Dec. 14, 1948. A. J. BELISLE 2,456,043

LOCKING DEVICE FOR ROCKING CHAIRS

Filed May 22, 1948

Fig. 2.

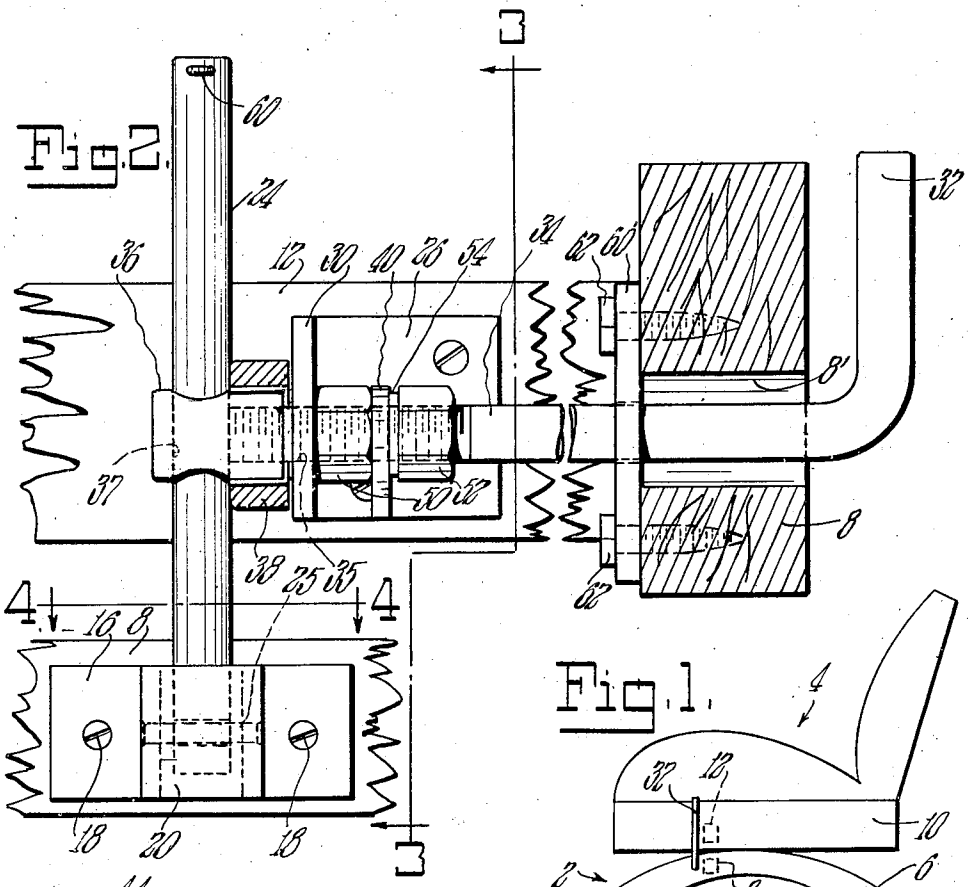


Fig. 1.

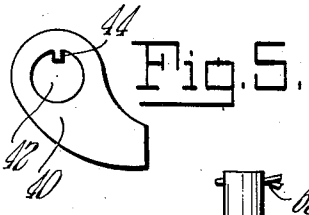


Fig. 5.

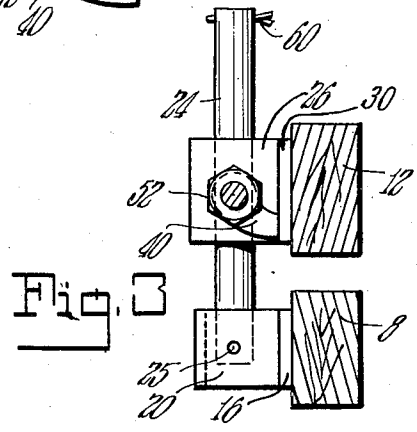


Fig. 3.

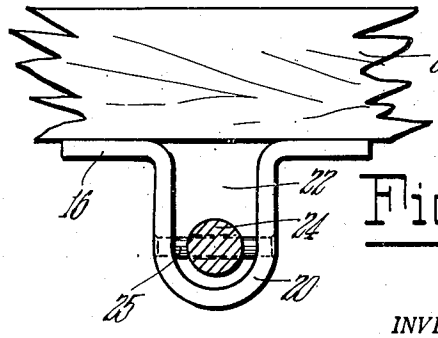


Fig. 4.

