

No. 32,751.

PATENTED JULY 9, 1861.

J. CARHART.
PROPELLER SHIELD.

Fig. 2.

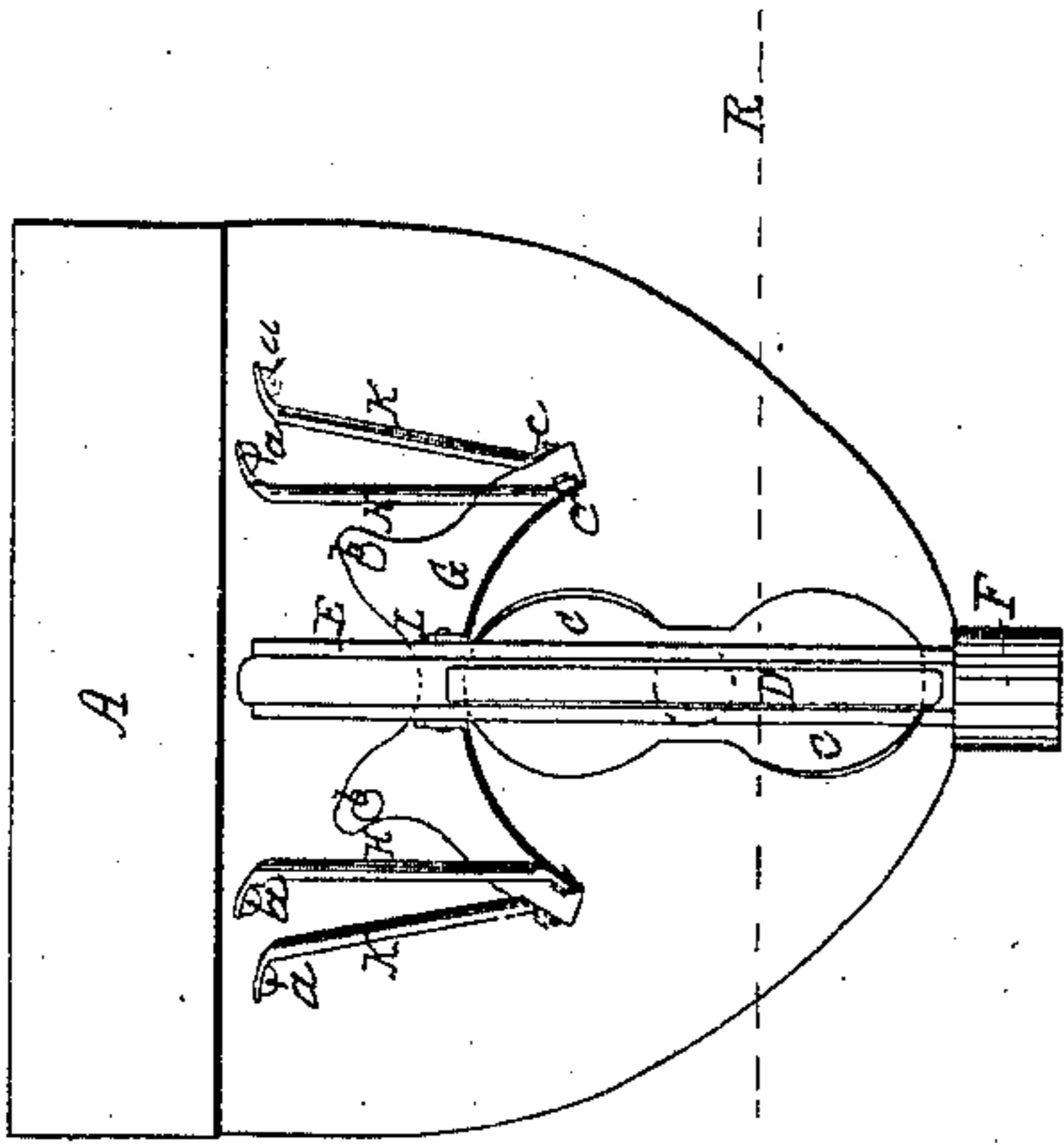
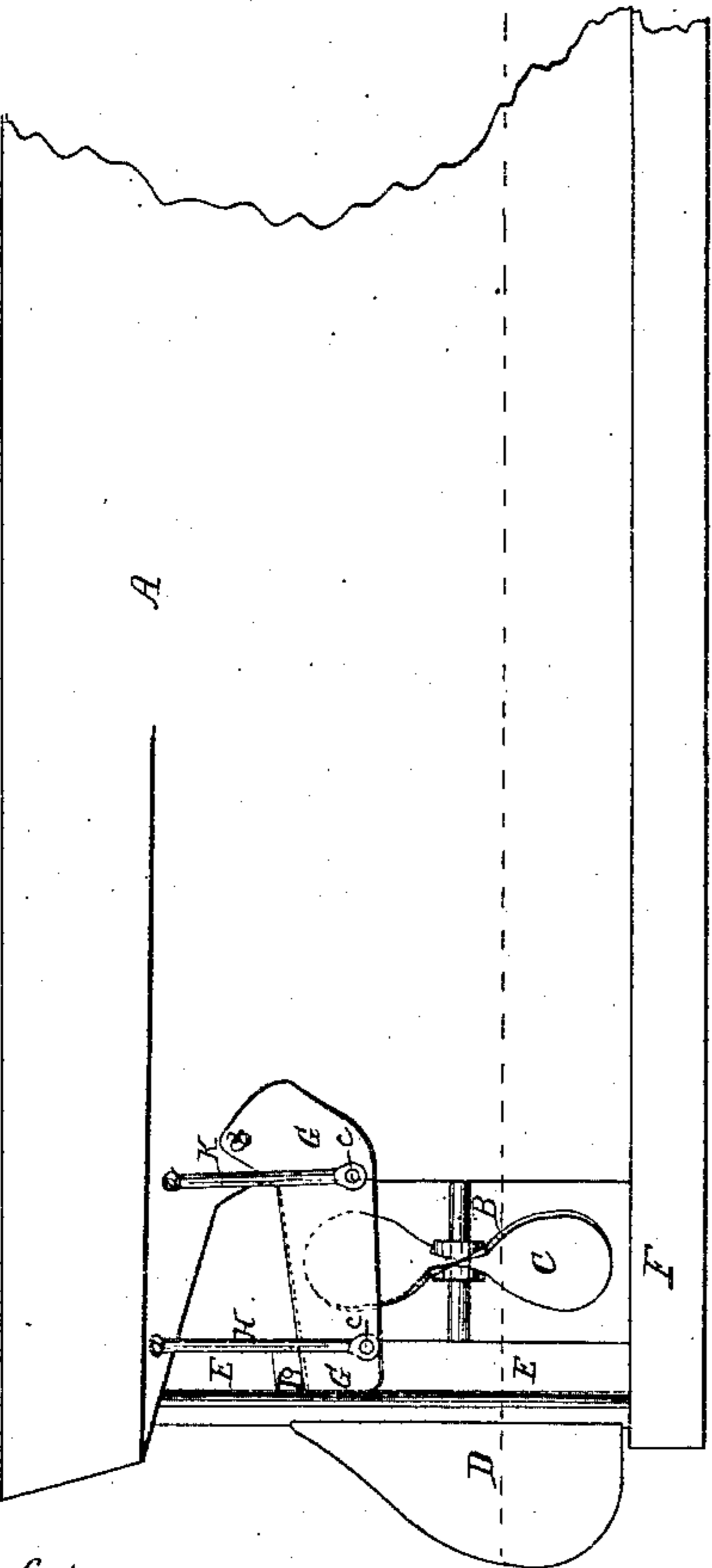


