F. E. BARNICKLE.

RECLINING ATTACHMENT FOR CHAIRS.

APPLICATION FILED AUG. 7, 1907.

900,077. Patented Oct. 6, 1908.

Fig. 1.

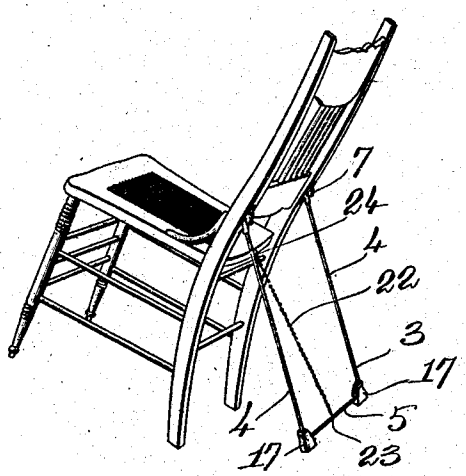


Fig. 2.

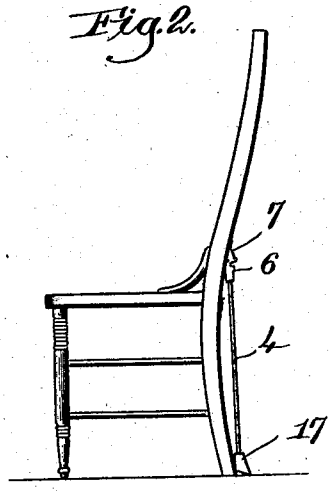


Fig. 3.

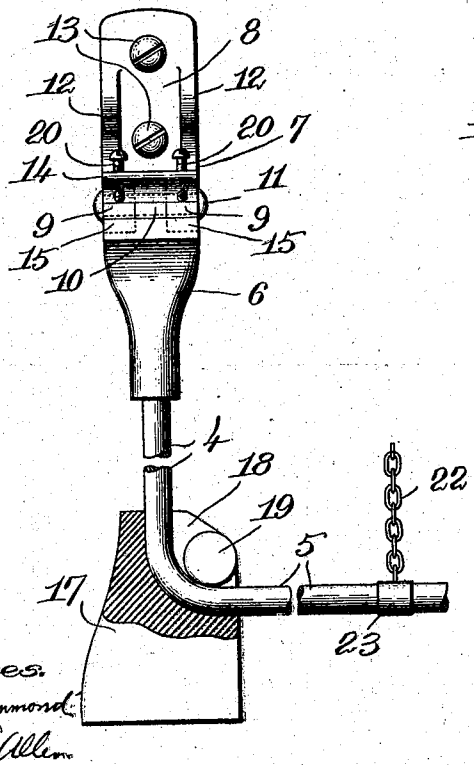


Fig. 4.

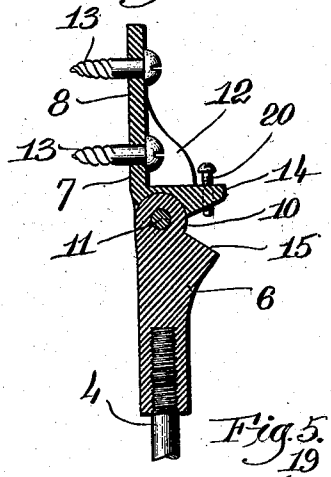
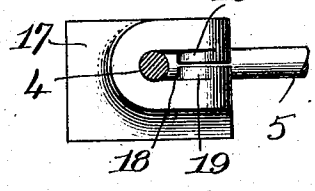


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

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RECLINING ATTACHMENT FOR CHAIRS.

No. 900,077. Specification of Letters Patent. Patented Oct. 6, 1908.

Application filed August 7, 1907. Serial No. 387,420.

To all whom it may concern:

Be it known that I, FRANK E. BARNICKLE, a citizen of the United States, residing at Rochester, county of Strafford, and State of New Hampshire, have invented an Improvement in Reclining Attachments for Chairs, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

This invention has for its object to provide a novel attachment for chairs which will firmly support an ordinary chair in a reclining position. The device is arranged to be attached to any chair, and when so attached a person sitting in the chair may tilt the chair back and the chair will be firmly supported in its tilted position.

I will first describe one embodiment of my invention and then point out the novel features thereof in the appended claims.

In the drawings, Figure 1 is a perspective view of a chair having my attachment applied thereto, said view showing the chair in tilted position; Fig. 2 shows the position of the attachment when it is not in use; Figs. 3 and 4 are detail views of the hinge by which the attachment is secured to the chair. Fig. 5 is a plan view of the rest 17 showing a portion of the frame to which the rest is secured.

My improved attachment comprises the brace 3 which is arranged to be hinged to the back of the chair. This brace carries two separate rests which are adapted to rest on the floor when the attachment is in use. In the preferred embodiment of my invention this brace is formed from a piece of wire bent to constitute the two side arms 4 which are connected by the cross portion 5.

