July 7, 1936. W. C. MARTIN 2,046,644

PORCH ROCKING CHAIR

Filed June 6, 1935

Fig. 1

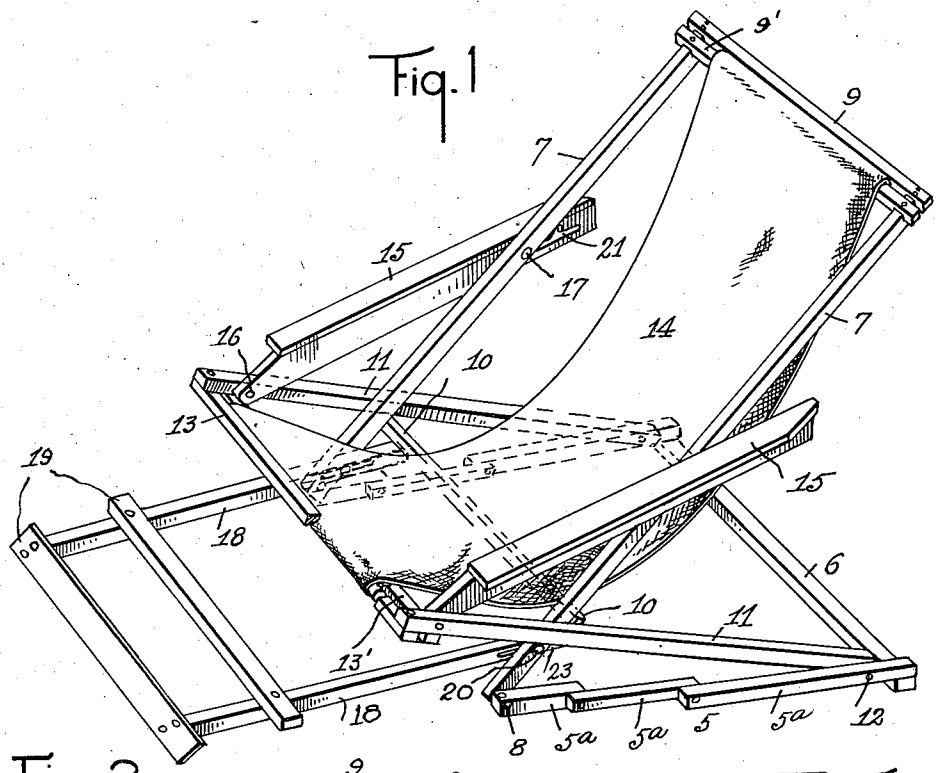


Fig. 2

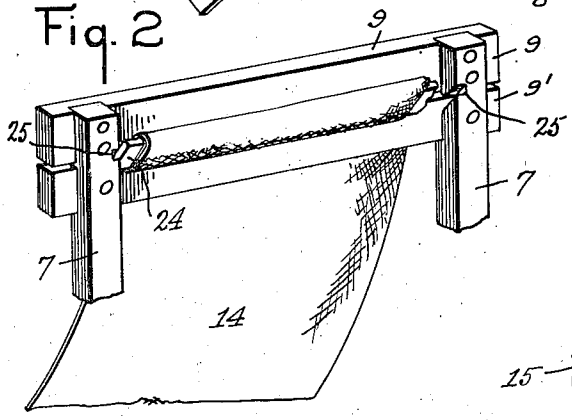


Fig. 4

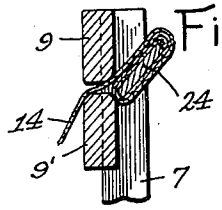


Fig. 5

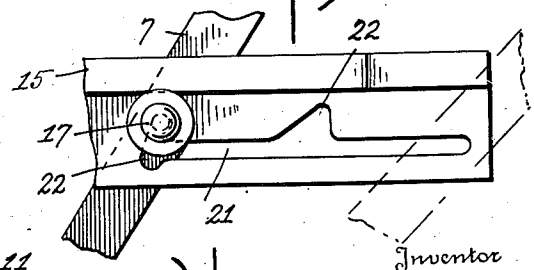
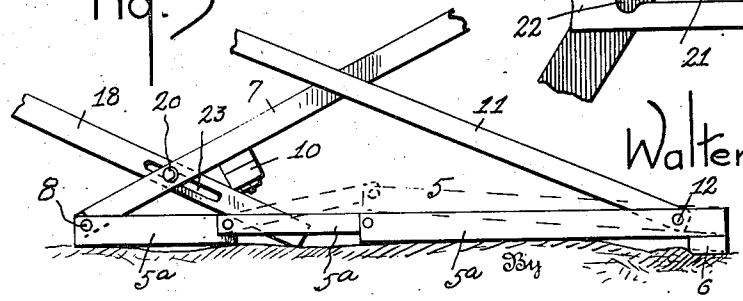


