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RECLINING ARTICLE OF FURNITURE

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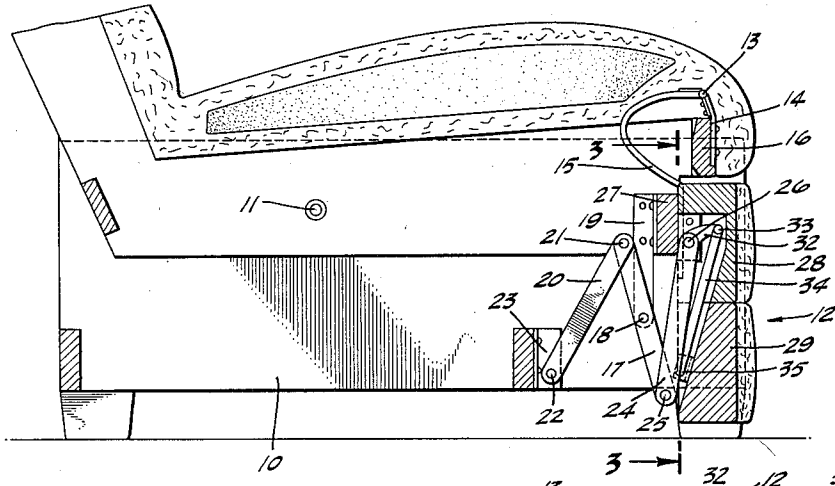

FIG. 1.

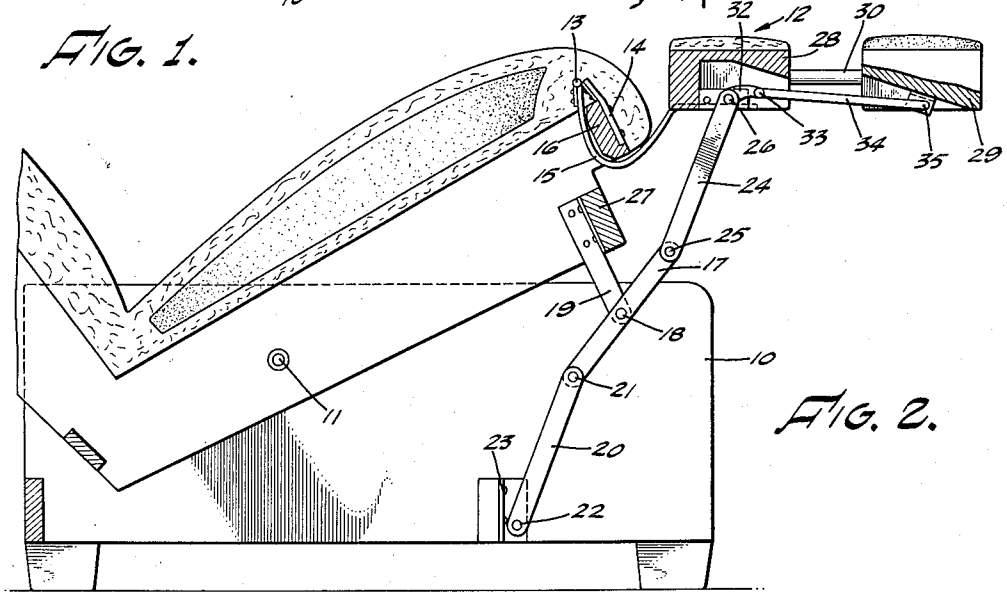

FIG. 2.

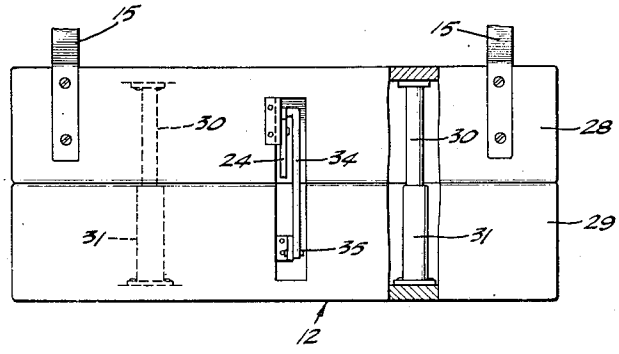

FIG. 3.

