

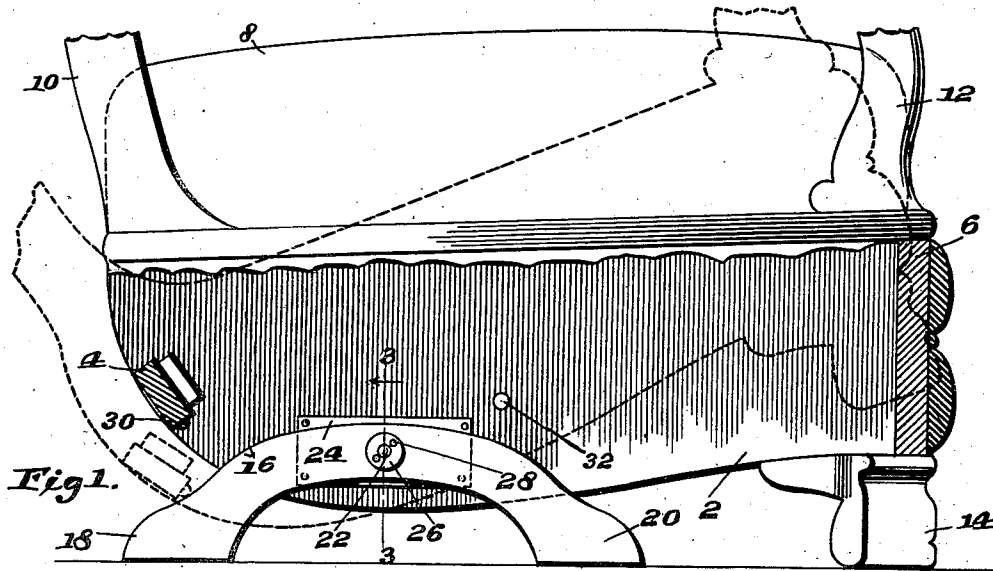
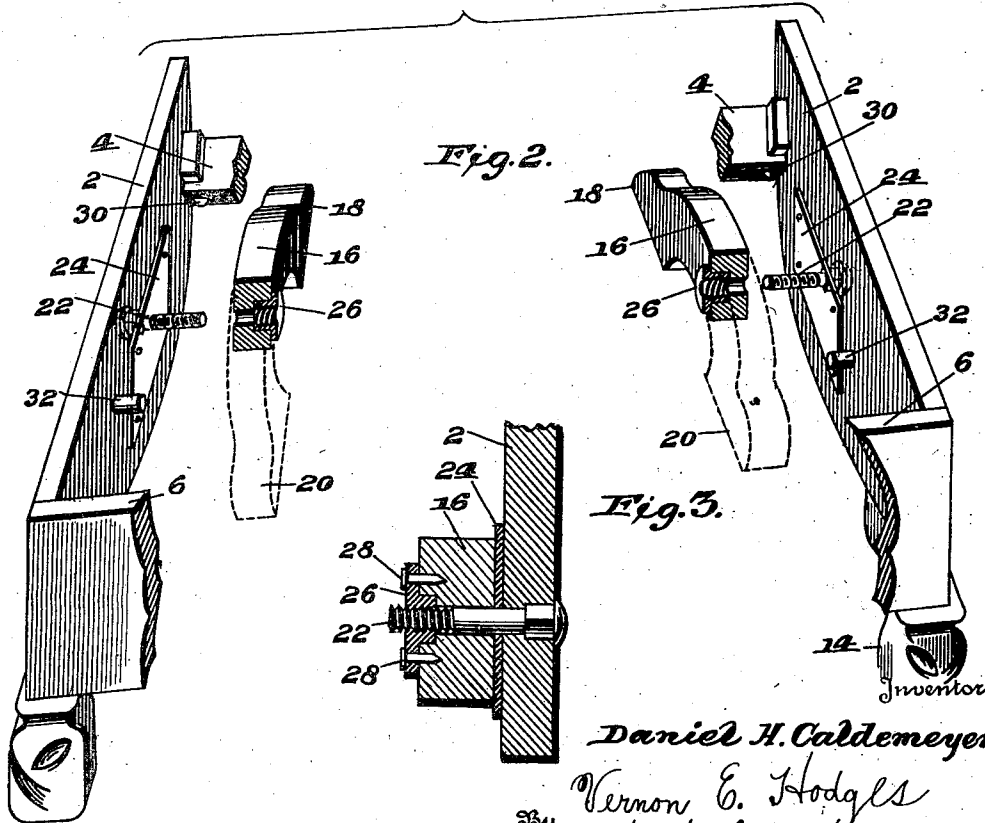
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D. H. CALDEMEYER

