deepening of the inner harbor, new docks, a 12 ft. driveway along the front, etc. The complete works, estimated to cost about \$19,000,000, will be spread over the next six years.

Canada Steamship Lines s. s. W. Grant Morden, which was launched at Port Arthur, recently, underwent steam trials, May 7, when a speed of 14 miles an hour was attained, without the limits of her machinery being reached. She left the head of the lakes, May 11, with her first cargo of grain, for Port Colborne. In mentioning the matter, the Toronto Globe stated that the vessel was built for the Norcross interests to replace the James Carruthers, lost in the storm on the lakes last November. S. s. W. Grant Morden was built for Canada Steamship Lines, Ltd., of which company, J. W. Norcross is Managing Director. 8. s. James Carruthers was owned by the St. Lawrence and Chicago Steam Navigation Co., with which Mr. Norcross has no connection whatever.

The first lock gate accident of the season occurred in the Welland Canal, Apr. 30, when F. E. Hall and Co.'s s.s. Compton, bound for Ashtabula, Ohio, entered lock 4 at what was considered too great a speed, and forced open the head gates. These returned unevenly, and the pressure of Water from the higher level tore them from their fastenings, and swept them with the vessel and one of the lower gates, out to the lower level. Apart from the damage to the gates, the loss was light. The s.s. John Duncan, owned by Canada Cement Transport, Ltd., while passing through the canal, May 4, rammed the gates of lock 5 and also of lock 10, but as each of these gates are equipped with a safety device, which was described and illustrated in Canadian Railway and Marine World for August, 1912, any damage was averted. This device has been installed on the gates in several of the locks, and it is said that in the near future, all the lock gates will be so equip-

Manitoba, Saskatchewan and Alberta.

The Ross Navigation Co.'s steamboat Minasin struck a sandbar in the Pas River, May 5, and partially capsized.

The assembling of the parts of the Dominion Government dredge at Pas, Man., to which some reference has already been made, was completed early in May, and she was placed in operation.

The Ross Navigation Co.'s steamboat Notin, which has been placed in local service at Pas, Man., was built at Winnipeg in 1913. She is screw driven by engine of 4 n.h.p. Her dimensions are: length 48 ft., breadth 10 ft., depth 9.2 ft.; tonnage, 18 gross, 13 register.

The s.s City of Edmonton, owned in Strathcona, Alta., has been thoroughly overhauled and repaired, and was ready for service at the end of May. She is a paddle wheel vessel with engine of 9 n.h.p. Her dimensions are: length 132 ft., breadth 28.8 ft., depth 4 ft., draught about 20 ins.

The Peace River Transportation Co. is building a passenger vessel for service between Sawridge and Grouard, on Lesser Slave Lake, connecting with the Edmonton, Dunvegan and British Columbia Ry. trains running between Edmonton and Sawridge, and also with a motor bus line to be run from Grouard to Peace River Landing. The whole trip from Edmonton to Peace River Landing will be accomplished in about 1½ days. The vessel will be about 60 ft. long, 11 ft. beam, and under normal conditions will draw about 2 ft. of water. It will be equipped with two 50 h.p. gasoline en-

gines, and the hull will be divided into five water tight compartments. It will be lighted throughout by electricity, and will have a powerful searchlight. There will be accommodation for about 100 passengers and 17 tons of freight.

The Saskatchewan Steamship and Coal Co., which has arranged to operate steamboats on the Saskatchewan River, between Prince Albert, North Battleford and Edmonton, as reported in our last issue, has a capital of \$1,500,000, and office at Minneapolis. Minn. The capital is said to be all provided for, and it is intended to establish branch offices at Pas, Man., Prince Albert and North Battleford, Sask., and Edmonton, Two light draught steamboats are being built at Prince Albert, the machinery being supplied from Chicago. The approximate dimensions of the vessels are,passenger vessel, length 210 ft., beam 45 ft.; tow boat, length 150 ft., beam 35 ft. The officers are: President, E. J. Newell; First Vice President, J. A. Burrichter; Second Vice President, J. Segerstrom; Traffic Manager, R. F. Tompkins; Secretary-Treasurer, C. A. O'Leary.

British Columbia and Pacific Coast Marine.

The C.P.R. steam tug Naramata, built for towing barges on Lake Okanagan, was launched at Okanagan Landing recently.

West Vancouver's ferry steamboat, No. 5, which underwent trial trips at the end of April, was placed in service, on a half hour schedule, May 1.

A number of the U.S. coast steamship companies trading to Alaskan waters have petitioned the U.S. Congress for a resurvey of the inland passage to southeastern Alaska.

The Border Line Transportation Co., which runs a steamboat line between Tacoma, Seattle, Victoria and Vancouver, has added Nanaimo as a port of call. The steamboats Dispatch and Fulton are engaged in the service.

