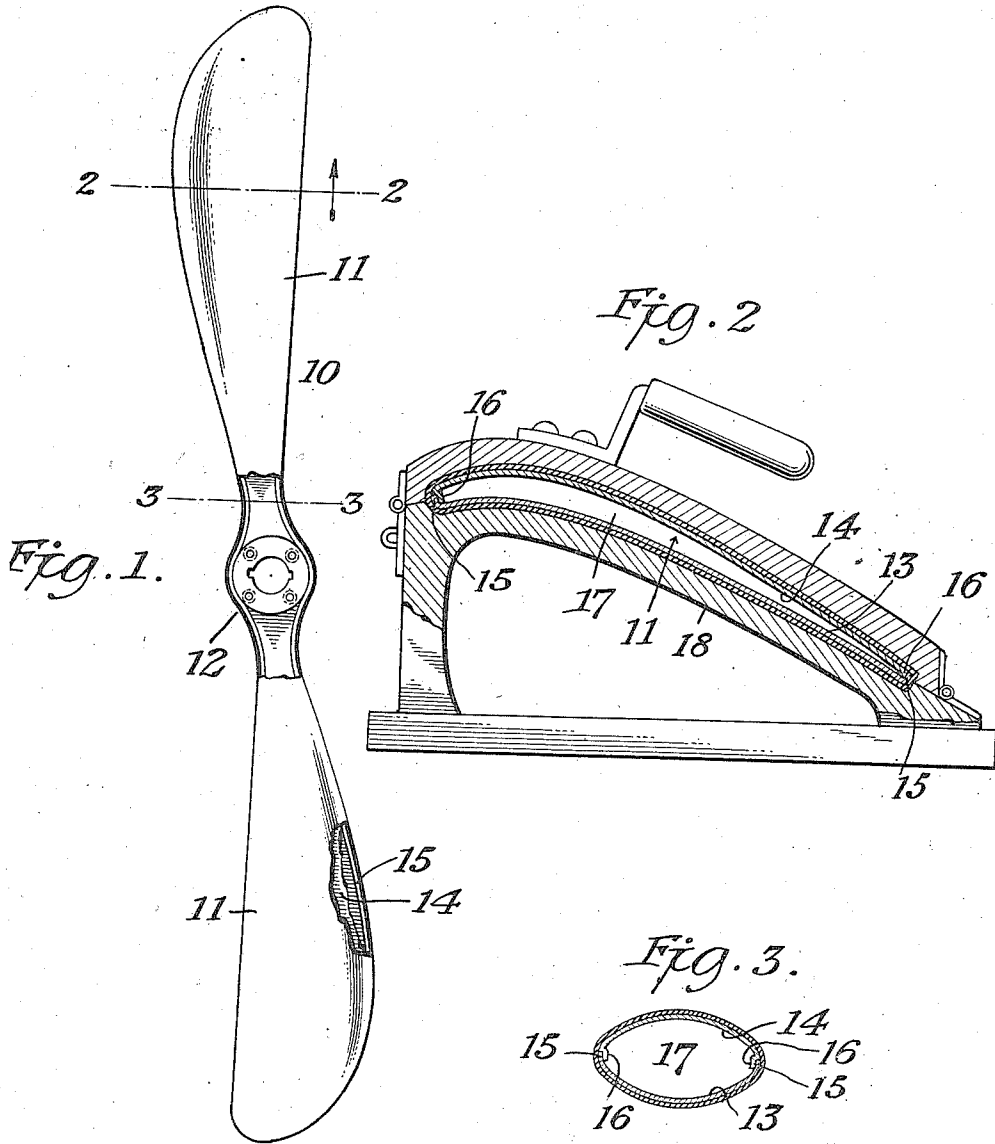


C. M. BERRY,
PROPELLER.

APPLICATION FILED JULY 31, 1915. RENEWED DEC. 6, 1916.

1,228,874.

Patented June 5, 1917.



Inventor,
CHARLES M. BERRY,
By *Fris* Attorney
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UNITED STATES PATENT OFFICE.

CHARLES M. BERRY, OF NEW YORK, N. Y., ASSIGNOR TO THE REINFORCED PROPELLER AND INSULATING COMPANY, INC., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

PROPELLER.

1,228,874.

Specification of Letters Patent.

Patented June 5, 1917.

Application filed July 31, 1915, Serial No. 42,907. Renewed December 6, 1916. Serial No. 135,485.

To all whom it may concern:

Be it known that I, CHARLES M. BERRY, a citizen of the United States, residing at New York city, New York, have invented a new and useful Improvement in Propellers, of which the following is a specification.

This invention relates to propellers for use in connection with aeroplanes, steamboats and the like, the object being to produce an article of manufacture of the class described, possessing lightness, strength and balance.

It is commonly known that the wooden propeller now in general use in connection with aeroplanes is unsatisfactory in that it is susceptible to climatic changes and warps readily, which condition greatly increases vibration and appreciably affects the balance. My propeller aims to correct any tendency toward warping and maintains accurate balance indefinitely.

In carrying out my invention I provide stamped sheet metal propeller halves the edges being provided with suitable flanges which are adapted, when the parts are assembled, to snugly fit one within the other and over and around this hollow structure I place a layer of carbonaceous matter which gives the structure a finish and reinforces the same throughout and in this manner I am enabled to construct a propeller possessing great rigidity and lightness and which will always retain its given shape and balance under any and all conditions of use.

In the drawings:

Figure 1 is a face view of a propeller constructed, according to my invention, partly broken away to show the interior.

Fig. 2 is an enlarged cross section taken at 2—2, through one of the blades and showing a mold employed in the manufacture of the propeller.

Fig. 3 is an enlarged section taken on the line 3—3 of Fig. 1.

Referring to the drawings I show at 10,

a propeller constructed according to my invention and which is constituted by blades 11, and the hub 12.

In carrying out my invention I stamp or otherwise form two properly shaped sheet metal sections 13 and 14, having marginal flanges 15 and 16 adapted to snugly fit one within the other, and in the form of construction shown, the flange 16, is received within the flange 15, and when the parts are assembled a hollow space 17, remains between the sections as shown.

The sections are preferably coated either with sheets, strips or plastic material of a carbonaceous nature and are then placed in a proper mold or form such as 18, and subjected to heat and pressure after which the propeller may be removed in a finished highly polished condition and is ready for use. The finishing layer or coat just described acts to reinforce the entire structure and produces a smooth finish which is desirable in this class of articles of manufacture. I have not described the mold 18 in detail as it forms no part of this invention and is the subject matter of co-pending application 42,906.

It will be understood that the metallic sections may be made up in quarters or any practical number of these sections may be employed and changes in and modifications of the form shown may be resorted to without departing from the spirit of my invention or the scope of the appended claim.

The flanges may also be eliminated.

Having thus described my invention what I claim, and desire to secure by Letters Patent is:

A propeller constructed of sheet metal sections having marginal flanges to form, when assembled, a hollow structure reinforced with a coating of carbonaceous material.

In testimony whereof, I, CHARLES M. BERRY, have signed my name to this specification, this 30th day of July, 1915.

CHARLES M. BERRY.