

Aug. 4, 1953

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2,647,559

RECLINING ARTICLE OF FURNITURE

Filed July 28, 1952

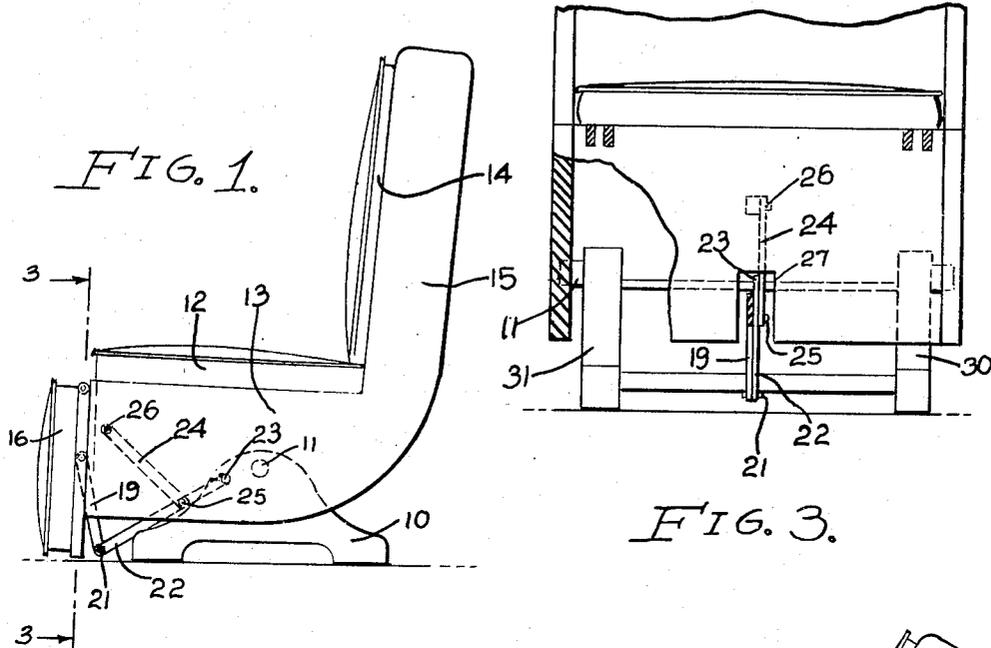


FIG. 3.

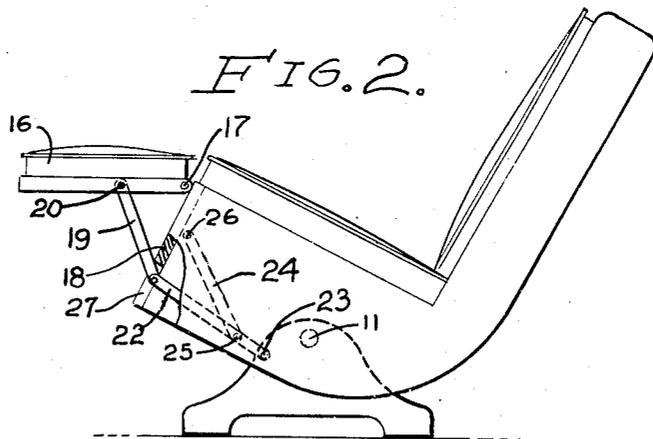


FIG. 2.

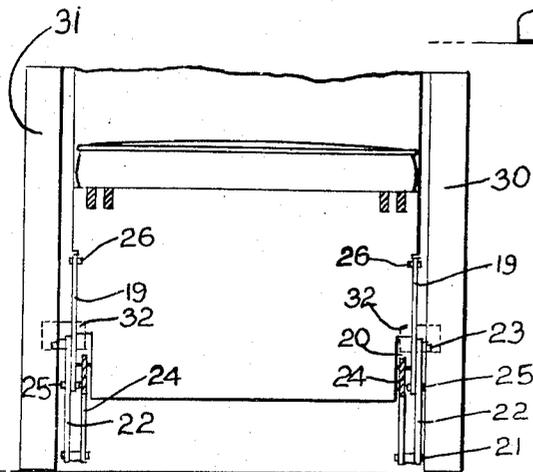


FIG. 4.

