May 9, 1939. M. W. ROSNER 2,157,349

PROPELLER GOVERNOR

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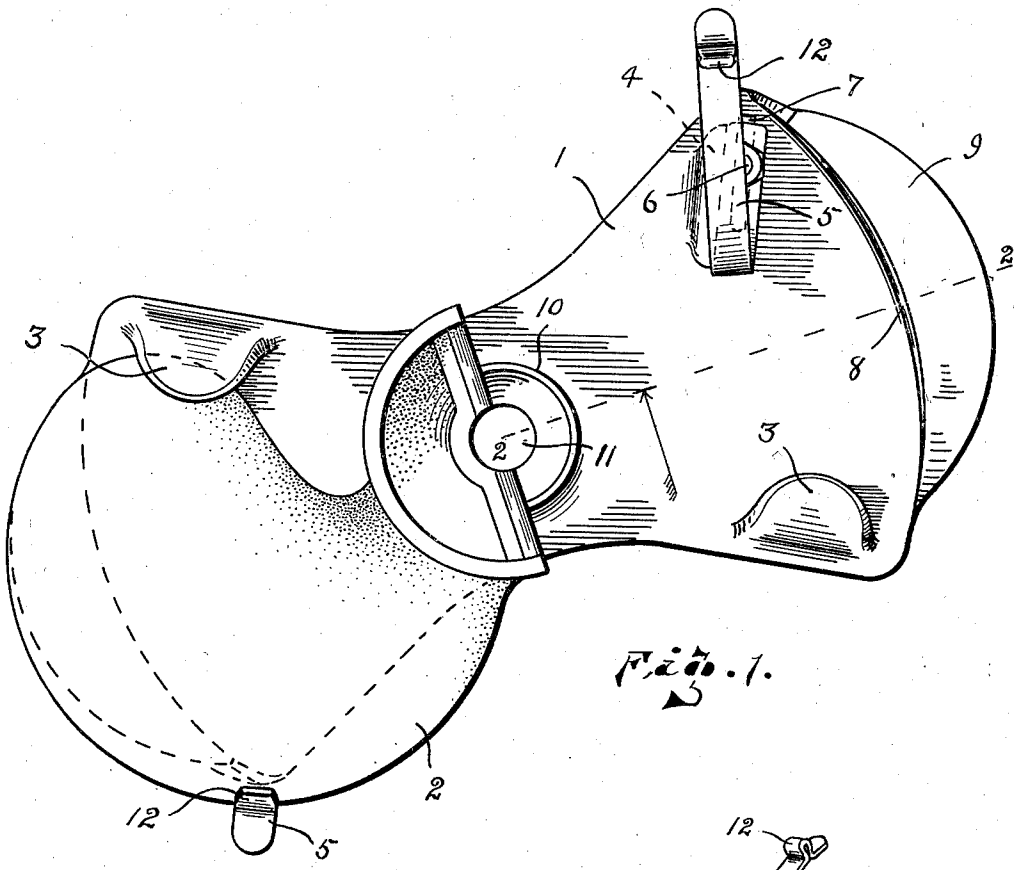


Fig. 1.

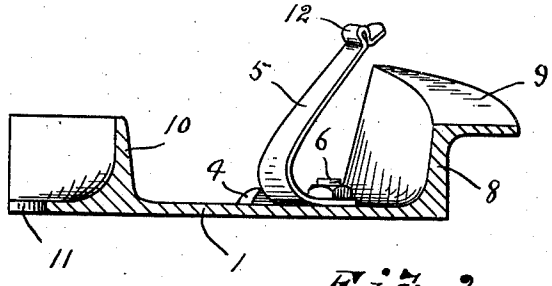


Fig. 2.

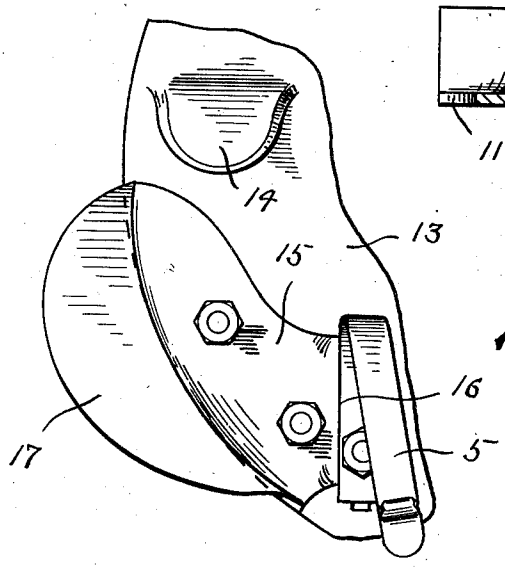


Fig. 3.

