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G. MEIER
PROPELLER BLADE
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2,498,170

Fig. 1.

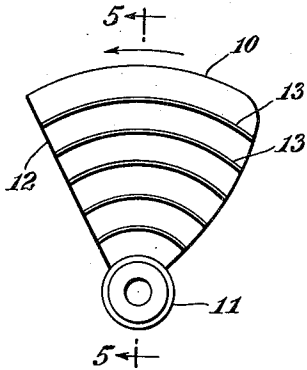


Fig. 2.

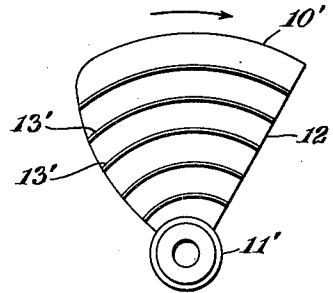


Fig. 3.

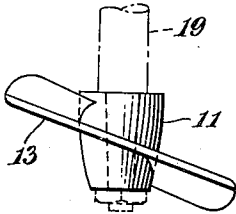


Fig. 5.

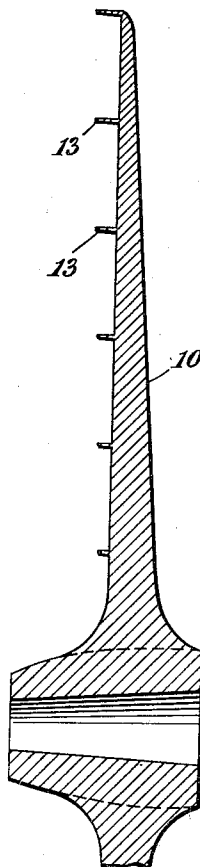


Fig. 4.

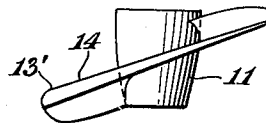
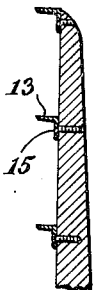


Fig. 6.



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PROPELLER BLADES

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2 Claims. (Cl. 170-170)

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This invention relates to new and useful improvements in propellers with two or more blades, and it has for its specific object to reduce the flow of water from the center of the propeller towards the tips of the propeller blades to minimize the so-called "slip."

Thus the main object of the present invention is to attain a reduction in said "slip."

Another object of the invention is to increase the efficiency of the propeller blades.

A further object of the invention is to increase the speed of a ship.

A still further object of the invention is to increase the pulling power of the propeller.

A further object of the invention is to increase the pulling power of a ship.

An ancillary object of the present invention is to reduce the economical cost per shaft horsepower.

With the above and other objects in view, this invention consists of the novel features of construction, combination and arrangement of parts, hereinafter fully described, claimed and illustrated in the accompanying drawings forming part of this application, and in which similar characters of reference indicate corresponding parts in all views, and in which:

Figure 1 is an elevation of a left hand propeller.

Figure 2 is an elevation of a right hand propeller.

Figure 3 is a top plan view of a propeller, as shown in Figure 1, looking down towards the propeller shaft.

Figure 4 is a top plan view of a propeller, as shown in Figure 2, looking down towards the propeller shaft.

Figure 5 is a section on the line 5-5 in Figure 1, showing the ribs cast in the propeller blade.

Figure 6 is also, a section in part, on the line 5-5 in Figure 1, but showing the ribs bolted to the propeller blade by countersunk screws, or the like.

Referring more particularly to the drawing, 10 indicates a left hand view of a propeller blade adapted for high revolution, and secured to a hub 11; mounted upon a shaft 19 the said blade has its entering edge as indicated at 12, and the blade is formed with one or more ribs 13, which are at a certain distance from one another, and concentric with the bore of the propeller hub.

In Figure 2 is shown a right hand view of a propeller blade 10' adapted for low revolution, and secured to a hub 11'; said blade has its entering edge at 12' and is formed with eccentrically arranged ribs 13', which ribs, one or more, are tapered, as shown at 14 in Figure 4, commencing and narrowing from the edge entering the water towards the edge leaving the water.

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In Figure 5 the ribs 13 are shown cast in the propeller blade and gradually increasing in height from the hub to the top of the blade; while in Figure 6 the ribs are shown bolted on to the propeller blade by means of screws 15 which are countersunk in the rib portions.

The above arrangement shown in regard to the ribs 13 may, of course, be equally applicable to the rib portions 13'.

It is obvious that changes may be made in the form, construction and arrangement of the several parts, as shown, within the scope of the appended claims, without departing from the spirit of the invention, and I do not, therefore, wish to limit myself to the exact construction shown and described herein.

What I claim as new, and desire to secure by Letters Patent of the United States, is:

1. A propeller having a number of blades and a hub portion formed with a bore therein, a plurality of ribs arranged upon each blade at a distance from each other end eccentric with the bore in the hub portion, said ribs being of gradually increasing height from the hub to the top, and disposed at a right angle to the blades, the ribs being of a tapered shape, commencing and narrowing from the edge entering the water towards the edge leaving the water.

2. A propeller having a number of blades and a hub portion with a bore therein, each blade being arranged with a vane at the perimeter and one or more ribs located at a distance from each other and eccentric with the bore of the hub portion, said vanes and ribs being of gradually increasing height from the hub to the top, and disposed at a right angle to the blades, the ribs being of a tapered shape, commencing and narrowing from the edge entering the water towards the edge leaving the water.

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