Sept. 9, 1924. 1,508,134

T. B. BARNETT

ROLLER ATTACHMENT FOR ROCKING CHAIRS

Filed Jan. 30, 1924

Fig. 1

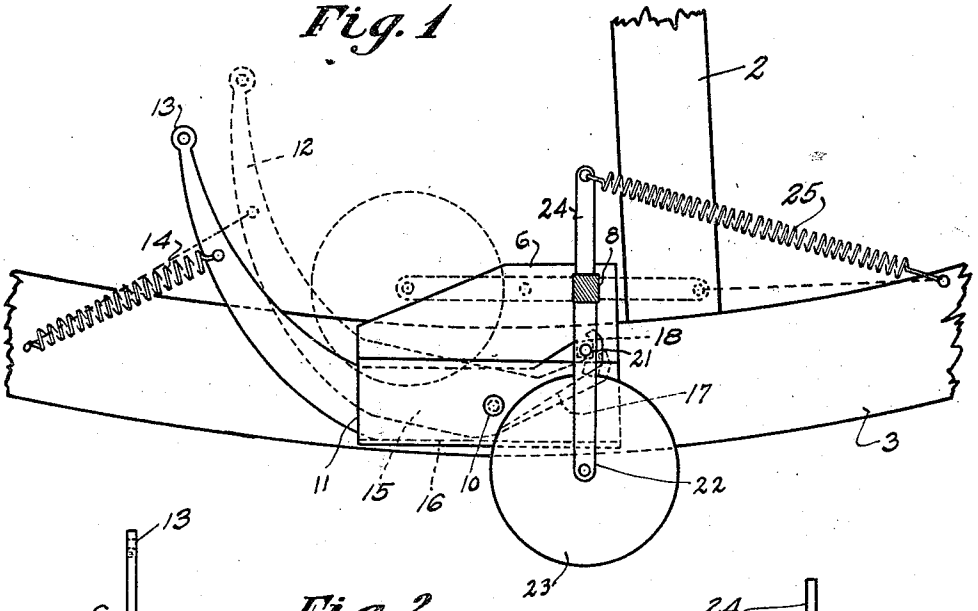


Fig. 2

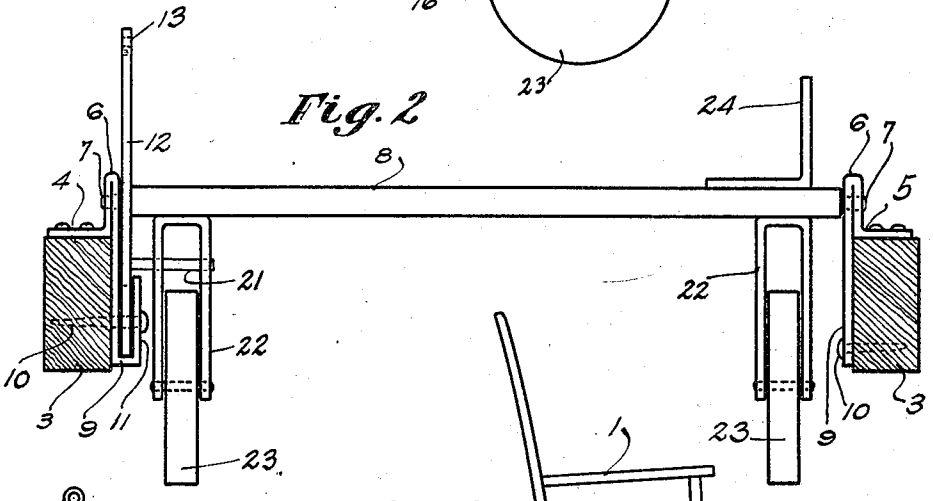


Fig. 3

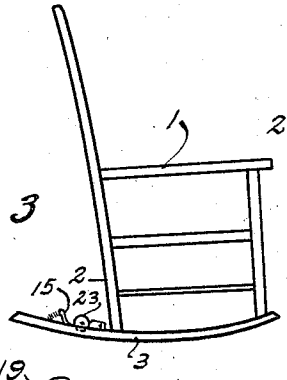
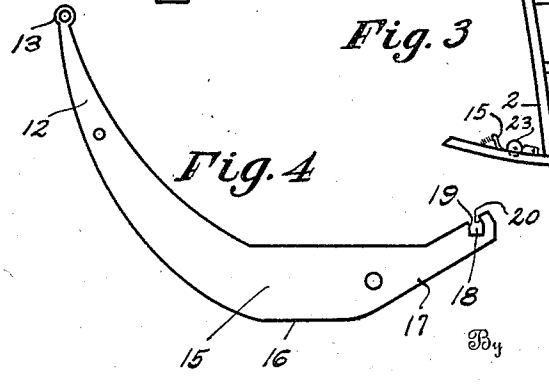


Fig. 4



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UNITED STATES PATENT OFFICE.

THOMAS B. BARNETT, OF BIRMINGHAM, ALABAMA.

ROLLER ATTACHMENT FOR ROCKING-CHAIRS.

Application filed January 30, 1924. Serial No. 689,550.

To all whom it may concern:

Be it known that I, THOMAS B. BARNETT, a citizen of the United States of America, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Roller Attachments for Rocking-Chairs, of which the following is a specification.

My invention relates to roller attachments applicable to rocking chairs and designed to be readily thrown into operating position to permit the rocking chair to be rolled with ease about the room, thus facilitating the handling of heavy chairs and avoiding any dragging or lifting of rocking chairs.

More particularly my invention comprises brackets attachable to the chair rockers adjacent to the back legs and rollers mounted upon a rocker shaft journaled in said brackets and adapted to be pressed into operating position by the foot and there automatically latched, said rockers being returned to inoperative position by spring means when the latch is tripped by the foot. This avoids any stooping or hand manipulation in the control of the rollers which can be set and released in the easiest possible manner.

My invention also comprises the novel details of the bracket mounting of the rocker shaft and of the spring-pressed latch for setting the rollers in operating position.

My invention also comprises the novel details of construction and arrangements of parts, which in their preferred embodiment only are illustrated in the accompanying drawings which form a part of this specification, and in which:—

Fig. 1 is an enlarged fragmental view in side elevation of a rocking chair showing my invention applied with the rollers appearing in full lines in operating position and in dotted lines in inoperative position.