Fig. 3



Inventor

Walter C. Martin,

Davis & Davis,

Attorneys

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PORCH ROCKING CHAIR

Walter C. Martin, Florence, Ala.

Application June 6, 1935, Serial No. 25,333

4 Claims. (Cl. 155—56)

This invention relates to that type of porch rocking chairs which are adapted to collapse into a flat package or condition for convenient storage and shipment, and which are adapted to be adjusted to one or more positions in order to suit the desires or needs of the user, as will be hereinafter set forth.

In the drawing annexed,

Fig. 1 is a perspective view showing my chair adjusted for a sitting position;

Fig. 2 is a detail perspective view showing the manner in which the flexible seat may be adjusted as to length;

Fig. 3 is a detail side elevation of parts of the chair showing the adjustment of the leg structure 18 when the chair is adjusted to a cot form for reclining;

Fig. 4 is a detail vertical section through Fig. 2;

Fig. 5 is a detail side elevation showing the arm adjustment.

Referring to the drawing by reference characters, 5 is a pair of side base-bars extending fore and aft and rigidly connected at their rear ends by a rear base-bar 6, these three bars forming a base-frame adapted to rest upon the floor. Attached to the inner faces of the forward ends of the side base-bars 5 is a pair of back-bars 7, these bars being attached to the base-bars 5 by means of horizontal pivots 8, said back-bars 7 being rigidly connected at their upper, rear ends by a head-bar 9 and also at their forward, lower ends by a cross-bar 10, this cross-bar being fastened to the bar 7 at a point above the pivots 8.

A pair of seat-bars 11 is pivotally attached to the inside faces of the base-bars 5 at the rear ends thereof by pivots 12, and at the forward ends of these seat-bars 11, at a point forward of the back-bars 7, the seat-bars 11 are rigidly connected by a cross-bar 13. This cross-bar 13 is connected to the head-bar 9 by a flexible sheet of fabric 14 which forms the seat as well as the back-rest.

A pair of arm-bars 15 are respectively connected to the inner faces of the bars 11, at the forward ends thereof, by pivots 16, and the rear ends of these bars extend beyond the back-bars 7 and are pivotally connected thereto by horizontal pivots 17.

By the construction above described, it will be seen that the weight of the body of the user will rest entirely upon the pivots 8 and 12, and that these in turn are supported by the base-frame 5—6. The base-frame lies immovably upon the floor, and all the rocking takes place on the aforesaid pivots 8 and 12, the pivots 16 and 17 permitting this action to take place.

Attached to the inner faces of the back-rest bars 7 are the rear ends of a pair of bars 18 which together with two front cross-bars 19 form a foot-and-leg rest. The bars 18 are secured to the bars 7 by horizontal pivots 20, and these pivots are positioned so that the bars 18 rest upon the bottom edge of bar 10. I prefer using two foot-bars 19 in order to adapt the chair for persons of different heights.

It is desirable that the chair shall have at least three adjustments; namely, sitting, half-reclining and full-reclining positions. In order that these adjustments may be readily made, I provide for adjustably connecting the arms to the bars 7. One way of doing this is shown in Fig. 5. I provide a slot 21 in each bar 15, and provide the upper wall of this slot with two notches 22, so that the pivot bolts 17 may be slid back and forth in the slot and lodged in either one of the notches 22, or allowed to come to rest at the extreme rear end of the slot. In Fig. 5, I show in full lines a sitting adjustment; the half-reclining position can be obtained by adjusting the bolt to the middle notch 22, and a full-reclining position may be obtained by adjusting the bolt 17 to the rear end of the slot 21, at which point the bar 7 will incline as shown by the dotted lines.

