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SADASUKE KURIHARA

3,034,828

CHAIR

Filed Sept. 6, 1960

Fig. 1

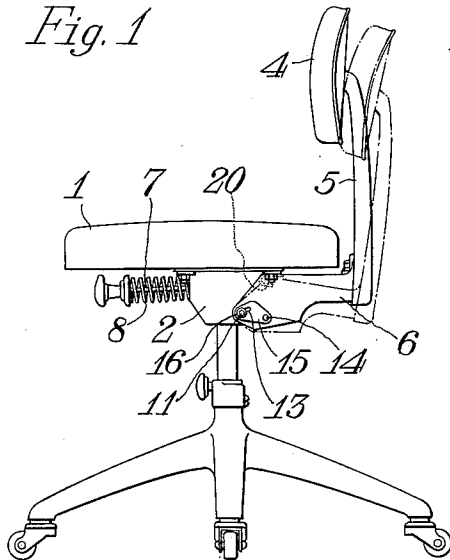


Fig. 2

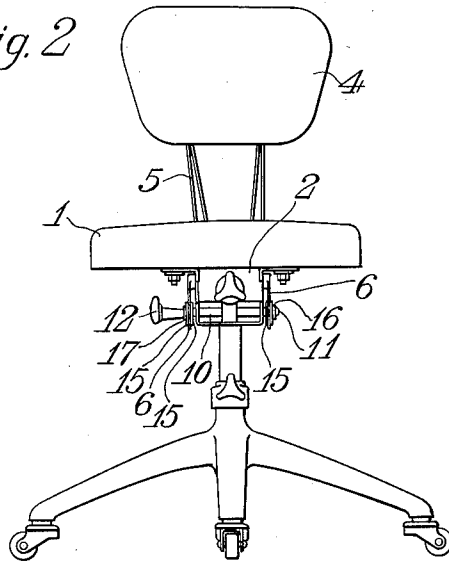


Fig. 3

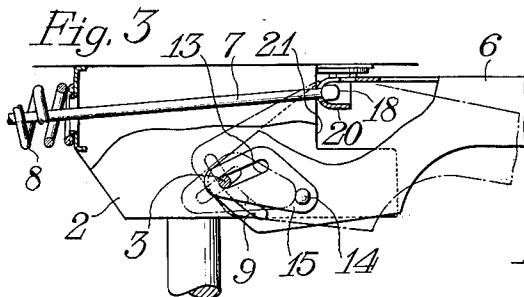


Fig. 4

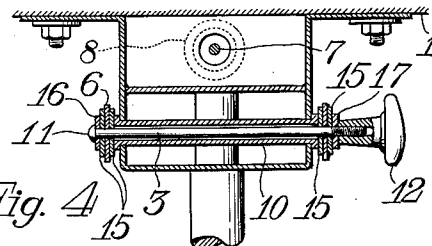


Fig. 5

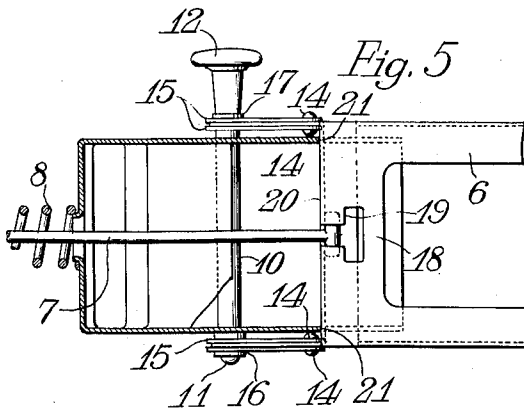
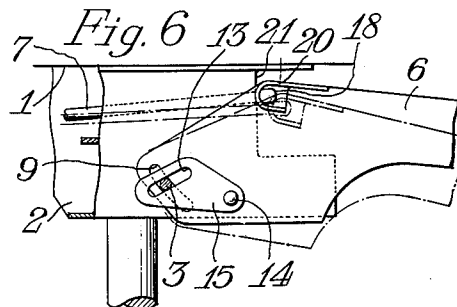


Fig. 6



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3,034,828
CHAIR

Sadasuke Kurihara, 1720 Miyagaoka, Meguro-ku,
Tokyo, Japan

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1 Claim. (Cl. 297—306)

This invention relates to an improvement in a chair, particularly a back plate mounting of a chair, in which a base frame of the arm carrying the back plate is pivotally mounted to an immovable support forming the lower part of a seat of the chair, and in which a spring biased rod is provided engaging directly with said base frame of the back plate so as to allow the oscillating movement of the back plate within a predetermined limit. The object of the invention is to provide an improved chair of such conventional type, wherein the pivotal point of connection of the base frame of the back plate carrying arm with the seat support is made adjustable, so that the back plate can normally be held in desired inclination according to the size and taste of the user.

