terial for the establishment of a fog horn station at Battle Island, about 100 miles northeast of Fort William, on the north shore of Lake Superior.

Canada Steamship Lines s.s. J. H. Plummer, with package freight from Montreal to Toronto and Hamilton, went aground at Lake Ontario Park, near Kingston, Sept. 18. She was released Sept. 21, and it is stated that the damage is not serious.

The Canadian Shipbuilding and Dry Dock Co., Ltd., has been incorporated under the Ontario Companies Act, with \$2,000,000 capital and office at Owen Sound, to build and operate dry docks, steam and other vessels, and to carry on a general shipbuilding and navigation business.

W. Sanford Evans, Chairman of the Government commission appointed to gather statistics relating to the proposed Georgian Bay canal scheme, with the Secretary, J. D. Hepburn, was in Montreal Sept. 10, collecting information from the local business interests.

The Department of Marine has placed a lighthouse on the western extremity of the Main Duck Island in Lake Ontario. It is an octagonal tower with sloping sides, of reinforced concrete construction, 80 ft. high from the base to the lantern vane. The light is of 100,000 c.p. of the third dioptric order, flashing every 10 seconds.

It is reported from Fort William that S. Buchanan, Superintendent, Upper Lake Service, C.P.R., has stated that the company has booked sufficient business to warrant the operation of its vessels on Lakes Superior and Huron until well on in December. In previous years the C.P.R. has suspended operations on the Great Lakes generally in November.

The Board of Railway Commissioners has amended its regulations governing the operation by railway companies of draw, swing or bascule bridges over navigable waters, to provide that the signal to be given by a steamboat, to have the swing opened on the Canadian Canal at Sault Ste. Marie, shall be three long, followed by two short, blasts of the whistle.

Following on the resignation of H. Foster Chaffee, Passenger Traffic Manager, Canada Steamship Lines, Ltd., Montreal, John F. Pierce, Assistant General Passenger Agent, has been given jurisdiction over all matters pertaining to passenger business, reporting to W. E. Burke, Assistant Manager. The position of Passenger Traffic Manager has been abolished for the present.

The s. s. Forest City, which has been operating in the neighborhood of Port Arthur and Fort William in a local passenger traffic during the summer, was damaged by colliding with the bank in the Mission River, Sept. 5, and while being tied up was further damaged by striking a sunken pile, both paddle boxes being smashed. She has been docked at Port Arthur, where she will be laid up for the winter, when repairs will be undertaken.

The U. S. Lake Survey reports the levels on the Great Lakes in feet above tidewater for August, as follows,—Superior 602.76; Michigan and Huron 580.64; Erie 572.59; Ontario 246.33. Compared with the average August levels for the past 10 years, Superior was 0.10 ft. above; Michigan 0.42 ft. below; Erie 0.12 ft. below, and Ontario 0.44 ft. below. It was anticipated that during September, Superior would be 0.1 ft. higer; Michigan and Huron 0.2 ft. lower; Erie 0.3 ft. lower and Ontario 0.4 ft. lower.

W. Livingstone, President of the Lake Carriers' Association, Detroit, Mich., has issued a notice to captains of vessels controlled by the association, directing a more rigid observation of the rule adopted by the association last year, requiring vessels to make a definite inside course while westbound, and an outside course when eastbound, in order to avoid the danger of collision in foggy or thick weather. He states that complaints continue to be received that vessels are disregarding this rule, and points out that every master is expected to observe it to the letter in all weathers.

The Temiskaming Navigation Co., Ltd., Haileybury, is being wound up, by an order of the court, with J. Hardy, Toronto, as interim liquidator. The company was incorporated under the Ontario Companies Act, with \$99,000 capital, and head office at Toronto, in 1906. It is reported that of the capital stock, \$50,400 was subscribed and fully paid up. There are at present \$28,000 of overdue debts, and the immediately realizable assets amount to \$7,000. The other assets which cannot be realized at once consist of vessels, real estate and other goods. The company operated the steamboats Jubilee, Meteor, Silverland and Temiskaming.

The Lake Nipissing Shipping and Transportation Co., Ltd., has been incorporated under the Ontario Companies Act, with \$40,-000 capital, and office at Toronto, to own and operate steam and other vessels and to carry on a general navigation business. This company has been formed to take over the four vessels formerly operated by the French River and Nipissing Navigation Co., -Elgin L. Lewis, Highland Belle, Ltd., viz.:-Northern Belle, and Dundonald, full details of which were given in our last issue. President of the company is F. E. Macdonald, the Secretary-Treasurer, H. H. R. Macdonald, and J. W. Bain is a director, all of Toronto.