Fig. 2 is a cross-sectional view of Fig. 1 showing the roller mechanism in rear elevation.

Fig. 3 is a reduced view showing a rocking chair equipped with my invention in inoperative position; and

Fig. 4 is a detail view of the spring-pressed latch.

Similar reference numerals refer to similar parts throughout the drawings.

In the embodiment of my invention illustrated, I show a typical rocking chair 1 having rear vertical legs 2 and rockers 3. I mount on the rockers brackets 4 and 5, each bracket having a top leg screwed to the upper surface of its respective rocker and having an upturned portion 6 of double thickness which has a bearing hole drilled therein to receive the trunnion 7 at the adjacent end of a square rocker shaft 8. The extensions 9 of the portions 6 which drop below the top lever of the rockers are of substantial width and are connected by screws 10 to the inside face of their respective rockers. The extension 9 of the bracket 4 has its lower end bent out and then up at 11 in spaced parallelism with 9 to form a housing in which I pivotally mount on the screw 10 a latch 12 which is received snugly between the housing walls 9 and 11 and is braced against lateral or rocking play between them. The rear end 13 of the latch extends upwardly on a curve and is connected by a coiled tension spring 14 to the adjacent rocker. The body portion 15 of the latch has a flat bottom edge 16 which extends forwardly to a point approximately under its pivot and from that point it is bevelled or inclined upwardly to form the latch end 17. In the upper edge of this latch is formed a notch 18 having a rear wall 19, which stands substantially vertically, and its forward wall 20 is formed with an indentation which will cause it to hook over and hold a pin 21. This pin is secured to the yoke 22 which also carries the roller 23 disposed adjacent to the latch. This yoke is attached near one end to the rocker shaft 8 and a similar yoke 22 is attached near the other end of the rocker shaft 8. The pin 21 overhangs far enough to be engaged and controlled by the latch in the manner hereinafter described.

