Canadian Notices to Mariners.

The Marine Department has issued the following:—

Ontario—Lake Ontario, Toronto Harbor During the past season, the Dominion Public Works Department has dredged the channel between the piers at the eastern entrance to Toronto harbor 200 ft. wide to a depth of 17 ft. below elevation 245.0 or zero of the Toronto Harbor Commissioner's gauge at Queens wharf.

Ontario—Lake Erie, Rondeau Harbor
The hand fog horn maintained on the
outer end of the east breakwater pier
was discontinued Dec. 31, 1919.

Ontario — Lake Huron, Kincardine—During the past season the entrance between the piers and a part of the basin in Kincardine harbor were dredged by the Dominion Public Works Department, to a depth of 14 ft. below the zero of the harbor gauge, which is 578.50 ft. above mean sea level, New York. The channel between the piers is 50 ft. wide from deep water to the inside end of the entrance piers, where the deepened area turns southward for 205 ft. The south end of the dredged area is 50 ft. wide, gradually widening to 90 ft., 108 ft. north. For the next 85 ft. the dredged area is 250 ft. wide, then narrowing gradually to 50 ft. at the inside end of the entrance piers.

British Columbia—Strait of Georgia, Sandheads at entrance to Fraser River—The two red steel conical buoys 10F. and 12F. established in 1919 on the south side of the channel at the entrance to the Fraser River will be discontinued; black buoy 9F. will be re-established on its former position 0.30 mile 66° 30′ (N. 41° 30′ E. mag.) from buoy 7; black can buoy 11F. will be re-established on its former position 0.27 mile 66° 30′ (N. 41° 30′ E. mag.) from buoy 9.

British Columbia— Chatham Sound, Prince Rupert Harbor, Barret Rock—On or about Mar. 1, 1920, when the gas and bell buoy will be withdrawn, and light and fog alarm established on the rock, lat. N. 54° 14′ 32″, long W. 130° 20′ 38″, character, occulting red acetylene light, automatically occulted at short intervals; elevation, 22 ft. Structure, white rectangular reinforced concrete tower, with pointed ends, surmounted by square concrete house with lantern on top; height, 44 ft. Fog alarm, diaphone, operated by air, compressed by electri-

city, controlled from dwelling on shore, gives 2 blasts of 2 secs. duration every 30 secs.; the horn elevated 13 ft. above high water, and will be put in operation immediately; dwelling, rectangular wooden dwelling on shore directly east of beacon by submarine cable.

British Columbia—Strait of Georgia, Fraser River — Frasermouth Outer Range Lights; the fixed oil lights will be replaced by occulting acetylene gas lights, automatically occulted at short intervals; the front light will be changed from red to white, the back light to remain white as formerly; Garry Point Range Lights; front light, on Steveston jetty; fixed red light shown from a cluster of 3 incandescent electric lamps, at elevation of 15 ft; visibility, 6 miles; structure, wooden pole; back light on same pole as Wingdam back range light; fixed white light shown from a cluster of 3 incandescent electric lamps at elevation of 30 ft.; visibility, 10 miles in line of range; the lights in one astern bearing 305° (n. 80 w. mag.) lead up from the intersection of their alignment with that of the northside range lights to black buoy 25F.

British Columbia—Cousins Inlet, David Point—Lighted beacon established on northeast extremity of point; fixed red oil light at elevation of 16 ft.; wooden slatwork pyramid, surmounted by a slatwork ball having the lantern suspended from a bracket on the north face of the beacon; color, white; height, 26 ft.; the light will be maintained by Pacific Mills, Ltd., Ocean Falls.

Prince Edward Island—South Coast, Summerside Harbor—During the past season the Dominion Public Works Department has dredged the approach to, and a berth on the east side of Queens wharf, Summerside; from deep water 550 ft. south from the end of the wharf the approach was cleaned up to a depth of 18 ft.; the berth on the east side of the wharf is 250 ft. long by 80 ft. wide with 18 ft. water at the outer end of the wharf gradually decreasing in depth to 10 ft. at the inner end of the dredged area.

Quebec—Gulf of St. Lawrence, Moisie River—Owing to the back light of the Moisie River range lights having been moved northward, the bearing of the range has been changed to 272° (n. 62° w. mag.); distance between front and back lights 436 ft.

Quebec—River St. Lawrence below Montreal, vicinity of Longue Pointe—The two red gas buoys that were placed to mark a reserved harbor area in the vicinity of Longue Pointe have been discontinued.

British Columbia, Fraser River, North Army, change in character of lighted beacons—Westerly light, on south side of channel at outer entrance to North Arm, occulting white acetylene light, automatically occulted at short intervals, shown from a lens lantern, elevation, 18 ft.; easterly light, on south side of channel at turn in jetty, occulting white acetylene light, automatically occulted at short intervals, shown from a lens lantern, elevation, 18 ft.; both lights are unwatched.

Gulf of St. Lawrence Shipping and Trading Co.'s Services.

Canadian Railway and Marine World for December, 1919, contained some details of this company's projected winter services in the Gulf of St. Lawrence. It is further reported that a winter service down the Gulf as far as Blanc Sablon and Natashquan, on the north shore, and a summer service between Montreal and Gulf and Newfoundland ports will be undertaken. The winter service comprises a regular operation between Murray Bay, at the mouth of the Saguenay River, as far as Natashquan and Blanc Sablon, to which ports navigation has not yet been attempted in winter. The company's s.s. Labrador is, it is said, to be used in the service, which will consist of two trips a month. The company expects to obtain certain privileges from the Dominion Government to enable it to carry on the service to some advantage. Arrangements are reported to have been made for the chartering of a number of steamships for an extended summer service on the same line as carried out in 1919.

The Canadian Deep Waterways Association held a joint meeting with the Great Lakes and St. Lawrence Tidewater Association at Windsor, Ont., Jan. 21, and discussed plans for deepening the St. Lawrence system to allow ocean going vessels to pass to the head of the Great Lakes.

Grain Shipped from Port Arthur and Fort William, Ont.

by The followingt table, prepared by the Board of Grain Commissioners, shows the quantity of each kind of grain shipped cargons result from Port Arthur and Fort William, Ont., during the 1919 navigation season, according to the ports at which the

Canadian ports— Depot Harbour	Wheat	Oats Bush.	Barley Bush.	Flax Bush.	Rye Bush.	Mixed lbs.	Screenings tons.
Midland Montreal	8,498,470—10 427,777—30	3,192,728-13 $2,952,263-04$ $2,084,812-32$ $721,246-31$	147,352—25 2,144,640—46 1,806,603—10 3,761,276—46	375,188—44 	33,474—46 571,074—31 55,548—28 58,907—14	6,376,140 4,590,691 3,307,710	
Port McNicoll	28,181,602—40 14,647,886—00	2,918,282—11 239,489—04	1,848,365—39 1,350,995—09	53,378—42	66,545—03	5,908,408	161—1740
To U. S. ports—	86,486,174—10	12,108,823—27	11,059,234—31	494,567—30	785,550—10	20,182,949	161—1740
Buffalo Chicago Cleveland Duluth - Superior	2,797,037—30 988,285—50	2,468,948—06	1,085,367—24	180,572—42 	29,684—14		1,612—0750 5,986—1810
Total	3,785,323—20	2,468,948—06	1,085,367—24	612,241—35	303,421—52		34,168—0420 41;767—0980
storage cargoes	2,497,823—20	1,150,310—12	261,260—16	100,397—48	2.4		
Grand total	92,769,320—50	15,728,082—11	12,405,862—23	1,207,207—01	1,088,972—06	20,182,949	41,929—0720