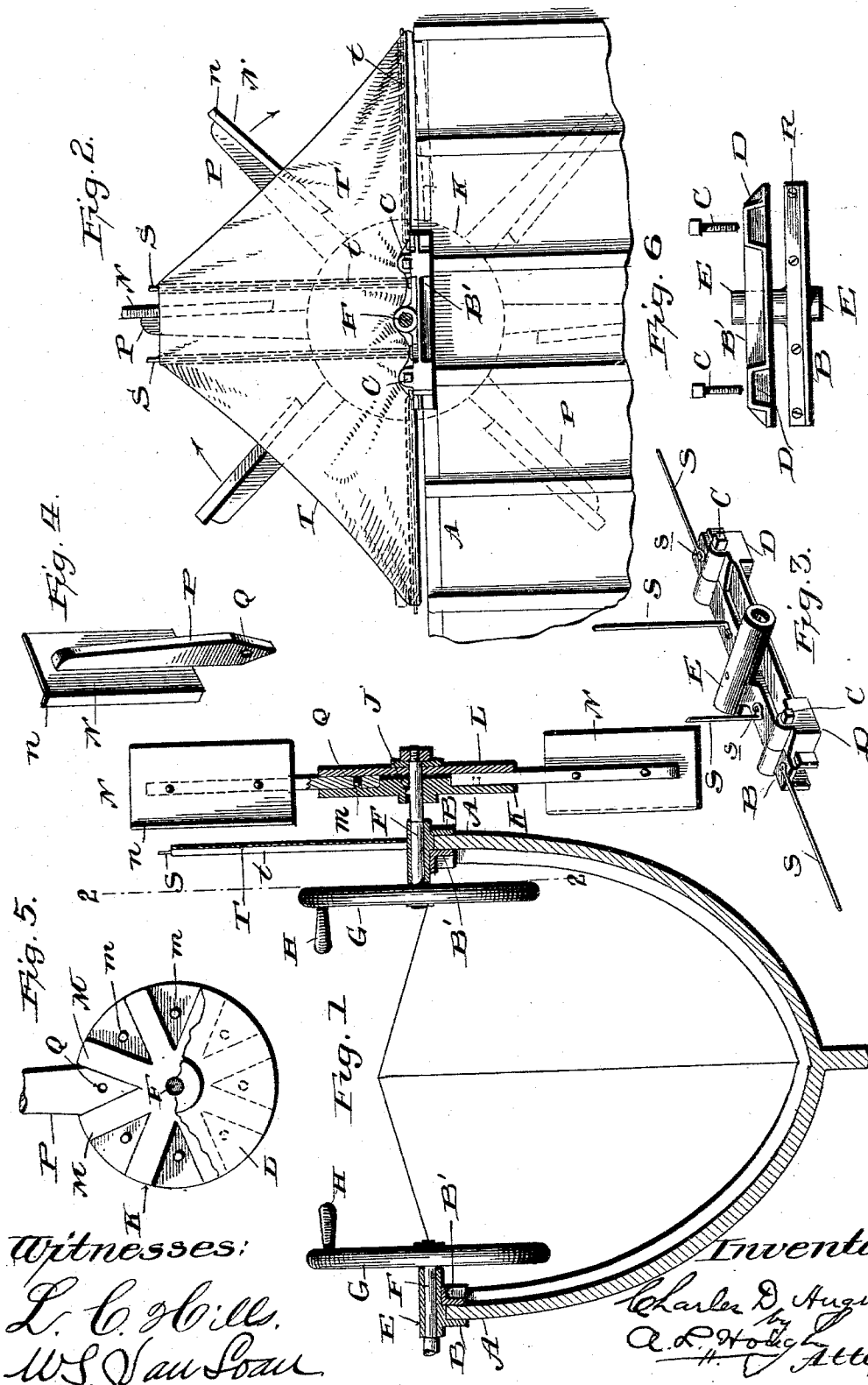


(No Model.)

C. D. AUGUR.
BOAT PROPELLER.

No. 561,956.

Patented June 16, 1896.



Witnesses:
L. C. Hill.
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UNITED STATES PATENT OFFICE.

CHARLES D. AUGUR, OF TURIN, NEW YORK.

BOAT-PROPELLER.

SPECIFICATION forming part of Letters Patent No. 561,956, dated June 16, 1896.

Application filed September 25, 1895. Serial No. 563,609. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. AUGUR, a citizen of the United States, residing at Turin, in the county of Lewis and State of New York, have invented certain new and useful Improvements in Boat-Propellers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in devices for propelling boats; and the especial object of the invention is to provide a device of this character which will be simple in construction and adapted for use on various boats having different widths of gunwale and capable of being readily removed from the boat when it is desired.

