

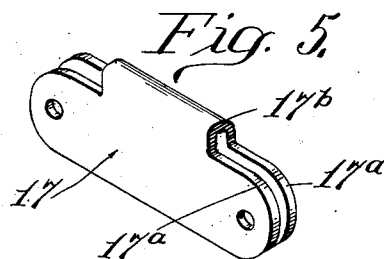
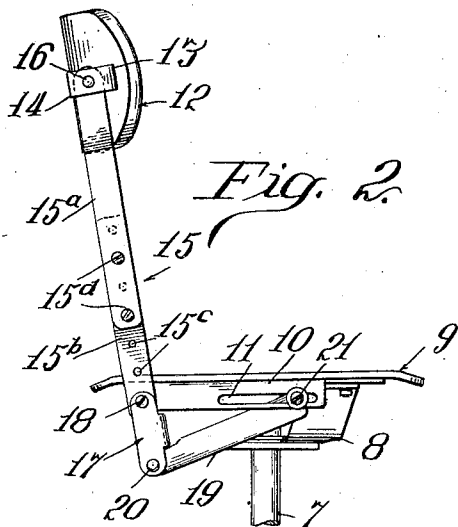
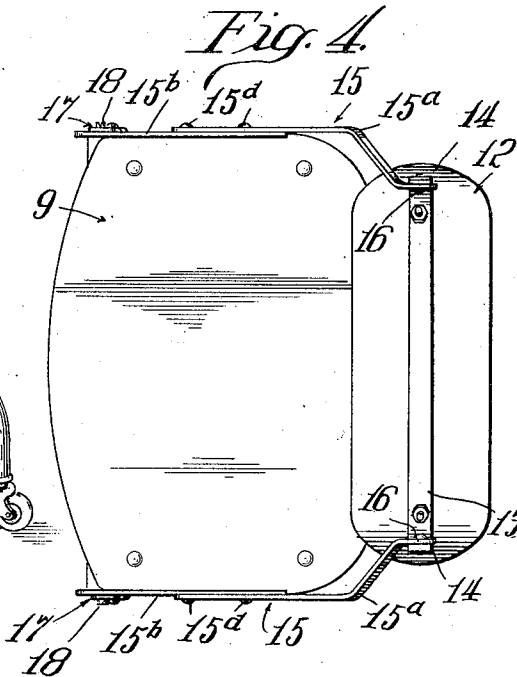
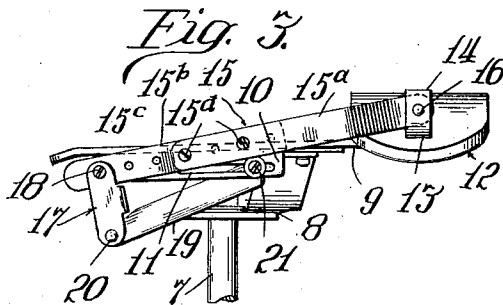
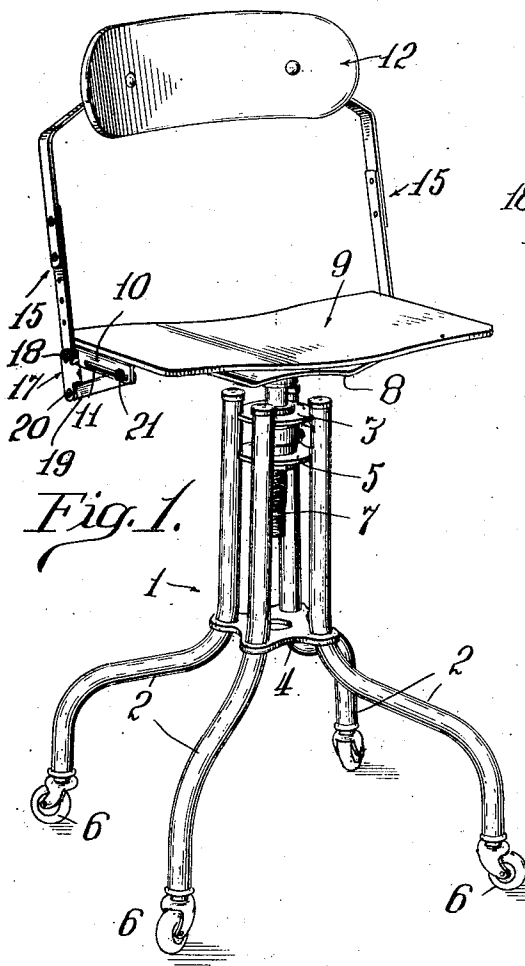
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BACK REST ARRANGEMENT FOR CHAIRS