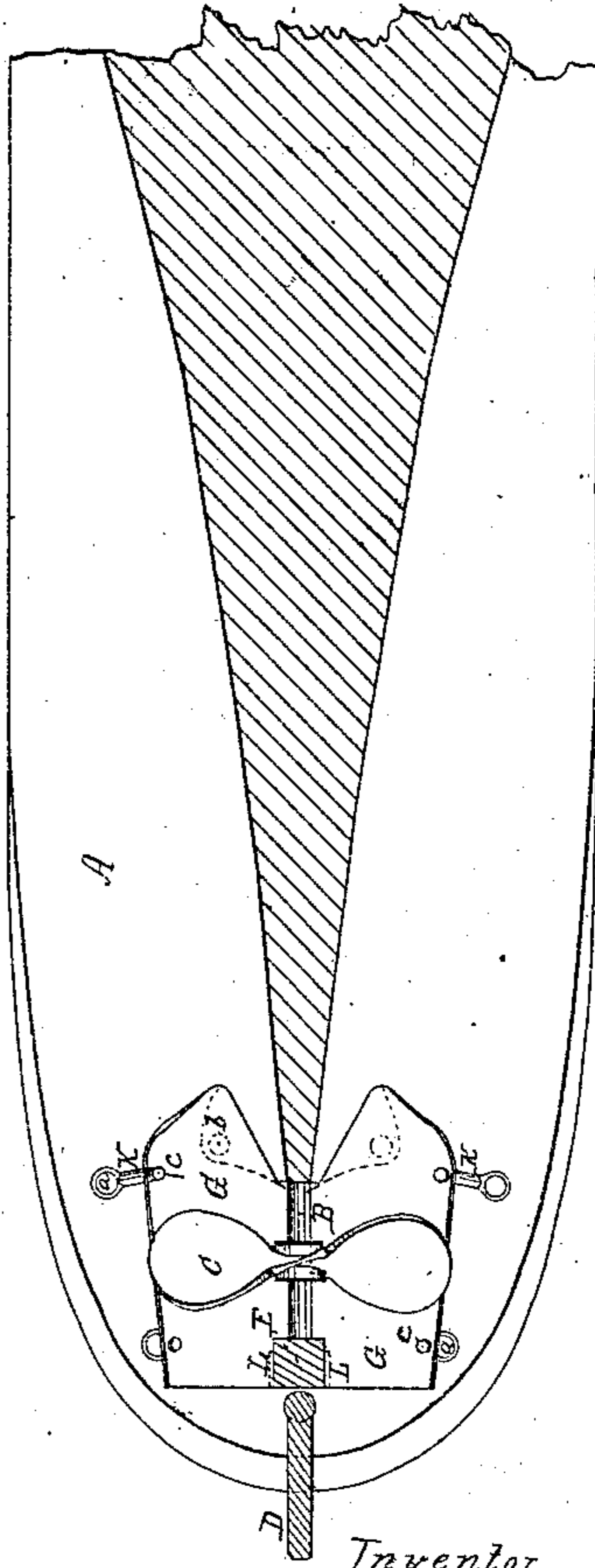
Fig. 1.