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LOCKING DEVICE FOR ROCKING CHAIRS

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2 Claims. (Cl. 155—72)

1

My invention relates to improvements in rocking chairs and is directed more particularly to devices for locking the rocking part of a chair, such as the seat, in various positions.

The principal object of my invention is directed to the provision of an apparatus for a rocking chair having a base and a seat rockable therein, which is adapted to lock the seat in various positions or to release the same.

The novel features of my invention make it possible to lock the rocking part of the chair in any position within the limits of its rocking movement whereby the user may utilize the chair for rocking or for reclining all as may be desired.

As a special feature of my invention, the user may operate the apparatus while in the chair and may thereby readily and easily lock or release the rocking part without the necessity of leaving the chair for such purpose.

With the foregoing and various other novel features and advantages and other objects of my invention as will become more apparent as this description proceeds, my invention consists in certain novel features of construction and in a unique combination and arrangement of parts as will be hereinafter more particularly pointed out in the claims hereunto annexed and more fully described and referred to in connection with the accompanying drawings wherein:

Fig. 1 is a small scale side elevational view, more or less diagrammatic, of a rocking chair having the novel features of my invention associated therewith;

Fig. 2 is a front elevational view of the device of my invention;

Fig. 3 is a small scale side elevational view along the line 3—3 of Fig. 2;

Fig. 4 is a sectional plan view on the line 4—4 of Fig. 2; and

Fig. 5 is a plan view of the stop member of the device of my invention.

Referring now to the drawings more in detail, the invention will be fully described.

In Fig. 1, a chair is diagrammatically shown and includes, as in the usual case, a base 2 for resting upon a floor and an upper or seat part 4 which is associated with the base 2 in any of the well known manners for purposes of rocking forwardly and rearwardly thereon.

The base member 2 normally has opposite side members such as 6 and one or more transverse members such as 8 whereas the seat member 4 normally has opposite side members 10 and one or more transverse members such as 12.

It is to be explained that the novel features of my invention are associated with the transverse cross members 8 and 12 of the chair shown in Fig. 1.

2

A bracket 16 is secured to the cross member 8 by any suitable means such as by screws 18 or the like. The member 16 has a U-shaped portion 20 intermediate the ends thereof extending outwardly from the member 8 so as to provide an opening 22 through which is loosely receivable a slide rod 24 substantially as shown in Fig. 4.

A slide rod cross pin 25 is receivable through one end of the slide rod 24 to hold the members in pivotal relation and has its opposite ends receivable in the opposite sides of the U-shaped portion 20 as shown.

The slide rod 24 is loosely receivable in the opening 22 to permit relative movement thereof. As will shortly be observed, the slide rod is subject to various movements and resultant tensionings at or along its upper end portion or its intermediate portion upwardly of the cross pin 25 and in such movements a definite rocking is observed to take place. The slide rod being loose relative to the bracket, the rocking movement is easily compensated for.

A bracket 26 is similarly secured to the transverse member 12 and it has a forwardly extending flange 30.

An operating rod has a handle part 32 disposed at one side of a chair and a transverse part 34 which extends inwardly from and through the side member and loosely through an opening 35 in the flange 30.

The end of the member 34 is screw threaded and engages the internal threads of a slide lock nut 36 which has a bore 37 therethrough for slidably receiving the member 24 as shown in Fig. 2.

A slide lock collar 38 is insertable over the nut 36 and is inserted between the member 24 and the outside of the member 30 all as is shown in Fig. 2.

The members 34 and 36 are threaded so that when the member 32 is moved in one direction the effect is to tighten the collar member 38 against the rod member 24 thereby to hold the rod member securely in position relative thereto and when the member 32 is moved in an opposite direction the effect is to loosen the parts 24 and 38 so that the same are movable relative to each other.

On the member 34 on the inside of member 30 there is a stop member 40. This member is shown in detail in Fig. 5 and has an opening 42 therein. A key 44 is provided so that when the member 40 is inserted over the member 34, the key 44 is receivable in a keyway in the member 34 (not shown) all for the purpose of insuring that the stop is non-rotatable on the rod 34. It

will be appreciated, of course, that such purpose may be accomplished in other conventional ways.

By swinging the operating member **32** forwardly from the position shown in Fig. 1, the rocking part of the chair is free to rock on the base. By swinging the operating member **32** rearwardly or counterclockwise, the members **24** and **38** are drawn to each other so that the one frictionally engages the other.

