June 19, 1951

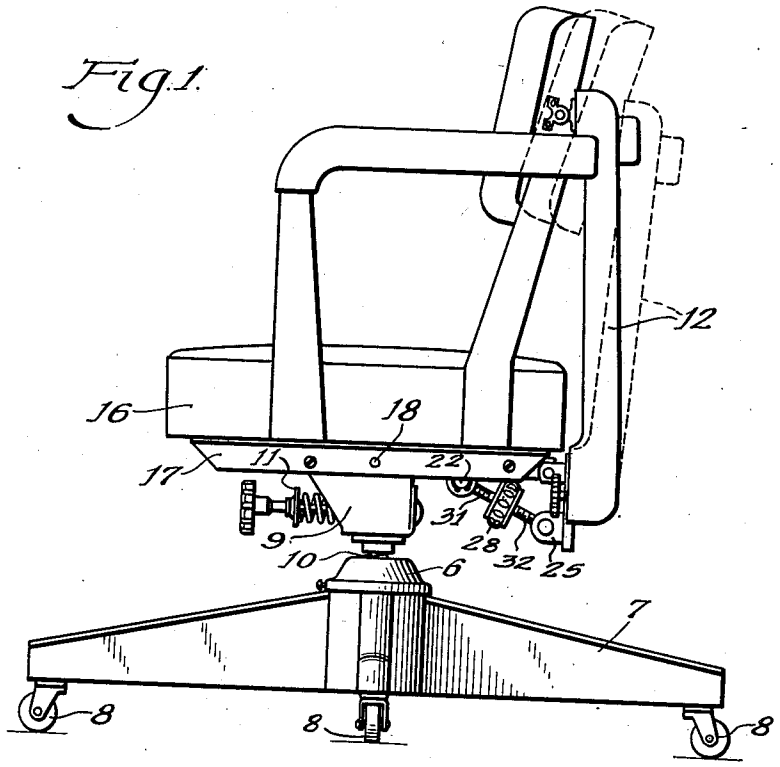
M. FOX

2,557,736

ADJUSTING MEMBER FOR CHAIR IRONS

Filed Nov. 29, 1946

Fig. 1.



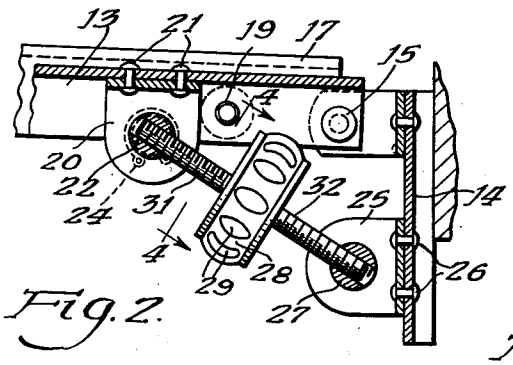


Fig. 2.

Fig. 3.

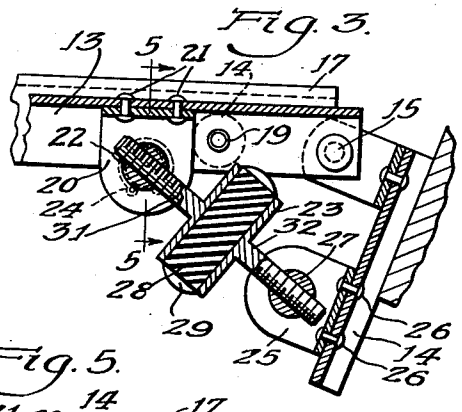
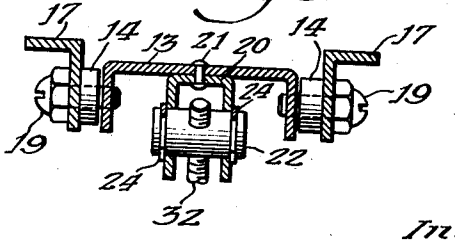


Fig. 5.



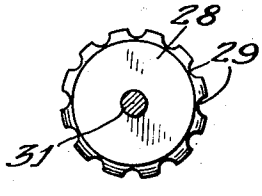


Fig. 4.

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ADJUSTING MEMBER FOR CHAIR IRONS

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5 Claims. (Cl. 155—161)

1

This invention relates to chair irons, and more particularly to an improved adjusting member for regulating the angular relation of the back-rest to the supporting bracket.

