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PROPELLER ATTACHMENT FOR ROCKERS

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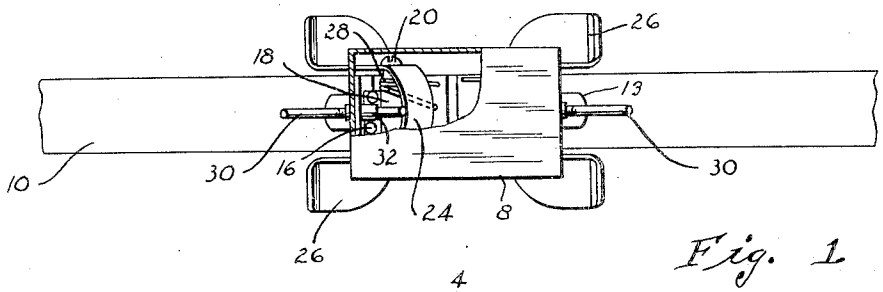


Fig. 1

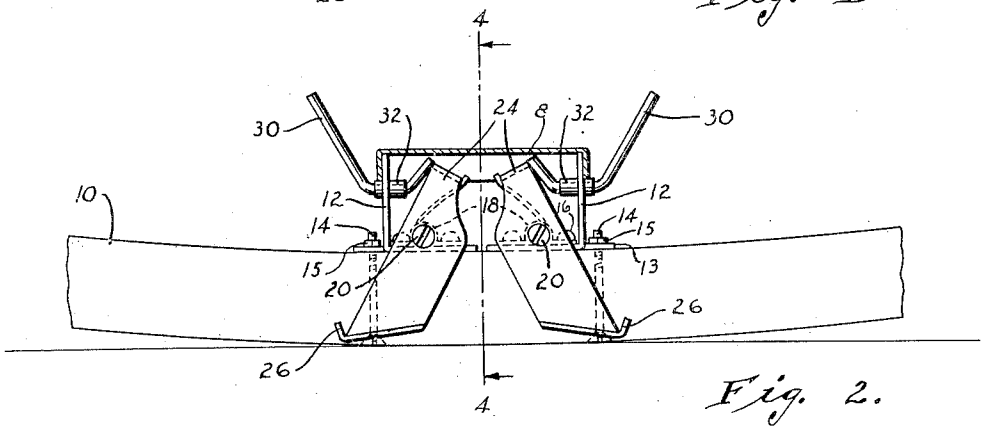


Fig. 2.

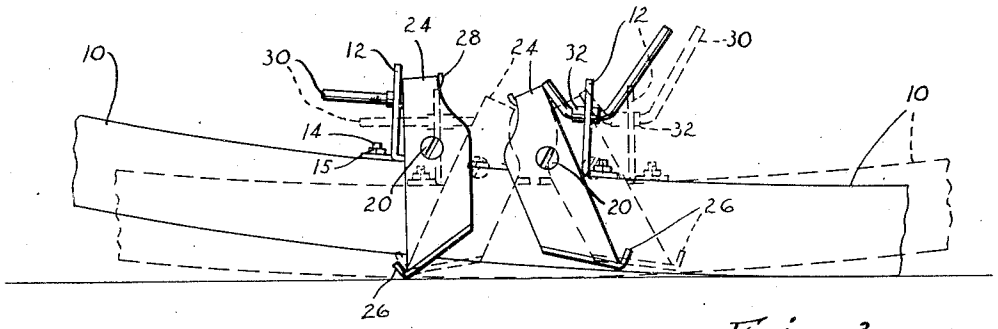


Fig. 3.

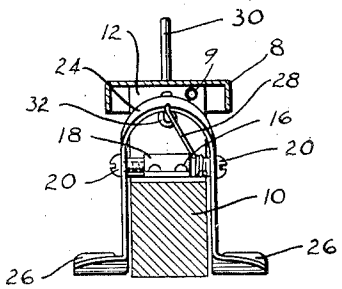


Fig. 4

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PROPELLER ATTACHMENT FOR ROCKERS

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2 Claims. (Cl. 272—53)

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The present invention relates to rocker devices, and aims to provide an accessory for such devices which will operate to produce a travelling movement of the rocker in one direction or the other in response to the rocking movement thereof.

