New Steamship for Great Lakes **Transportation Company.**

The Great Lakes Transportation Co., Midland, Ont., of which James Playfair is President and General Manager, has ordered a steel freight steamship from ordered a steel freight steamship Thor Iron Works, Toronto. The keel will be laid during this month, and it is expected that the vessel will be launched early in the spring of 1917. The prin-cipal dimensions will be: length over all 261 ft., length between perpendiculars 251 ft., breadth moulded 431/2 ft., depth moulded 28 ft. 2 in. She will be of the single deck type with poop, bridge and forecastle, steel deckhouse on bridge and chart room on top of deckhouse with navigating bridge. The propelling ma-chinery will be located amidships with coal bunkers in wings. There will be two large cargo holds with two hatches to each hold, one hold extending from the collision bulkhead to the boiler room bulkhead and the other from the engine room bulkhead to the after peak bulkhead, all made water tight and divided by water tight transverse floors into a suitable number of compartments. She will be built to Lloyd's specifications and to highest class of British Lloyd's ocean ser-vice, and equipped in accordance with the requirements of the British Board of requirements of the British Board of Trade. The machinery space will equal as near as possible, 13% of the gross tonnage so as to attain a reduction of

The hull will be built with flat plate keel and bilge keels, the latter to extend for about 100 ft. amidships and to be of plate 9 ins. deep connected to shell with angle bars fitted on short lengths extending from butt to butt of shell, the plate to be continuous. There is to be a straight stem and elliptic stern, and channel frame is to be fitted extending from tank margin to main deck without hold stringers or 'tween deck beams. The propeller frame is to be of wrought iron or cast steel with sufficient bearing in boss for propeller tube, and the rudder post will extend to the main deck and be attached plates. The rudder will be of the single plate type of wrought iron or cast steel, with arms alternately on the port and starboard sides. The hull will be divided into four water tight compartments, and a water tight sliding door will be fitted to the engine room bulkhead 36 ins. high

by 21 ins. wide, The propelling machinery will consist of triple expansion engine with surface condenser, built in type, with three cylinders each working on a separate crank at an angle of 120 degrees. The cylinders to be 20, 33, and 54 in. diar. with a common stroke of 40 in., with an average h.p. of 1,200 and a maximum of 1,300. Steam be supplied by two Scotch boilers with return tubes, at a working pressure of 100 lbs. inside diar. by 11 ft. long with inter-14½ ft. changeable furnaces and heating surface of 5,250 sq. ft., with grate surface of 126 sq. ft., and equipped for natural draught. The machinery is being built by the Left with the second secon draught. The machinery is being the by the John Inglis Co., Ltd., Toronto. The electric transition will consist of one electrical installation will consist of one 74_2 k.w. generator and complete lighting system, the sidelights being arranged for electric as well as oil light. In addition to the propelling machinery, there will be a complete system of pumps, capstans and the usual sundries, as well as all life saving apparatus and boats in ac-cordance with the Dominion Government inspection rules.

The Loss of the Tug Frank C. **Barnes.**

An investigation into the loss of Canada Steamship Lines' tug, Frank C. Barnes, Nov. 2, 1915, in the neighbor-hood of Point Peter, Lake Ontario, when all hands were lost, was held at Toronto, July 5. The investigation was held at the request of a sister of the late engineer, on the ground that the vessel was unseaworthy when she left Port Colborne. The owners were represented by Francis King, M.A., Counsel for the Dominion Marine Association, and the en-quiry was conducted by Capt. L. A. Demers, Dominion Wreck Commissioner, assisted by Capts. J. B. Foote and James McMaugh, as nautical assessors.

