Nov. 1, 1949 C. J. J. KUEBLER 2,486,716

ADJUSTABLE COMFORT CHAIR

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Fig. 1.

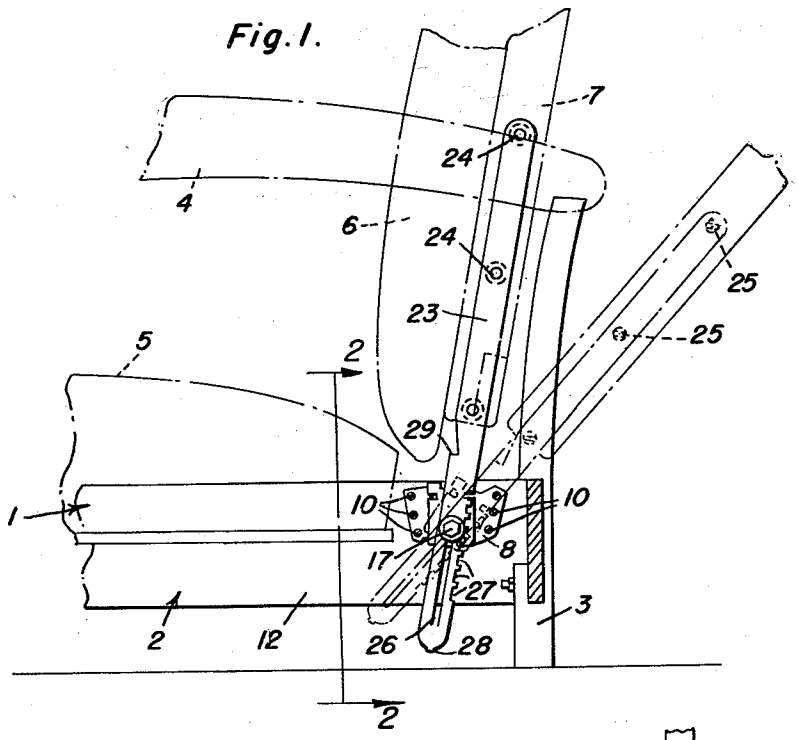
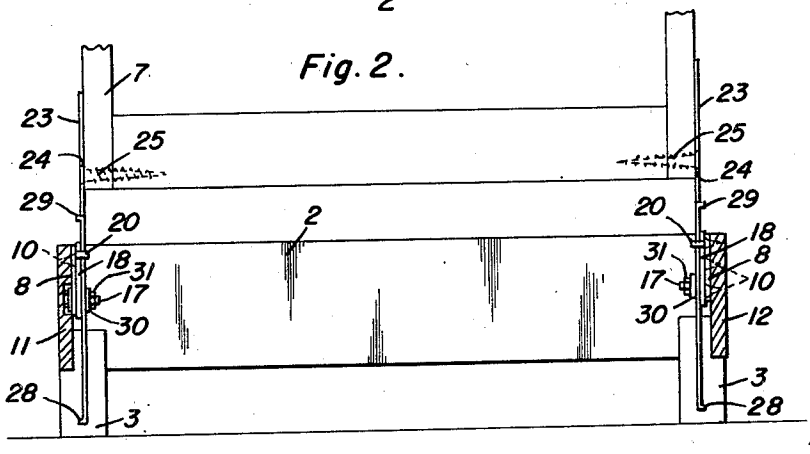


Fig. 2.



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Fig. 3.

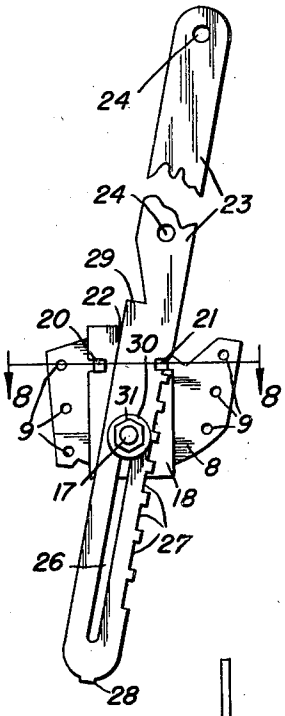


Fig. 5.

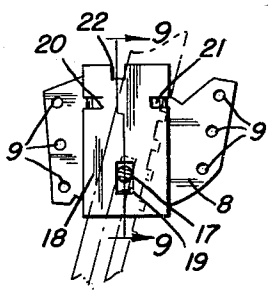


Fig. 4.

