

A. E. SELTZER.
 PROPELLER WHEEL.
 APPLICATION FILED AUG. 16, 1909.

955,291.

Patented Apr. 19, 1910.

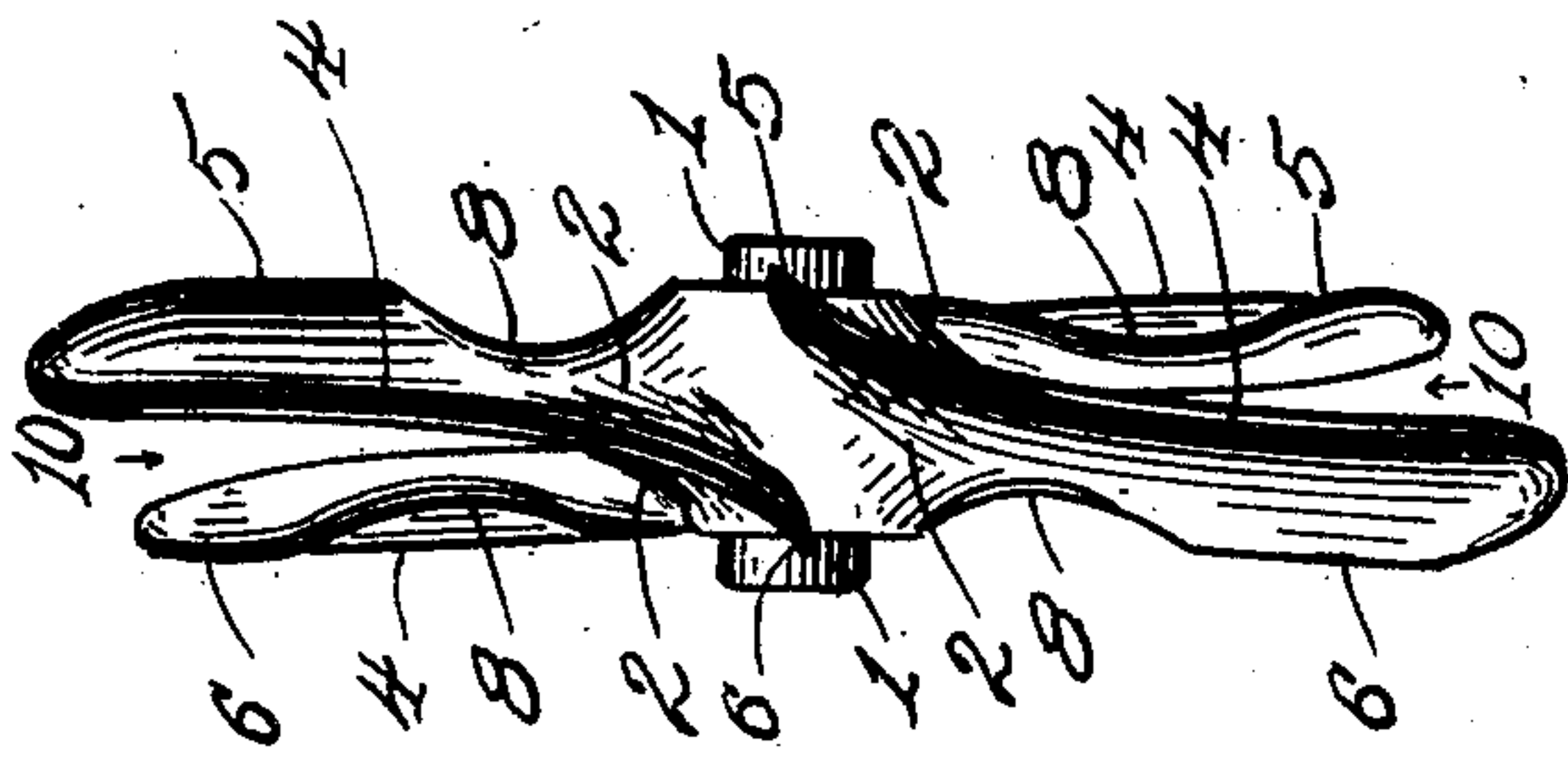


Fig. 2.

