

Government. She was built in 1891, her dimensions being:—Length, 297, ft.; breadth, 41 ft.; depth, 23 ft.; tonnage, 2,003 gross, 1,675 register.

The Dominion Dredging Co., contractors on section 1 of the Welland Ship Canal, commenced dredging operations, Oct. 9, placing a dredge and two tugs about 2,000 ft. from the shore, where the new Lake Ontario entrance will be. Quinlan and Robertson, subcontractors under O'Brien and Doheney, general contractors for section 3, have commenced operations with one steam shovel at Thorold, and have another nearly ready for work.

The name of the s.s. Chili, which has been purchased in Chicago, Ill., and transferred to the Canadian register, has had its name changed to Sarnian. She is a steel vessel, built in 1895, equipped with triple expansion engines with cylinders 20, 33 and 54 ins. diam. by 40 ins. stroke, supplied with steam by two Scotch boilers, each 12½ by 11½ ft., at 170 lbs. Her dimensions are:—Length, 324 ft.; beam, 42 ft.; depth, 27 ft.; tonnage, 2,584 gross, 1,845 register.

Tenders for the removal of a triangular section of the west bank of the Detroit River, in order to widen the approach to the Livingstone Channel, are under consideration of officers of the U.S. War Department at Detroit, Mich. It is stated that the lowest tender is \$1.90 a cub. yd. for material excavated, and 60c a sq. yd. for clearing and sweeping a small portion of the area. The estimated quantity of rock to be removed is quoted as 43,500 cub. yds., widening the approach about 200 ft., the estimated cost of the work being \$200,000.

The United States Lake Survey reports the levels of the Great Lakes in feet above tidewater for September as follows:—Superior, 602.83; Michigan and Huron, 580.93; Erie, 572.76; Ontario, 246.74. As compared with the average September levels for the past ten years, Superior, Michigan and Huron were 0.05 ft. above, Erie 0.33 ft. above and Ontario 0.46 above. It was anticipated that Superior would remain stationary during October and that Michigan and Huron would fall about 0.2 ft., and Erie and Ontario about 0.3 ft.

The St. Lawrence and Chicago Steam Navigation Co. is issuing \$140,000 capital stock, being the balance of an authorized \$1,000,000. It is offered to shareholders of record on Nov. 15 at par in the proportion of one new share to six shares held. The amounts are payable, 25% on Dec. 15 and the balance on Jan. 5, 1914. The amount realized will be used to pay for an additional steamship of the same capacity as the s.s. James Carruthers, and it will be built at Collingwood. The new vessel will probably be ready for service by the fall of 1914.

The Montreal Transportation Co. is acquiring the s.s. Prince Rupert, and the barges Burma and Ceylon from the Calvin Co., Garden Island, Ont., for operation on the Great Lakes and St. Lawrence route. The Prince Rupert was built at Dumbarton, Scotland, in 1908, and is screw driven by engine of 170 n.h.p. Her dimensions are:—Length, 249 ft.; breadth, 43 ft.; depth, 19.5 ft.; tonnage, 1,908 gross, 1,172 register. The Burma was built at Garden Island in 1901, her dimensions being:—Length, 183.6 ft.; breadth, 39.5 ft.; depth, 15 ft.; 885 tons, and the Ceylon was built at Garden Island in 1891, her dimensions being:—Length, 205.4 ft.; breadth, 36.3 ft.; depth, 15.2 ft.; 908 tons.

The Northern Navigation Co. has practically decided to remodel its s.s. Huronic, so far as the cabin accommodation and upper works are concerned, so as to make her equal in accommodation to the com-

pany's steamships Hamonic and Noronic. It is not the intention to have this work carried out during the forthcoming winter, as the time is too short in which to obtain the necessary material, and have the vessel ready for service on the reopening of navigation next spring. The present intention is to carry out the alterations without lengthening the vessel. The matter will be taken up in time next year, and tenders will probably be called for during the summer for carrying out the alterations during the winter of 1914-15.

The attempt to raise the Keystone Transportation Co.'s s.s. Keystorm, which is lying in deep water near Kingston, will be watched with considerable interest, as, owing to the position occupied by the wreck, and being in very deep water, it is considered that, if successful, it will be one of the most remarkable achievements in the use of compressed air in salvage work. All the work will have to be done under water, such as covering hatches, connecting air hose and placing air locks, etc., after which the real work of the air men will commence. They will descend through the air locks to the holds, repair any breaks and reclaim as much of the hold space as possible. Each hold will thus be worked separately until sufficient buoyancy is obtained to float the vessel, when air will be put on all the holds and an attempt made upper works are concerned, so as to make to bring her to the surface. So far, in the use of compressed air for salvage purposes, there has been no failure, but the present case is considered an extreme one, and A. J. Lee, Westmount, Que., who has undertaken the work, is doing it chiefly with the view of developing certain theories of his own in this line.

