

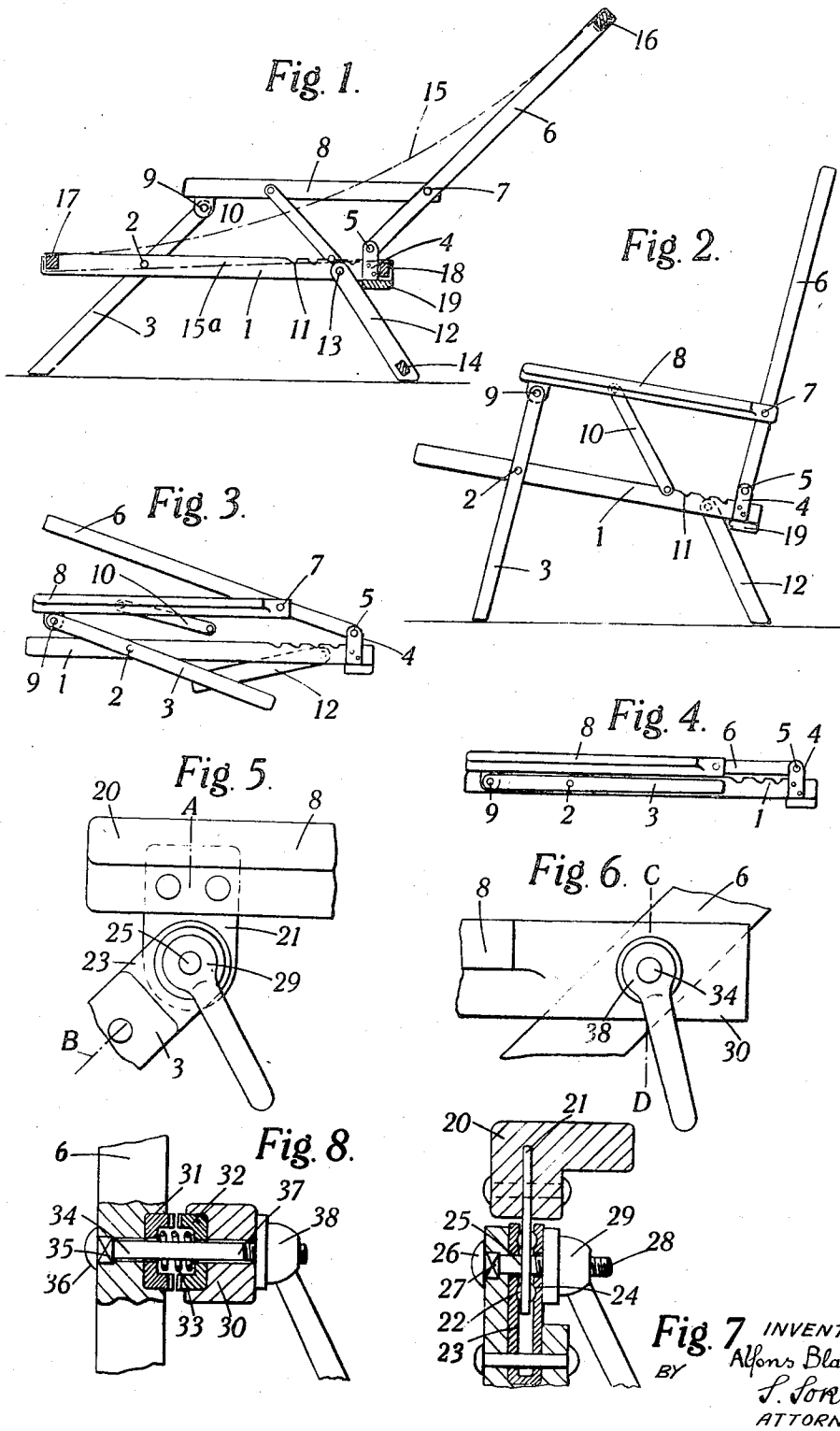
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RECLINING CHAIR

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RECLINING CHAIR

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This invention relates to an improvement in reclining chairs, and more especially reclining chairs adapted to be adjusted to various reclining positions as well as to a position for use as an ordinary chair.

One of the objects of my invention is to provide a chair which can readily be adjusted by the occupant while seated therein, as well as a chair which will occupy a minimum of space when folded or opened.

Another object of my invention is to provide adjustable supporting means for the chair which will retain the chair in its adjusted position without placing undue strain on any one of the pivotal joints or any members of the chair and at the same time position said adjustable supporting means between the back rest of the chair and the front legs thereof.

The preferred form of my invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a side elevation, partially in section of a chair in accordance with my invention, in which the chair is adjusted for reclining.

Fig. 2 is a side view in which the chair has been adjusted for use as an ordinary chair.

Fig. 3 is a similar view in which the chair is shown partially folded.

Fig. 4 is a similar view in which the chair is shown fully folded.

Fig. 5 is a side elevation of a modified form of connection between the front leg and the arm rest.

Fig. 6 is a view similar to Fig. 5 of a modified form of connection between the rear end of the arm rest and the back rest.

Fig. 7 is a sectional view on the line A—B of Fig. 5.