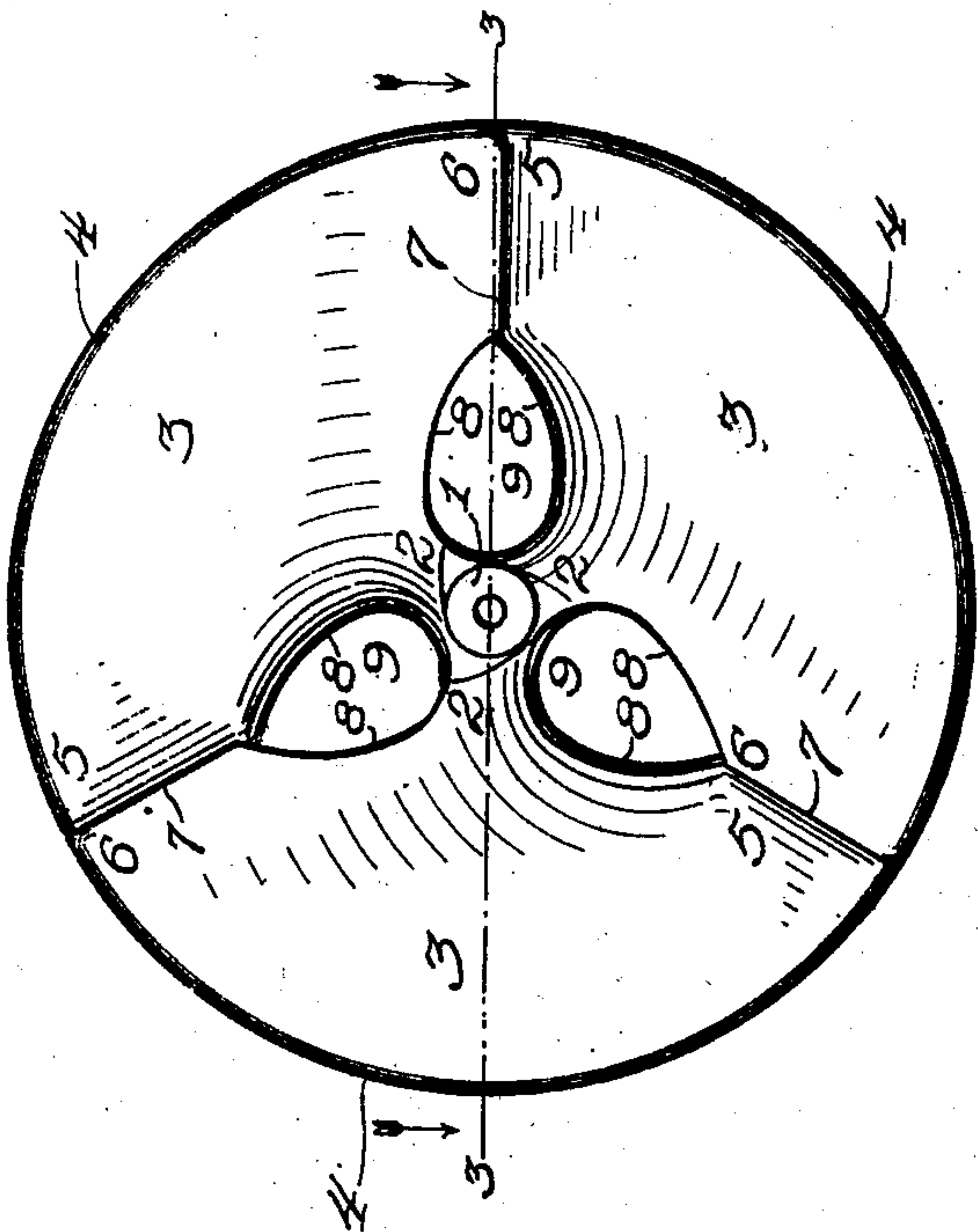


Fig. 1.