The primary object of the present invention is to provide an improved adjusting member which not only serves as a means for controlling the angular position of the back-rest, but also acts as a cushion to permit a slight yielding action of the back-rest with respect to the supporting bracket.

The invention is illustrated in a preferred embodiment in the accompanying drawings, in which—

Figure 1 is a side elevational view of a swivel chair with an adjustable back, embodying the invention; Fig. 2 is a fragmentary vertical sectional view showing how the adjusting member is connected to the brackets; Fig. 3, a view similar to Fig. 2, but showing the back-rest bracket in a rearwardly inclined adjusted position; Fig. 4, a sectional view, taken as indicated at line 4—4 of Fig. 2; and Fig. 5, a vertical sectional view, taken as indicated at line 5—5 of Fig. 3.

In the embodiment illustrated, a swivel chair is shown mounted on a base 6, provided with legs 7 and casters 8. A headpiece 9 is rigidly mounted on a spindle 10, and contains a mechanism 11 for urging the back-rest 12 through an inverted U-shaped supporting bracket 13 to an upright position. As best shown in Figs. 2, 3 and 5, a back-rest bracket 14 is hinged to the supporting bracket 13 by studs 15. A seat-member 16 is shown with a pair of rearwardly extending angle bars 17 which are pivotally connected to the headpiece by a pintle 18. As shown in Fig. 3, the angle bars 17 are connected to the member 13 by studs 19, so that the seat-member may move with the supporting bracket 13. An inverted U-shaped bearing member 20 is riveted to the member 13, as indicated at 21. A cylindrical nut 22 has a laterally extending tapped opening to receive one end of an adjusting member 23. The nut may be held in the bearing by means of a pair of snap rings 24.

As shown in Figs. 2 and 3, another bearing bracket 25 is riveted to the back-rest bracket, as indicated at 26, and forms a bearing for another cylindrical nut 27 which has a laterally extending opening threaded in the opposite direction from the nut 22. This nut also may be held in its bearing by means of snap rings, not shown.

The adjusting member includes a thick circular rubber disk 28 forming a hand wheel pro-

2

vided in its periphery with finger notches 29. It is cemented to the opposed heads of axially aligned bolts 31 and 32, which make threaded engagement with the nuts 22 and 27, respectively.

In order to change the angular position of the back-rest, it is merely necessary to rotate the hand wheel 28. However, any backward pressure on the back-rest will tend to compress the cushion-member and be more comportable for the occupant of the chair.

The foregoing detailed description is given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, for some modifications will be obvious to those skilled in the art.

I claim:

1. A chair iron having an angularly adjustable back, comprising: a supporting bracket having a downwardly extending U-shaped bearing member; a back-rest bracket hinged to said supporting bracket and having a forwardly extending U-shaped bearing member; a cylindrical nut journalled in said first mentioned bearing member and having a laterally extending tapped opening therethrough; a second cylindrical nut journalled in the second mentioned bearing member and having a laterally extending opening which is internally threaded in an opposite direction to the first mentioned tapped opening; and an adjusting member including a thick disk of rubber-like material secured to opposed heads of bolts provided with right and left screw threads making threaded engagement with the cylindrical nuts.

2. In apparatus of the character set forth, a cushioned adjusting member comprising: a pair of axially aligned screws oppositely threaded and having opposed heads cemented to an interleaved thick rubber-like cushion-member.

3. A device as specified in claim 1, in which the heads and cushion-member are circular and form a wheel, the periphery of said cushion being notched to form finger-grips.

4. A chair iron having an angularly adjustable back, comprising: a seat-member provided with a depending bearing; a trunnion journalled in said bearing; a back-rest bracket hinged to said seat-member and having a bearing; another trunnion journalled in said seat-member bearing; said trunnions having tapped openings aligned with each other; and an adjusting member provided with a yielding hand wheel between opposed studs provided with right and left screw threads making threaded engagement with the tapped openings in said trunnions.

5. A chair iron having an angularly adjustable back, comprising: a seat member having a downwardly extending bracket; a back-rest bracket hinged to said seat member; and a threaded adjusting bolt pivotally connected to both said brackets and making threaded engagement with a tapped opening in one of them to vary the angle between the seat member and the back rest bracket, said adjusting bolt having an integral yielding portion serving as a cushion between said brackets.

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