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2,647,559

RECLINING ARTICLE OF FURNITURE

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Application July 28, 1952, Serial No. 301,189

4 Claims. (Cl. 155—105)

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This invention relates to improvements in reclining articles of furniture such as reclining chairs, settees, and the like.

A primary object of the invention is to provide an improved article of furniture of this class wherein a seat and backrest are pivotally mounted on a base or supporting structure for rocking movement so that the seat and backrest may either assume substantially horizontal and substantially vertical positions respectively, or inclined positions wherein the occupant may assume a reclining position. In combination with the seat and backrest there is a leg rest automatically operable to assume a vertical or collapsed position against the forward side of the seat when the seat is in a substantially horizontal position, and in an extended or horizontal position when the seat and backrest are in inclined positions. In this manner, when the occupant of the chair or similar article of furniture assumes a reclining position the leg rest will automatically serve to elevate the legs.

More specifically, an object of the invention is to provide a structure having the above-mentioned characteristics which is of extremely simple and highly durable design, and which can be easily manufactured and incorporated in an article of furniture of this character.

With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawing for an illustrative embodiment of the invention wherein:

Figure 1 is a view in side elevation of an article of furniture embodying the present invention, the seat being illustrated in a substantially horizontal position and the leg rest being shown in a collapsed or vertical position;

Fig. 2 is a view similar to Fig. 1, but illustrating the seat in a reclining position and the leg rest in its extended position;

Fig. 3 is a view taken substantially upon the line 3—3 of Fig. 1 in the direction indicated; and

Fig. 4 is a view in front elevation showing a modification, parts being broken away and shown in vertical section.

Referring to the accompanying drawing wherein in similar reference characters designate similar parts throughout, the construction shown in Figs. 1 to 3, inclusive, comprises a base 10 adapted to be positioned on the floor and which serves to rockably support a combined seat and backrest by means of pivots or trunnions 11. The

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combined seat and backrest may be of any conventional or preferred construction and are preferably rigid with each other so that there is no change or alteration of angular relationship between the backrest and the seat. An adjustable backrest can of course be employed if desired, but in so far as the present invention is concerned it is unnecessary. The seat is indicated at 12 supported on a suitable seat structure 13 and the backrest is indicated at 14 mounted on a backrest structure 15 that is shown as being rigid with and integral with the seat structure 13. A leg rest 16 is hingedly mounted as at 17 at the forward end of the seat structure 13 so as to be capable of assuming a vertical position lying against the forward side 18 of the seat structure 13 or an extended and substantially horizontal position as shown in Fig. 2.

A first link of a linkage indicated at 19 is pivotally connected to the leg rest at 20 intermediate the top and bottom of the leg rest. This link has its lower end pivotally connected at 21 to a second link 22 which is pivotally connected at 23 to the base or supporting structure 10 downwardly and forwardly of the axis of the supporting trunnions 11. A third link 24 is pivotally connected at 25 forwardly of the pivot 23 and intermediate the ends of the second link 22. Preferably, this pivotal connection is located fairly close to the pivotal connection at 23. The forward end of the third link is pivotally connected at 26 to the seat structure 13 at a point disposed upwardly and forwardly of the pivotal connections 23 and 25. The linkage above described in the construction shown in Figs. 1, 2, and 3 is located centrally of the base 10 and centrally of the seat structure. The forward side 18 of the seat structure is notched as indicated at 27 to accommodate this linkage in the course of its movement. The upper side or upper edge of this notch is engageable by the linkage and functions as a stop limiting upward swinging movement of the leg rest and also rearward tilting movement of the combined seat and backrest.

From the above-described construction it will be appreciated that when the combined seat and backrest is swung forwardly or into a position as shown in Fig. 1, that the linkage causes the leg rest 16 to be automatically collapsed into a vertical position lying against the forward side of the seat structure. On the other hand, if the occupant tilts the seat structure rearwardly the link 24 being attached to the seat structure, causes the link 22 to swing upwardly rather rapidly. This upward swinging movement of the link

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22 is transmitted by the link 19 to the leg rest 16 so that the leg rest 16 assumes an extended horizontal position while the combined backrest and seat assume a reclining position.

