## THE ROLLER BOAT

The 1997 lake navigation season brought with it the one hundredth anniversary of the appearance on Toronto Bay of one of the most unusual vessels ever to have been seen there. Indeed, there is not much doubt that Frederick Knapp's ROLLER BOAT was the most unusual vessel ever seen anywhere on the Great Lakes. She was built right here on our own waterfront, but although intended to revolutionize navigation, she was such a remarkable failure that she was nicknamed "Knapp's Folly" by contemporary observers and writers.

We did a small write-up on the ROLLER BOAT back in Volume IV, No. 2, our issue of November, 1971. That little piece, however, was far too short and did not really say much of substance about this enigmatic aberration of marine architecture. We have been working on a special feature to appear in the hundredth anniversary year, and we have just made it in under the wire. The story of this strange craft is, however, not something that can be finished in one issue, and so we will continue with the story of the ROLLER BOAT in January.

The "father" of the ROLLER BOAT (as the craft came to be known and as we shall call her, although she never was documented officially), was Frederick Augustus Knapp, a lawyer and inventor of note, who was born at Prescott, Ontario, on February 4th, 1854. He was a son of Van Rensselaer Knapp and Amelia Spencer, and was a member of one of Prescott's oldest families. He graduated from McGill University, Montreal, in 1877, and practised law in Montreal for a number of years before returning to carry on a law practise in his home town. Frederick Knapp was an inventor at heart and spent many years, particularly during his retirement from the law, with his experiments and inventions. Predeceased by his wife, the former Eleanor Lydia Blackie, who passed on in 1936, Frederick Knapp died at his home, "The Manor" at Prescott, on Monday, September 14, 1942, at the age of 88. He was buried in the Blue Church Cemetery on Highway 2, west of Prescott, and was survived by five of his six children.

Some time before Frederick Augustus Knapp got the idea to build his rolling boat, a Frenchman by the name of Bazin had a similar idea, and "The Canadian Engineer" in 1897 reported that "the principle of the roller boat is not by any means new". The publication went on to state that there were important differences between Knapp's boat, and others (like Bazin's) that had gone before and had proven to be failures. "That invented by Bazin... has been tried, and instead of making 30 knots per hour, as it was to do, it only made six or seven. In the first type tried in French waters, the engines were not powerful enough; then new engines were put in of three times the power, but the increased weight and force submerged the rollers so that instead of making 40 turns a minute, they only made 10, and they threw up such quantities of water behind that each acted like a brake. Mr. Knapp's boat, which is now being completed at Polson's shipyard in Toronto, is quite different from Bazin's."

Confused? So were most people who read press reports about the building of the rolling boat, so perhaps we should examine the patent application dated February 26, 1897, filed with the Department of Agriculture, Patent Branch, by F. A. Knapp on March 15, 1897, and endorsed with the notation "Patent May Issue, April 6, 1897, W. J. Lynch for Deputy Com. of Pat." Patent number 55620 was dated April 13, 1897.

We will not go through the entire description of the proposed craft as contained in Knapp's patent application, but visiting part of it may enlighten readers as to the workings of the rolling boat. We have deleted most references to points on the design drawings, as they would mean nothing to our readers without the full diagrams in front of them, except where necessary to maintain the structure of the narrative.