H. McLeod, one of the engineers of the Department of Railways and Canals, Ottawa, is in charge of the surveys for the projected extension of the Rideau canal into the Hastings county mining district.

A survey to ascertain and define the International boundary between Detroit and Lake Erie, it is reported, will be made at an early date by the Dominion Department of Marine. The last survey was made in 1822.

The Victoria Island lighthouse near Fort William, which was being removed recently to a more exposed position, was blown over in transit, and smashed beyond repair. It is too late to erect a new lighthouse this year.

Press reports state that the Dominion Government is considering the desirability of constructing a graving dock at Prescott, Ont., large enough to accommodate the biggest steamer navigating Lake Ontario and the St. Lawrence River.

The str. Canada, formerly the Dominion cruiser Druid, owned by the Georgian Bay Park and Summer Resort Co., is again for sale. The steamer has been on the ferry service from Owen Sound, Ont., having a license to carry 550 passengers.

The str. S. N. Parent, belonging to the Great Lakes and St. Lawrence Transportation Co., has been in dry dock at Buffalo, N.Y., undergoing repairs, having recently been aground twice, once in the Lachine and once in the Welland canal.

A large warehouse has been erected on the wharf on the south side of the river at New Liskeard, Ont., for the Lumsden line of steamers. It is expected that a spur line will be run on to this wharf from the Temiskaming and Northern Ontario Ry., now nearly completed to New Liskeard.

The Rondeau Tug Co. has been incorporated under the Ontario Companies' Act with a capital of \$20,000, and offices at Blenheim, ont., to acquire and operate steamships and tugs for fishing purposes. J. W. Post, W. E. Hall and R. N. Thompson, of Blenheim, are the provisional directors.

Tenders were received to Sept. 30 for leasing the Yonge St. wharf, Toronto, for two, three, five or 21 years, or for the purchase of the property. The property has a land frontage of 325 ft., a depth of 1,000 ft., or 250 ft. beyond the end of the existing piers, and a total dock frontage of 2,500 ft.

The Northern Navigation Co.'s str. United Empire has been libelled at the instance of the Calbick Transportation Co., Chicago, Ill., which claims \$14,542 damages to its schooner Oct. 10, 1903. The allegation is that the United Empire was on her wrong side.

The Collingwood Shipbuilding Co. at its annual meeting to be held Oct. 3, will be asked to pass a by-law authorizing the issue of bonds to the total amount of \$300,000. It also stated that Capt. A. Macdougall, of President, now Vice-President, will be elected resident, succeeding the late J. J. Long.

The grain carrying steamer Haddington, recently completed at the yard of the Bertram Engine Works Co., Toronto, made 12 miles an hour on her trial trip Sept. 6. She is chartered to J. T. Matthews for the balance of the season, and will carry grain from Fort William to Montreal. She has a capacity of 80,000 bush.

The effect of the competition in the steam-ship traffic between Toronto and Hamilton has resulted in a large increase of the number of passengers carried. The Hamilton trip will be made by the Macassa as long as the lake is open, and is giving a return fare of 25c., while the Turbinia is making two round trips a day at a return fare of 5oc.

A project has been mooted for the construction of a dam at Long Lake, Ont., over



THE HUDSON'S BAY CO.'S STEAMER MOUNT ROYAL,

on which the Grand Trunk Pacific Ry. Co.'s directors recently inspected various harbors and inlets on the B.C. coast, and went up the Skeena River as far as Hazleton.

the height of land north of Lake Temiskaming, to turn the water so that it will flow into the Ottawa instead of by the Abitibi River into Hudson's Bay. By a series of dams it is proposed to hold the water of the lake and river at various points in wet seasons so as to provide a sufficiency of water for periods when the river level is below the average height.

The work in progress at the canal at Sault Ste. Marie, Ont., was inspected Aug. 30 by C. Schrieber, Deputy Minister of Railways and Canals. The upper entrance to the lock is being deepened so as to allow vessels having a draught of 21 ft. 3 in. to pass, and the lower entrance pier is being extended for 500 ft. Most of the cribbing is in place, and it is expected to have the whole of the cribwork completed by the end of Oct. The cement work will be gone on with in the spring.