The accompanying drawing will serve to illustrate specific embodiment of my invention, in order that its utility and functioning will be thoroughly appreciated. It will be understood, however, that this is by way of illustration only and is not to be taken as limiting the invention in any way. In the drawing:

FIGURE 1 is a side view of a chair equipped with a back plate mounting according to this invention;

FIGURE 2 is a front view thereof;

FIGURES 3, 4 and 5 are respectively a side view, a vertical section as seen from the rear, and a sectional plan view of detail of the back plate mounting; and

FIGURE 6 is a side view similar to FIGURE 3, but showing the swung position of the parts after being set to an adjusted position.

Referring now to the drawing, 1 designates a seat of a chair, which is fixed to a support 2 mounted on a suitable leg. 4 is a back plate carried by an arm 5 extending upwardly from the base frame 6 which is pivotally mounted as at 3 directly to the immovable support 2 at a lower part thereof. The support 2 is provided with a spring biased rod 7, one end of which is engaged by said base frame 6, so that the back plate 4 may resiliently be swung rearwardly against the action of a spring 8. The construction so far described is conventional and well known and forms no part of the present invention.

According to this invention, the base frame 6 is provided with an arcuate slot 9 to be engaged by the pivot 3, said arcuate slot having its center of curvature in coincidence with the line of engagement of the end of the rod 7 with the base frame 6 as shown in FIGURE 3, so that the base frame may be oscillated around said engagement line relative to the support 2. In order to maintain said base frame 6 at desired angle after being oscillated around said engagement line, a sleeve 10 is provided surrounding the pivot 3 and passing through both walls of the support 2, the extended ends of said sleeve 10 being engaged by

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the arcuate slot 9 of the base frame 6, and the walls of the base frame 6 are tightened against the ends of the sleeve 10 by means of a head 11 of one end of the pivot 3 and an internally threaded knob 12 screwed on the other end of the pivot 3, so that said pivot 3, the sleeve 10 and the base frame 6 are in unison adapted to oscillate relative to the support 2. Placed adjacent both sides of each side wall of the base frame 6 and pivotally mounted thereon as at 14, there are two triangular slabs 15, each having an oblong slot 13 through which the pivot 3 is passed and engaged, said triangular slabs 15 being adapted to be oscillated around the pin 14. Washers 16 and 17 are preferably provided between said triangular slabs 15 and the head 11 and the knob 12, respectively.

As shown in FIGURES 3 and 5, the inner end of the spring biased rod 7 has a crosshead 18 which engages with the bottom of a trough shaped engaging member 20 of the base frame 6, which engaging member being provided with a recess 19 through which said crosshead 18 is inserted. The said engaging member 20 normally abuts against the edge 21 formed in the support 2 as shown in FIGURES 3, 5 and 6.

In the operation of this invention, the back plate 4 together with its arm 5 and the base frame 6 may be swung rearwardly around the pivot 3 against the action of the spring 8, similarly as in the conventional chair of this type, as shown in FIGURE 1. According to this invention, it will be seen that the position of the pivot 3 relative to the support 2 may beforehand be adjusted along the slot 9 and set to a desired position, so that the normal position of the back plate 4 may be kept at desired inclination so as to suit to the user according to his size and taste.

What I claim is:

A chair comprising an immovable support for a seat, a base frame having a vertically extending arm carrying a back plate and oscillatably mounted on said immovable support by means of a pivot, and a spring biased rod provided in said support at a position above the position of said pivot and having one end abutting against said base frame, characterized by the provision of a trough shaped engaging member in said base frame and by the provision of an arcuate slot in the said base frame of the back plate with which said pivot engages, said arcuate slot in the base frame having its center of curvature in coincidence with the line of engagement of the end of the said spring biased rod and the trough shaped engaging member of said base frame, and means for adjusting the position of said pivot along said arcuate slot and for fixing the pivot at the adjusted position relative to said base frame of the back plate.

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