In the construction shown in Figs. 1, 2, and 3, the base 10 is shown as being disposed beneath the seat and within the sides of the seat structure 13. With this arrangement, only a single set of linkage between the base and the leg rest is ordinarily necessary.

In the construction shown in Fig. 4, the base structure is shown as being formed of two spaced side arms 30 and 31 suitably connected together and serving to pivotally support the seat structure such as by trunnions 32. Two sets of linkage are employed, each set being disposed between a side of the seat structure and the adjacent side arm or supporting member.

The arrangement of the linkage, however, is the same in that the forward links 19 of each set of linkage are pivotally connected to the leg rest intermediate its ends. The links 22 are pivotally connected to the lower ends of the links 19 and to the side arms 30 and 31 respectively below and forwardly of the trunnions 32. The links 24 are pivotally connected to the links 22 and to the seat structure at a point upwardly and forwardly of the pivotal connections between the links 22 and the links 24 and between the links 22 and the side arms. The function and operation of this form of construction is the same as that previously described although the linkage sets are duplicated on both sides of the seat structure.

It will be appreciated from the similarity of the two constructions disclosed herein that the form of chair illustrated in Figs. 1 to 3, inclusive, may, if desired, be equipped with double sets of links, and that the chair illustrated in Fig. 4 can, if desired, be equipped with but a single linkage.

Various changes may be made in the details of construction without departing from the spirit and scope of the invention as defined by the appended claims.

I claim:

1. An article of furniture comprising a base or supporting structure, a seat and backrest pivotally supported for rocking movement thereon about a pivot arranged beneath the seat, a leg rest hingedly mounted upon the forward side of the seat, a link pivotally connected to the leg rest, a second link pivotally connected to the mentioned link and to the base, and a third link pivotally connected to the second link intermediate its ends and to the seat at a point forwardly of the first-mentioned pivot, whereby as the seat is tilted rearwardly relative to the base the links will collectively cause the leg rest to swing upwardly and forwardly relative to the seat.

2. An article of furniture comprising a base or supporting structure, a seat and backrest piv-

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otally supported for rocking movement thereon about a pivot arranged beneath the seat, a leg rest hingedly mounted upon the forward side of the seat, a link pivotally connected to the leg rest, a second link pivotally connected to the mentioned link and to the base forwardly of the pivotal connection between the seat and the base, and a third link pivotally connected to the second link intermediate its ends and pivotally connected to the seat upwardly and forwardly of its pivotal connection with the second link whereby as the seat is tilted rearwardly relative to the base the links will collectively cause the leg rest to swing upwardly and forwardly relative to the seat.

3. An article of furniture comprising a base or supporting structure, a seat and backrest pivotally supported for rocking movement thereon about a pivot arranged beneath the seat, a leg rest hingedly mounted upon the forward side of the seat, a link pivotally connected to the leg rest, a second link pivotally connected to the mentioned link and to the base, downwardly and forwardly of the pivotal connection between the seat and the base, and a third link pivotally connected to the second link intermediate its ends and to the seat upwardly and forwardly of the pivotal connection between the base and the second link whereby as the seat is tilted rearwardly relative to the base the links will collectively cause the leg rest to swing upwardly and forwardly relative to the seat.

4. An article of furniture comprising a base or supporting structure, a seat and backrest pivotally supported for rocking movement thereon, a leg rest hingedly mounted upon the forward side of the seat, a link pivotally connected to the leg rest, a second link pivotally connected to the mentioned link and to the base, downwardly and forwardly of the pivotal connection between the seat and the base, a third link pivotally connected to the second link intermediate its ends and to the seat upwardly and forwardly of the pivotal connection between the base and the second link whereby as the seat is tilted rearwardly relative to the base the links will collectively cause the leg rest to swing upwardly and forwardly relative to the seat, and means engageable with the linkage for limiting upward movement of the linkage and consequently limiting upward movement of the leg rest and rearward tilting movement of the seat.

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