June 9, 1931. E. R. MAISON 1,809,131

PROPELLER

Filed June 3, 1929

Fig. 1.

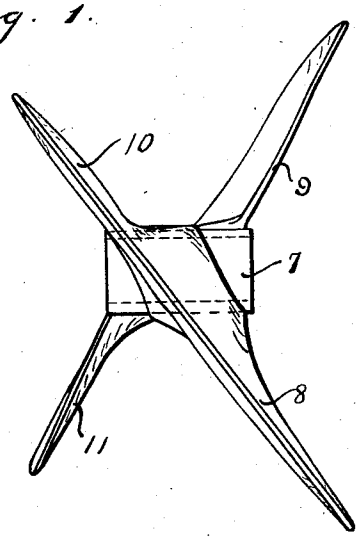


Fig. 4.

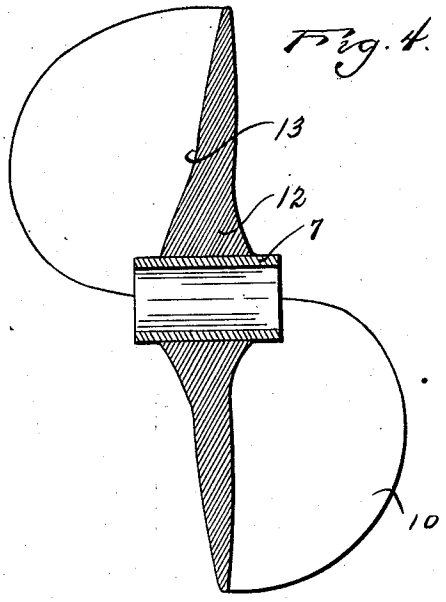


Fig. 2.

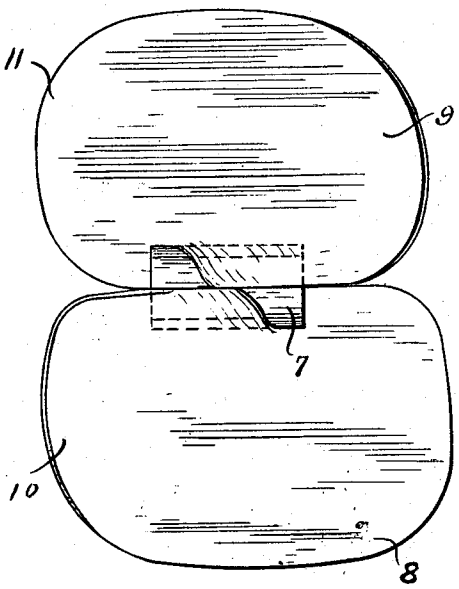
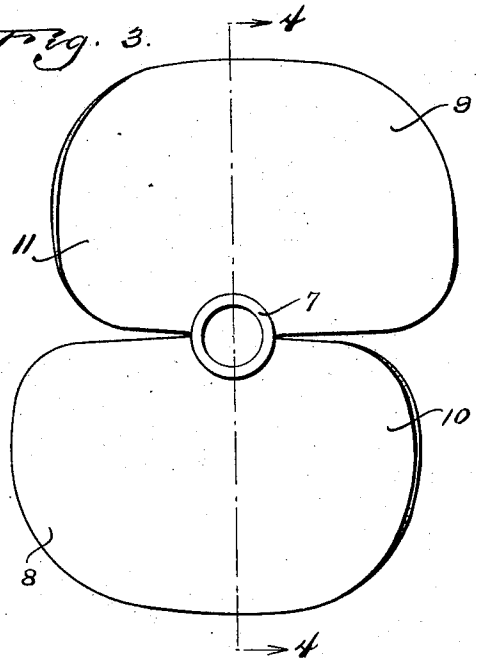


Fig. 3.



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Patented June 9, 1931 1,809,131

UNITED STATES PATENT OFFICE

EDMUND R. MAISON, OF MOUNT CLEMENS, MICHIGAN

PROPELLER

Application filed June 3, 1929. Serial No. 367,849.

My invention relates to a new and useful improvement in a propeller adapted for use on boats, aeroplanes and similar vehicles for propelling purposes and also for use as a fan or draft producing agent.

It is an object of the present invention to provide a propeller which may be easily and quickly constructed and which will operate with a maximum efficiency.

Another object of the invention is the provision of a propeller having the blades so arranged relatively to the rotating axis that a maximum area will be directly exposed to the medium in which the plate is rotating.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by a reference to the accompanying drawings which form a part of this specification and in which,

Fig. 1 is a side elevational view of the invention.

Fig. 2 is a view of Fig. 1 rotated ninety degrees.

Fig. 3 is an end elevational view of the invention.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 3.

In the invention there is provided a hub 7 on which are fastened the propelling blades. In the drawings, I have illustrated a pair of these blades, each comprising the major outwardly projecting portions 8 and 9 and the minor outwardly projecting portions 10 and 11 so that the blades are positioned on the rotating axis in such a way that the rotating axis does not pass through the transverse medial line of the blades. These blades are also positioned on the axis at an angle.

This location of the blades at the angularity and in the position relative to the medial line described is adopted in order to provide a propeller of maximum efficiency as it presents, when the propeller is rotated, a maximum area to the medium in which the blade is rotated.

As shown in Fig. 4, the base 12 of the blade is quite thick and the face proceeding outwardly therefrom formed concave as at 13, thus affording the desired strength on the blade at the position of mounting and at the same time dishing out the face to provide a pocket for increasing the efficiency of the blade. It will be noted from Fig. 1 that the blades are extended across the rotating axis in such a way as to cross each other at substantially right angles and that each of the blades determines a single plane, that is, the blades are not of a twisted or spiral construction so that each of the blades, allowing, of course, for its thickness, may be considered a planar body. It will also be noted that while the blades are extended across each other they do not overlap the adjacent edges.

While I have illustrated and described the preferred form of my invention, I do not wish to limit myself to the precise details of structure shown but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A propeller of the class described comprising: a hub determining the axis of rotation; a pair of propeller blades mounted on said hub at an inclination to the axis of rotation, said blades being extended across said axis in planes at substantially right angles to each other and crossing said axis at a line other than the transverse medial line of said blades, each of said blades being a planar body.

2. A propeller of the class described comprising: a hub determining the axis of rotation; a pair of propeller blades mounted on said hub at an inclination to the axis or rotation, said blades being extended across said axis in planes at substantially right angles to each other and crossing said axis at a line other than the transverse medial line of said blades, the faces of said blades being concaved intermediate their ends, the main body of each of said blades lying in a single plane.

In testimony whereof I have signed the foregoing specification.

EDMUND R. MAISON