W. S. MYERS.

HORIZONTAL SCREW PROPELLER.

No. 184,102. Patented Nov. 7, 1876.

Fig. 1.

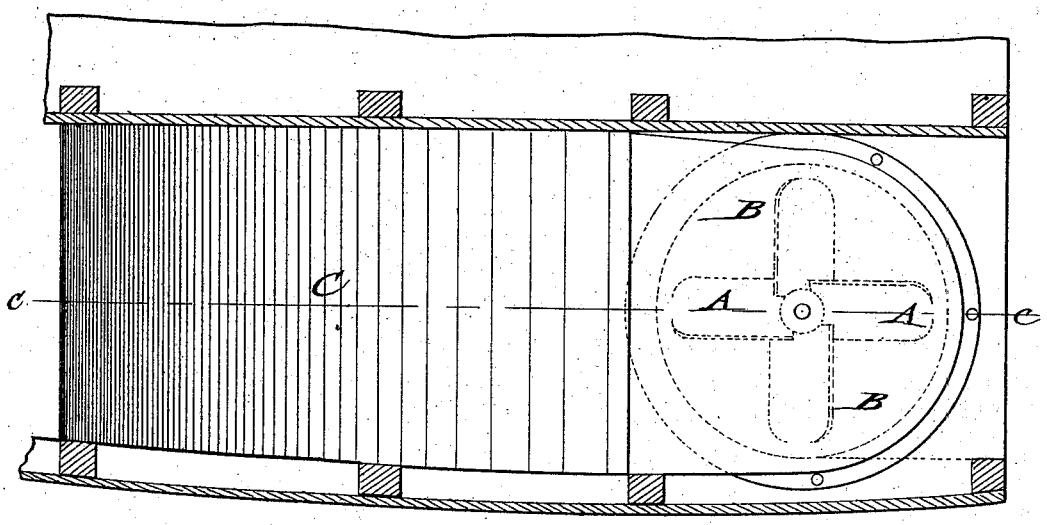
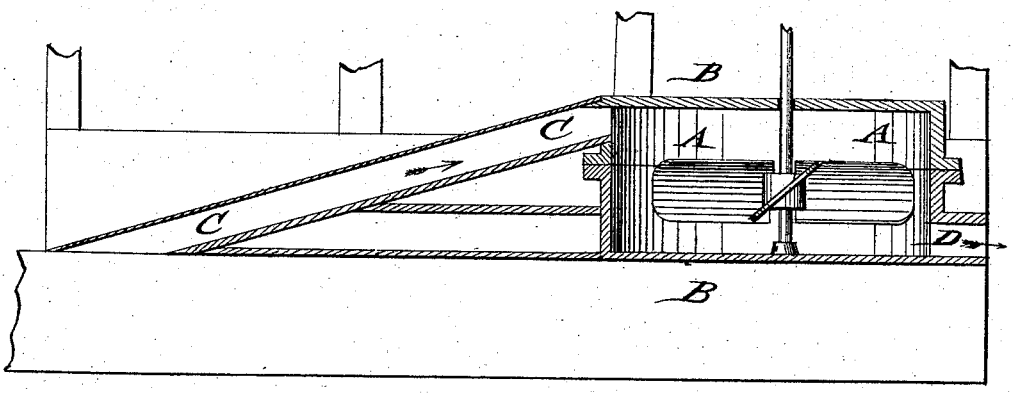


Fig. 2.



WITNESSES:

Francis M. Angle.

John Boettals

INVENTOR:

W. S. Myers.

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM S. MYERS, OF SOUTHINGTON, CONNECTICUT.

IMPROVEMENT IN HORIZONTAL SCREW-PROPELLERS.

Specification forming part of Letters Patent No. **184,102**, dated November 7, 1876; application filed August 28, 1876.

To all whom it may concern:

Be it known that I, WILLIAM S. MYERS, of Southington, in the county of Hartford and State of Connecticut, have invented a new and Improved Propeller, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view, and Fig. 2 a vertical longitudinal section on line *c c*, Fig. 1, of my improved propeller for vessels.

Similar letters of reference indicate corresponding parts.

The invention relates to an improvement in that class of propellers in which the wheel or screw is concealed or incased in the bottom of the boat or vessel, and the water conducted to and away from it by a channel formed in the bottom of the boat or vessel.

The improvement consists in the combination and construction of parts, as herein described.

In the drawing, A represents a propelling-screw that is placed in horizontal position into an inclosing-casing, B, the screw being applied to a vertical shaft revolved by suitable power. The screw is arranged below the water-line. In the case of a canal-boat, or other small boat, a screw would be located on both the larboard and starboard sides, but in larger vessels one large screw may be located amidships.

An additional channel or flume, C, in front of casing B, ascends gradually from the bottom of the hull to the upper part of the casing, and conducts the water to the screw, while an exit channel or flume, D, back of the casing, forces the water from the lower part of the casing, after it has been worked upon by the screw to the outside, and produces thereby the propulsion of the vessel. The agitation of the water by the screw, being confined into the casing and flumes, will not produce any washing of banks when used in canals, being also adapted for vessels of war, which require protection for the screw, and to vessels plying in shallow rivers and waters. I am aware turbine-wheels or equivalent propellers have been arranged with one side projecting into a channel or passage leading out at the stern of a vessel, but I do not claim such construction and arrangement.

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

The combination of the upwardly-inclined passage C, the horizontal screw arranged below the inner or discharge end of the same, and the outlet D communicating with the lower portion of the casing B, as shown and described, for the purpose specified.

WILLIAM S. MYERS.

Witnesses:

WALTER HOLCOMB,

M. H. HOLCOMB.