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RECLINING CHAIR

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Daniel H. Caldemeyer

Vernon E. Hodges

H. Hamlin Hodges

By

Inventor

Attorneys

UNITED STATES PATENT OFFICE

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RECLINING CHAIR

Daniel H. Caldemeyer, Evansville, Ind.

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4 Claims. (Cl. 155-77)

This invention relates to reclining chairs which are adapted to assume and remain in a selected position, that is either straight or reclining.

Many chairs have been designed to serve the purpose of a straight chair which could be readily changed from a straight position to a reclining position merely by the occupant of the chair shifting his position so as to change the center of gravity of his body so that it would hold the chair either in straight position or reclining position.

An object of my invention is to provide a reclining chair which may be utilized in an upright position by the occupant, and which may be readily changed to a reclining position by the occupant merely shifting his weight to make the chair tilt backwardly on a fixed pivot point.

A further object of my invention is to provide a chair having a set of legs adapted to support a pivot on which a chair may tilt in an upright or reclining position.

A further object is to provide a pivot point for supporting a chair to permit the chair to be either in an upright or reclining position, the pivot point being provided with means whereby the chair may be frictionally held in either the upright or reclining position.

In the accompanying drawing:

Fig. 1 is a fragmentary vertical cross-section through a chair provided with my pivotal support, the chair being shown in an upright position;

Fig. 2 is an exploded view in perspective showing disassembled the legs and chair side members, and detailed in cross-section the pivotal supports;

Fig. 3 is an enlarged vertical section on the line 3-3 of Fig. 1.

I provide a seat frame which consists primarily of side members 2 which are rigidly held in position with a suitable back cross-member 4 and a front cross-member 6. Positioned above the chair frame I provide a conventional seat 8, a back support 10, and arms 12.

The frame side members 2 at the front end thereof are provided with fixed legs or feet 14 which may be of any suitable design and are adapted to support the front end of the chair when it is in an upright position as shown in solid lines in Fig. 1.

For the rear of the chair I provide legs 16 which, for convenience, I call double legs because these legs are provided with two feet 18 and 20.

The double legs 16 are pivoted to the side members 2 by means of bolts 22, the heads of which

are provided with a nut-like end to be embedded in the side members 2 so that the bolts are held against turning. I have shown these bolts as being right-hand threaded bolts for use on both the right and left side members 2, but it will be obvious that these bolts could both be left-hand threaded bolts if desired. The fundamental idea is to have both bolts threaded alike as will be further explained hereinafter.

A metal wear plate 24 is conveniently attached on the inside of each side member 2, through which the bolts 22 pass. These plates 24 are provided to create a sufficient amount of friction between the side members 2 and the double legs 16. The double legs 16 are each provided with a hole approximately at the center thereof of sufficient diameter so that they may conveniently fit over the threaded ends of the bolts 22. After the double legs 16 are positioned properly over the bolts 22, nuts 26 are threaded onto the bolts 22 to hold the legs in position. These nuts are tightened the desired amount, drawing the legs 16 toward the side members 2 against the wear plates 24. After the desired frictional contact is obtained, the nuts 26 are secured in their then adjusted positions by driving one or more tacks or nails 28 through the holes provided in the nuts to hold them.