Filed Aug. 8, 1928



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UNITED STATES PATENT OFFICE

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BACK-REST ARRANGEMENT FOR CHAIRS

Application filed August 8, 1928. Serial No. 298,253.

This invention relates to improvements in back rest arrangements for chairs and it consists of the matters hereinafter described and more particularly pointed out in the appended claims.

The primary object of the invention is to provide in connection with a bench worker's chair, a novel arrangement for supporting the back rest, which when so desired, may be folded down toward the seat to reduce the overall height of the chair so that it may then be placed beneath the bench, out of the way, when not in use.

Another object of the invention is to provide an arrangement which permits of an adjustment of the back rest so that it may be moved into the position most convenient for the occupant of the chair.

These objects of the invention, as well as others, together with the many advantages thereof will more fully appear as I proceed with my specification.

In the drawing:—

Fig. 1 is a perspective view of a bench worker's chair, embodying my improved back rest arrangement, with the parts in the position they occupy when the chair is ready for use.

Fig. 2 is a view in side elevation of the seat and back rest arrangement with the parts shown in the position they occupy in Fig. 1.

Fig. 3 is a view similar to Fig. 2 with the back rest in its folded down position.

Fig. 4 is a top plan view of the seat and back rest arrangement with the parts in the position they occupy in Fig. 3.

Fig. 5 is a perspective view of a folding joint member embodied in the improved arrangement.

Referring now in detail to that embodiment of the invention illustrated in the accompanying drawing, 1 indicates as a whole the supporting standard of the chair which includes a plurality of legs 2—2 the top ends of which are disposed in grouped relation and are connected together by means of top, bottom and intermediate spiders 3—4 and 5 respectively. The bottom ends of said legs are spread laterally to give the necessary stability and are equipped with the usual

casters 6 by which the chair may be easily moved about.

Journalled in the top and intermediate spiders 3 and 5 respectively, is a seat post 7 the top end of which carries a spider 8 to which is fixed a seat member 9. As shown herein, said seat member is made of wood and at each side thereof is depending metallic flange 10. Said flange forms part of an angle bar which is secured to both said seat and spider and extends from the rear end of said seat to a point spaced from the front end thereof. In the forward end of the flange at each side of the seat is a longitudinal slot 11.

Associated with the chair thus far described is a transversely bowed back rest member 12 also made of wood and secured to the convexed side thereof is a flat bar 13 the ends of which are bent to form arms 14—14 which normally extend rearwardly from the back rest member. Said back rest member is normally supported upon the top ends of side arms, each indicated as a whole in Fig. 1 by the numeral 15. Preferably said arms are made so as to be capable of being lengthened or shortened as desired and to that end I make each arm of a pair of longitudinally adjustable top and bottom arm members 15^a and 15^b respectively. In each arm member 15^b is provided a plurality of longitudinally spaced threaded openings 15^c to receive screws 15^d carried by the arm member 15^a. The top ends of the arm members 15^a are offset inwardly and are pivotally connected as by the rivets 16 to the rearwardly extending arms 14 of the back rest bar 13.

The bottom end of each arm member 15^b is disposed between the top ends of a folding rule joint member 17 by means of a screw or bolt 18 which is threaded into a suitable opening in the rear end of the flange 10 and thus also provides the pivotal connection between said arms and flanges. The joint member 17 comprises spaced plates 17^a—17^a which are connected together along one edge by a web 17^b of a length shorter than said plates.

