Nov. 7, 1950 A. M. FITZPATRICK, JR 2,528,505

RECLINING CHAIR

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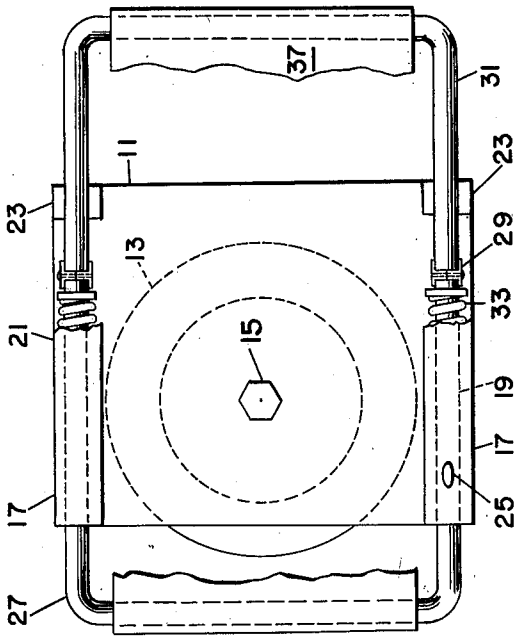


FIG. 1

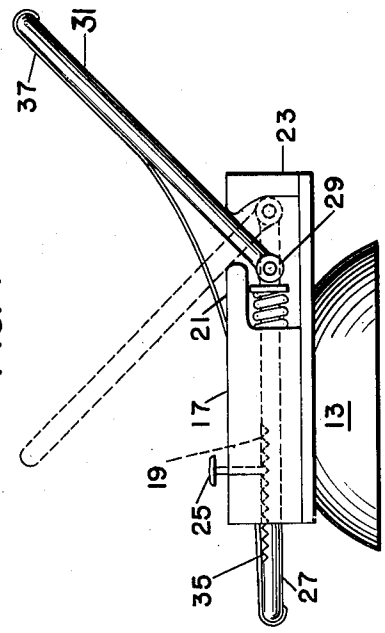


FIG. 3

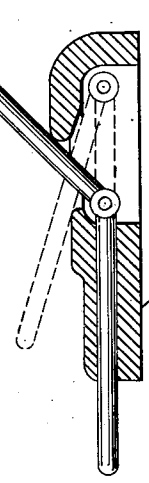


FIG. 5

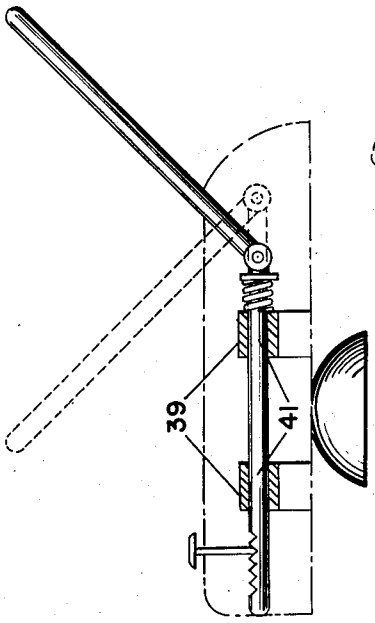


FIG. 4

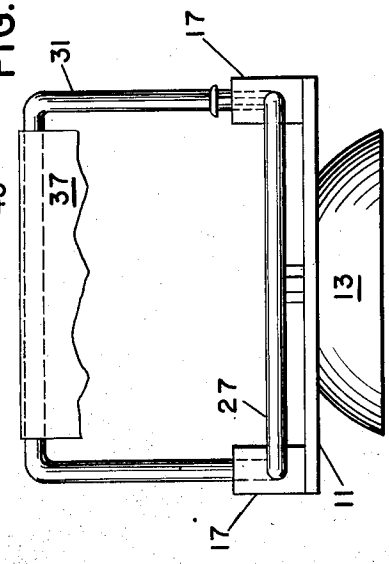


FIG. 2

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RECLINING CHAIR

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Application May 26, 1947, Serial No. 750,614

5 Claims. (Cl. 155—116)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

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This invention relates to improvements in seats.

The primary object is to provide a seat of simple and durable construction.

Another object is to provide a seat that is compact and comfortable in use.

A further object is to provide a seat having a back rest that is adjustable to a plurality of angular positions.

Still another object is to provide a seat having a back rest that is adjustable to upright, reclining and a plurality of intermediate positions.

Another object is to provide a seat that can be folded compactly when not in use and is particularly adapted to use in places where limitations of space is a significant design factor.

A further object is to provide a seat that will tip or tilt when the back rest thereof is disposed at a relatively extreme angular position.

Further objects and advantages of this invention, as well as its construction, arrangement and operation, will be apparent from the following description and claims in connection with the accompanying drawing, in which

Fig. 1 is a plan view of a seat, partly cut away, showing a preferred embodiment of the invention;

Fig. 2 is an elevation thereof;

Fig. 3 is a side view thereof, showing in dotted lines the back-rest portion of the seat in another position;

Fig. 4 is a sectional elevation of a modified form thereof; and

Fig. 5 is a sectional elevation of another modified form thereof.

Similar numerals refer to similar parts throughout the several views.

A base plate 11 is mounted on a suitable pedestal 13, being secured thereon by bolt 15. A plurality of bearings 17 secured to the face of said base plate 11 distal the pedestal 13 in parallel and spaced relation carry the frame hereinafter described in the longitudinally axial bores 19 of said bearings. Lugs 21 extend from said bearings 17, preferably parallel to the base plate 11, to provide stops limiting rotation of the back-rest portion of the frame hereinafter described in one direction, and lugs 23 extend from said base plate 11 to provide stops limiting rotation of said back-rest portion in the opposite direction. A pin 25 engaged slidably in a hole in a selected bearing 17 extends into the bore of said bearing.

