1917, authorizing, subject to the approval of the International Joint Commission, the construction of the submerged weir. A copy of the latter permit was attached to the application by the Commission and another copy was filed at the hearing as Exhibit 7. Subsequently, the applicant having modified its plans as to the construction of the ice boom and the dredging, it obtained from the Secretary of War