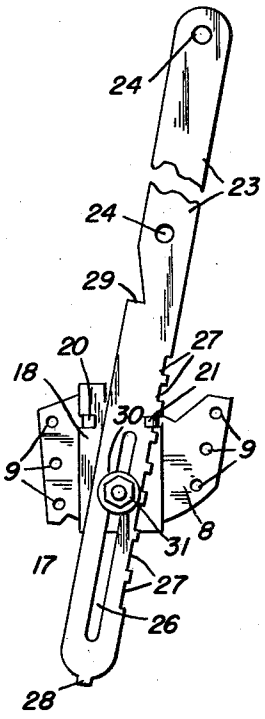


Fig. 6.

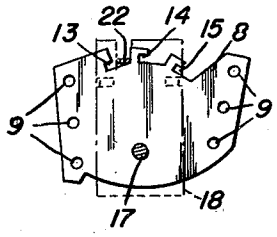


Fig. 7.

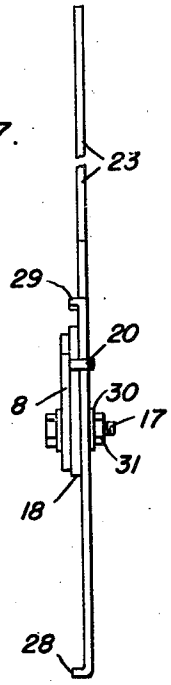


Fig. 8.

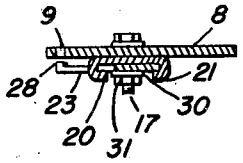
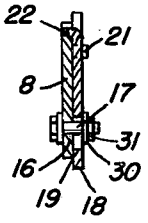


Fig. 9.



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ADJUSTABLE COMFORT CHAIR

Carl J. J. Kuebler, Evansville, Ind.

Application September 4, 1947, Serial No. 772,046

4 Claims. (Cl. 155—160)

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This invention relates to improvements in adjustable comfort chairs.

An object of the invention is to provide an improved comfort chair having a back which is adjustable angularly with respect to the chair seat, and is also adjustable for varying the back height or length as measured from the top of the chair seat to the top of the chair back.

Another object of the invention is to provide an improved form of easy chair having means for adjusting the chair back to any of three positions of angular inclination, and further means being provided for raising or lowering the effective length of the chair back with respect to the top of the chair seat.

A further object of the invention is to provide an improved form of adjustable back for an easy chair which will be highly efficient and comfortable in use, and which will be relatively inexpensive to manufacture and produce.

Other objects will appear as the description proceeds.

In the accompanying drawings which form a part of this application,

Figure 1 is a side elevation of a portion of a chair being partly broken away and in section showing the chair back adjusting means secured in place thereon;

Figure 2 is a partial sectional view taken on the line 2—2 of Figure 1;

Figure 3 is a side elevation of the chair back adjusting means or mechanism showing the back supporting plate adjusted to its lowest position;

Figure 4 is a side elevation of the chair back adjusting mechanism showing the back supporting plate elevated to a point approximately one-third of the distance to its point of highest adjustment;

Figure 5 is a front elevation of the chair back angle adjusting assembly with associated plates shown in dotted lines, one assembly being attachable to each side of the chair frame;

Figure 6 is a front elevation of a portion of the chair back angle adjusting assembly with the back supporting plate removed therefrom;

Figure 7 is an edge view of the chair back adjusting mechanism as viewed from the left side of Figure 3;

Figure 8 is a sectional view taken on the line 8—8 of Figure 3, and

Figure 9 is a sectional view taken on the line 9—9 of Figure 5.

In carrying out the invention, there is provided and shown an easy chair generally designated by the reference numeral 1 having a body frame 2, legs 3, arms 4, a seat 5, and a back 6 including a back frame 7.

A pair of flat base or anchoring plates 8 are provided with a plurality of spaced openings 9 through their opposite sides for receiving screws 10 for attaching the same to the inner rear surfaces of the sides 11 and 12 of the chair frame 2.

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A series of transversely spaced undercut positioning notches 13, 14, and 15 are formed on an arc in the upper edges of each of the pair of flat base or anchoring plates 8 for purposes hereinafter more fully described, and each plate 8 is apertured at 16 for receiving and supporting a pivot bolt 17.

A pair of substantially rectangular coupling or lock plates 18 are formed with the vertical slots 19 through their lower ends for overlying the pivot bolts 17 supported by the flat base or anchoring plates 8, and are formed with the oppositely disposed inwardly directed locking ears 20 and 21, and locking tabs or teeth 22 in their upper edges for being selectively received in either of the undercut slots 13, 14 or 15 in the upper edges of the flat base or anchoring plates 8, for determining the angle of inclination of the chair back 6. The coupling or locking plates 18 are vertically movable with respect to the fixed base plates 8 when a change of adjustment is made in the inclination of the chair back 6.