The frame of the seat comprises a first U-shaped tube or rod 27 having its side members engaged slidably in the bores 19 of the bearings 17 and having its ends secured rotatably by

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hinges 29 to the ends of a second U-shaped tube or rod 31, which extends a substantial distance beyond the lugs 21 and 23 to define the back-rest portion of the seat. The tube or rod 27 is provided with springs 33 positioned to bear against the hinges 29 and the bearings 17 and a selected portion of the tube or rod 27 is provided with a plurality of spaced notches 35 adapted to receive the pin 25, said springs and said pin and notches being adapted to retain said tube or rod in selected position relative the bearings 17.

A suitable fabric or covering 37 is secured to the portions of the tubes or rods 27 and 31 distal the hinges 29 to form the saddle and back-rest portions of the seat.

Release of the pin 25 from engagement of a selected notch 35 permits sliding pivot of the tube or rod 31 on the fulcrum of the lug 21 or the lug 23 to desired angular position relative the tube or rod 27, at which point it is secured by engagement of another selected notch 35 by the pin 25. The range of rotation of the tube or rod 31 is limited by the lugs 21 and 23. It is also to be observed that the tube or rod 27 is retained in a single plane during such rotation of the tube or rod 31.

Alternative constructions adapted to accomplish the same purposes are shown in Figs. 4 and 5. Fig. 4 shows a seat in which a plurality of spaced posts 39 are each provided with bores 41 that engage the tube or rod 27 slidably, said posts being employed in lieu of the bearings 17. Fig. 5 shows a seat in which the pedestal, base plate, bearings and lugs are constructed as a unitary member 43.

In all forms of the invention, conventional arm-rests, saddle and back-rest portions can be employed.

Various modifications and changes can be made in the subject device without departing from the scope of the invention.

The invention described herein may be manufactured and used by or for the Government of the United States of America for governmental purposes without the payment of any royalties thereon or therefor.

I claim:

1. A seat comprising a plurality of bearings mounted on a pedestal and disposed in spaced and parallel relation, a first U-shaped tube slidably engaged in said bearings, a second U-shaped tube having its ends rotatably secured to the ends of said first U-shaped tube, a first plurality of lugs secured to said bearings and adapted to limit rotation of said second tube in one direction relative said first tube, a second plurality of lugs se-

cured to said bearings and adapted to limit rotation of said second tube in the opposite direction, a pin retractibly extending into a selected bearing and adapted to engage a selected notch on said first tube and restrain said first tube against movement relative said bearings, a plurality of springs mounted on said first tube between said bearings and said second tube and adapted to effect travel of said first tube relative said bearings upon disengagement of said pin from said notch, and means to support an object between the transverse portions of said tubes.

2. A seat comprising a plurality of bearings mounted on a pedestal and disposed in spaced and parallel relation, a first U-shaped tube slidably engaged in said bearings, a second U-shaped tube having its ends rotatably secured to the ends of said first U-shaped tube, a first plurality of lugs secured to said bearings and adapted to limit rotation of said second tube in one direction relative said first tube, a second plurality of lugs secured to said bearings and adapted to limit rotation of said second tube in the opposite direction, a pin retractibly extending into a selected bearing and adapted to engage a selected notch on said first tube and restrain said first tube against movement relative said bearings, a plurality of springs mounted on said first tube between said bearings and said second tube and adapted to effect travel of said first tube relative said bearings upon disengagement of said pin from said notch, and fabric forming a back-rest portion and saddle portion suspended between the transverse portion of said first tube and the transverse portion of said second tube.

3. A seat comprising a plurality of bearings mounted on a pedestal and disposed in spaced and parallel relation, a first U-shaped tube engaged slidably in said bearings, a second U-shaped tube having its ends secured rotatably to the ends of said first tube, first means to limit rotation of said second tube relative said first tube in one direction secured to said bearings, second means to limit rotation of said second tube in the opposite direction secured to said bearings, a pin retractably extending into a selected bearing and adapted to engage a selected notch on said first tube and restrain said first tube against movement relative said bearings, a plurality of springs mounted on said first tube between said bearings and said second tube and adapted to effect travel of said first tube relative said bearings upon disengagement of said pin from said notch, and means to support an object between the transverse portions of said tubes.

4. A seat comprising a plurality of bearings mounted on a pedestal and disposed in spaced and parallel relation, a first U-shaped tube slidably engaged in said bearings, a second U-shaped tube having its ends rotatably secured to the ends of said first U-shaped tube, a first plurality of lugs secured to said bearings and adapted to limit rotation of said second tube in one direction relative said first tube, a second plurality of lugs secured to said bearings and adapted to limit rotation of said second tube in the opposite direction, means to restrain said first tube against movement relative said bearings carried by at least one of said bearings, a plurality of springs mounted on said first tube between said bearings and said second tube and adapted to effect travel of said first tube relative said bearings upon disengagement of said means, and means to support an object between the transverse portions of said tubes.

5. A seat comprising a plurality of bearings mounted on a pedestal and disposed in spaced and parallel relation, a first U-shaped tube slidably engaged in said bearings, a second U-shaped tube having its ends rotatably secured to the ends of said first U-shaped tube, a first plurality of lugs secured to said bearings and adapted to limit rotation of said second tube in one direction relative said first tube, a second plurality of lugs secured to said bearings and adapted to limit rotation of said second tube in the opposite direction, means to restrain said first tube against movement relative said bearings carried by at least one of said bearings, spring means mounted on said first tube and adapted to effect travel of said first tube relative said bearings upon disengagement of said restraining means, and means to support an object between the transverse portions of said tubes.

ARTHUR M. FITZPATRICK, JR.

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