Accordingly an object of the invention is to provide an attachment suitable for application to a rocking chair or other appliance having one or more rocking elements, and which comprises means operating by engagement with the floor during the chair's rocking movement to produce a travel of the same in either direction at the will of the occupant of the chair.

To this end, one form of embodiment of the invention comprises a simple accessory device attachable to the rocker member and having pusher elements which may be retained in a normal inoperative position but may be selectively released into operative position for producing a travelling movement of the rocker in one direction or the other. The said pusher elements are moreover adapted (when both are set in inoperative position) to permit either a normal rocking movement of the chair or other appliance upon the floor, or to support such appliance in slightly elevated position or off the floor, for rocking movement in a suspended position.

It is further sought to provide a practical and yet extremely simple and economical construction comprising few parts adapted for fulfilling all the purposes of the invention.

With the foregoing general objects in view, the invention will now be described by reference to the accompanying drawing illustrating one form of construction which I have devised for embodying the proposed features of improvement, after which those features and combinations deemed to be novel and patentable will be particularly set forth and claimed.

In the drawing:

Figure 1 is a plan view showing a portion of a rocker member provided with an accessory appliance embodying the present invention, a portion of the casing thereof being broken away;

Figure 2 is a side view of the same, with said casing shown in vertical section;

Figure 3 is a similar view with said casing omitted and one of the pusher devices adjusted into operative position and dotted lines representing a shifted position of the parts in response to a rocking action of the rocker member; and

Figure 4 is a transverse sectional view, representing a section taken on the line 4—4 of Figure 1.

Referring now to the accompanying drawing

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in detail, this illustrates the improved appliance as an accessory device attached to a rocker member 10, such as one of the supporting rockers forming part of a rocking chair (not otherwise illustrated). This accessory appliance comprises a pair of duplicate but reversely arranged pusher devices, each made up of an angle bracket 12 having an outstruck lug 13 adapted to be secured by one or more bolts 14 and nuts 15 to the upper face of the rocker member 10, with said brackets set in oppositely arranged relation, as illustrated in Figures 2 and 3. Inside each bracket element 12 is secured, as by rivets 16 or the like, a bearing clip element 18 for transversely mounting a fulcrum pin or screw 20. Each of said fulcrum elements serves as means for pivotally mounting a U-shaped pusher member 24 in a position astride the rocker member 10, the opposite sides or legs of said pusher member terminating in outwardly projecting foot portions 26 at approximately the bottom edge of the rocker member, all as clearly represented in Figure 4.

Each of the fulcrum elements is also provided with a coil spring 28 engaging the upper portion of the corresponding pusher member 24 and adapted to actuate the latter outwardly or into more nearly upright position for projecting its foot portion 26 below the bottom face of the rocker member for floor engagement (as indicated at the left in Figure 3).

The pusher members are adapted to be withheld, however, against the action of said springs 28 by a form of detent means comprising a separate detent arm 30 for each pusher member, said arm being pivotally mounted in a sleeve 32 carried by the upright portion of the corresponding bracket 12 and having its inner end in position to engage the upper portion of the pusher member and hold the same rocked inwardly against the action of its spring, the outer end of the arm 30 projecting a sufficient distance for the convenient manipulation by the occupant of the chair. When turned to disengage the detent from the pusher member, the inner end of the arm 30 is swung to the interior of said member and completely out of engagement therewith, thus releasing the same to the action of said spring, as represented at the left in Figure 3.

It is to be understood that duplicate devices as above described are mounted upon both rocker members of a chair, and if no movement is desired of the chair or rocker other than a simple rocking movement, both pusher devices 24 of each appliance are latched by the detent means comprising the arms 30, as represented in Figure

2, which retains said devices with their lower feet portions **26** elevated and out of engagement with the floor.

