

ice belt is fitted, 10 ft. deep, 1½ in. thick at the stem and 1 in. at the stern. Forward in the bows and from the bottom of the ice belt to the keel plate, the plating is for a considerable distance aft 1½ in. and 1 in. thick respectively.

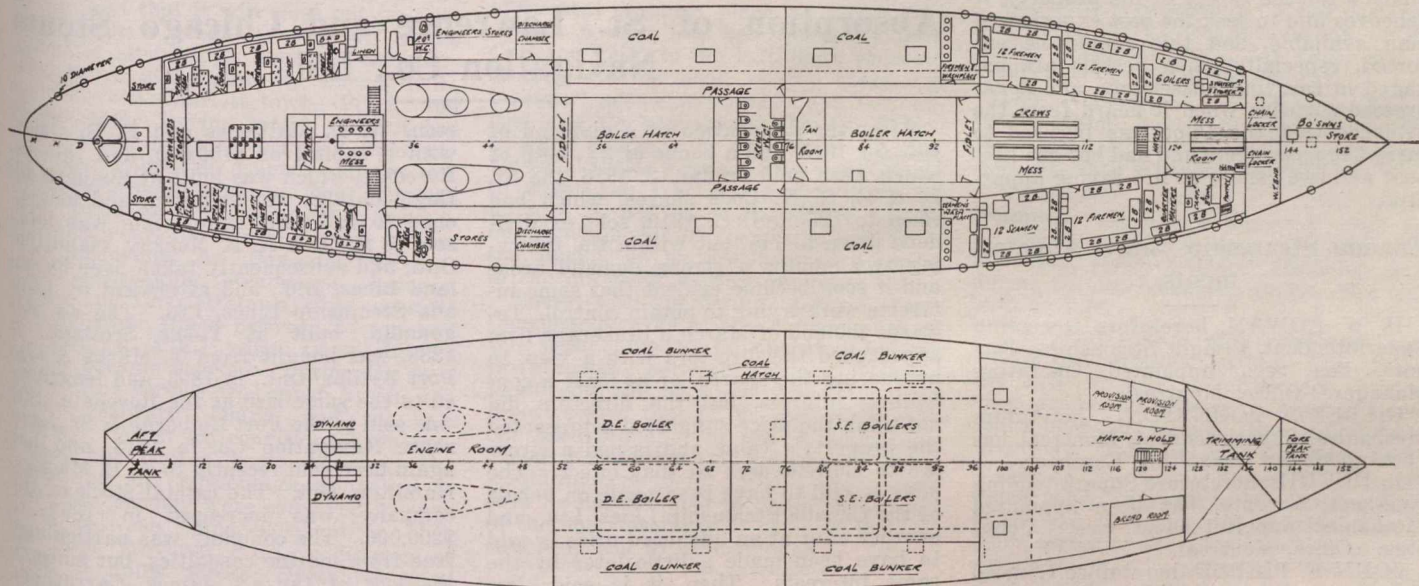
The main propelling machinery consists

The lifesaving appliances are in accordance with the latest rules of the Canadian Steamboat Inspection Act, and include four lifeboats and one cutter.

The deck machinery consists of powerful steam steering gear aft, controlled from the bridge by telemotor, and fitted

Loss of the s.s. Pilot Investigated.

An investigation was held at Quebec, recently, by Capt L. A. Demers, Dominion Wreck Commissioner, assisted by Capt. C. Koenig and L. R. Demers, as nautical assessors, into the causes of the loss of the

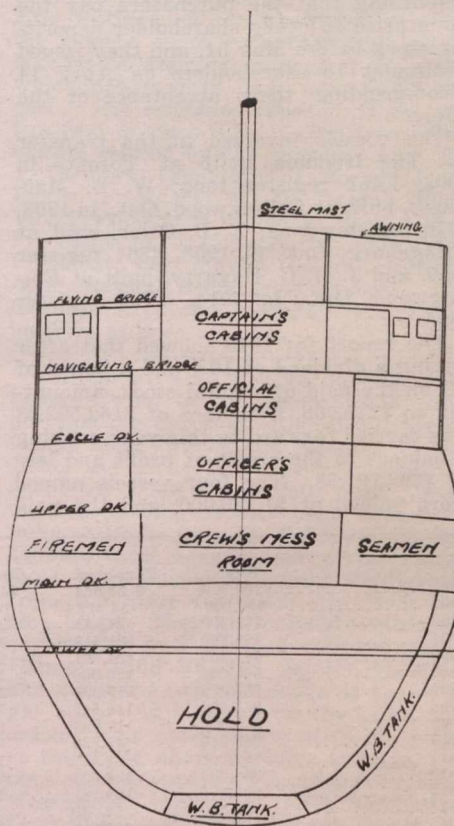


Icebreaking Steamship. Main and Lower Decks.

