Siberia. Winter navigation has been maintained for many years on the Great Lakes, and at some points on Lake Ontario, icebreaking ferries are operated through 3 or 4 ft. of solid ice for a distance of 50 or 60 miles.

The whole cost of making the St. Lawrence River navigable in winter as far as Quebec, including the construction of two icebreakers, the dredging of the channel to a minimum of 40 ft. and proper equipment of lights and buoys, has been estimated at \$10,000,000, in round figures. The advantages to be derived by keeping the port of Quebec open the year round are so great that the cost of equipment to meet these conditions appears insignificant.

The foregoing paper was read before the American Association of Port Authorities at its annual meeting in Galveston, Texas, recently.

Wreck Commissioner's Enquiries and Judgments.

Stranding of s.s. Germanicus Held at Montreal, Nov. 21, by Capt. L. A. Demers, Dominion Wreck Commissioner, assisted by Capt. C. Lapierre and Commander C. J. Stuart, R.N.R., into the cause of the stranding of the s.s. Germanicus on the northwest reef of Bicquette Island in the River St. Lawrence, Nov. 7, while bound to Montreal from Rotterdam. The s.s. Germanicus was formerly a German steamship and is being operated by Ropener & Co., on behalf of the British Ministry of Shipping.

The court found that the master's evidence showed a marked indifference as to the manner in which the vessel was navigated. At Cape Magdalen the vessel had apparently deviated from her course, and the evidence showed that either the courses by compass were faulty, or were badly steered, or other agencies were at work which were not explained. There were no unusual currents and, though strong winds were experienced, it was said that they did not tend to take the ship from her course. At the time of the stranding, the mate was in charge, it being alleged that the master was intoxicated, and that it was impossible to arouse him. The vessel struck while going at half speed and immediately the order full speed astern, was given, and at that time the master appeared on the bridge. Subsequent effort to release the vessel proved unavailing and further attempts will be made if possible, in the spring.

With regard to the pilot boat, the court expressed the opinion that there was nothing in the weather conditions to prevent her being, if not at the pilotage grounds, at least at her station, which is Father Point and not Bic. It may happen in rough weather that the pilot boat would be forced to take refuge at Bic Island, but the moment the weather moderated her place would be Father Point, and the court was assured that at the time of the stranding, the pilot boat was west of the reef on which the vessel by the weather existing. The court found that the master, Capt.

John Olive, was incapable of administering or exercising the vigilance and care for property with which he was entrusted, through having indulged freely in intoxicating liquors. It cancelled his cer-tificate as master, but recommended that a mate's certificate be granted to him. On account of the extenuating circumstances, the court exercised leniency towards the mate, Thomas Pinkney, and did not deal with his certificate, but severely reprimanded him for not taking into account the state of the tides. The second officer was exonerated from all blame and his certificate returned to him. With regard to the pilot boat being away from her station, the court expressed the opinion that it is a matter which should

be investigated by the Marine Department, and recommended that that course be adopted at the earliest moment possible.

Stranding of s.s. Rio Negro.

Held at Quebec, Que., Dec. 3, 1919, before Capt. L. A. Demers, Dominion Wreck Commissioner, assisted by Capt. Lapierre and Commander C. J. Stuart, C R.N.R., into the stranding of the s.s. Rio Negro near Point des Monts, on the north shore of the Gulf of St. Lawrence, Nov. 17. The master's evidence, which was given in a very straightforward manner, indicated that the ship's courses and dis tances had been made good up to Martin River, and a safe distance was allowed off the land in order to reach Father Point. On leaving the bridge, he left written instructions in the night order book, as well as verbal instructions, that he should be called when Cape Chat was visible, or the distance run. When the distance had been run, the second officer did not carry out the instructions to call the master, and the ship proceeded on the course. He was succeeded by the first officer, who stated that the weather was clear, though his log book shows that a heavy snow storm had come on. Seeing what he considered to be the Matane light ahead of him, he immediately put the ship full speed astern and hard aport, and called the master. The first officer then ordered half speed ahead, and then full speed, with the intention of leaving the light, thought to be the Matane light, astern of him, and getting an offing. This speed was main-tained for about four minutes after the master came on deck, and then full speed astern was ordered, when land became visible, the ship striking at that time.

