

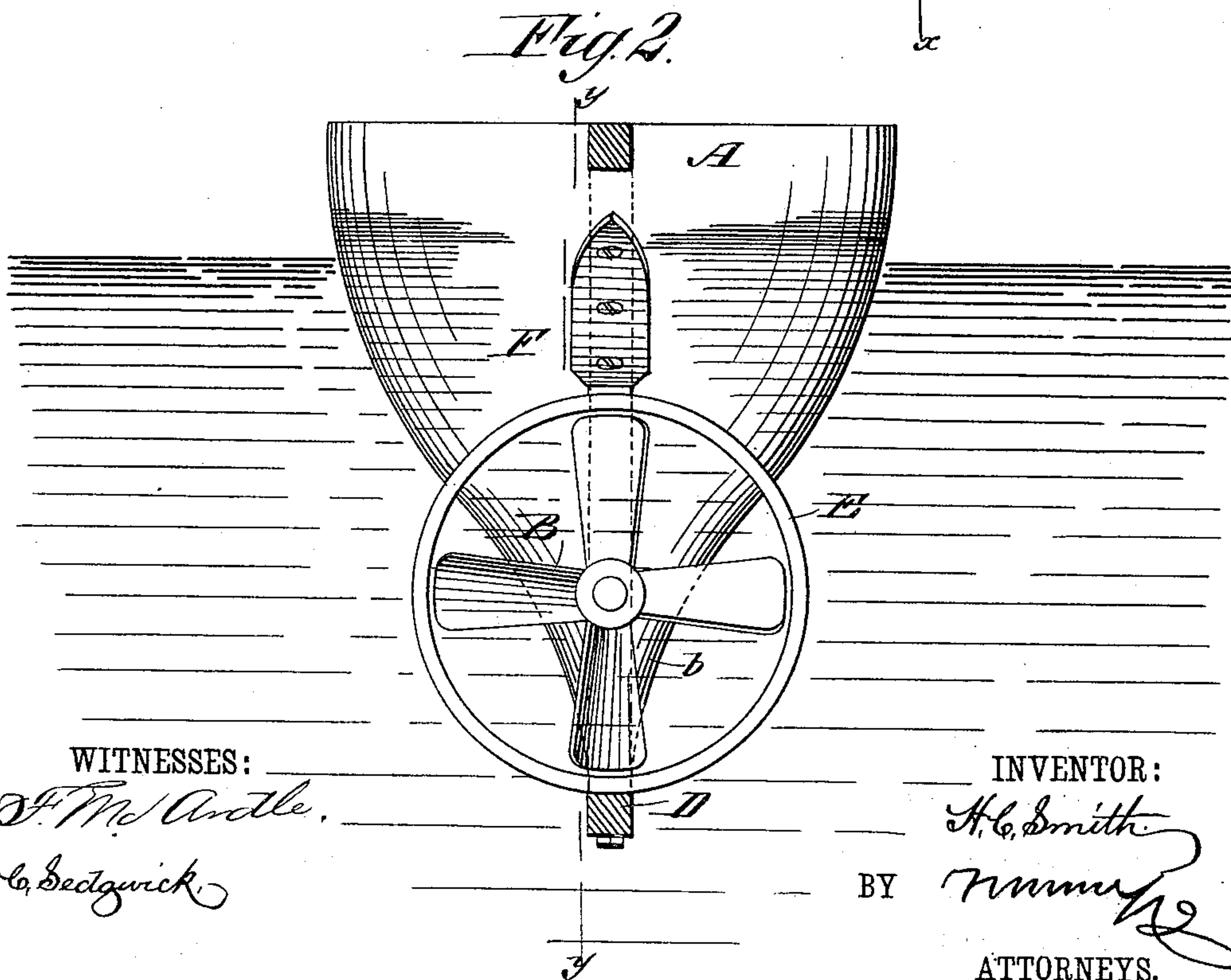
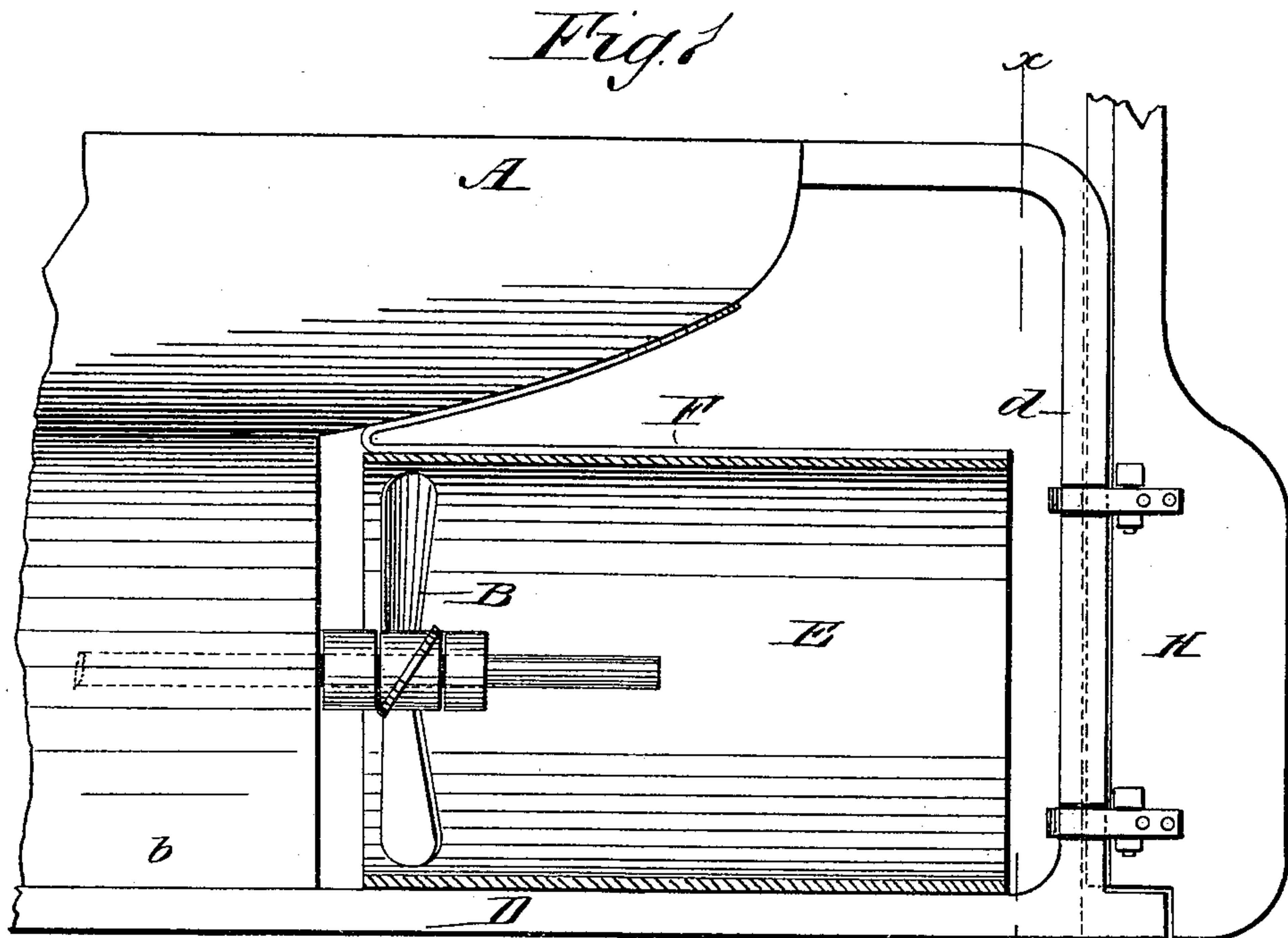
(No Model.)