of twin screw, triple expansion, surface condensing engines, with cylinders 28, 46 and 75 in. diam., by 48 in. stroke, capable of developing 8,000 collective i.h.p., when running at 100 r.p.m. The shafting is made stronger than actual requirements, to withstand the shock, should the propellers strike solid ice, and the propellers themselves are especially strong, being of nickel steel. Independent air, feed and bilge pumps of extra large capacity are provided and the engine room auxiliary equipment is very complete. Steam is supplied to all machinery by two double ended and four single ended boilers of the return tubular type, having a grate area of about 560 sq. ft., and delivering steam at 180 lb. pressure, working under forced draught. All the boilers will supply steam to the main engines, and connections for the auxiliary steam main are also led from three of the single ended boilers. Ash ejectors and steam ash hoists are provided in the various stokeholds.

Accommodation on the main deck is provided for the engineers and stewards, etc., while forward on the same deck are the quarters for the crew and petty officers. On the upper deck at the forward end of the casing are the officers' quarters and mess room. The two galleys are located on this deck in the casing, and communicate with all messing quarters by dumb waiters. In the forecabin are two houses for cold storage with cook's day stores alongside. The official accommodation is located on the forecabin deck, and consists of two official cabins, pantry, bath and w.c., and combined dining saloon and chart room. The wireless telegraph cabin and operator's room are on the boat deck aft, and the captain's cabin and wheel house are on the navigating bridge. Complete hot and cold fresh water, sanitary and steam heating systems are fitted throughout the vessel, and also electric light. A searchlight of 25,000 candle power is also provided and fitted on the fore side of the foremast. Electric current is supplied by two direct current compound dynamos direct driven by high speed enclosed compound engines.

with hand gear at the engine, a windlass, two capstans and boat and coal hoists. Special arrangements have been made for coaling and mooring equipment.



Icebreaking Steamship. Section in Way of Deck Houses, Frame III, looking forward.

Universal Transportation Co., Ltd., has been incorporated under the Dominion Companies Act with \$100,000 authorized capital and office at Toronto, to own and operate steam and other vessels, docks, wharves and other transportation facilities, and to carry on a general transportation business for passengers and merchandise.

Quebec & Levis Ferry Co.'s s.s. Pilot, Jan. 18, on Red Island in the River St. Lawrence, when en route from Riviere du Loup to Saguenay. The master, A. Deschenes, gave evidence that his log was lost and that he encountered much ice, but that the weather was clear. After steering a tortuous course to avoid ice floes, he met with a large field of ice extending some 200 to 300 ft. on his port side, and he chose what appeared to be the narrowest part to enter with the idea of breaking a passage. The ice appeared to be about an inch above the surface, thus indicating a depth of about 11 ins. He entered at full speed to two-thirds of the vessel's length when she stopped. He then tried to work out of the ice, but without success, the vessel being wedged in. In the meantime the tide was ebbing at about 6 miles an hour, and he realized that the vessel was being brought on to Red Island, and when she grounded there, a boat was lowered and all hands landed, as nothing could be done to save the vessel after she grounded.

The court finds that the master showed lack of judgment in entering the ice floe where he did and failing to take into consideration the strength of the ebb and his distance from Red Island, and it cannot conceive why the vessel could not extricate herself from the ice if the conditions were as stated. While the court only charges the master with an error of judgment, it deprecates the system whereby a man holding a minor inland water certificate only, is entrusted with such a responsible position to navigate the St. Lawrence during the winter, a post which requires knowledge acquired by experience only, and it claims that his experience was not sufficient for the position and had there been loss of life, its remarks would have been more severe. The master cannot be held at fault if the owner chooses to engage him, but the master, A. Deschenes, was reprimanded and cautioned to exercise better judgment in future, and the court considers it would have been preferable for him to have waited a more fitting opportunity to enter the ice, and that the mate had not suffi-