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R. W. SHAW
REVERSIBLE PROPELLER
Filed May 27, 1924

Fig. 1.

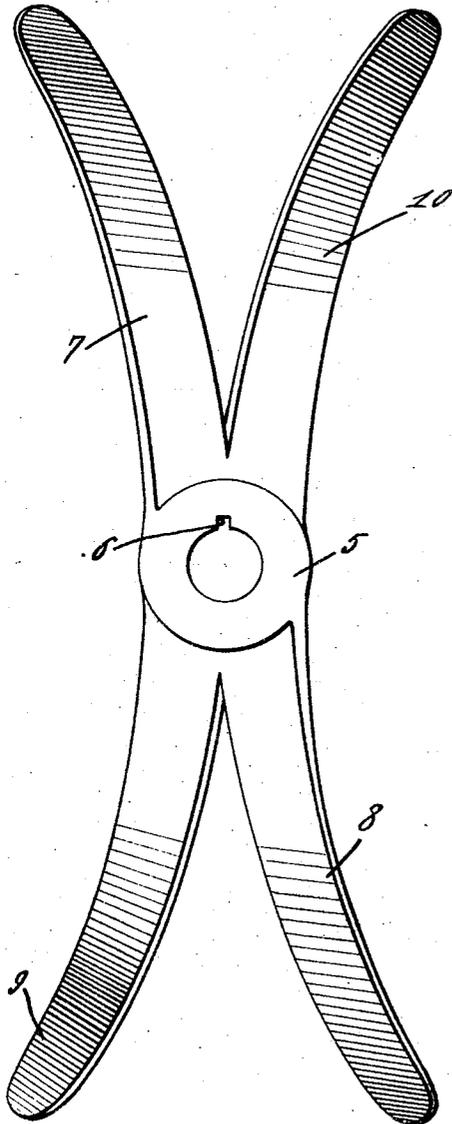
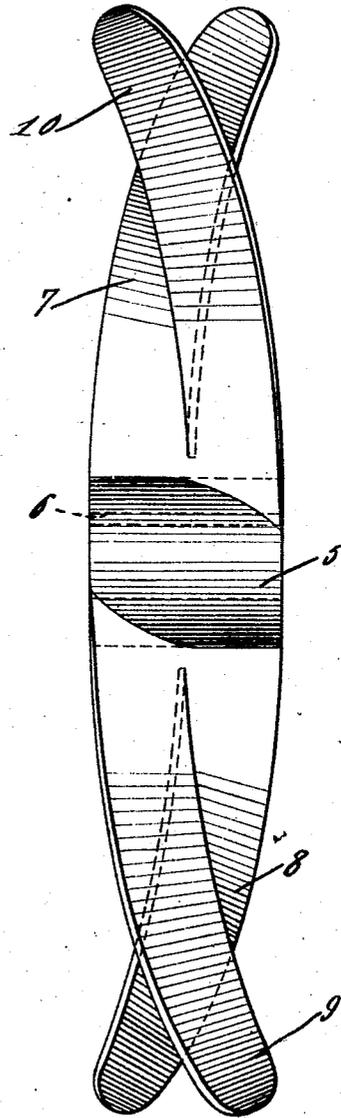


Fig. 2.



R. W. Shaw, Inventor

By *C. A. Snow & Co.*
Attorney

UNITED STATES PATENT OFFICE.

ROBERT WILLIAM SHAW, OF ALBANY, NEW YORK.

REVERSIBLE PROPELLER.

Application filed May 27, 1924. Serial No. 716,233.

This invention relates to propeller construction and aims to provide a propeller wherein the blades or flukes are so constructed that when the propeller is operated to move its supporting body forwardly, the rear flukes will act to assist in moving the body forwardly, eliminating the usual drag.

Another important object of the invention is to provide a propeller which will have the maximum amount of pulling force when the propeller is operating in a reverse direction.

Another object of the invention is to provide a propeller which will be exceptionally cheap to manufacture, the same including comparatively few parts.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is a front elevational view of a propeller constructed in accordance with the invention.

Figure 2 is a side elevational view of the propeller.

Referring to the drawing in detail, the reference character 5 designates the hub of the propeller which may be of any desired construction, the same being formed with a keyway 6 whereby the propeller may be keyed to the propeller shaft on which the same is positioned.

Secured to opposite sides of the bearing 5 and arranged diagonally thereacross, in opposite directions, are the blades 7 and 8, which constitute the forward blades of the propeller, while the blades 9 and 10 which extend in the opposite directions, constitute the rear blades or flukes of the propeller.

As shown the forward blade 7 is curved outwardly and due to the angle at which the same is supported on the hub 5, the blade curves slightly rearwardly. The blade 8 is also curved rearwardly as clearly shown by Figure 1 of the drawing, the rear blades 9 and 10 are separated from the forward blades 7 and 8, at points adjacent to their outer ends, so that as the propeller rotates, the blades may cut into the body of water in which the propeller is operated to force the supporting body through the water according to the direction of rotation of the propeller.

From the foregoing it will be seen that due to the construction of the propeller and the pitch of the blades, both the forward and rear blades of the propeller will operate to force the supporting body through the water, eliminating the usual drag caused by the rear blades of propellers now in use.

It might be also stated that upon reverse movement of the propeller to move the supporting body rearwardly through the water, the rear propeller blades cut into the water in a manner to pull the supporting blades, while the forward blades also cut into the water to assist the rear blades in their movements.

I claim:—

In a propeller of the class described, a hub section, integral blade sections extending from the hub and having their side faces disposed at oblique angles with respect to the ends of the hub, said blades being split throughout their lengths providing flukes, the flukes adjacent to one end of the hub being curved throughout their lengths and disposed laterally and forwardly, and the flukes at the opposite end of the hub being curved throughout their lengths and disposed laterally and rearwardly.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

ROBERT WILLIAM SHAW.