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RECLINING ARTICLE OF FURNITURE

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4 Claims. (Cl. 155—105)

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This invention relates to a reclining article of furniture such as a reclining chair, reclining divan, and the like.

A primary object of the invention is to provide a reclining article of furniture consisting essentially of a base on which a combined seat and backrest are pivotally mounted for swinging movement relatively to the base. A leg rest is hingedly connected to the seat adjacent the forward end thereof so as to be capable of swinging upwardly and forwardly relatively to the seat when the seat is inclined or assuming a position vertically beneath the forward end of the seat when the seat is in its substantially horizontal position.

An object of the invention is to provide an improved and highly simplified linkage between the base, seat, and leg rest which will cause the leg rest to be automatically swung upwardly and forwardly as the combined seat and backrest are tilted rearwardly with relation to the base and which will cause the leg rest to be automatically collapsed from such an extended position when the seat is returned to its normal or substantially horizontal position.

In chair structures of this type having elevatable leg rests it is desirable to have the leg rest of adequate length when the leg rest is in its elevated or extended position but to be collapsed or contracted when the leg rest is in its retracted or upright position.

It is, therefore, another object of the invention to provide an article of furniture of this type wherein the leg rest is transversely divided into two sections movably connected together so that these sections may move toward or away from each other and to provide a mechanism preferably operated by the linkage for causing the sections to automatically separate as the leg rest is moved into its extended position and to cause the sections to move together as the leg rest is swung into its upright position.

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 drawings for an illustrative embodiment of the invention, wherein:

Figure 1 is a transverse partial section through a chair or divan embodying the present invention, the leg rest being shown in its upright or collapsed position;

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

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Fig. 3 is a partial view in vertical section taken substantially upon the line 3—3 upon Fig. 1.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, the improved chair or divan consists of a base 10 on which a combined seat and backrest structure are pivotally mounted as at 11 for rearward tilting movement relatively to the base. The seat and backrest structure may be of any conventional or preferred design and are usually, but not necessarily, rigid with each other. At the forward end of the seat a leg rest, generally indicated at 12, is hingedly mounted as by hinges 13.

In the preferred form of construction one leaf of each of the hinges 13 is secured by a bracket 14 to the forward side of a transversely extending rail on the seat structure. The other leaf of each of the hinges 13 is secured to a curved bracket 15 which extends rearwardly from the hinge, then downwardly and forwardly, and is secured to the back of the leg rest 12. This enables the leg rest 12 to swing upwardly and forwardly from the position shown in Fig. 1 to the position shown in Fig. 2, and if desired, the engagement between the bracket 15 and the back of the rail 16 may serve to limit upward swinging movement of the leg rest.

The linkage employed to cause the leg rest 12 to automatically swing upwardly and forwardly relatively to the seat whenever the seat and backrest structure is tilted rearwardly consists of what may be termed a seat link 17 pivotally mounted at 18 intermediate its ends on a supporting arm 19 that is secured to the under side of the seat adjacent the forward end thereof and forwardly of the pivot 11. A base link 20 is pivotally connected to the seat link 17 at 21 and is also pivotally connected as at 22 to a bracket 23 on the base 10. A leg rest link 24 is pivotally connected as at 25 to the forward end of the seat link 17. It is also pivotally connected to the leg rest 12 as at 26.

With this arrangement of linkage it will be appreciated that as the combined seat and backrest structure tilts rearwardly with relation to the base that the seat link 17 functions somewhat in the nature of a walking beam causing the leg rest 12 to swing from its upright position shown in Fig. 1 into the horizontal or extended position shown in Fig. 2. In the latter position the three links 17, 20, and 24 approach being in the same straight line and consequently may be effective to serve as a stop limiting rearward tilting movement of the seat in the event that the

rail 16 is not engaged by the bracket 15 for this purpose. When the seat and backrest structure return to their normal position wherein the seat is substantially horizontal, this movement may be limited by the engagement of the leg rest with the rail 27 on the seat. Or in lieu thereof, it may be limited by the engagement of either the link 24 or the link 17 therewith.