A pair of elongated chair back supporting plates 23 are provided with the spaced openings 24 in their upper ends for receiving the screws 25 for attaching the same to the opposite sides of the chair back frame members 7, and are formed with the elongated slots 26 through their lower ends for overlying the pivot bolts 17 supported by the base plates 8.

The chair back supporting plates 23 have a plurality of vertically spaced notches 27 in their lower edges for selective engagement by the inwardly directed locking ears 21 on the coupling or lock plate 18, and the forward movement of said plates 23 is limited by the inwardly directed locking ears 20 on said coupling or lock plates 18. An inwardly bent stop lug 28 is formed on each chair back supporting plate 23 for engagement with the bottom edges of the coupling or lock plates 18 to limit the upward movement of the back supporting plates 23, and inwardly directed stop lugs 29 are struck from the front edges of the back supporting plates 23 for engagement with the upper edges of the coupling or lock plates 18 to limit the downward movement of said back supporting plates 23.

Washers 30 and nuts 31 are disposed on the threaded ends of the pivot bolts 17 for holding the assemblies together in operative position.

In operation, assuming the locking tabs 22 on the coupling or lock plates 18 were disposed in the undercut notches 13 in the base or anchoring plates 8 for supporting the chair back in substantially vertical position, and it is desired to make an adjustment in the angular inclination of the chair back 6, it is only necessary to rock or pivot the back 6 slightly and raise up on the same until the pivot bolts 17 engage the lower ends of the slots 26 in the back supporting plates

23. During the lifting of the plates 23 the stop lugs 28 engage the bottom edges of the lock plates 18, whereupon the tabs 22 are disengaged from the slots 13 and placed in either of the slots 14 or 15 when the plates 23 and hence the plates 18 are lowered. The height of the chain back is selectively adjustable by raising or lowering the same until the locking ears 21 are disposed in the desired notches 27 in the plates 23.

From the foregoing description, it will be apparent that there has been devised and provided a useful form of adjustable comfort chair whose back may be adjusted to various degrees of angularly inclination and also the effective height of the chair back 6 may be adjusted with respect to the top of the chair seat 5.

Having described the invention what is claimed as new is:

1. A chair including a frame and a back supported thereby, means for varying the angular inclination and the effective height of said chair back, said means comprising anchoring plates attached to the chair frame and formed with arcuately disposed undercut notches, pivot bolts supported by said anchoring plates, lock plates slidably supported upon said bolts and having teeth for selective engagement of said teeth with the undercut notches in said anchoring plates, chair back supporting plates slidably mounted on said bolts having means engageable with said lock plates for varying the effective height of the chair back and means on the chair back supporting plates engageable with the lock plates whereby the teeth of the lock plates may be selectively engaged with said undercut notches.

2. A chair including a frame and a back supported thereby, means for varying the angular inclination and the effective height of said chair back, said means comprising anchoring plates attached to the chair frame and formed with arcuately disposed undercut notches, pivot bolts supported by said anchoring plates, lock plates slidably supported upon said bolts and having teeth for selective engagement of said teeth with the undercut notches in said anchoring plates, slotted chair back supporting plates slidably mounted on said bolts and having spaced adjusting notches in their edges engageable with said lock plates for supporting said chair back at the desired effective height, and means on the chair back supporting plates engageable with the lock plates whereby the teeth of the lock plates may be selectively engaged with said undercut notches.

3. A chair including a frame and a back supported thereby, means for varying the angular inclination and the effective height of said chair back, said means comprising anchoring plates attached to the chair frame and formed with arcuately disposed undercut notches, pivot bolts supported by said anchoring plates, lock plates slidably supported upon said bolts and having teeth for selective engagement of said teeth with the undercut notches in said lock plates, oppositely disposed locking ears on said lock plates, slotted chair back supporting plates slidably mounted on said bolts and having spaced adjusting notches in their edges engageable with the locking ears on said lock plates for supporting said chair back at the desired effective height, and means on the chair back supporting plates engageable with the lock plates whereby the teeth of the lock plates may be selectively engaged with said undercut notches.

4. A chair including a frame and a back supported thereby, means for varying the angular inclination and the effective height of said chair back, said means comprising anchoring plates attached to the chair frame and formed with arcuately disposed undercut notches, pivot bolts supported by said anchoring plates, lock plates slidably supported upon said bolts and having teeth for selective engagement of said teeth with the undercut notches in said anchoring plates, oppositely disposed locking ears on said lock plates, slotted chair back supporting plates slidably mounted on said bolts and having spaced adjusting notches in their edges engageable with the locking ears on said lock plates for supporting said chair back at the desired effective height, members forming stops on said chair back supporting plates for limiting their distance of vertical movement with respect to said anchor plates, and means on the chair back supporting plates engageable with the lock plates whereby the teeth of the lock plates may be selectively engaged with the undercut notches.

CARL J. J. KUEBLER.

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