Oct. 3, 1950 A. J. BELISLE 2,524,418

LOCKING DEVICE FOR ROCKING CHAIRS

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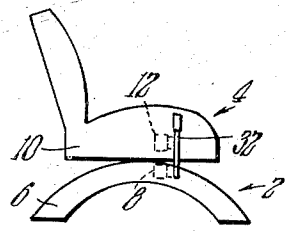



Fig. 1.

Fig. 2.

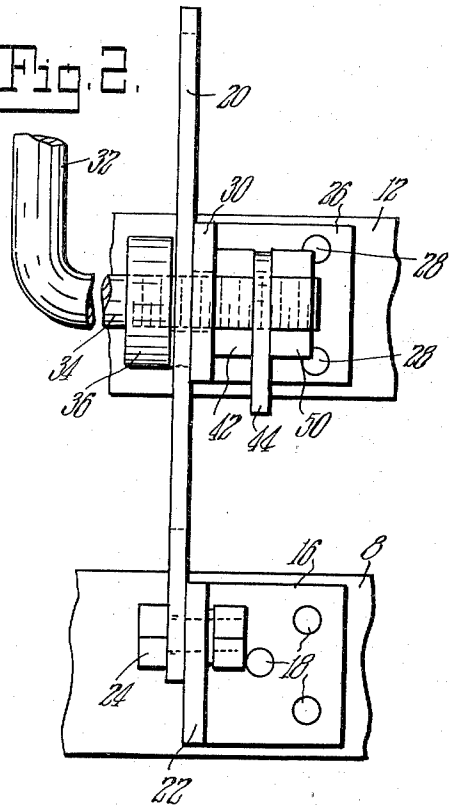



Fig. 3.

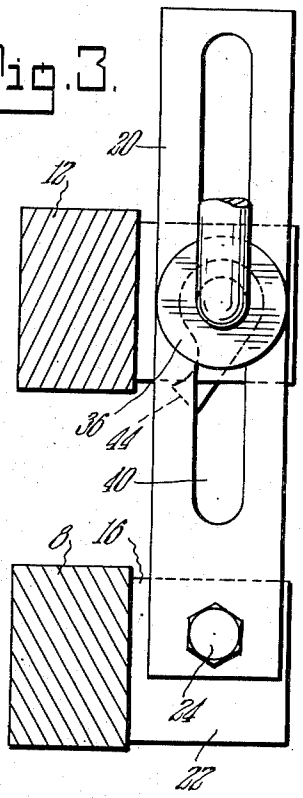



Fig. 5.

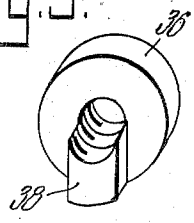
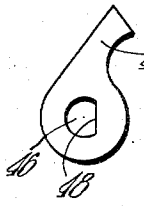



Fig. 4.

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# UNITED STATES PATENT OFFICE

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## LOCKING DEVICE FOR ROCKING CHAIRS

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3 Claims. (Cl. 155—72)

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This 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 objects of the invention are directed to the provision of 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 the invention make it possible to lock the rocking part in any position within the limits of its rocking movement and thereby the user may utilize the chair for rocking or for reclining as may be desired.

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

With the foregoing and various other novel features and advantages and other objects of my invention as will become more apparent as the description proceeds, the invention consists in certain novel features of construction and in the 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 the invention associated therewith;

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

Fig. 3 is a side elevational view of the apparatus shown in Fig. 2;

Fig. 4 is a plan view of the stop member of the apparatus; and

Fig. 5 is a perspective view of the friction member of the apparatus.

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

In Fig. 1 a chair is shown diagrammatically which in the usual case includes a base 2 for resting on the floor and an upper or seat part 4 which is connected to the base for rocking to and fro thereon. The base usually has side members such as 6 and one or more transverse members such as 8 while the seat part has side members 10 and one or more transverse members 12.

The novel features of the invention are associated with the transverse cross members 8 and 12 of the chair shown in Fig. 1.

A bracket 16 is secured to the cross member 8

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by any suitable means such as screws indicated by 18 and a plate 20 is pivotally connected to a flange 22 of the member 16 by a bolt 24 or the like.

A bracket 26 is similarly secured as by screws 28 or the like to the transverse member 12 and it has a flange 30 extending therefrom.

An operating rod has a handle part 32 disposed at one side of a chair and a transverse part 34 which extends inwardly from one of the side members.

The end of the member 34 is screw threaded and at one side of the plate 20 there is a friction member 36 shown more in detail in Fig. 5. This friction member has a tongue 38 which is disposed in a longitudinal slot 40 of the member 20.