Greer, Coyle & Co. are reported to have purchased the steam tug Czar from the C.P.R. She was built at Victoria in 1897, and is screw driven by engine of 56 n.h.p. Her dimensions are: length 101 ft., breadth 21.5 ft., depth 11 ft.; tonnage, 152 gross 93 register.

The West Vancouver Ferry Co. has appointed the following officers for its vessels for the current year:—Doncella, D. Smith, captain; R. Pyne, chief engineer. Sea Foam, E. Sloane, captain. Sonrisa, P. H. Johnson, captain; R. Rhodes, chief engineer. West Vancouver No. 5, A. A. Findlay, captain; H. L. Thompson, chief engineer.

The Grand Trunk Pacific Coast Steamship Co. has arranged to make calls at Surf Inlet, on the west coast of Princess Royal Island, the s.s. Prince John, from Vancouver on Fridays, calling there when northbound, and the s.s. Prince Albert calling when southbound, every other trip, i.e., monthly, from Prince Rupert to Vancouver.

The Canadian Fish and Cold Storage Co., Prince Rupert, has appointed the following captains and chief engineers, respectively, for its steam vessels for the current season:—Andrew Kelly, Capt. Stinson and R. Blance; Chief Zibassa, Capt. Parsons and R. Hesketh; G. E. Foster, Capt. Gilmour and J. Dick; James Carruthers, Capt. Knightall and H. Troland.

The name of the steamboat William Joliffe, recently acquired from the Department of Marine by the C.P.R., has been changed to Nitinat. She has the official number 91,255, and is registered at Victoria.

The C.P.R. s.s. Princess Victoria, which has been undergoing a thorough overhauling at Esquimalt, returned to service, May 7, replacing the s.s. Princess Charlotte, which was docked for a short overhaul.

The Terminal Navigation Co., Vancouver, is reported to have purchased the s.s. Joan from the C.P.R., and it is said that after extensive alterations she will be renamed and placed in service to Howe Sound and Bowen Island. She was built at Victoria in 1892, and is screw driven by engine of 85 n. h. p. Her dimensions are, length 176.8 ft., breadth 30 ft., depth 11 ft.; tonnage, 821 gross, 544 register.

The construction of the breakwater at Ogden Point, Victoria, is progressing satisfactorily. It will extend into deep water for 2,530 ft., the greatest depth of water being 75 ft. For about 1,400 ft. the bed of the breakwater has been laid from the shore end. This comes to within about 20 ft. of the surface, and it will be capped by large blocks of granite laid by divers. It is anticipated that the work will be completed by the end of 1915. Sir John Jackson, Canada, Ltd., are the contractors.

The extensive alterations to the C. P. R. s. s. Princess Mary, of which some mention has been previously made, cover the lengthening of the vessel by 38 ft. 4 ins. The new portion will contain oil tanks with fuel capacity for 2,000 miles steaming, and will double the second class accommodation, give 24 additional first class staterooms, increase the main deck space for package freight by over 10,000 cubic feet and give accommodation for something over an additional 250 tons of freight, and there will also be much increased space in the hold. It is expected that with the additional length, and the use of oil as fuel, the average speed will be considerably increased. The new dimensions are, length 238.33 ft., breadth 40.15 ft., depth

Canadian Notices to Mariners.

The Department of Marine has issued the following:—

133. Apr. 20. Quebec, River St. Lawrence, Orleans Island, St. Laurent, new lighthouse under construction, intended change in character of light.

134. Apr. 25. Ontario, Lake Ontario, Whitby harbor, dredging, buoys established. 135. Apr. 25. Ontario, Detroit River, Ballard Reef channel, lights exhibited temporarily from Fort Malden range towers.

136. Apr. 25. Ontario, Georgian Bay, Byng Inlet, buoyage, corrections.

137. Apr. 28. Nova Scotia, south coast, off Little Hope Islet, change in color of gas and whistling buoy.

138. Apr. 28. Nova Scotia, south coast, Beaver harbor, Hardwood Island, light to be established.

139. Apr. 28. Nova Scotia, south coast, Isaac harbor, change in color of gas and whistling buoy.

140. Apr. 28. Nova Scotia, south coast, Cape Breaker, change in color of bell buoy. 141. Apr. 30. Ontario-Quebec, Ottawa River, Green shoal, dredging, buoys established, East Templeton, buoys established.

142. Apr. 30. United States of America, Lake Superior, Isle Royale light station, change in character of light.

143. May 2. Nova Scotia, Bay of Fundy, westward of Lurcher Shoal, depth of water, continu

144. May 2. Prince Edward Island, north coast, Cascumpecque harbor, Alberton, change in position of range lights.

145. May 2. New Brunswick, east coast, Miramichi Bay, Preston Beach, range lights improved.