

(No Model.)

2 Sheets—Sheet 1.

C. MYERS.
SCREW PROPELLER.

No. 467,323.

Patented Jan. 19, 1892.

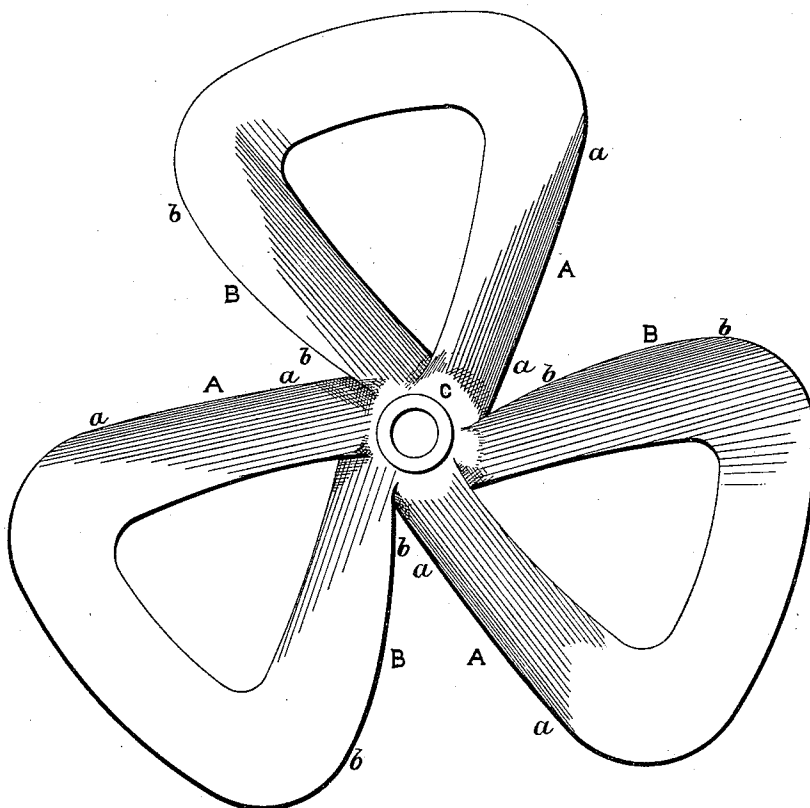


FIG. 1.

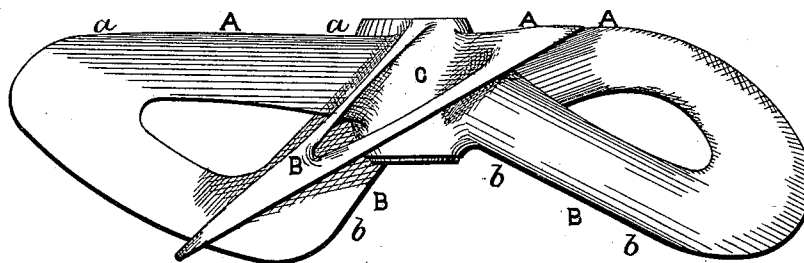


FIG. 2.

WITNESSES

William H. Saylor
Chas. Osendale.

INVENTOR

Chas. Myers
by Wm. P. Thompson
Attys.

(No Model.)

2 Sheets—Sheet 2.

C. MYERS.
SCREW PROPELLER.

No. 467,323.

Patented Jan. 19, 1892.

FIG. 4.