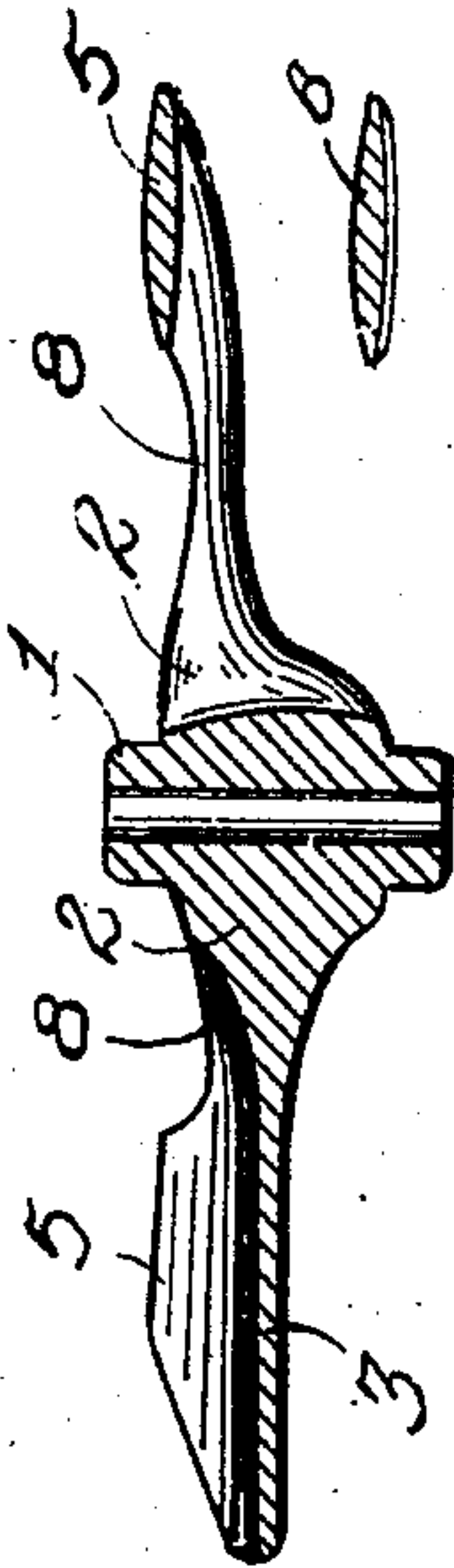


Fig. 3.

Witnesses
 C. Everett Lancaster.
 H. J. Moore & Co.

Inventor
 Abram E. Seltzer,
 By E. E. Vrooman,
 his Attorney.

UNITED STATES PATENT OFFICE.

ABRAM E. SELTZER, OF MIAMI, FLORIDA.

PROPELLER-WHEEL.

955,291.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed August 16, 1909. Serial No. 513,091.

To all whom it may concern:

Be it known that I, ABRAM E. SELTZER, a citizen of the United States of America, residing at Miami, in the county of Dade and State of Florida, have invented certain new and useful Improvements in Propeller-Wheels; of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to propellers for boats and the principal object of the same is to provide novel types of blades for the propeller by means of which the pressure is exerted to push and pull the water away from the boat's hull so that none of the water will be driven against the hull with the usual speed retarding effect.

In carrying out the object of the invention generally stated above, it is contemplated employing blades which have a twisted shank connection with the hub of the propeller, the body of each blade being flat and presenting an outer edge which is arranged in the arc of a circle and on a compound curve so that oppositely projecting ends are provided, the ends of each blade slightly overlapping the ends of adjacent blades and arranged in different planes to permit the water to be forced rearwardly and through the openings between the overlapped ends of the blades.

In the practical application of the invention, it will, of course, be readily understood that changes in detail and structural arrangements may be resorted to, but one preferred and simple embodiment thereof is shown in the accompanying drawings, wherein—

Figure 1 is a front elevation of the improved propeller. Fig. 2 is an edge view thereof. Fig. 3 is a central sectional view taken on the line 3—3, Fig. 1.

Referring to said drawings by numerals, 1 designates the hub of the improved propeller from which the shanks 2 radiate. Said shanks are slightly twisted and merge into the flat bodies 3 of the blades. The blades are shown as three in number, although obviously more or less may be em-

ployed, and each blade is a segment of a circle. The periphery of each blade is in the form of a compound curve as indicated at 4 to provide a forwardly-projecting end portion 5 and a rearwardly-projecting end portion 6, the end edges of which are straight, as indicated at 7. The longitudinal edges 8 of the shanks 2 merge into said straight edges 7 on an easy inward curve, to provide a substantially elliptical opening 9 between each pair of shanks.

The ends 5 and 6 of the blades are arranged so that the edges of each blade slightly overlap, the end 5 of one blade overlapping the end 6 of the adjacent blade, and as said ends are projected on curves in an opposite direction a rearwardly-flaring opening 10 is provided between each overlapped end through which the water is sucked and pushed by the revolutions of the propeller. It will thus be seen that the bearing surfaces of the blades are increased; that a similar force of propulsion is obtained while moving either forward or backward; and that the centrifugal pressure of the water around the hub is considerably reduced.

What I claim is my invention is:—

A propeller comprising a hub, shanks radiating therefrom, said shanks being disposed at right angles to the axis of the hub, a blade carried by each shank having a flat body with its marginal edge presenting a compound curve, said blades being a segment of a circle and provided with a forwardly and rearwardly projecting end, and arranged so that the rearwardly projecting end of one blade overlaps in spaced relation the forwardly projecting end of the adjacent blade, and the shanks having therebetween ovoidal openings which are arranged medially of the hub, the larger portion of each opening being proximate the hub.

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

ABRAM E. SELTZER.

Witnesses:

ORLO EDWARD HAINLIN,
WILLIAM FRANKLIN MILLER.