The s.s. William Henry Mack, which was purchased from the Jenkins Steamship Co., Cleveland, Ohio, by Lake Commerce, Ltd., Toronto, recently, has been transferred to the Canadian register, and renamed Valcartier. She was built at Cleveland in 1903, of steel on the channel system, with steel tank top where no ceilings are fitted, five bulk heads, three of which are watertight, steel boiler house, complete electric lighting plant, and steam pump wells. She is equipped with triple expansion engines with cylinders 20, 33½ and 55 ins. diar. by 40 ins. stroke, 1,170 i.h.p. at 85 r.p.m., supplied

with steam by two Scotch boilers, 12 ft. 10½ ins. diar. by 13 ft. long, with four furnaces, having 108 sq. ft. grate area, 4,229 sq. ft. heating surface, working pressure of 175 lbs. Her dimensions are: length 354 ft., breadth 48 ft., depth 28 ft.; tonnage, 3,781 gross, 2,923 register. The vessel left Fort William with her first load of grain under her new ownership, Sept. 17, for Port McNicoll. J. J. Burke is agent for the company at Fort William.

The ice breaking steamship J. owned by James Whalen, Fort William, left there Sept. 8, for Montreal, from whence, it is reported that she will be taken to Europe. It is stated that she has been acquired by the Russian Government, for \$168,000, and that she is to be utilised in Russian waters in conjunction with the icebreaker Ermack. She was built at Port Arthur in 1913, of steel, with steel boiler house, and the null is divided into five bulkheads, three of which are watertight. There is a complete electric light plant, and she is equipped with triple expansion engines with cylinders 18, 30 and 48 ins. diar. by 40 ins. stroke, 1,000 i. h. p. at 130 r. p. m. Steam is supplied by one Scotch boiler 15 ft. 41/2 ins. diar. by 11 ft. 5 ins. long, 3 furnaces with a grate area of 75 sq. ft., and a total heating surface of 2,941 sq. ft., working pressure 185 lbs. per sq. in. Her dimensions are, length 114 ft., breadth 28 ft., depth 16 ft.; tonnage, 428 gross, 291 register. She has been used as a tug, icebreaker and fire tug in Thunder Bay.

Manitoba, Saskatchewan and Alberta.

The steamboat Mont Cashel, owned by E. D. Moore, Winnipeg, was practically destroyed by fire, at Winnipeg, Sept. 9. It is believed that the fire was the work of incendiaries. It is stated that the vessel will probably be rebuilt in readiness for operation next season. She was built at Winnipeg in 1912, and was screw driven by engine of 60 n. h. p. Her dimensions were, length 147.8 ft., breadth 28.5 ft., depth 11 ft.; tonnage 508 gross, 346 register.

A press report from Winnipeg states that the construction of two large docks on the Red River, at Winnipeg, will be started in the immediate future by the Dominion Gov-

Sault Ste. Marie Canals Traffic.

The following commerce passed through the Sault Ste. Marie Canals during August.

Articles		CANADIAN CANAL	U. S. CANAL	TOTAL
Copper Eastbound Grain "Building stone "	Short tonsBushelsShort tons	676 1,289,632	9,515 997,192	10,191 2,236,824
Flour " Iron ore " Pig iron "	Short tons	347,460 4,251,419	1,000,940 1,641,848	1,348,400 5,893,267
Lumber	M.ft b.m. Short tons	3,557	63,136	66,693
Wheat	BushelsShort tonsNumber	2,189,217 18,479 3,491	1,998,114 20,314 5,507	4,187,331 38,793 8,998
Coal, hard	Short tons Barrels Bushels	54,107 275,440	238,952 1,808,341	293,059 2,083,781
Manufactured iron " Iron ore. "	Short tons	11,477	20,314	31,791
Salt	Barrels Short tons Number	1,302 57,198 4,096	91,475 94,796 5,628	92,777 151,994 9,724
Vessel passages	NumberNet	939	2,049 3,868,652	2,988 6,719,955
Freight—Eastbound	Short tons	4,400,632 398,408 4,799,040	1,959,822 2,176,124 4,135,946	6,260,454 2,574,532 8,934,936