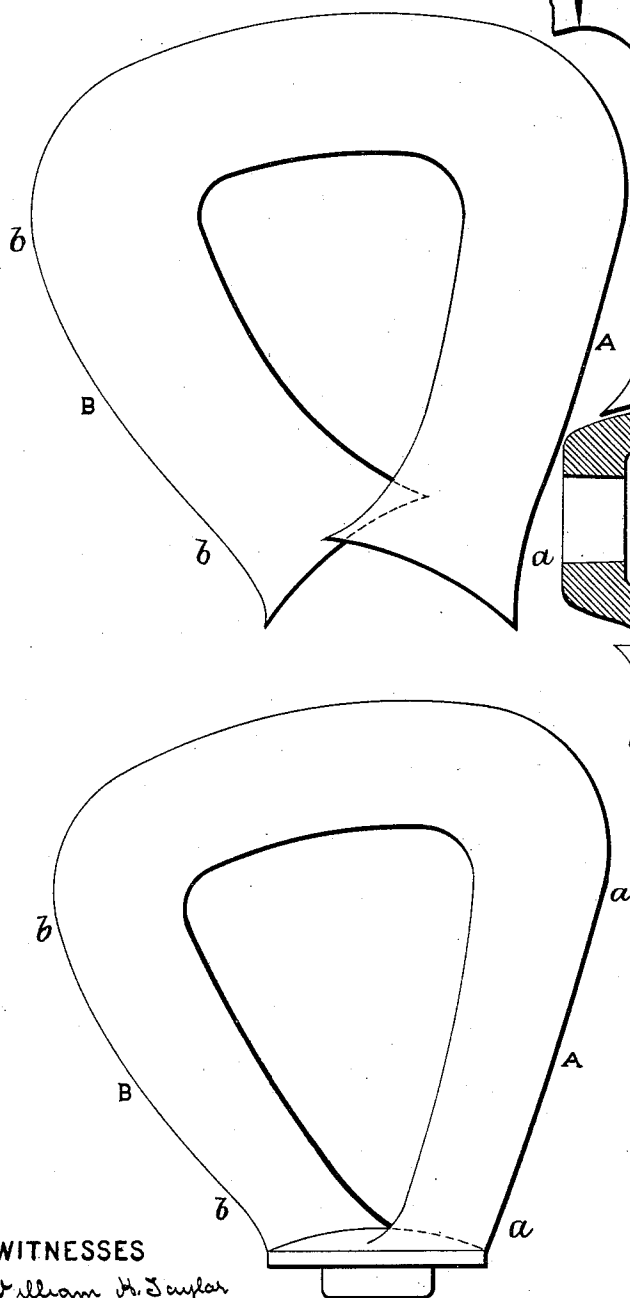
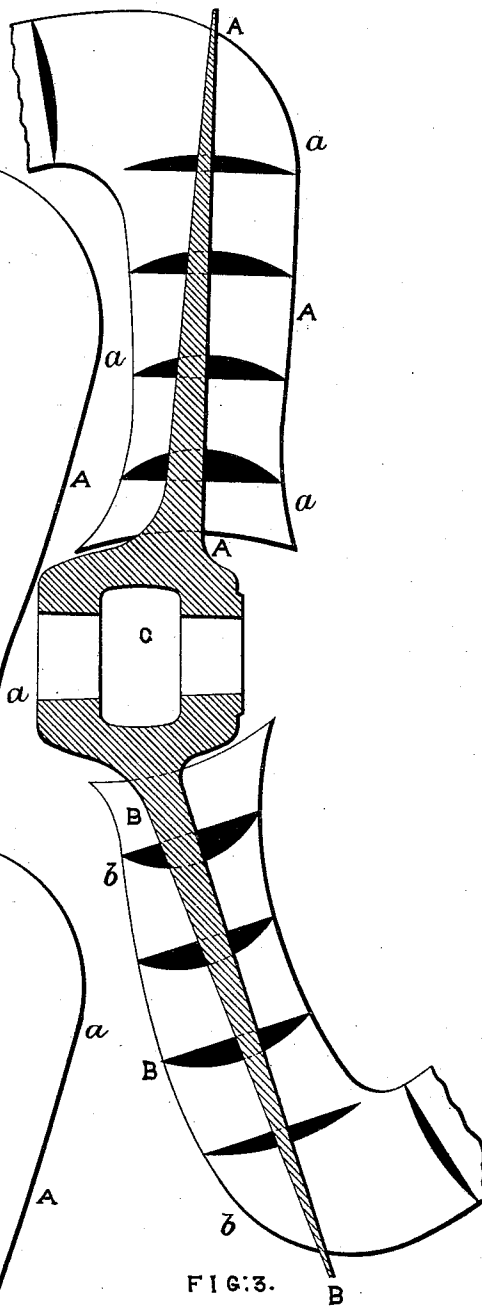


FIG. 5.