H. W. Cowan, Operating Manager, Canada Steamship Lines, stated that the equipment and general operations of vessels came under his supervision. In May, 1915, the Frank C. Barnes was purchased as an aid to other tugs for harbor work; but not needing the vessel for that season she was taken from Port Arthur to Port Colborne and tied to a dock until late in October, when Capt. Herbert LaRush, one of the most efficient masters in the company's service, was ordered to take her to Sorel, Que., where it was intended that she should undergo a thorough over-The instructions issued to his hauling. representative at Port Colborne and to the master, were that the vessel was to be taken to Sorel, leaving the master absolutely free in choosing the date of departure, when weather conditions were favorable, and that there was no hurry in reaching Sorel. The company made it a point to leave these questions to the master who is the only man who should know when and how the vessel should be The general order to fit the vessailed. sel, which was issued to Capt. LaRush, included the clearing of the vessel at the customs house. With regard to the fact that the boat had not been officially inspected for two years, he stated that he was absolutely ignorant of that particular, as this was left to the master and the collector of customs. He assumed that when the tug was bought she carried the certificate of inspection, and that it was the master's duty to enquire, as his orders were to fit the vessel for the jour-Other evidence gave details of times nev at which the tug had been met and passed by other vessels, and also particulars of the weather conditions at the time, and none of it indicated that the tug was unseaworthy. The person at whose request the investigation was held, did not appear in person, and no witnesses were brought forward to substantiate her suppositions, or the rumors circulated. The court's judgment is summarized as fol-

lows: Notwithstanding the fact that the tug was old, and in need of repairs to her hull, there is nothing to show that Can-ada Steamship Lines, through its repre-sentatives, is in default for neglecting to take precautions to ensure the safety of the crew. The master was an able, intelligent, competent man, and in taking command of the tug to take her to Sorel he was left free to use his own judgment in navigating her. Since he left without remonstrating it shows that he did not apprehend any disaster through her possible unseaworthiness. In the absence of evidence on the crew's side, the court accepts the statements of the company's representatives, that the master requisi-tioned for articles needed for the trip, which were delivered without question.

As to the equipment and life saving appliances, it is said that there were at least one circular buoy and several life belts, one of which was found on the beach not far from the place where the engineer's body was recovered. There was also a metal life boat for which two oars were supplied before leaving Port As there is no law governing Colborne. the inspection of hulls of tug boats, the court cannot examine any official record, but must accept the statement given that the vessel needed repairs. While in dock from May to November she was not leaking to any extent, requiring only a little pumping once daily. On the day of the departure the weather appears to have been anything but threatening, but subsequently a fresh breeez sprang up from the westward, which increased in intensity, and the records show that on the morning the tug disappeared the wind had a velocity of 31 miles an hour, causing a heavy sea which forced the s.s. Seguin to seek shelter.

A personal log found on the body of the Capt. LaRush was produced, and court failed to note any entry indicating doubts or apprehension on his part. The company, in verbally notifying the mas-ter to take his own time, and otherwise giving him a free hand as to the manner in which he was to take the tug to Sorel, relieved itself of any blame for this de-plorable casualty. With regard to the plorable casualty. With regard to the state of the boilers, though the court has on its file a memo to the effect that no inspection of the boilers had been made for the last two years-which in itself is a violation of the statutes-this cannot be accepted as a factor in bringing about this disaster, for the following reason, that the chief engineer held a first class Board of Trade certificate as engineer, and when joining the tug, if anything defective had been found with the boilers or machinery, he would naturally have requisitioned for repairs; but no request that nature appears to have been of made, other than a requisition for oils, packing, and the usual engine room ne-

cessaries for every voyage. Therefore, analysing all the facts and reports which have been submitted, and in view of the weather conditions existing that morning, when larger vessels had to seek shelter, the court cannot arrive at any other conclusion than that either one of two causes could have brought about this disaster, either the tug shipped a sea over the stern, or she broached to, and while in the trough of the sea, capsized. These are the only two theories the court can advance. Consequently in view of such conclusion it holds both the owners of the tug, her master, Captain LaRush, and her engi-neer, A. McG. Cummings, blameless, and finds that this disaster can be attributed to unforseen and unavoidable circumstances, in fact, to an act of God.

The court expresses its sincere sym-pathy with the relatives of those who unfortunately lost their lives on this vessel.

Among the Express Companies.

R. W. Burnham has been appointed acting agent, Canadian Northern Ex. Co.. Brockville, Ont., vice A. F. Schussler.

The Canadian Northern Ex. Co. has opened offices at Huberdeau, Montfort, Morin Heights, Perthuis, St. Sauveur and 16 Island, Que.; Beachburg, Ont., and Al-liance and Sangudo, Alta. The Canadian Ex. Co. has opened of-

fices at Juneau, Ketchikan and Skagway,