The rod is arranged for oscillatory movement and passes loosely through the part 30 of the bracket 26. A nut 42 adjacent the part 30 is in screw threaded engagement with the threaded end of the part 34 and a stop 44 such as shown in Fig. 4 is provided.

The threaded end of the member 34 is flattened off at one side and the opening 46 in the member 44 has a flat side 48 whereby this stop is non-rotatable on the rod.

A nut 50 is in screw threaded engagement at the extremity of the rod member 34 and the nuts 42 and 50 will tighten in such a way as to firmly grip the stop therebetween.

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, since the member 36 is held against rotation, the operating member 32 urges the member 36 toward the member 30.

When member 32 is moved to a locking position as stated, the action is such that nut 42 bears against the outer face of the upper bracket 26 while the member 36 bears against the outer face of the plate 20 thereby squeezing and frictionally engaging members 20 and 30.

Therefore with the rod 32 in its forward position or in the 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 plate moves up and down relative to the rod and bracket 26.

By means of this novel construction the rocking part of the chair many be locked in various desired positions relative to the base of the rocking chair.

The stop member 44 is provided to abut the flange 30 of the bracket 26 and 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.

It will be observed that the rocking 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 the desired position under all ordinary circumstances. Should the weight upon the chair be abnormal, however, so as to overcome the frictional action, the plate 20 may slip between the flange 30 and lock member 36 thereby to avoid injury to the parts and there is a decided advantage over constructions where members are positively engaged and become broken under abnormal use.

The invention may be embodied in other specific forms without departing from the essential characteristic thereof. Hence, the present embodiment is 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. A rocking chair having a base member and a seat rockably mounted thereon, means for releasably locking said seat to said base comprising separate brackets secured to the seat and base members, an elongated plate pivotally connected at one end to one of said brackets and provided with a longitudinal slot therein and having a free end with an inner face thereof disposed adjacent one side of a lateral face portion of said other bracket, an operating member having a threaded end portion extending through and freely movable in the slot in said plate and an opening provided in said other bracket, abutment means fixed to the threaded end portion of said operating member and disposed adjacent an opposite side of said portion of said other bracket, and a friction member in threaded engagement with the threaded portion of said operating member disposed at the outer face of the free end of said plate and having a portion disposed in the slot to prevent rotation thereof, all adapted and arranged whereby as said operating member is oscillated in clamping direction said plate and other bracket are drawn into frictional engagement by said friction member and abutment means while when oscillated in non-clamping direction said plate and other bracket are released from frictional engagement.

2. A rocking chair having a base member and a seat rockably mounted thereon, means for releasably locking said seat to said base comprising, separate brackets secured to the seat and base members, a plate pivotally connected at one end to one of said brackets and provided with a longitudinal slot therein, an operating member having a threaded end portion extending through the slot in said plate and an opening provided in said other bracket, abutment means fixed to said operating member and disposed outside of a lateral face portion of said other bracket, and a friction member in threaded engagement with said operating member at the outer side of said plate and having a portion disposed in the slot to prevent rotation thereof, all adapted and arranged whereby as said operating member is oscillated in one direction said plate and other bracket are drawn into frictional engagement by said friction member and abutment means while when oscillated in non-clamping direction said plate and other bracket are released from frictional engagement.



3. A rocking chair having a base and a seat rockably mounted thereon and means for releasably locking said seat to said base comprising, a pair of brackets consisting of a lower bracket secured to the base and an upper bracket secured to the seat, said upper bracket having laterally extending friction portion provided with outer and inner faces and having an opening therethrough, an elongated friction plate member pivotally connected at its lower end to said lower bracket and having a longitudinal slot therein, said friction plate member having an upper free end and provided with inner and outer faces with the inner face disposed adjacent the inner face of the friction portion of said upper bracket, an operating member having an end portion extending through the slot in said friction plate member and being movable transversely through said slot between clamping and non-clamping positions, clamp members disposed adjacent the outer faces of the friction portion of said upper bracket and said friction plate member and upon said operating member for moving towards one another to frictionally clamp the friction portion of said upper bracket to said friction plate member, means on said operating member adjacent said bracket friction portion holding one of said clamp members against movement away from said bracket friction portion and the other of said clamp members being screw threaded on said operating member, and means for preventing rotation of said other clamp member as said operating member rotates, all adapted and arranged whereby as said operating member is oscillated in clamping direction said clamp members urge the friction portion of said upper bracket and said friction plate member into frictional locking relation while when oscillated in non-clamping direction said clamp members release said members from frictional relation.

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