

(No Model.)

O. B. GENTY.
PROPELLER.

No. 520,563.

Patented May 29, 1894.

Fig. 1.

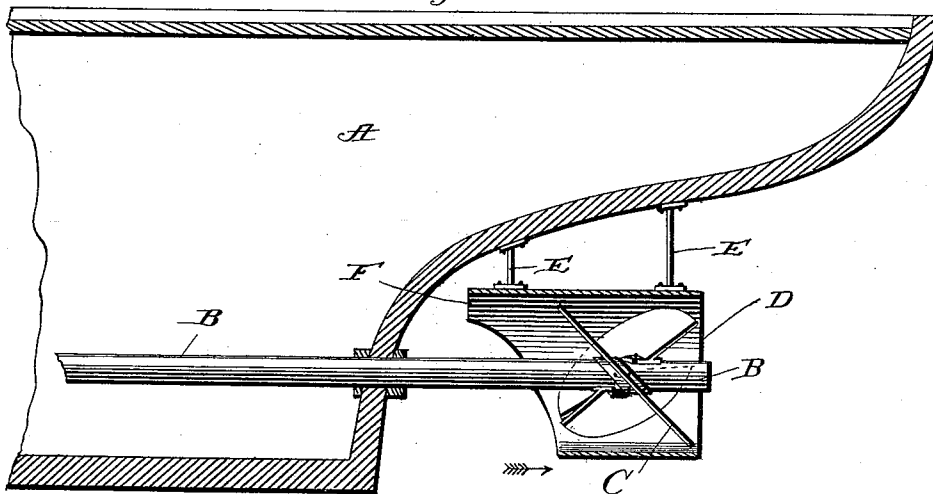


Fig. 2.

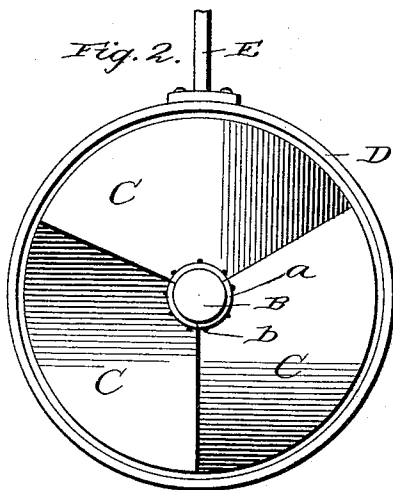


Fig. 3.

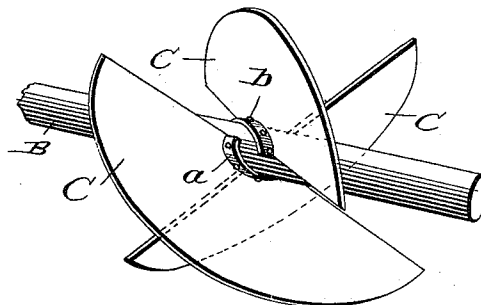
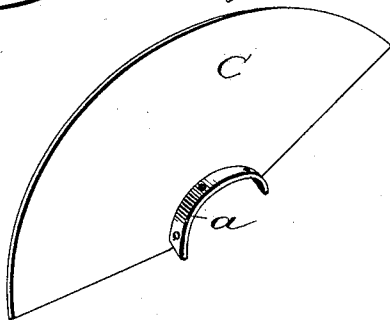


Fig. 4.



Witnesses:

C. H. Gaeder
R. P. Matthews.

Inventor

O. B. Genty

By

James J. Shuey

Attorney

UNITED STATES PATENT OFFICE.

OWEN B. GENTY, OF VALLEJO, CALIFORNIA.

PROPELLER.

SPECIFICATION forming part of Letters Patent No. 520,563, dated May 29, 1894.

Application filed January 5, 1894. Serial No. 495,856. (No model.)

To all whom it may concern:

Be it known that I, OWEN B. GENTY, a citizen of the United States, residing at Vallejo, in the county of Solano and State of California, have invented certain new and useful Improvements in 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.

My invention has relation to improvements in screw propellers; and its novelty will be fully understood from the following description and claim when taken in connection with the accompanying drawings, in which—

Figure 1, is a longitudinal section of the hull of a vessel equipped with one of my improved propellers. Fig. 2, is a rear end elevation of the propeller with its casing or hood. Fig. 3, is a perspective view of the propeller removed, and Fig. 4, is an enlarged perspective view of one of the propeller blades.

Referring by letter to said drawings:—A, indicates the hull of a vessel which may be of any suitable construction.

B, indicates the propeller shaft; and C, indicates the blades of my improved propeller, which are preferably provided with flanges *a*, for the passage of bolts *b*, through the medium of which they may be connected to the shaft B, as better shown in Fig. 3. These blades C, of which there are three employed, are of a general semi-circular form as better shown in Fig. 4, and they are so disposed or arranged on the shaft B, that each blade will extend approximately at right angles to the other two, and the front and rear ends of the several blades will rest in the same vertical planes as shown. By reason of this arrangement of the blades, it will be perceived that they respectively exert a pressure against the water throughout the rotation of the shaft and that they do not in any way interfere with each other's action since each moves in a plane almost at right angles to the plane of movement of the others and consequently does not engage the water displaced thereby. It will also be perceived that the blades have a very large working surface, and being at all

points very near the shaft, the propeller requires but little power to rotate it.

D, indicates the casing or hood in which the propeller is arranged and designed to rotate. This casing or hood is fixed with respect to the hull A, by stays as E, or in any other suitable manner, and it is of a circular form in cross section, and has its forward upper portion F, extended in advance of its lower portion, as better shown in Fig. 1, so as to prevent the water from rising when it is engaged by the blades C, and thereby insure its passage through the casing in the direction indicated by the arrow. By thus preventing the water from rising when engaged by the blades C, it will be perceived that a greater purchase is afforded a propeller and its power is consequently increased. It will also be perceived that by reason of the peculiar construction and arrangement of parts embodied in my propeller, the action of the propeller is in a direct line with the shaft and the strain and liability of breakage is diminished; and it will furthermore be seen that by reason of my peculiar manner of connecting the blades to the shaft, any one of the blades may be readily removed when damaged or broken and a new blade placed and secured in position without disturbing the other blades.

Having described my invention, what I claim is—

In a propeller, the combination with a shaft and the blades C, of general semi-circular form connected to and so arranged or disposed on the shaft that each blade will extend approximately at right angles to the other two and their forward and rear ends will rest in the same vertical planes; of the fixed casing or hood D, inclosing the blades and having its forward upper portion extended in advance of its lower portion, substantially as and for the purpose set forth.

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

OWEN B. GENTY.

Witnesses:

J. H. COOPER,

GEO. H. WILLIAMSON.