I mount near either end of the rocker shaft an upright bracket 24 and to the upper end of this bracket I connect a forwardly extended coiled tension spring 25 which is connected in any suitable manner to the rocker adjacent to the bracket. This tends to hold the rocker shaft 8 and the rollers in the dotted position shown in Fig. 1, which represents their inoperative position.

In operation, when it is desired to use the rollers one's foot is pressed against either one of the rollers and both will be forced downwardly, rocking about the axis of the shaft 8 until they raise and support in part

the weight of the chair. This causes the arm 24 to swing upwardly against the tension of the spring 25. As the roller yokes swing downwardly the pin 21 engages and travels over the upper bevelled or inclined face of the end 17 of the latch, depressing the latch against the tension of spring 14 until the pin snaps into the latch notch 18. Thereupon the latch rocks back to the position shown in full lines, Fig. 1, and the pin bears against the face 19 in the slot which positively holds the rollers in operative position against the pull of the spring 25 and against the thrust strain when the chair is pushed forward. If the chair be pulled backward the pin will swing across the notch 18 and will engage under the hook 20 and this will resist the thrust strain or drag of the rollers when the chair is pulled backward. The rollers while thus in operative position are so disposed that by grasping the chair back its entire weight can readily be imposed on the rollers to make movement of the chair easy. When the chair has been moved to the point desired, the operator kicks the rear end of the latch upwardly, moving it against the tension of spring 14 and swinging its latch end 17 downwardly so as to disengage it from the pin 22, whereupon the spring 25 acts to draw the rocker shaft and rollers back to, and hold them in their inoperative dotted line position, as shown in Fig. 1. It will be observed that the latch has considerable width, thus increasing its surface engagement between the walls 9 and 11 of its housing, thereby preventing any tendency of it to rock laterally on its pivot and giving it the requisite strength to perform its functions without undue weight of metal.

The bottom edge 16 of the latch forms a stop when it engages the bottom of its housing to limit its movement responsive to the spring 14, and in like manner the bevelled bottom edge of the latch end 17 will engage the bottom of its housing and serve to limit the unlatching stroke of the latch. The spring 25 will hold the rollers in their inoperative position.

Though I have described with great particularity the details of the embodiment of the invention herein shown, it is not to be construed that I am limited thereto, as changes in arrangement and substitution of equivalents may be made by those skilled in the art without departing from the invention as defined in the appended claims.

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

1. A roller attachment for rocking chairs, comprising brackets attachable to the chair rockers, a rocker shaft journaled in the brackets, rollers mounted in bearings offset from said shaft, a latch element rigid with one roller bearing, a spring-pressed latch having spaced jaws adapted to receive between them said latch element and hold the rollers in operating position against forward or backward thrust, one of said brackets having its lower end bent to form a housing in which the latch is pivotally mounted, said latch having angularly disposed bottom edges adapted to engage said housing to limit its rocking play in both directions, and spring means to retract the rollers to inoperative position.

2. In a roller attachment for rocking chairs, a pair of angle brackets attached to the chair rockers, a rocker shaft mounted in said brackets and carrying rollers mounted eccentric to the shaft axis, spring means tending to hold said rollers in inoperative position, a latch pivoted to one bracket, a pin movable with the rocker shaft and adapted to be engaged and held by said latch with the rollers in operative position, and spring means to force the latch into engagement with said pin, said latch having a rearward projection convenient to be kicked up by the foot to disengage the pin, as and for the purposes described.

3. A roller attachment for rocking chairs in accordance with claim 2, in which the latch co-acts with stops on both sides of and below its pivot to limit its rocking movements in both directions and has an inclined upper edge up which the pin rides against the action of the latch spring as the rollers are forced downwardly into operating position.

In testimony whereof I affix my signature.

THOMAS B. BARNETT.

Witness:
NOMIE WELSH.