For producing a forward or backward movement of the rocker, the appropriate pusher devices are released by operation of said detent means, as at the left in Figure 3, which results in the springs **28** swinging the released pushers in a direction to project their lower ends **26** into position for floor engagement as that part of the rocker rises. In this connection it will be noted that the upright portions of the brackets **12** act as stop limiting the pivotal movement of the pushers so that their lower ends or feet **26** never move quite into vertical alinement with the fulcrums **20**. Consequently when the lowering movement of the rocker takes place, the force applied through said fulcrums to the pusher members and as pressure upon the foot pieces is always in a direction away from the upright portion of the corresponding bracket, and hence produces a rocking movement of the parts upon the said foot-pieces as a fulcrum in a corresponding direction, as represented by the dotted lines in Figure 3, or until the rocker again comes to rest upon the floor.

It is obvious that a movement of the rocker in the opposite direction would be produced by simply reversing the latched and released conditions of the pusher devices from the relation illustrated in Figure 3.

Moreover, both pusher devices on one of the rockers may be left latched as represented in Figure 2 and those of the other rocker set or adjusted according to a turning movement which it may be desired to impart to the chair itself. Thus an invalid occupying the chair may readily cause it to travel or to execute such turning movements he may desire at any time, in moving about from place to place.

Again it is possible to convert the chair into a platform type of rocker by simply releasing all the pusher elements, thus resulting in the chair being in effect suspended for rocking movement, by the combined supporting action of all said pusher devices.

Thus it will be apparent that the improved device is adapted to have various useful applications in connection with different forms of apparatus having rocker members as a part of the construction, such as swing devices, and also various forms of toys or juvenile equipment (rocking horses and the like); moreover, some equipment can make use of a single one of the pusher devices, as for example in connection with a scooter type of toy equipment in rocker form and having the improved pushing device incorporated in the form of an attachment to the rocker.

As illustrated in Figures 1, 2 and 4, a top cap form of casing member **8** may be fitted over the upper ends of the bracket elements and retained in positon thereon by suitable nipple engaging means as indicated at **9** in Figure 4.

Therefore while I have illustrated and herein described what I have found to constitute a practical and satisfactory form of embodiment of my improvements, I desire to be understood as expressly reserving the right to make such changes or modifications as may fairly fall within the spirit and scope of my invention as defined by the appended claims.

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

1. An accessory pushing attachment for rockers comprising, a U-shaped pusher member adapted to be mounted astride the rocker, a bracket member adapted to be secured in fixed position to the upper face of the rocker and provided with a transverse fulcrum element for pivotally supporting said pusher member for movement of the lower free ends thereof into and out of projecting relation below the bottom face of the rocker, spring means for retaining said pusher member with its lower free ends normally in said projecting relation, said bracket member having a portion extending in the path of movement of the upper cross portion of the pusher member for limiting the movement thereof in opposition to said spring means, and detent means carried by said bracket member for engagement with said upper cross portion of the pusher member and positively latching the latter with said lower free ends above the bottom face of the rocker.

2. An accessory pushing attachment for rockers comprising, a pair of U-shaped pusher members adapted to be mounted astride the rocker, bracket members adapted to be secured in fixed position to the upper face of the rocker and provided with transverse fulcruming elements for separately and pivotally supporting said pusher members for opposite swinging movement for bringing the lower free ends thereof into and out of projecting relation to the bottom face of the rocker, oppositely acting spring means for retaining said pusher members with their lower free ends normally in said projecting relation, said bracket members having portions extending in the paths of movement of the upper cross portions of said pusher members for limiting the swinging movement thereof in opposition to said spring means, and detent means carried by said bracket members for engagement with the upper cross portions of the pusher members and positively latching either or both of said pusher members with their lower free ends above the bottom face of the rocker.

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