H. C. SMITH.

DEVICE FOR INCREASING THE SPEED OF VESSELS.

No. 389,330.

Patented Sept. 11, 1888.



WITNESSES:

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HENRY C. SMITH, OF BROOKLYN, NEW YORK.

DEVICE FOR INCREASING THE SPEED OF VESSELS.

SPECIFICATION forming part of Letters Patent No. 389,330, dated September 11, 1888.

Application filed January 18, 1888. Serial No. 261,141. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. SMITH, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved
5 Device for Increasing the Speed of Vessels, of which the following is a full, clear, and exact description.

My invention relates to an improvement in devices for increasing the speed of vessels, and
10 has for its object to provide a means whereby the waste water delivered from the blades of a propeller may be confined and utilized in the propulsion.

The invention consists in the peculiar construction and arrangement of parts, as herein-
15 after fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification,
20 in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation of the stern of a vessel, illustrating the attachment of the device, the latter being in section; and Fig. 2 is
25 a rear elevation partially on line *x x* of Fig. 1.

In carrying out the invention, A represents the stern of a vessel, and B the propellers, secured thereto in the usual manner. Along the keel *b* of the vessel an iron or steel bar or
30 beam, D, is attached in any suitable or approved manner, which beam is projected horizontally to the rear of the keel, carried vertically upward to form the rudder-stay *d*, and then horizontally inward to an engagement
35 with the stern, as illustrated in Fig. 1. A jacket, E, is provided, preferably cylindrical in shape, having both ends open, which jacket is bolted to the main horizontal extension of the keel-beam in such a manner that the in-
40 ner end of the jacket will surround the propeller, the former being of a diameter to per-

mit the unobstructed revolution of the latter. As an additional means of holding the jacket in position an angle-strap, F, is employed, hav-
45 ing one member secured to the sweep of the stern and the other member to the upper surface of the jacket, which latter member extends from end to end of the jacket.

In operation the propeller will in its revolution discharge the water within the jacket, 50 and the said discharged water, having considerable power, is forced by the steady supply in violent and constant contact with the back-water, thereby materially aiding the propeller in the propulsion of the craft. The rudder H
55 is hung in any approved manner to the stay or vertical member *d* of the keel-beam.

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

1. The combination, with a vessel and its propeller-wheel, of a bar or beam projecting rearwardly from the keel of the vessel and then bent upwardly and inwardly and secured to
65 the stern of the vessel, and an imperforate cylindrical jacket secured to said bar or beam and having its inner end inclosing the propeller-wheel, substantially as described.

2. The combination, with a vessel and its propeller-wheel, of the bar D, projecting rear-
70 wardly from the keel of the vessel and then bent upwardly and inwardly and secured to the stern of the vessel, the cylindrical casing E, secured to the said bar and having its inner end inclosing the propeller-wheel, and the
75 angle-strap F, secured to the jacket and to the vessel, substantially as herein shown and described.

HENRY C. SMITH.

Witnesses:

JAMES WRIGHT,
G. P. CONKLIN.