

"As indicated in the drawings, the hollow shafts furnish a means of communication between the stationary hulls and the pilot houses and thence outside the vessel when in dock. An entrance door is also provided in each stationary hull...

"A series of flanges run from end to end of the hull so that it will take the necessary grip of the water when revolved by the action of the machinery... This rolling action admits of a high rate of speed being given to the hull with a comparatively small expenditure of power.

"If it is desired to turn the vessel to starboard, the windlass in the starboard pilot house is set in motion and the drag caused to assume a more vertical position by means of the chain. The drag then takes a strong grip of the water, and that end of the vessel is retarded so as to cause it to slowly swing to starboard. If it be desired to swing to port, the port drag is operated. If it be desired to stop the vessel without reversing the engines, both drags are put in operation at once.

"To provide against the remote contingency of a breakdown occurring in the bearings, it may be preferable to locate tracks around the inside of the hull, with which rollers on shoes on the stationary hulls may engage if the breakage allows the hulls to drop.

"The points of construction of the device which is claimed as being of particular importance are the double skinned cylindrical hull, of which the inner skin or cylinder is of such diameter that its lower side is raised sufficiently high above the surface of the water to keep its interior dry in all ordinary weather; (as the draft of water is only about ten or eleven feet, a vessel with dimensions such as described would have about twenty-five feet of freeboard).

"Second, in the use of drag rudders at each end of the hull. Third, in the use of the hollow axles rigidly connected to the inner stationary hulls so as to afford ready access to the pilot houses outside the vessel. Fourth, in the direct application of the power to a central shaft and thence to the outer hull. Fifth, in the construction of the hull in two sections connected together by truss work so as to leave an opening for the admission of air and light, and for the emission of smoke (although the hull might also be made without this central division).

"Telephone and signal communication will, of course, be provided between all parts of the vessel."

These plans were for a vessel of such a size that she could not have operated in narrow channels or in most ports, and she must have been intended for service on salt water. Mr. Knapp, however, scaled down his dreams and enlisted the assistance of marine architect W. E. Redway, and they had the prototype of Knapp's rolling boat built by the Polson shipyard at Toronto. One of the bankrollers of the scheme was William Leonard Hunt, otherwise known as Guillermo Antonio Farini, of Port Hope, Ontario, who was an aerialist, adventurer, and investor in peculiar inventions, and who eventually died at Port Hope in January of 1929 at the age of 91. Farini himself obtained a patent in 1906 for the construction of a tubular boat with a single hull, but it was not a boat designed to roll sideways.

In any event, the rolling boat was constructed by the Polson Iron Works Company at its yard on the old (unextended) Toronto waterfront, located south of The Esplanade and between the foot of Sherbourne and Frederick Streets. As described by "The Canadian Engineer" while it was under construction during the summer of 1897, the ROLLER BOAT was 110 feet long and 22 feet in diameter, with the inner cylinder having an outside diameter of about twelve feet.

"The engine and platform or cabin for passengers will be placed inside this