

U. B. SCOTT.
PROPELLER.
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934,633.

Patented Sept. 21, 1909.

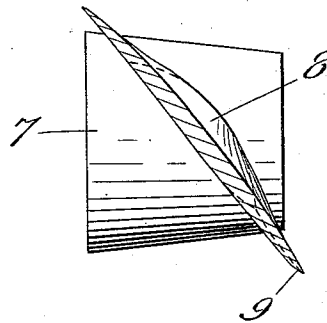
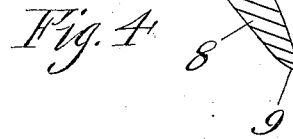
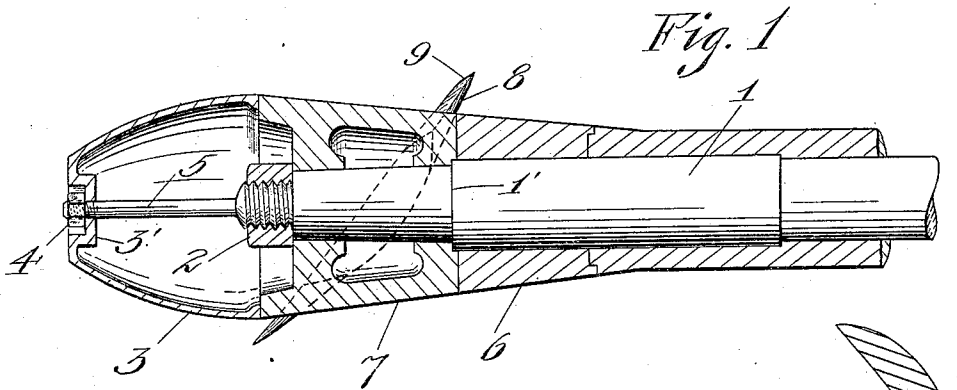
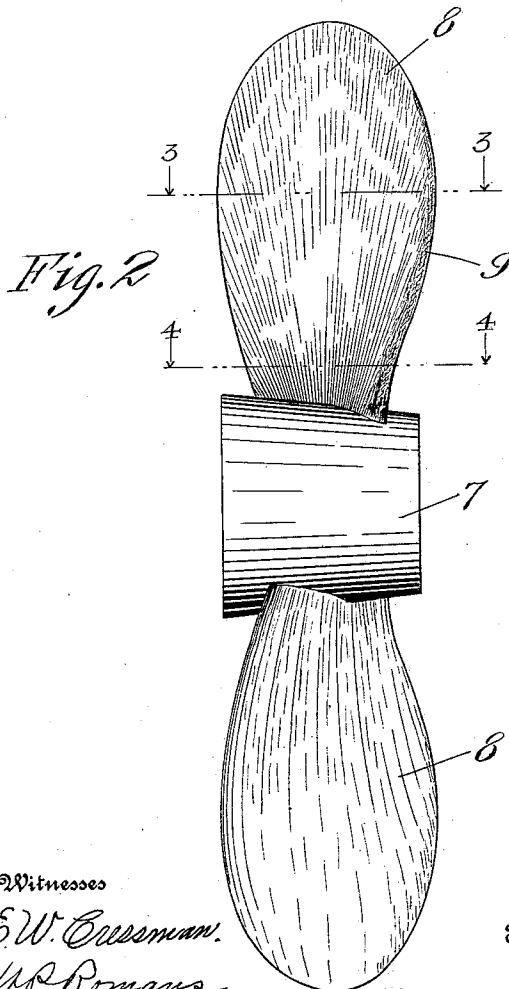


Fig. 3



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UNITED STATES PATENT OFFICE.

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PROPELLER.

934,633.

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To all whom it may concern:

Be it known that I, URIAH B. SCOTT, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Propellers, of which the following is a specification.

My invention aims to provide an improved propeller for boats which is so constructed that in its operation, no vibration is produced.

A further object resides in provision of blades on the hub, which are of such form and arrangement relatively thereto, as to, while forming in conjunction with said hub a propeller which is balanced on the shaft, enable a maximum grip being obtained on the water.

With the above and other objects in view, to be referred to as the description progresses, my invention resides in the structural features, arrangements and combinations of parts hereinafter described and succinctly defined in my annexed claim.

Referring now to the accompanying drawing, in which like numerals of reference indicate like parts throughout: Figure 1 is a view in longitudinal section illustrating the present invention as normally arranged. Fig. 2 is a view in side elevation of the propeller wheel removed from the shaft. Fig. 3 is a section taken on line 3—3 of Fig. 2, and Fig. 4 is a similar section taken on line 4—4 of Fig. 2.

Referring now to the drawing by numerals of reference, 1 indicates the propeller-shaft, formed with a shoulder 1' against which the propeller is secured by a nut 2, and 3 indicates a cap inclosing the rear end portion of shaft 1, said cap having its rear portion bent inwardly, as at 3' to form a seat for a nut 4, engaged on the threaded end portion of an integral extension 5, of comparatively small diameter.

Reference numeral 6 indicates a collar or sleeve arranged on shaft 1 forwardly of the propeller, the same tapering in a forward direction and having its rear end bearing against the forward face of the hub 7. Hub 7 is frusto-conical in form and collar or sleeve 6 engages the forward or small end thereof, as shown.

Reference numeral 8 indicates oppositely disposed blades of suitable pitch which are secured in any suitable manner to the hub 7,

those shown being formed integral therewith. Blades 8 at their base or inner end portions extend rearwardly from diametrically opposite points on the hub, in curved paths, which extend but part-way about the hub, whereby opposite wide unobstructed surface portions for the entire length of the hub, are provided to crowd the water outwardly onto the blades as the propeller advances, thereby insuring of a denser pack of the water at the base of the blades and preventing the formation of a cavity at the rear end portion of the hub. Blades 8 increase in width in an outward direction so as to at their greatest width have their forward edge portions, which on one face are cut away, as at 9, extend through the plane of the fore end surface of the hub. The rear edges of blades 8 terminate substantially in the plane of the rear end surface of the hub, as clearly shown in Figs. 2 and 3. By cutting away the forward edge portions of blades 8, as described I provide flat guiding surfaces for the water (see Figs. 3 and 4). By this construction, the blades cut the water in advance of the hub and are enabled to take a firm grip inasmuch as there will be a dense pack of water between the blades, resulting from the crowding action of the hub and the guiding surfaces 9.

While I have in practice found that the parts combined and arranged as specified accomplish the results specified, I reserve the right to make such changes as fall within the scope of my annexed claim.

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

A propeller comprising a frusto-conical hub tapering in a forward direction, oppositely disposed blades having base portions curving from diametrically opposite points on said hub rearwardly, said blades increasing in width in an outward direction and at their points of greatest width having their rear edges disposed substantially in the plane of the rear end face of said hub and their forward edges extending through the plane of the forward face of said hub.

Signed at Seattle, Washington this 14th day of November 1908.

URIAH B. SCOTT.

Witnesses:

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