Manitoba, Saskatchewan and Alberta.

The Winnipeg Harbor Commissioners have drawn up a comprehensive scheme of harbor development, and it is reported that the Dominion Government will be asked to include \$100,000 in the next estimates, for a series of docks on the Red River.

British Columbia and Pacific Coast Marine.

The Dominion Government has awarded the contract for the construction of a wharf in Victoria harbor, at a cost of \$15,124.40, to Macfarlane, Pratt and Hanley.

Navigation on the Yukon River for points north of Dawson, was announced to close for the winter by the sailing of the steamboat Norcott from Dawson, Oct. 17.

The Dominion Government is reported to be having plans prepared for the construction of a dredge for use on the interior waters, at an approximate cost of \$100,000. The dredge is being designed by Cartwright, Matheson and Co., consulting engineers, Vancouver.

Press reports from Vancouver, state that O. L. Dickeson, President, White Pass and Yukon Ry., has announced there, that the company will start a direct passenger steamship service from Vancouver to Skagway, Alaska, using vessels which will be built at a cost of about \$1,000,000 each.

The All Red Line, Ltd., operating the s.s. Selma out of Vancouver, in the coast trade, has transferred its vessel from the British to the Canadian, register. The Selma, which was formerly known as Santa Cecilia, and was built at Glasgow, Scotland, in 1881, is screw driven by engine of 80 n.h.p. Her dimensions are, length 141.8 ft., breadth 22.1 ft., depth 11.6 ft.; tonnage 203 gross, 96 register.

The s.s. Rupert City, owned by the Marine Transportation Co., Vancouver, has been sold to United States purchasers and has been transferred to the U. S. register. She was built at Barrow in Furness, Eng., in 1886, and is screw driven by engines of 300 n.h.p. Her dimensions are, length 310.3 ft., breadth 38.1 ft., depth 25.2 ft.; tonnage, 2,536 gross, 1,640 register.

A press report from Victoria states that the Dominion Public Works Department will shortly award contracts for the equipment of all its tugboats and dredges with the necessary apparatus to enable them to use oil as a fuel. It is stated that there are about 15 of such vessels in operation on the Pacific coast, some of the dredges being very powerful vessels consuming large quantities of coal. It is also stated that reservoirs for oil will be built at Victoria and Vancouver to act as bases of supply.

The C.P.R. s.s. Princess Maquinna has resumed her service to the west coast of Vancouver Island, after having undergone repairs necessitated by grounding while on her recent trip to Alaska ports with members of the Geological Convention. The C.P.R. is asking the Dominion Government to provide better wharfing accommodation at ports on the west coast touched by this vessel, and it is reported that should nothing in the way of improvement there be done, the Princess Maquinna may be withdrawn from the service.

It is reported that the C.P.R. s.s. Beaver, which has been run on the New Westminster-Chilliwack route for several years, has been withdrawn from the service on account of having been operated at a loss since the opening of the British Columbia Electric Ry. line between the points named. She was built at Victoria in 1898, and was originally intended for the Yukon trade during the Klondyke gold rush of that year, but was taken over by the Canadian Pacific Navigation Co., which was later absorbed by the C.P.R.

Sir Thomas Shaughnessy, President, C.P.R., in dealing with the report for the year ended June 30, at the annual meeting, Oct. 1, announced the issuing of £1,000,000 consolidated debenture stock at 4%, in part to pay for the two first class steel two compartment turbine passenger steamships, for the British Columbia Coast Service. These vessels will be about 395 ft. long with beam 54 ft., and moulded depth of 20 ft., and will be propelled by two independent sets of Parsons compound steam geared turbine engines, and will have a tonnage of about 5,000. They have already been dealt with in Canadian Railway and Marine World and are under construction at Dumbarton, Scotland.

British Columbia and United States papers have recently renewed the reports which have been circulated at regular intervals during the past two years, to the effect that the Canadian Northern Ry. has awarded contracts for the construction of two turbine steamships, to be named Duke of Connaught and Duke of Clarence, for a service between Port Mann, Vancouver and San Francisco, with possible calls at Victoria. The older reports are amplified by the statement that the vessels have been actually ordered, and are in fact now being built at Glasgow, Scotland. In connection with these reports, Canadian Railway and Marine World has had occasion frequently to state that no doubt when the C.N.R. line is completed, a coast steamship service will naturally follow, but we are officially advised that no such order as that mentioned has been placed.

As announced in our last issue, under Canadian Notices to Mariners, the Department of Marine has installed a submarine