WITNESSES
William H. Taylor
Chas. Overdale.

FIG. 3.



INVENTOR

Chas. Myers
By Wm. P. Thompson
Attys.

UNITED STATES PATENT OFFICE.

CHARLES MYERS, OF MANCHESTER, ENGLAND, ASSIGNOR OF ONE-HALF TO
MATTHEW WELLS, OF SAME PLACE.

SCREW-PROPELLER.

SPECIFICATION forming part of Letters Patent No. 467,323, dated January 19, 1892.

Application filed July 14, 1891. Serial No. 399,449. (No model.) Patented in England January 13, 1891, No. 670.

To all whom it may concern:

Be it known that I, CHARLES MYERS, designer, a subject of the Queen of Great Britain, residing at Manchester, in the county of Lancaster, England, have invented certain new and useful Improvements in Screw-Propellers, (for which I have obtained Letters Patent in Great Britain under No. 670, dated January 13, 1891,) of which the following is a specification.

This invention relates to improvements in the screw-propeller formed with flat looped blades helically disposed and is designed with the object of obtaining greater speed therefrom or power of driving the vessel faster.

It consists, essentially, in constructing the front or forward arm of each looped blade with the striking-edge approximately straight and tangential to the boss at the point of contact with it and in a plane parallel or approximately parallel with the face of the boss, and the back arm of each looped blade with the rear edge radial or approximately radial to the center of the boss and inclined to the face of the boss, so as to overhang or extend to a considerable degree beyond it, the pitch of the screw being increased toward the back, so as to be greater than that nearer to the front or forward edge. It will be fully described with reference to the accompanying drawings, in which—

Figure 1 is an elevation; Fig. 2, a plan; Fig. 3, a sectional elevation; Fig. 4, an expanded view of one blade, and Fig. 5 an elevation of a single blade with base or disk for connecting it to the boss.

Instead of making each blade symmetrical with the two arms A and B thereof in the same relative position to the boss C, I make the front arm A of the flat loop with the striking-edge *a* approximately straight and in a plane approximately tangential to the boss or hub C at the point where it touches it, and in side elevation this striking-edge *a*

is practically parallel to the face of the hub C, so as not to overhang it at all; and I make the back arm B of the looped blade with the rear edge *b* approximately radial to the center of the boss or hub C and, as seen in side elevation, overhanging or extending beyond the vertical face of the boss to a considerable degree, the pitch of the flat part of the blade being increased toward *b*. The front arm A of the looped blade is thus made more erect than the back or following arm B and a better grip of the water is obtained at the point of contact with the blade and I consider that a considerable gain in speed will result.

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

1. A screw-propeller blade of the form of a flat severed loop, constructed with the striking-edge of the front or forward arm of the loop approximately tangential to the hub or boss at its point of contact therewith and parallel to the face of the boss and with the rear edge of the other arm of the loop approximately radial to the center of the boss and inclined at a considerable degree to and overhanging its vertical face, substantially as described and shown.

2. A flat-looped screw-propeller blade provided at one side with an arm tangential to the boss and parallel with the face thereof and at the other side with an arm radial with the center of the boss and inclined to the face thereof and with the top vertical flat surface increasing in pitch from the front to the back, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 3d day of July, 1891.

CHARLES MYERS.

Witnesses:

I. OWDEN O'BRIEN,
CHAS. OVENDALE.