

*D. Bookwalter,
Screw Propeller.*

Nº 95,763.

Patented Oct. 12, 1869.

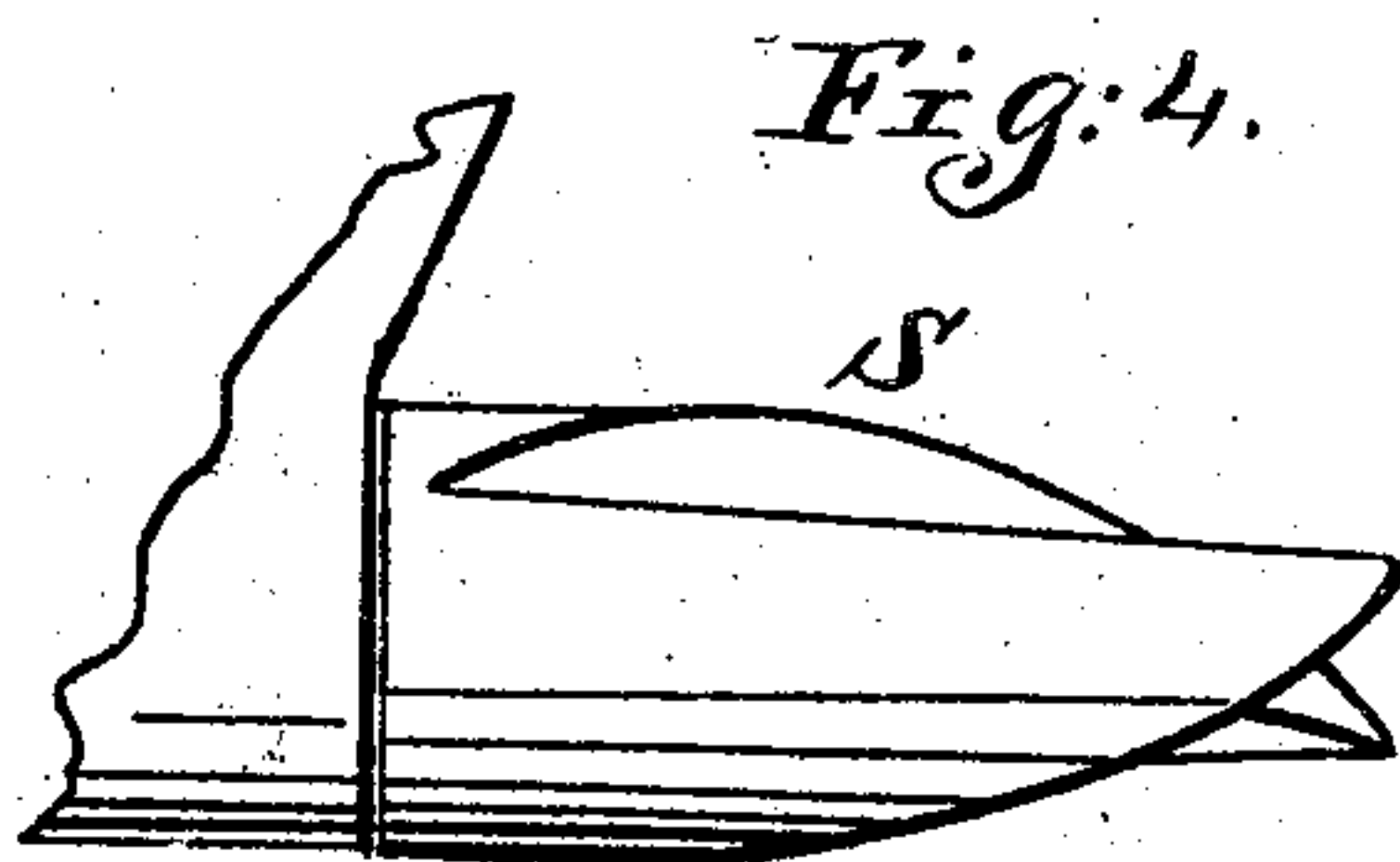