The court was of opinion that the cause of the casualty was the disobeying of instructions by the second officer, as to calling the master, and he was declared in default for not carrying out implicitly the instructions he had received. The first officer erred in judgment, by being led astray as to the light he saw being the Matane light, and considered that he should have made sure of the nature of the light before acting on his assumption, or to have taken soundings and stopped the ship until his position was verified. He was, therefore, found in default for lack of judgment. The court considered that there was nothing in the master's conduct to give rise to criticism, but, on the contrary, the fact that he released the ship from her precarious position, with such slight damage under the circumstances, is much to his credit. The certificate of the second officer, David Davies, was suspended for three months, and the first officer, Alfred Hodder, had his master's certificate suspended for two months, dating from Dec. 3, 1919. The master and third officer were exonerated from all blame.

Repair of German Ships Interned in South America.

The Montreal Gazette's London, Eng., correspondent sent the following copyrighted cable dispatch, Dec. 4:-The award of the contract to repair enemy ships interned in South American waters to a German instead of a Canadian firm, has been explained in the House of Commons at the instance of Percy Hurd, M. P. Col. Leslie Wilson, Parliamentary Secretary to the Minister of Shipping, under took to defend the contract, but to anyone with inside knowledge of the negotiations, his statement appears very curious. He said: "The ships which could not be properly repaired on the spot, are being towed to German yards to be repaired, the expenses being met by Germany." There would not be a by Germany." year's delay, as suggested would be oc-casioned, but on the contrary, the work should be expedited, as the majority of the ships were built in Germany, and German shipbuilders are in possession of the drawings, patterns, etc., of the dam-aged parts. Even if it had been possible for any British or colonial firm to have undertaken the repairs, it would have cost a large sum, which would have to be financed in cash by the British Government.

Col. Wilson appears to have been badly misinformed. Had the Canadian contract been accepted, the ships would have been accepted, the ships would have been ready six months ago, and their operation would have paid the whole cost of repairs by now. As it is, it will be another six months before they are ready. As for Germany bearing the expense of the repair, the Secretary admitted to your correspondent, provision had to be made for this under the treaty obligation. Meanwhile Canada has been de-prived of the use of the ships.

Proposed Drydocks at Vancouver-In addition to the applications for subsidies for the construction of drydocks at Vancouver, made by J. Coughlan & Sons, Davidson & Cameron, and Wallace Shipyards, Ltd., details of which were given in Canadian Railway & Marine World for Nov., 1919, page 621, we are officially advised that the Raymond Concrete Pile Co. Ltd., Montreal, has applied for a subsidy in connection with its project to build a masonry graving dock of the first class at Burrard Inlet, Vancouver. The Drydock Subsidy Act provides that a drydock of the first class shall cost not more than \$5,500,000, and shall be of the following dimensions, clear length of bottom from caisson groove or hollow-quoin 1,150 ft.; clear width of to head, entrance, 125 ft.; depth of water over sill at high water ordinary spring tides, 38 ft. The subsidy to be paid for such dock is at the rate of $4\frac{1}{2}\%$ per annum of the cost of the work, payable half yearly for not exceeding 35 years from the completion of the work.

The s.s. Frontenac, which, as stated in Canadian Railway and Marine World for Nov., 1919, was bought from U.S. owners by the Davie Shipbuilding and Repairing Co., Lauzon, Que., has been thoroughly overhauled at the company's yard and has been placed on the Canadian register un-der the name of Vaudreuil, in the name of C. A. Barnard, Montreal. She is screw driven, by engine of 136 n.h.p., and her dimensions are: length, 278 ft.; breadth, 40 ft.; depth, 20.3 ft.; tonnage, 2,514 gross, 1,436 registered.