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PROPELLER GOVERNOR

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Application May 9, 1938, Serial No. 206,791

5 Claims. (Cl. 170—159)

This invention relates to propeller governors and is deemed an improvement over my former application Serial No. 160,866, now Patent No. 2,116,849, issued May 10, 1938, and which in actual practice is found to be more efficient, and to produce such a device is the principal object of the invention.

Other objects and advantages of the invention will appear in the following description thereof.

Referring now to the accompanying drawing forming part of this application and wherein like reference characters indicate like parts:

Figure 1 is a plan view of a two-blade propeller attachment with one blade of a propeller shown as applied thereto.

Figure 2 is a section on the line 2—2, Figure 1.

Figure 3 is a plan view of a modified embodiment of the invention.

In Figures 1 and 2 of the drawing 1 represents a relatively thin metal plate adapted for use upon a two blade propeller, one of which blades is illustrated at 2 showing the attachment as applied thereto.

It will be noted that in this embodiment the opposite sides of the plate 1 are cut-away, forming substantially sector shaped remaining portions for registration with the blades of the propeller, and upon which portions the attachments applied to each blade is installed. These attachments embody the integrally formed arcuately shaped ear or lug 3 adjacent one edge of each sector, while adjacent the opposite edge is also an upstanding integral guide 4 for support of the spring clip 5, which is held in position by a suitable bolt 6 extending through the elongated slot 7 adjacent the guide 4, this slot and bolt arrangement being for the convenient longitudinal adjustment of the clip to suit varying dimensions of propeller blades.

Extending about the circumferential marginal edge of each sector of the plate 1 and stepped at right angles thereto is the upstanding wall 8 which terminates in a flat outwardly extending arcuately shaped inclined blade rest or shelf indicated at 9 and upon which the blade of the propeller when the device is applied to same will snugly rest or fit, thus forming a sort of pocket in the space beneath the propeller blade and between it and the plate 1. This pocket has been found to function admirably in slowing down the rotation of the propeller blade and thus reducing its functioning as a propeller, and which is the paramount object of the device.

While I have shown this embodiment as one applicable to a two-blade propeller and having its opposite sides cut-away so as not to excessively retard centrifugal action of the propeller, it is obvious that the device may be applied to a three or a four blade propeller, in which event the cut-away portion may be modified as desired without departing from the spirit of the invention. In the present embodiment I have shown the hollow hub-like portion 10 upon the device, but the same is not material to the functioning of the invention, and also the central portion of the plate may be provided with a circular opening only, as illustrated at 11, and of any desired dimension.

The spring clips 5 do not differ materially from that shown in my above mentioned patent, and, as is apparent, for convenient snapping engagement over the edge of the propeller blade, as clearly shown in Figure 2, they are made of suitable spring metal material and provided with the loop 12 for such overlapping engagement.

In Figure 3 is shown a modified form of pocketing wall for attachment to any desired form of plate, illustrated at 13, and which plate is shown as provided with a lug 14 similar to the lugs 3, previously described, and these pocketing members or ear-like lugs as shown at 15 have their base portions extended somewhat and provided with a straight edge terminus as at 16 to act as a guide and support for the spring clips 5, which are identical with those shown in the other figures of the drawing and installed upon the plate 13 in exactly the same relation to the lug 14 as those illustrated in the other figures of the drawing. The removable ear 15 has the upstanding form and relationship to the plate and clip, substantially identical to that shown in the other figures of the drawing, its flat inclined arcuate surface 17 being for engagement with the propeller blade when applied thereto.

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

1. A speed governor for screw propellers comprising in combination a plate, means carried by said plate for removable engagement with the edges of the blades of said propeller, a stepped arcuately shaped blade rest extending outwardly from the face of and beyond the periphery of said plate.

2. A speed governor for screw propellers comprising in combination a plate, means carried by said plate for removable engagement with the edges of the blades of said propeller, and arcuately shaped inclined blade rests extending outwardly from the face of the plate and beyond the periphery thereof for reducing the speed of said propeller.

3. A speed governor for screw propellers comprising in combination a plate, means carried by said plate for removable engagement with the edges of the blades of said propeller, and removable stepped blade rests attached to and extending outwardly from the face of and beyond the periphery of said plate.

4. A speed governor for screw propellers comprising in combination a plate, means carried by said plate for removable engagement with the edges of the blades of said propeller, and blade rests extending outwardly from the face of and beyond the periphery of said plate for contact with the outer portion of the face of said propeller blades.

5. A speed governor for screw propellers comprising in combination a plate, means carried by said plate for removable engagement with the edges of the blades of said propeller, and arcuately shaped inclined blade rests extending outwardly from the face of and beyond the periphery of said plates and in a different plane therefrom.

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