On an under edge of the back cross-rail 4 I provide conventional bumpers of rubber or other suitable material 30, which are adapted to come into contact with the legs 16 at a time that the chair is placed in a reclining position. At a convenient point on the inside of the side members 2 I provide a suitable lug 32 which is positioned primarily to stop the legs 16 from swinging too far under the chair when the chair is being transported for any desired reason.

Operation

In the use of the chair after it has been assembled as described above when the chair is in a straight position as it is shown in solid lines in Fig. 1, the nut 26 on the left-hand side as shown in Fig. 2 is at that time in a tightened position, thereby creating a strong frictional contact between the plate 24 and the leg 16 on the left side of the chair (left side of the chair when facing the chair). By thus providing a tight frictional contact between the leg 16 and the wear plate 24 on the side member 2, the chair will be held in an upright position and will not easily rock back and forth between a straight and reclining position by merely being touched.

On the right side of the chair, the nut 26 will

have been slightly loosened on its bolt 22, but this loosening will not very materially change the position of the leg 16 relative to the side member 2 and friction plate 24 on that side of the chair.

When the chair has been placed in a reclining position, the reverse action will take place, namely the nut 26 on the right side of the chair will become tightened on the bolt 22, and the frictional contact between the leg 16 and the plate 24 will have been made greater and will tend to hold the chair in its reclining position.

At this time (in a reclining position) the screw-threaded nut 26 on the left side of the chair will have become slightly loosened from its bolt 22, but not materially so.

By providing these pivotal bolts 22 with similar screw-threads, I am able to provide a chair which will not readily and accidentally move from either a straight or a reclining position because of the relatively tight frictional contact between one of the double legs 16 and the plate 24 on the side member 2 when the chair is either in a straight position or a reclining position.

I claim:

1. A chair including a seat frame having side members, stationary rear legs adapted to rest on the floor, bolts fixed to one of said parts and threaded nuts to the other part for pivoting said frame and legs together, the threaded nut and bolt on each side of the chair threaded alike, whereby the legs and side members are drawn toward each other in frictional contact on opposite sides of the chair alternately with the forward and backward movement of the chair, thereby providing for a limited resistance of the chair to swing in order to automatically hold the chair seat and back in a predetermined forward or backward position.

2. A chair including a seat frame having side members, stationary rear legs adapted to rest on the floor, bolts fixed to one of said parts and

threaded nuts to the other part for pivoting said frame and legs together, the threaded nut and bolt on each side of the chair threaded alike, whereby the legs and side members are drawn toward each other in frictional contact on opposite sides of the chair alternately with the forward and backward movement of the chair, thereby providing for a limited resistance of the chair to swing in order to automatically hold the chair seat and back in a predetermined forward or backward position, the nuts being adjustable with respect to the part to which they are secured in order to create the desired degree of friction.

3. A chair including a seat frame having side members, legs secured at the front ends of said side members, and stationary rear legs adapted to rest on the floor and to which legs the seat frame is pivotally connected to swing thereon, the pivotal means including a bolt and nut for each side of the chair being anchored each to its associated side members and rear legs, whereby the swinging of the seat frame from one extreme position to the other will draw the side members and rear legs together to impart a frictional contact of their adjacent surfaces first on one side of the chair and then on the other side of the chair.

4. A chair including a seat frame having side members, legs secured at the front ends of said side members, and stationary rear double legs adapted to rest on the floor, said side members pivotally attached to said double legs approximately at the centers of the latter, the pivotal means including a bolt and nut for each side of the chair being anchored each to its associated side members and rear legs, whereby the swinging of the seat frame from one extreme position to the other will draw the side members and rear legs together to impart a frictional contact of their adjacent surfaces first on one side of the chair and then on the other side of the chair.

DANIEL H. CALDEMEYER.