L. BROWN.

Buoyant Propelling-Wheels for Vessels.

No. 196,136. Patented Oct. 16, 1877.

Fig. 1.

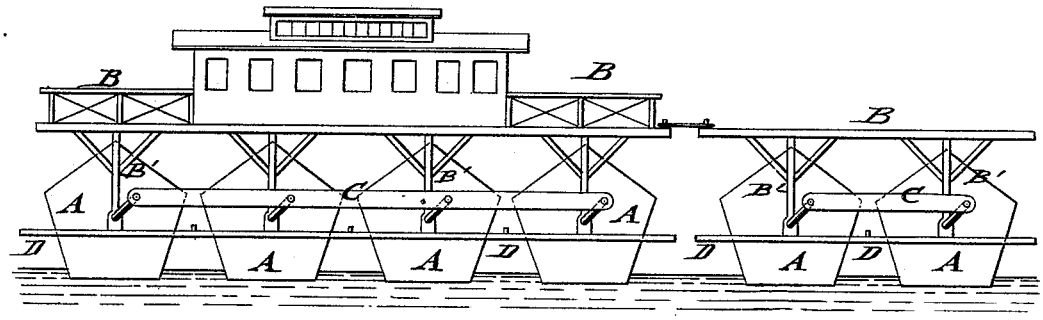
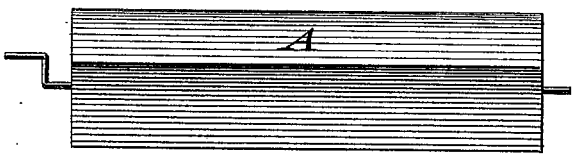


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LAURENCE BROWN, OF CHATHAM, NEW BRUNSWICK, CANADA.

IMPROVEMENT IN BUOYANT PROPELLING-WHEELS FOR VESSELS.

Specification forming part of Letters Patent No. **196,136,** dated October 16, 1877; application filed July 30, 1877.

To all whom it may concern:

Be it known that I, LAURENCE BROWN, of Chatham, in the Province of New Brunswick and Dominion of Canada, have invented a new and Improved Marine Locomotive, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved marine locomotive, and Fig. 2 is a detail side view of one of the air-tight revolving drums.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide a new system of vessels and mode of propelling them, to be used for canal and inland navigation, the vessel being easily and speedily moved, and capable of traversing very shallow waters, as it requires but little depth; and the invention consists of a vessel constructed of air-tight revolving drums that support the superstructure on a suitable frame on, or hung to, the axles.

By referring to the drawings, A A are a number of air-tight drums that support the superstructure B above the drums, being made with three, four, five, or more sides. The drums A have fixed crank-axles, and are connected by crank-rods C, by which they are jointly revolved, the crank-rods being set in motion by a steam or other motor of the required power, supported on the superstructure B of the vessel. The superstructure B is placed on upright standards B′, which extend above the drums, and are braced and stiffened off in suitable manner to form a rigid support for the platform, cabins, saloon, engine-room, and other spaces thereon.

The fixed axles of the drums turn in bearings of the standards B′, which are also connected below the axles by longitudinal and lateral pieces D that form a rigid base-frame for the drums and superstructure. The revolving of the drums produces the propulsion of the entire structure, on the principle of an air-tight float or box, which, when upset or turned, will change position and move over to the side toward which it falls.

When in use one of my vessels may be the driving vessel or locomotive, the same requiring a suitable number of air-tight drums, while one or more cars, with a greater or less number of drums, may be coupled onto the locomotive, representing thus a marine train. If desired, the locomotive may be made large enough to provide for all the passengers, freight, and other space, and has to be arranged with the required steering apparatus, being, on account of its small depth, specially adapted for shallow waters, canals, and other inland navigation.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of rotary polygonal drums A, connected by cranks and crank-rods, the superstructure B, standards B′, and laterals D, as and for the purpose specified.

LAURENCE BROWN.

Witnesses:

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