Fig. 8 is a sectional view on the line C—D of Fig. 6.

In the drawing the reference character 1 designates a seat frame having side members, front and rear transverse bars 17 and 18, respectively, which bars are secured to the side members.

Pivotaly connected to each of the side members of the seat frame at 13 is a rear leg 12, connected to each other at their lower ends by a rung 14, and 19 designates a cross brace secured to the lower faces of the sides of the seat frame at the rear ends thereof which forms a stop for the rear legs when the chair is opened for use.

Secured to and extending upwardly from the side members of the seat frame near the rear ends thereof, are plates 4 to which plates are pivoted at 5 the lower ends of side members of a back rest frame 6, which are substantially the

same length as the seat frame and connected to each other at their upper ends by a transverse bar 15.

8 designates arm rests, one on each side pivoted at its rear end to a side member of the back rest frame at 7 and at its front end to the upper end of a front leg 3, as at 9.

Each of the front legs 3 is pivoted at 2, to one of the side members of the seat frame 1, a distance from the front end of the seat frame, so that when the chair is folded, as shown in Figure 4, the front end of the arm rests, the front end of the seat frame, and the upper end of the back frame will be substantially in alignment with each other.

In order to retain the chair in its various positions for use, I provide an adjustable strut member 10 at each side of the chair, which are pivoted to the arm rests 8 and are provided with laterally extending pins at their lower ends, arranged to engage notches 11 in the upper faces of the side members of the frame 1, whereby the chair may be adjusted and braced in its adjusted position. A flexible seat and back 15 adapted for use when the chair is adjusted to any of its positions is connected at one end to the cross bar 16 of the back rest frame 6 and extends downwardly around the front bar 17 of the frame and then back to the rear bar 18 to which it is connected. The portion of the flexible seat extending from the front bar 17 to the rear bar 18 of the seat frame designated 15a forms a support below the portion between bars 16 and 17.

The joints between the front leg 3 and the arm rest 8, as well as between the arm rest and the back rest 6 may be locked by clamps as shown in Figs. 5 to 8. The clamps shown in these Figures 5-8 form an alternative means to the above described strut members 10 for fixing the chair in any particular adjusted position.

In Figs. 5 and 7, 21 designates a plate secured to the arm rest, which forms a cage for balls 22, and extends between the legs of a U-shaped member 23, secured to the upper end of the leg 3, and 24 are races in the adjacent faces of legs 45 of the member 23 for the balls 24.

Extending through the member 23, the upper end of the leg 3, the cage portion of plate 21, and concentric with the ball races 24 is a bolt 25. The bolt is provided with a head 26 and a square portion 27 seated in an opening in the leg 3. The other end of the bolt is threaded as at 28, and is provided with a nut 29 having a lever, whereby the joint can be locked in any position.

Another form of locking means for the piv-

otal connections between the different parts is illustrated in Figs. 6 and 8, connecting the arm rest 8 to the back rest 6. In these views 31 and 32 are opposed cup-shaped clutch members seated in recesses in the back rest 6 and arm rest 8, respectively. The opposed faces of the clutch members are provided with teeth arranged to engage each other for locking the joint in its adjusted position when drawn together and 33 is a spring seated within the clutch members for spreading them to release the clutch member.

The clutch members are drawn into clutching position by means of a bolt 34 which extends through the back rest, clutch members and arm rest. The threaded end 37 of the bolt is engaged by a clamping nut 38. The end of the bolt opposite the threaded end is provided with a head 36 and a squared portion 35 to prevent the turning of the bolt when the nut is turned for clamping or releasing the clutch members.

The advantages of my invention result from the provision of a foldable reclining chair, in which the seat frame and the back frame are substantially the same length so that when folded there are no projecting parts.

A further advantage of my invention results from the provision of adjustable supporting means for the chair between the arm rests and seat frame and between the back rest frame and the front legs, which adjustable means are accessible to the occupant of the chair, so that the chair can be adjusted while the occupant is sitting therein, and which supporting means is so positioned that the strain is distributed over the several pivot points without placing undue strain on any one of the pivot points.

I claim:

1. A reclining chair comprising connected seat frame members; connected back rest members pivoted to the rear ends of the seat frame members, said back rest members being of substantially the same length as the seat frame members; arm rest members parallel to the seat frame members pivoted to said back rest members; front legs parallel to the back rest members pivoted medially to said seat frame members and at the upper end thereof to said arm rest members; each of said seat frame members, arm rest members, lower portions of said back rest members and upper portions of said front leg members forming an adjustable parallelogram and said seat frame members having portions, projecting forwardly of the pivots between said front leg members and said seat frame members, of substantially the same length as the upper portions of said front leg members, whereby in the collapsed condition of the chair, the length of the collapsed chair is substantially the same as the length of the back rest members or the seat frame members; and means for locking said parallelogram in any adjusted position comprising a strut pivoted to each of the arm rest members and engageable in notches formed in said seat frame members.

2. A reclining chair according to claim 1, characterised in that the actual seat of the chair consist of a cloth fixed at the upper end of the back rest members, passed over the front end of the seat frame and fixed at the other end to the rear end of the seat frame members.

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