Witnesses.

A. U. Saper
Horn & L. Esmeray

Fig. 3.



Inventor

J. Carhart.

UNITED STATES PATENT OFFICE.

JEREMIAH CARHART, OF NEW YORK, N. Y.

PROPELLER-SHIELD.

Specification of Letters Patent No. 32,751, dated July 9, 1861.

To all whom it may concern:

Be it known that I, JEREMIAH CARHART, of the city of New York, State of New York, have invented a new concentrating and protecting shield or arch to be placed over the wheels of propellers for the purpose of partially confining and concentrating the water acted upon by the said wheels and protecting the same; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the corresponding letters of reference marked thereon.

The action of the wheels of propellers now in use has a tendency to throw the water upward, which lessens their power, and they are not protected from injury by coming into contact with obstacles, and the nature of my invention consists in placing above said wheel, under the stern of the vessel a strong oval concentrating and protecting shield or arch, which serves the purpose of partially confining and concentrating the water upon the wheel, and protecting the same. It would not do to inclose said wheel entirely as then there would be danger of a partial vacuum of water around said wheel which would diminish its power. I make this arch in two pieces or half sections, so as to facilitate its removal in case it is necessary to make repairs to the same, or to the wheel, or to the vessel. It may be made whole, and of cast or strong sheet iron or any other suitable material.

Figure 1. in the drawings, represents a side view of my invention attached to a section of a vessel or propeller. Fig. 2. represents an end or stern view of the same, and Fig. 3. an underside view, with the keel of the vessel removed.

The said shield is represented by letters G. G. and can be readily attached to any propeller in use. The lower sides of the arch should project about one third of the diameter of the wheel downward, so as to partially confine and concentrate the water upon the wheel in its action. The front end is fastened to the under side and stern of the vessel by bolts and the rear is fastened to the stern post in any convenient manner and the sides are sustained by four or more posts running up to the vessel and permanently fastened to the same and to the sides. These rods are represented by letters H and K. The stern post is represented by letter E.

The wheel is represented by letter C and its shaft by B. The keel of the vessel is represented by letter F and the rudder and rudder post in the rear of the stern post is represented by the letter D.

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

A shield, substantially in the form of an arc of a circle, suspended from the stern of a vessel by rods projecting downward, without reference to size, placed over the wheel and in part inclosing and protecting the same, and which thereby partially confines and concentrates the water upon the same, increases its power and also the speed of the vessel, constructed substantially as and for the purposes described.

J. CARHART.

In presence of—

JOHN H. SWARTZ,
WM. P. WHEELER.