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T. B. RAYMOND.

Improvement in Propulsion of Vessels.

No. 122,650.

Fig. 1.

Patented Jan. 9, 1872.

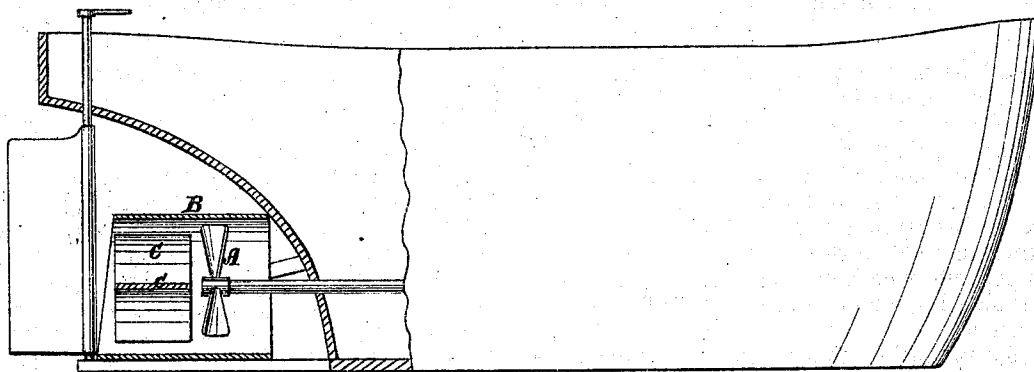
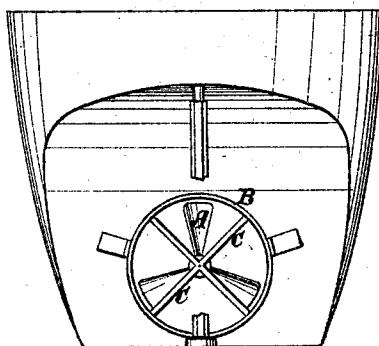


Fig. 2.



Witnesses:

A. Bennekenhoff.
Francis Mc Clell

Inventor:

Thos. B. Raymond.

PER *Mumt*

Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS B. RAYMOND, OF WINONA, MICHIGAN.

IMPROVEMENT IN PROPULSION OF VESSELS.

Specification forming part of Letters Patent No. 122,650, dated January 9, 1872.

To all whom it may concern:

Be it known that I, THOMAS B. RAYMOND, of Winona, in the county of Bay and State of Michigan, have invented an Improvement in the Propulsion of Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing which forms a part of this specification.

My invention relates to improvements in screw-propellers; and it consists in the application to a stationary tube surrounding the propeller, for preventing lateral displacement, of diametrical plates to receive the water at the rear from the propeller and prevent it from whirling around in said tube.

Figure 1 is a longitudinal sectional elevation of a boat having my improvements applied; and Fig. 2 is an elevation of the stern.

Similar letters of reference indicate corresponding parts.

A is the ordinary propeller; B, the tube surrounding it; and C, vanes or plates in the tube behind the propeller for receiving the water and checking the tendency to whirl around, and thereby essentially check the whirling,

while the water is subject to the action of the screw.

I am aware that stationary tubes surrounding the wheel, and likewise that spiral vanes, have been used before; but they have been found impracticable on account of the whirling of the water while subject to the screw and separated from the surrounding water; which I propose to overcome in great measure, if not entirely, by the employment of these vanes behind the propeller, and thereby render the employment of the tube a success. In this example the tube is extended beyond the propeller rearward to support the said vanes; but it may terminate near the propeller, and the vanes may be otherwise supported.

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

A cylindrical tube, B, provided with diametrical plates C, constructed as described, in combination with a propeller, A, as and for the purpose specified.

THOS. B. RAYMOND.

Witnesses:

GEORGE P. COBB,
T. C. GRIER.

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