19 indicates a link or brace which at its rear end is disposed between the bottom ends

of the plates 17^a—17^a of the member 17 and is pivoted thereto by a bolt or rivet 20. The forward end of said link engages the inner face of the associated flange 10 and carries
 5 a bolt and washer 21 which may be secured at the desired point along the slot 11.

When the back rest is in its position of use as shown in Fig. 2, the extreme bottom end of the arm member 15^b below the bolt 18 engages against the web 17^b of the joint member 17 and the bottom end of said web engages against the top edge of the link or bar 19. Thus such rearward pressure as is imposed upon the back rest member by the
 10 occupant of the chair will naturally hold the back rest arms in position. However, assume that it is desired to store the chair under a work bench. All that it is necessary to do is to swing the back rest and arms 15
 20 downwardly and forwardly about the pivotal connection 18, at the same time turning the back rest about the rivets 16 so that the parts are then in the position shown in Figs. 3 and 4. Thus the back rest member is dis-
 25 posed at the front marginal portion of the seat and only projects a slight distance above the same so that the chair may be moved on its casters under the work bench at which the occupant was heretofore en-
 30 gaged. To bring the back rest member into operative position, it is only necessary to swing the arms 15 upwardly and then arrange the back rest member as shown in Figs. 1 and 2.

By the bolt 21 and slot 11 connection of the forward ends of the links 19 and the longitudinal adjustment between the arm parts 15^a—15^b, it is apparent that the back rest may be readily adjusted in position with respect
 40 to the seat and by means of the folding rule joint 17, the back rest may be so disposed with respect to the seat that the chair as a whole may be readily slid under a bench.

The parts are few in number and may be
 45 readily assembled and are efficient for their intended purpose.

While in describing the invention, I have referred in detail to the form and arrangement of the various parts thereof, the same
 50 is to be considered as illustrative only so that I do not wish to be limited thereto except as may be specifically pointed out in the appended claims.

I claim as my invention:—

1. A back rest arrangement for chairs comprising in combination with a seat member having a depending flange along each side, with a slot therein, a pair of longitudinally
 60 extensible side arms, a back rest member connected to the top ends of said arms, a member comprising spaced plates and a web, means connecting one end of said plates to the bottom end of an associated arm and to the rear
 65 end of an associated flange and a brace asso-

ciated with each arm and connected at one end in the slot of an associated flange and at its other end to the other end of said member comprising spaced plates and a web.

2. A back rest arrangement for chairs comprising in combination with a seat member, back rest supporting arms and a back rest operatively connected with the top ends thereof, means pivotally connecting the bottom ends of said arms to said seat member at the sides thereof, joint members each pivoted at one end to said seat coincident with said arms, and brace members each connected at one end to said joint members and each adjustably secured at its other end to said seat member.

3. A back rest arrangement for chairs comprising in combination with a seat member, back rest supporting arms, and a back rest operatively connected to the top ends thereof, means providing a depending flange at each side of said seat member having a longitudinal slot in one end thereof, means providing a pivotal connection between the rear ends of said flanges and the bottom ends of said arms respectively, joint members each pivoted at one end coincident with said pivotal connection between said flanges and arm ends respectively, and brace members each adjustably connected at its front end in the slot in an associated flange and connected to its other end with the one end of said joint members.

4. A back rest arrangement for chairs comprising in combination with a seat, a pair of longitudinal extensible back rest supporting arms, a back rest member connected to the top ends of said arms, joint members each including side plates and a connecting web, which side plates engage at one end upon opposite sides of an associated arm end, means connecting said end of said plates and arms respectively to said seat, and brace members each adjustably connected at its front end to said seat towards the front thereof and connected at its rear end to the other end of an associated joint member between the side plates thereof.

In testimony whereof, I have hereunto set my hand, this 3rd day of August, 1928.

WILLIAM S. FERRIS.