There passed through the Canadian canal at Sault Ste. Marie, Ont., during Aug. 518 vessels having a registered tonnage of 588, 867 tons against 644 vessels and 741,778 tons for Aug., 1903, while the actual freight carried in Aug. was 690,713 tons against 879,420 tons for Aug., 1903. The total number of vessels using the Canadian canal for the season was 1,884, and the freight carried was 2,123,588 tons against 2,774 vessels and 3,481,911 tons for same period 1903. During the season the U.S. and the Canadian canals carried 14,842,975 tons of freight against 22,628,146 tons for the season of 1903 to Aug. 31.

J. Dudley, of Hamilton, Ont., has secured a patent for a new method of propelling vessels, by which he claims an extraordinary speed can be obtained. There is a tube in the vessel open at both ends; at one side is a gasoline engine which will pump the water through a feed pipe against the water in the tube. A model boat four feet in length has been tested with satisfactory results, and a 40 ft. boat is now under construction at Hamilton for experimental purposes on the bay. According to the calculations of the inventor a 75 h.p. engine would drive a vessel of the size of the Macassa at 40 miles an hour.

The Turbine Steamship Co. has under consideration the desirability of having another steamer built for its trade, but we are advised that nothing has been definitely decided, and no decision has been reached as to the route upon which it is to be placed. Reports in Hamilton state that the order for a second steamer has been placed at Hebburn-on-Tyne, Eng., and that the keel has already been laid. It is also reported in Hamilton that the new boat will run from Toronto to

Niagara in connection with the Turbinia, while another report says that it will be put on the Toronto-Hamilton run in addition to the Turbinia.

The piston rod of one of the cylinders of the engine on the Niagara Navigation Co.'s str. Chicora broke on the return trip to Toronto, Sept. 25, when the vessel was about 10 miles from port. The cylinder was damaged by the broken rod, and other damage was done to the machinery. After some delay some temporary repairs were effected, and the Chicora reached port under her own steam. The vessel was thoroughly overhauled and some new machinery put in prior to going on her route for the season. The loss is covered by insurance. As the company's other steamers had been laid up for the season the str. City of Owen Sound was put on the route on Sept. 26, on the 27th the Hamilton Steamboat Co.'s Modjeska was chartered, and on the 28th the company's own str. Chippewa, which was being dismantled for the winter, had been got ready to take up the run.

The lake cruiser Vigilant for the Dominion Government was launched at the yard of the Polson Iron Works, Toronto, Sept. 10. vessel was named as she left the ways by Mrs. F. B. Polson. Capt. Spain, R.N., of the fisheries protection service, was present on behalf of the Government. A general description and plan of the steamer was given in our May issue, p. 171. The following additional particulars are of interest: The Vigilant has a commodious deckhouse aft of the foremast, containing chart-room, galley and fan-room, and also a deckhouse abast the mainmast. The bridge is arranged extending from the forward deckhouse to the ship's side. The vessel is schooner-rigged, with jib-headed foresail and mainsail. She has a complete installation of auxiliary gear, including steam steering gear, steam windlass for working the anchors, electric engines and dynamos and powerful searchlight. She is to carry a 30 ft. speed motor-launch, two 25 ft. gigs and one 16 ft. dinghy. Accommodation for the officers and crew, about 40, are located below the maindeck.

The engineers who will make the surveys of the proposed Montreal, Ottawa and Georgian Bay canal from Montreal to North Bay, Ont., have been appointed by the Department of Public Works. The staff comprises: Chief Engineer, E. D. Lafleur; engineer in charge, A. St. Laurent; Divisional Engineers—Montreal section, G. P. Brophy, Ottawa; Ottawa section, E. J. Remboth, Hull, Que.; Nipissing section, J. C. Lapleau, Ottawa. Sectional engineers—E. R. Perrault, North Bay, Ont.;