The leg rest 12 is transversely divided into two sections 28 and 29. These are slidably guided by telescopic members 30 and 31 secured to these sections, respectively, so that the sections may be moved toward or away from each other. On the end of the leg rest link 24 there is a short horn 32 pivotally connected as at 33 to a link 34 that is pivoted to the section 29 at 35. As the leg rest 12 is swung into its horizontal position this horn in swinging about the pivot 26 causes the link 34 to push the section 29 away from the section 28. During such movement the telescopic members 30 and 31 merely slide one from within the other. Conversely, when the leg rest swings downwardly and rearwardly into the position shown in Fig. 1 the horn 32 pulls upon the link 34 and draws the section 29 toward the section 28. In this manner, when the leg rest is in its horizontal position it is extended and is of adequate length, but when it is in its retracted position it is collapsed as shown in Fig. 1 so as to occupy a minimum amount of space and present a neat and attractive appearance at the front of the chair.

From the above-described construction it will be appreciated that an improved reclining article of furniture is provided wherein the linkage used to extend the leg rest may be of very simple and durable design. This linkage may be arranged adjacent the center of the base and adjacent the center of the seat as depicted in Fig. 3. Or in the alternative, two or more sets of linkage may be arranged between the seat and base near each side of the base. The extensible leg rest structure is not necessarily restricted in its use to the linkage depicted but may be used in conjunction with other forms of linkage wherein there is a link such as the link 24, pivotally connected to the leg rest and which is swingable relatively thereto when the leg rest is swung from collapsed to extended position.

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. A reclining chair or the like comprising a base, a seat and backrest pivotally supported thereon, a leg rest hingedly mounted on the seat adjacent the forward end thereof, a seat link pivotally mounted on the underside of the seat intermediate its ends, a base link pivotally connected to one end of said seat link and pivotally connected to the base, and a leg rest link pivotally connected to the other end of the seat link and pivotally connected to the leg rest whereby as the seat and backrest tilt rearwardly relatively to the base, the leg rest will be caused to swing upwardly and forwardly relatively to the seat.

2. A reclining chair or the like comprising a base, a seat and backrest pivotally supported thereon, a leg rest hingedly mounted on the seat adjacent the forward end thereof, a seat link pivotally mounted on the under side of the seat intermediate its ends and at a point forwardly of said pivotal support for the seat and backrest, a base link pivotally connected to the rear end of said seat link and pivotally connected to the base at a point forwardly of the pivotal support for the seat and backrest, and a leg rest link pivotally connected to the forward end of the seat link and pivotally connected to the leg rest whereby as the seat and backrest tilt rearwardly relatively to the base the leg rest will be caused to swing upwardly and forwardly relatively to the seat.

3. In a reclining chair or the like, a seat and backrest pivotally supported on a base, a leg rest hingedly connected to the seat adjacent the forward end thereof, said leg rest being transversely divided into sections, means slidably connecting said sections enabling them to move toward and away from each other, linkage connecting the base, seat, and leg rest for causing the leg rest to swing upwardly and forwardly relatively to the seat when the seat and backrest are tilted rearwardly relatively to the base, and means for causing the sections of the leg rest to separate as the leg rest is swung upwardly.

4. A reclining chair or the like comprising a base, a seat and backrest pivotally supported thereon, a leg rest hingedly mounted on the seat adjacent the forward end thereof, a seat link pivotally mounted on the under side of the seat intermediate its ends and at a point forwardly of said pivotal support for the seat and backrest, a base link pivotally connected to the rear end of said seat link and pivotally connected to the base at a point forwardly of the pivotal support for the seat and backrest, a leg rest link pivotally connected to the forward end of the seat link and pivotally connected to the leg rest whereby as the seat and backrest tilt rearwardly relatively to the base the leg rest will be caused to swing upwardly and forwardly relatively to the seat, a horn on the end of the seat link, said leg rest being transversely divided into sections, means slidably connecting said sections enabling them to move toward and away from each other, and a link pivotally connected to the horn and to that section of the leg rest that is most remote from the hinge whereby the sections will be caused to separate as the leg rest is swung upwardly and will be caused to move towards each other as the leg rest is swung downwardly.

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