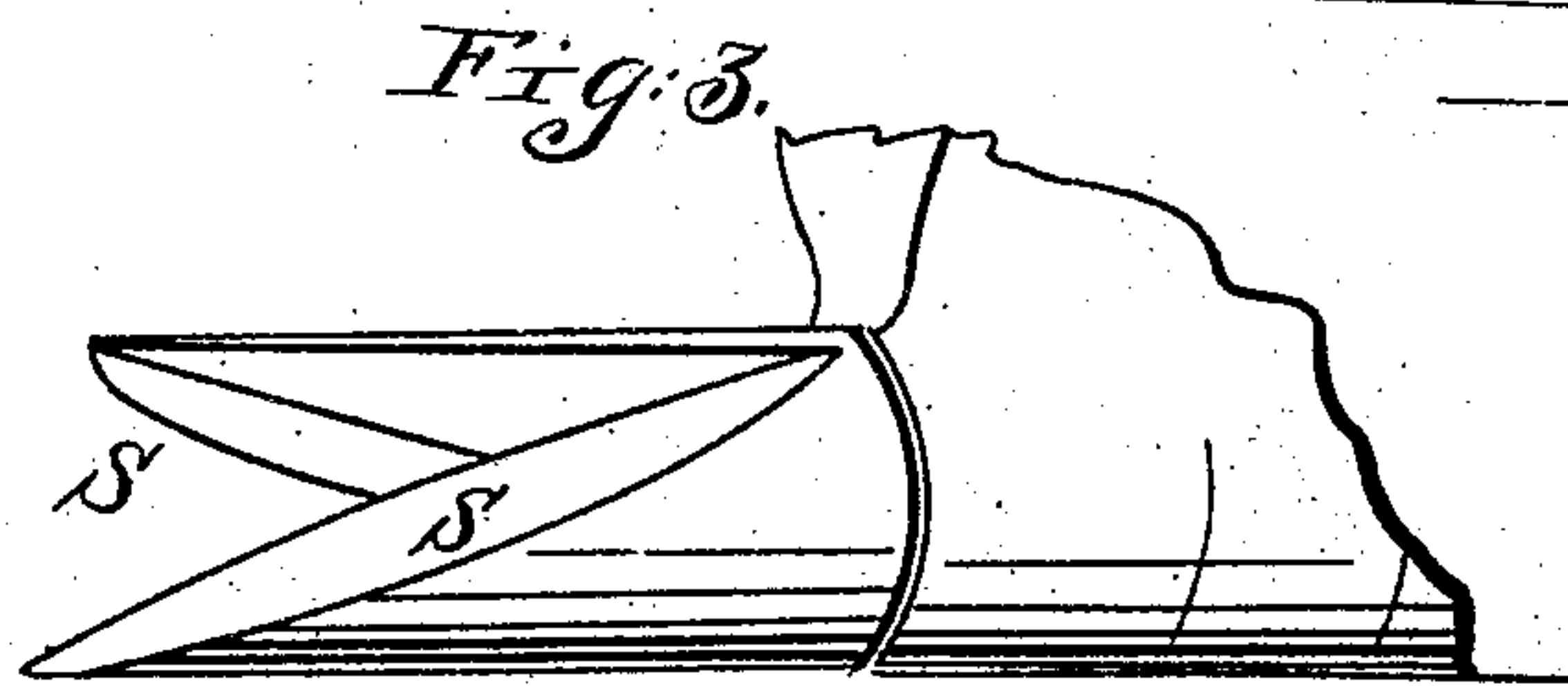
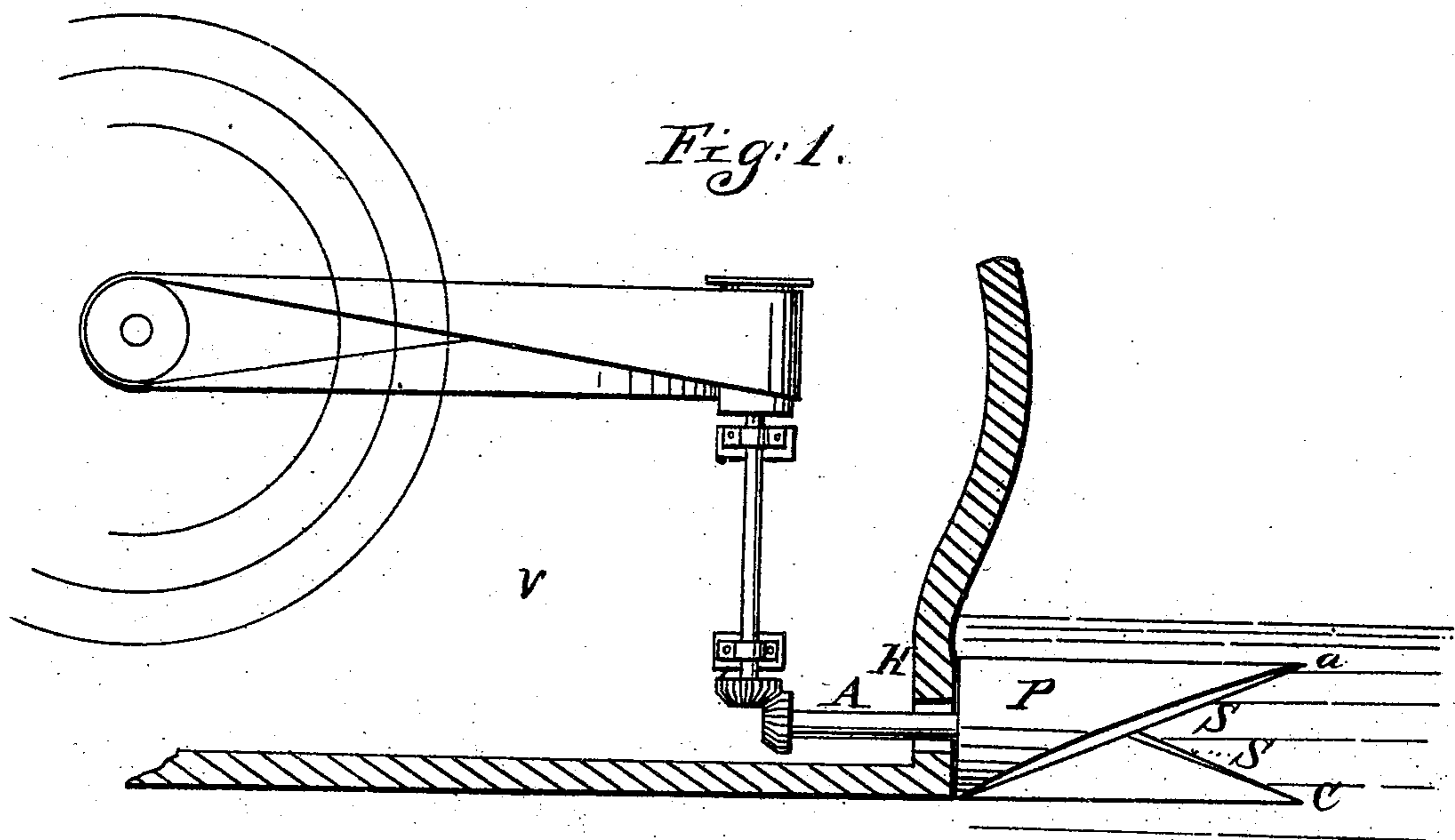
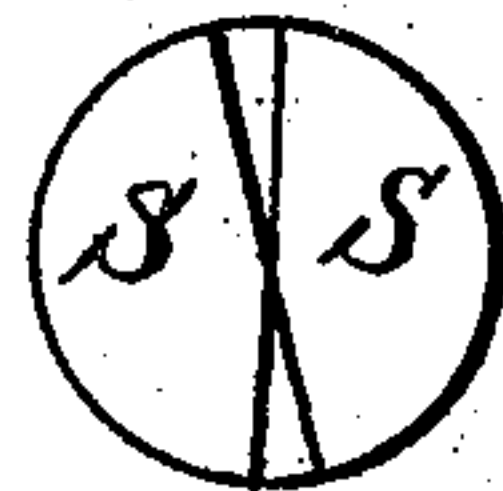