Therefor with the rod **32** in its forward position or in a position clockwise to the position shown in Fig. 1, the rocking part of the chair is free to rock on the base and in so doing the member **24** moves up and down relative to the rod **34** and the bracket **26**.

A primary nut **50** adjacent the member **30** is in screw threaded engagement with the threaded end of the member **34** and the stop member **40** is receivable upon the member **34** outwardly of the nut **50** and adjacent thereto.

A secondary nut **52** is in screw threaded engagement with the member **34** on the side of the stop member **40** opposite from the primary nut **50**.

A washer **54** is disposed on the member **34** between the stop **40** and the nut **52**.

The nuts **50** and **52** secure the member **40** to the member **34**.

The nuts **50** and **52** are tightened in such a manner as to grip firmly the stop **40** therebetween.

The operating member **32** is arranged for oscillatory movement.

As the member **32** is oscillated to the locking position the nut **50** is forced against the inner side of the member **30**.

The stop member **40** is provided to abut the bracket **26** and to limit the forward movement of the operating lever **32**.

The screw threads on the end of the member **34** may take various forms to accomplish the desired result but a double thread has been found to be adapted for the practice of the invention.

A cotter pin **60** is provided on the upper end of member **24** to prevent relative disengagement of the parts **24** and **36**.

It will be observed that the locking part of the chair is frictionally held against rocking movements by reason of the novel construction and thereby the rocking part of the chair is locked in any desired position under all ordinary circumstances.

As another novel feature of my invention, the member **34** extends loosely through an enlarged opening **8'** in the member **8**.

A guide plate **60'** has an opening therethrough which is snugly received over the member **34**. In the assembly of the components of the device of my invention, the member **34** may be accurately positioned relative to the member **8** by the adjustment of the member **60'** relative to the member **8** prior to securement thereto by means of screws **62** or the like.

The invention may be embodied in other specific forms without departing from the essential characteristics thereof. Hence, the present embodiments are therefore to be considered in all respects merely as being illustrative and not as being restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all modifications and variations as fall within the meaning and purview and range of equivalency of the appended claims are therefore intended to be embraced therein.

What it is desired to claim and secure by Letters Patent of the United States is:

1. Apparatus for releasably locking the base and seat members of a rocking chair against relative rocking movement, comprising in combination, a bracket having a plate portion secured to one of the members and a flange portion extending outwardly from the plate portion and having inner and outer sides, a manually engageable threaded actuator oscillatable in the flange portion between locking and unlocking positions, a locking nut at the outer side of the flange portion having a threaded socket operatively receiving one end of said actuator and provided with a slide rod opening therethrough, a primary nut fixed on said actuator for engaging the inner side of the flange portion, a slide rod having an end pivotally connected to the other of the members and slidably receivable through the slide rod opening in said locking nut, and a locking collar loosely carried on said locking nut between said slide rod and the outer side of the flange portion for engaging the same, all adapted and arranged whereby as said actuator is oscillated to locking position said primary nut is forced against the inner side of the flange portion and said locking nut is moved axially toward the outer side of the flange portion to cause said collar to be squeezed between said rod and the flange portion so that said slide rod is held by said collar against sliding movements relative to said nut.

2. Apparatus for releasably locking the base and seat members of a rocking chair against relative rocking movements comprising in combination, a bracket having a plate portion secured to one of the members and a flange portion extending outwardly from the plate portion and having inner and outer sides, a manually engageable threaded actuator oscillatable in the flange portion between locking and unlocking positions, a locking nut at the outer side of the flange portion having a threaded socket operatively receiving one end of said actuator and provided with a slide rod opening therethrough, a primary nut fixed on said actuator for engaging the inner side of the flange portion, a slide rod having an end pivotally connected to the other of the members and slidably receivable through the slide rod opening in said locking nut, and a locking collar loosely carried on said locking nut between said slide rod and the outer side of the flange portion for engaging the same, all adapted and arranged whereby as said actuator is oscillated to locking position said primary nut is forced against the inner side of the flange portion and said locking nut is moved axially toward the outer side of the flange portion to cause said collar to be squeezed between said rod and the flange portion so that said slide rod is held by said collar against sliding movements relative to said nut, and stop means carried by said actuator for engaging the plate portion and limiting oscillatory movement of said actuator to unlocking position.

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