Attached to the upper end on each side arm 4 is a hinge member 6 which is hinged to a complemental hinge member 7. The hinge member 7 is provided with the body 8 that is adapted to be screwed to the back of the chair, as shown in Figs. 1 and 2. This hinge member 7 has the two ears 9 between which is received the ear 10 on the hinge member 6, said ears being connected by the usual pintle pin 11. To stiffen and strengthen the hinge member 7 I form it with the two stiffening flanges 12 one on either side thereof between which one of the screws 13 may be received. Said hinge member 7 is also provided with the shoulder or flange 14 which coöperates with the shoulders 15 on the member 6 to limit the swinging movement of the brace 3. I have shown the arms 4 of the brace as screw-threaded into the hinge member 6, although said arms might be connected to said hinge members in any suitable way without departing from the invention.

The brace sustains two rests 17 which are preferably made of rubber or some other material which will have good frictional engagement with the floor. The advantage of using rubber is that these rests or shoes act as cushions as will be obvious. Said rests or shoes may be secured to the brace in any suitable way, but I have herein shown said shoes as each having the open slot 18 in which the rod or wire forming the brace is received, said shoes being retained in place by one or more projections or buttons 19 formed on the rest or shoe above the wire. I prefer to place these shoes at the corners of the brace, that is, at the ends of the cross piece 5, as shown in the drawings, because when said shoes are thus located they embrace both the lower portion of the upright arms and the end portions of the cross piece 5, and thus they are firmly held on the brace and prevented from turning thereon. My invention, however, is not limited to placing them in this particular position.

In applying the device to a chair the attachment will be placed with the rests on the floor adjacent to the rear legs of the chair and the two hinge members 7 will then be screwed to the chair at the proper point. Whenever it is desired to tilt back in the chair the brace may be swung backwardly as far as the stop 14 will permit and held in this position while the chair is tilted until the rests or shoes are brought against the floor. The brace will then firmly maintain the chair in such position so long as the chair is occupied.

By using a brace of the shape shown which has two rests thereon separated from each other a very firm bearing is provided for the chair and all danger of the chair tipping sidewise is prevented.

It is sometimes desirable to provide for tilting the chair to a greater or less extent, and to permit this, I have provided my device with adjustable stops which limit the swinging movement of the brace. For this purpose, I have herein shown set screws 20

threaded into the stop or flange 14 so that by setting up these screws more or less the distance through which the brace may be swung can be varied and thus the angle to which the chair can be tilted.

I have also shown a cord in the form of a chain 22 which is attached at one end to the center of the cross piece 5, as at 23, and the other end of which may be secured to the bottom of the chair beneath the seat 24. This chain prevents the rear legs of the chair from slipping forwardly on the floor. It is not essential to my invention that this chain be employed, however.

My attachment is so constructed that when the chair stands upright it will drop by its own weight into the position shown in Fig. 2, and in such position is entirely out of the way and does not interfere with any ordinary use to which the chair may be put.

In the preferred embodiment of the invention the brace is so shaped that when it is folded, the rests 17 lie against the chair legs, but the outer edges of said rests do not project beyond the outer faces of the chair legs. Said rests, therefore, serve to prevent the brace from injuring or marring the chair when the brace is folded.

I have illustrated herein one embodiment only of my invention and have not attempted to show all forms in which it may be made.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. An attachment for chairs comprising a brace made from a rod bent into U-shape and having at the end of each arm a hinge member provided with an abutment face or shoulder 15, a complemental hinge member pivoted to each of the first-named hinge members, means to secure each complemental hinge member to the back of a chair, and an adjustable stop screw carried by each complemental hinge member and adapted to engage the shoulder or abutment face of the other hinge member thereby to limit backward swinging movement of the brace.

2. The combination with a chair, of a brace hinged to the back side of the chair, said brace comprising two connected side arms, a hinge member 6 at the upper end of each arm, a complemental hinge member 7 pivoted to each hinge member 6, each hinge member 7 having a body portion for attachment to the chair and strengthening ribs connected by the transverse flange 14 and a stop screw carried by said flange and adapted to engage the hinge member 6 to limit the backward swinging movement of the brace.

3. The combination with a chair, of a brace hinged to the back side of the chair, said brace comprising two parallel side arms 4 connected at their lower extremities by a cross piece 5, a rest at each end of the cross piece, each rest having an open slot to receive the angle of the brace, and projections to overlie the brace at the angle and retain the rest in position.

4. The combination with a chair, of a brace hinged to the back side of the chair, said brace comprising two connected side arms, a hinge member 6 at the upper end of each arm, each hinge member having the shoulder 15, a complemental hinge member 7 pivoted to each hinge member 6, each complemental hinge member having a body portion for attachment to the chair and a transverse flange, and stop screws adjustably mounted in said flange and adapted to engage said shoulder 15 for limiting the backward swinging movement of the brace.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

FRANK E. BARNICKLE.

Witnesses:

LOUIS C. SMITH,

MARGARET A. DUNN.