Fig: 2.



Witnesses;
E. A. Mariner
Chas Mariner

Inventor:
D. Bookwalter
by *J. B. Purchin*
his attorney

United States Patent Office.

DAVID BOOKWALTER, OF GARDNER, ILLINOIS.

Letters Patent No. 95,763, dated October 12, 1869.

IMPROVED REVOLVING PROW FOR VESSELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DAVID BOOKWALTER, of Gardner, in the county of Grundy, and State of Illinois, have invented certain new and useful Improvements in "Revolving Prow for Vessels;" and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

Figure 1 represents the side elevation of the prow, and the longitudinal section of a vessel.

Figure 2 is the front elevation, and

Figures 3 and 4 are the perspective views of the prow.

The nature of my invention consists in a prow for vessels, said prow so shaped and arranged that when the vessel is put in motion, by any means of propulsion in use, it revolves on its own axis, thereby producing a power that can be readily utilized for certain useful purposes.

V is a vessel, the fore part of the hull H of which, where it is joined to the prow, is made cylindrical, or bulging out slightly on its sides, if desirable, but is calculated to be made always of about the same diameter as the prow is.

P is the prow, consisting of a cylinder firmly affixed to and balanced on a shaft, A, suitably journaled in the front part of the vessel.

The prow is provided with two slanting surfaces S S, cut out of the body of the cylinder, as it were, the

one of the surfaces being on one side of the axis of revolution, and the other equal surface on the opposite side of it, the distance between the forward points of the slanting surfaces S S being equal to the diameter of the prow, the said surfaces crossing the said axis of revolution at any desirable angle. The prow is calculated to be entirely submerged, and the front of the boat, above the upper line of the prow, to be of an ordinary shape.

The axle or shaft A of the prow may be provided with any desirable gear, for the purpose of transmitting the power to and driving any machinery on board the vessel, or on its sides on the outside, such as hoisting-apparatus, reefing-apparatus, machines for crews' purposes, additional side-wheels or oars, &c., during the time the vessel is moving, or propelled by any ordinary means.

The resistance of water against the slanting surfaces S S of the prow, when the vessel is under way, causes the revolution of the prow, which furnishes the power to be used for the above-described and other useful purposes.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The cylindrical rotating prow P, constructed and operating substantially as set forth, and for the purposes herein specified.

2. In combination with the above, the cylindrical fore end of the hull H, substantially as set forth.

D. BOOKWALTER.

Witnesses:

MARTIN L. FINLEY,
W. W. McMANN, M. D.