The pivotal arrangement of all the parts allows the chair to be readily collapsed into a flat state for storage and transportation, but in order that this collapsing may take place, it is essential that the pivot bolts 17 be adjusted in the slots 21 forwardly to sitting position, that is, to the extreme forward ends of the slots.

The side-bars 5 are made up of three link sections 5a pivotally connected together at their adjacent overlapping ends. This piece has a two-fold purpose; the links give up-and-down flexibility to the side-bars and thus permit it to adjust itself to unevenness in the supporting surface, and also permit me to use a longer base and thus avoid a difficulty that has been heretofore experienced in this type of chair, namely, the tendency to tip over backwardly when the parts are adjusted to either one of the two sitting positions. Furthermore, these flexible base-bars permit ready collapsing of the chair when the same is to be stowed away or transported.

At the point where the pivot 20 passes through the leg-bar 18, the leg bar is slidable longitudinally as shown at 23 to thus permit the leg frame to have a fore-and-aft movement in addition to

the pivotal action up and down. This sliding movement is advantageous in that when the pin 17 is adjusted to the extreme rear end of the slot 21 to form a cot, the leg-bars may be pushed rearwardly far enough to permit their rear ends to rest upon the supporting surface, as shown in Fig. 3, to thus prevent rocking action of the chair, this rocking action being generally undesirable when the chair is adjusted to a reclining position.

The forward end of the fabric 14 is attached to the rigid bar 13 in any suitable manner, preferably as shown, namely, by inserting it downwardly through a slit formed between the rigid bar 13 and a companion bar 13' and putting the rod through a hem formed across the forward edge of the fabric. The upper or rear edge of the fabric is attached to the bar 9 in somewhat the same manner, namely, by providing a companion bar 9' to form a slit between it and the bar 9 for the passage of the upper edge of the fabric, the flat bar 24 being inserted in a hem in the extreme end of the fabric and the fabric being wound upon this bar to a sufficient extent to give the desired adjustment to the seat portion of the fabric. The ends of the slat 24 are adapted to rest removably down into inclined notches 25 formed in the inner faces of the bar 7 to thus prevent the slat 24 from rotating while the chair is in use, thereby preserving the desired adjustment. The slat 24 may be readily withdrawn from the notches for winding or unwinding the fabric to thus shorten or lengthen the effective part of the fabric.

In accordance with the provisions of the patent statutes, I have herein described the principle of operation of my invention, together with the apparatus which I now consider to represent the best embodiments thereof, but I desire to have it understood that the apparatus disclosed is only illustrative and that the invention can be carried out by other means.

I claim:

1. A rocking chair embodying a base-frame having base-side-bars, a back-frame having back-frame-side-bars whose forward, lower ends are pivotally attached to the lower ends of the base-side-bars and whose upper ends are connected by a head-bar, said back-frame-bars being also rigidly connected at a point near their lower ends by a cross-bar, a seat-frame having a front cross-bar and side-bars extending downwardly and rearwardly and pivotally attached at their rear ends to the base-side-bars, a seat fabric secured to said head-bar and to said front cross-bar, and a leg-frame having side-bars pivotally attached by horizontal pivots to the side-bars of the back-frame forwardly of and below said back-frame cross-bar, said leg-frame-side-bars extending backwardly beyond the pivots and engaging the underside of the back-frame cross-bar, and side-arm-bars pivotally connected at their forward ends to the forward ends of the seat-frame-side-bars and adjustably and pivotally connected at their rear ends to the back-frame-side-bars.

2. The structure recited in claim 1, said leg-frame-side-bars being longitudinally slotted at their pivotal points to enable said leg-frame-side-bars to be moved bodily backwardly far enough to permit their rear extremities to rest upon the floor and their upper edges to engage under said cross-bar 10.

3. The structure recited in claim 1, said base-frame-side-bars being made up of three pivotally connected floor-engaging members horizontally alined so that all three members shall lie upon the floor in all adjustments of the chair.

4. The structure recited in claim 1, said head-bar being provided with a longitudinal slit and the inner faces of the back-frame-side-bars being notched at the rear of the head-bar to receive a slat upon which the upper end of the seat fabric is wound, the ends of said slat being removably engaged in said notches.

WALTER C. MARTIN.