The invention consists, further, in the provision of independently-operated paddle-wheels, each wheel being mounted on a suitable arbor which is held to the gunwale of a boat by a suitable yoke which clamps to the side of the boat, and a suitable hand-wheel keyed to the inner end of the said shaft carries a handle by which the device may be operated.

The invention relates, further, to the peculiar construction of the paddle-blades, which have corresponding sides turned up at an angle to the broad side of the blade for the purpose of deflecting the drippings and spray from the sides of the boat.

I aim, further, in my invention to provide a suitable screen, which is supported on rods carried by the yoke and interposed between the blades of the paddle-wheel and the turning-wheel for the purpose of protecting the operator from the spray caused by the revolutions of the wheel.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of the parts, as will be hereinafter more fully described, and then specifically defined in the appended claims.

I clearly illustrate my invention in the ac-

companying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a central vertical cross-sectional view through the boat, the paddle-wheel, yoke, and screen attached to the gunwale. Fig. 2 is a side elevation of screen and yoke. Fig. 3 is an enlarged detail view of the yoke, showing the recessed portions designed to be clamped over the ribs of the boat. Figs. 4, 5, and 6 are details enlarged.

Reference now being had to the details of the drawings by letter, A designates the gunwale of a boat, and B and B' the two-part yoke, the two pieces being designed to be clamped to the side of the boat by means of the screws C. The said yoke, it will be seen, is adjustable and may be fitted to gunwales of different widths, and one of the yoke parts B' is provided with two recesses D D, which are provided to receive the ribs of the boat, so that the inner side of the said part B' may be securely clamped to the gunwale. These recesses are of sufficient length to allow the yoke to be fitted to boats having ribs at different distances apart.

E is an integral journal-box cast, preferably, with the part B, and F is the shaft, upon which is keyed the hand-wheel G, carrying the handle H. The outer end of the said shaft is provided with a key-lug J, and K and L are plates between which the paddles are held and caused to revolve with the said shaft. The plate K is locked to the shaft by the said lug, and the outer face of the said plate K is provided with a radiating series of ribs M, and between each rib is an integral lug m, which is adapted to engage in a perforation Q near the end of a blade-carrying arm.

The blades N are made of any suitable material, preferably of sheet-iron, and have corresponding edges n, turned up at an angle for the purpose of deflecting the drippings from the sides of the boat. The arms P are securely bolted to the longitudinal centers of the said blades, and the lower ends of said arms are pointed, as shown, and provided with the said perforations Q. When the wheel is to be set up, the pointed end is inserted in the V-shaped recess between two of the said

ribs, and the integral lug is placed through the perforation. After the series of paddles are in place the plate L is placed over the end of the arbor and its inner face clamped against the outer faces of the paddle-arms, thus securely holding the latter in place.

In perforations of the yoke are carried the screws R, having their heads countersunk on the under side of the top wall of the yoke part B, and S are steel rods flattened at one end and perforated. The screws are then passed through the perforations of the steel rods, and nuts s hold the rods in place. The two rods between the outer ones are bent at right angles and similarly held to the screws, and T is a screen, made, preferably, of cloth, and is provided with pockets t, into which the said rods are passed to hold the screen in place between the paddle-wheel and the turning-wheel. This provision is made so as to prevent the spray blowing against the operator.

When the screen and the propelling device are not in use, they may be taken apart and stored away in a small space and easily and quickly set up when desired.

I am aware that it is old to construct hand-operating propelling or paddle wheels designed to be removably held to the gunwale of a skiff, and hence I do not claim broadly.

What I do claim to be new, and which I desire to secure by Letters Patent, is—

1. The combination in a hand propelling device for row-boats, of the yoke parts B and B', the journal-box E integral with the part B, the shaft carried therein, recesses D in the yoke-section B', designed to be clamped over the ribs of the boat, and the screws to clamp the yoke-sections to the gunwale, substantially as shown and described.

2. In combination with the yoke-sections as described, the integral journal-box and shaft carried therein, the paddle-blades held between the plates K and L, the longitudinal corresponding edges of said blades turned up at an angle, substantially as and for the purpose set forth.

3. In combination with the yoke-sections designed to be clamped over the ribs to the gunwale of a skiff, the steel rods S secured to the said yoke, and a screen T having pockets t designed to receive said rods, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES D. AUGUR.

Witnesses:

WILLIAM D. HOLDEN,
LOUIS H. LEE.