

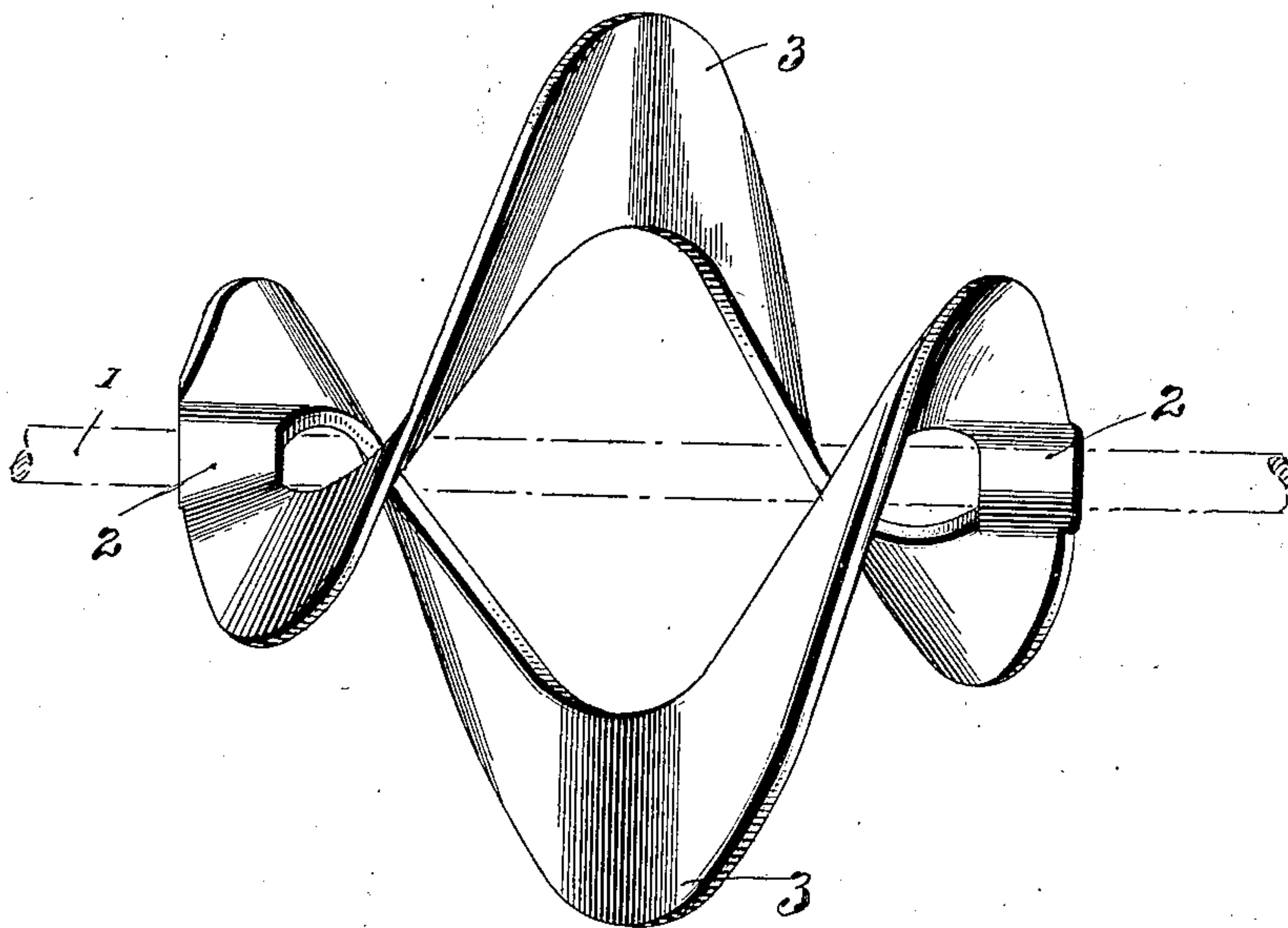
C. H. WESTON.

PROPELLER.

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917,217.

Patented Apr. 6, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

CLINTON H. WESTON, OF LA CROSSE, WISCONSIN.

PROPELLER.

No. 917,217.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed November 5, 1908. Serial No. 461,165.

To all whom it may concern:

Be it known that I, CLINTON H. WESTON, citizen of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Propellers, of which the following is a specification.

The present invention relates to improvements in marine propellers, and has for its primary object to provide a device of this character embodying a novel construction whereby it will operate upon the water most effectively and enable the greatest amount of propelling force to be obtained from the energy of the shaft.

The invention further contemplates a propeller which is strong and durable in its construction, and which is symmetrical in shape so that it can be readily reversed or caused to operate in either direction, as desired.

With this and other objects in view, as will more fully appear, as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing in which the figure is a side elevation of a propeller constructed in accordance with my invention.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

Referring to the drawings, the numeral 1 designates a shaft which may receive power from any suitable source and has a pair of spaced hubs 2 rigidly mounted thereon, the propeller blades 3 being carried by these hubs and being coiled about the shaft, each of the blades making one complete revolution. In the present instance, two of these blades are utilized, and the said blades are so arranged that corresponding portions thereof are always upon directly opposite sides of the

shaft. It will, however, be observed, that the outer edges of both of the blades lie in the surface of an imaginary sphere surrounding the propeller, the said blades having a helicoidal formation. The width of the blades at the middle portion thereof, is greater than the width at the extremities, and, in the preferred construction, this middle width is substantially twice the width of the ends where the blades are attached to the hub. With this proportion, the space between the inner edges of the middle portion of the blades is substantially equal to the space between the outer edges of the end portions of the blades so that the propeller acts upon all of the water within an area equal to that inclosed by a great circle of the before mentioned imaginary sphere.

It will thus be obvious that the propeller has a symmetrical formation, both ends thereof being of the same shape so that it can be readily reversed to operate in either direction as desired.

Having thus described the invention what is claimed as new is:

A marine propeller comprising a shaft, hubs upon the shaft, and a pair of blades coiled spirally about the shaft and having the ends thereof connected to the hubs, the outer edges of both of the blades lying in an imaginary sphere, and surrounding the propeller and each blade making a complete revolution about the shaft, the space between the inner edges of the blades at the middle of the propeller corresponding to the distance between the outer edges of the blades at the end portions of the propeller so that the two blades will act effectively upon all of the water within an area equal to that inclosed by a great circle of the before mentioned sphere.

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

CLINTON H. WESTON. [L. s.]

Witnesses:

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