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CHAISE LONGUE HAVING LOWERING BACK REST

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2 Sheets-Sheet 1

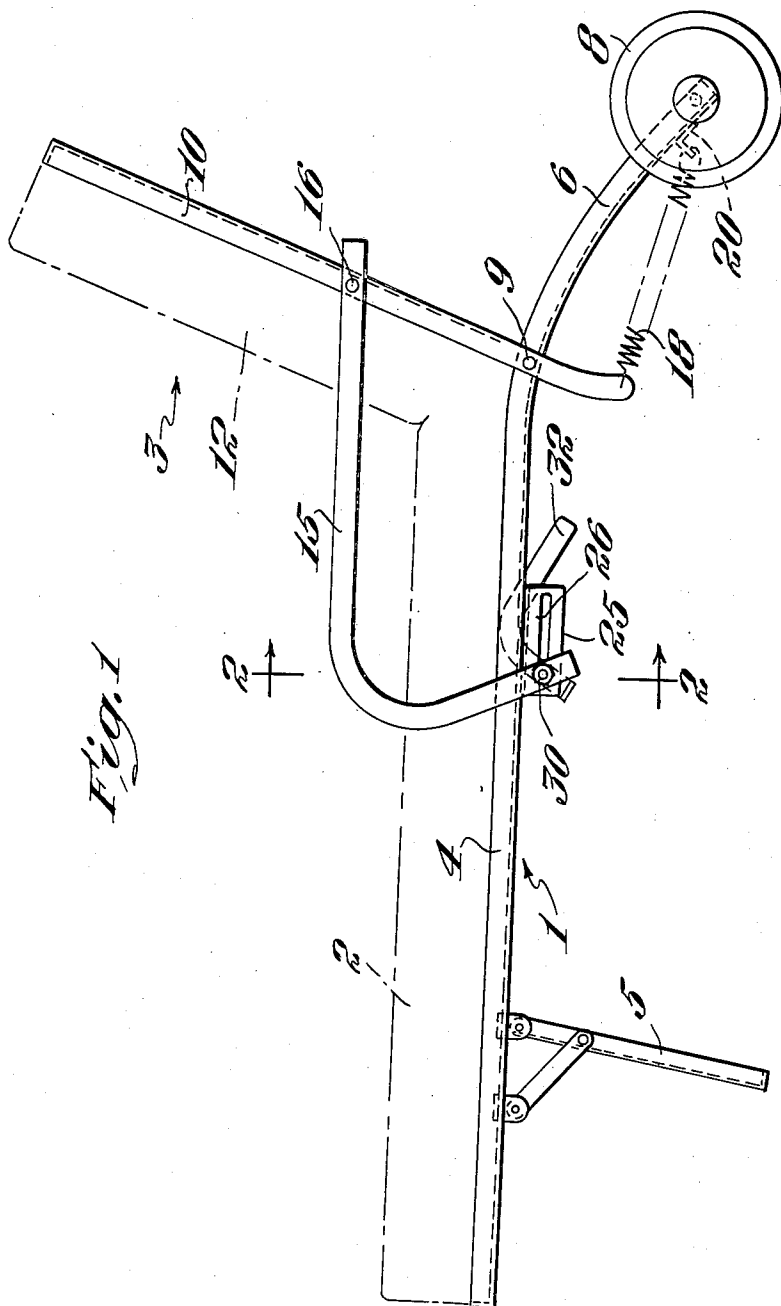


Fig. 1

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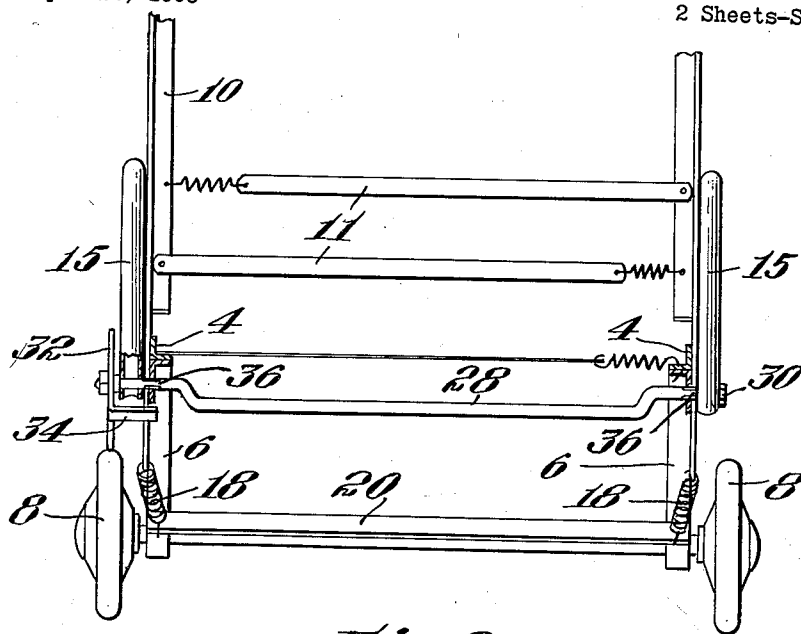


Fig. 2

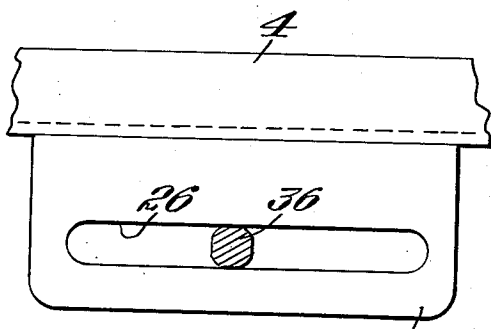


Fig. 3

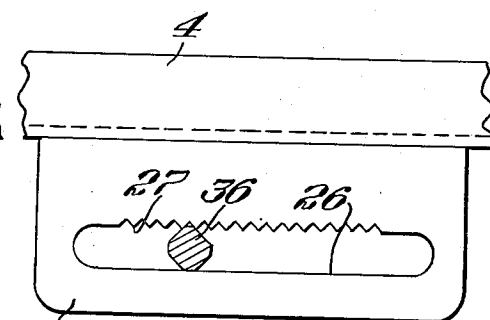


Fig. 4

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UNITED STATES PATENT OFFICE

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CHAISE LONGUE HAVING LOWERING
BACK REST

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7 Claims. (Cl. 155—45)

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This invention relates to chaise lounge and the like articles of furniture having a back rest pivotally supported with respect to a seat section so that it may be swung from an upright position to a horizontal position and held in a selected position of adjustment.

In articles of furniture of the above type the occupant often desires to change or adjust the position of the back, and most conventional constructions either provide notches for holding the back in one of a few positions of adjustment, or locking screws or nuts which must be well tightened in order to hold the back in the selected position of adjustment.

The principal object of the present invention is to provide an article of furniture of the above type which has a simple, efficient and reliable means permitting the occupant easily and conveniently to adjust the back while reclining on the seat and readily lock the back in the selected position of adjustment.

Further objects relate to various features of construction and will be apparent from a consideration of the following description and the accompanying drawings, wherein:

Fig. 1 is a side elevation of a chaise lounge constructed in accordance with the present invention;

Fig. 2 is a section on the line 2—2 of Fig. 1;

Fig. 3 is a view showing one type of back lock; and

Fig. 4 is a view similar to Fig. 3, but showing a modified type of back lock.

The embodiment herein shown for the purpose of illustration comprises a horizontal seat section 1 which may be of conventional construction, consisting of a rectangular angle iron frame which carries the usual slats, wire mesh, or the like, for supporting a mattress or cushion 2 which may also be of conventional construction. Each side member 4 of the seat section is supported adjacent to its front and rear ends by legs 5 and 6, the rear legs 6 preferably being in the form of curved extensions of the side members 4 and carry rollers or wheels 8 which permit the lounge to be moved from place to place. The back rest or section 3 is pivotally connected at 9 to the rear end of the seat section 1 so that it may be swung from an upright or substantially vertical position to a horizontal position in the plane of the seat section. The back section consists of a U-shaped angle iron frame 10 carrying the usual slats 11 for supporting a cushion 12 which is preferably connected with the cushion 2, as indicated in Fig. 1, so as to provide, in effect, an integral part thereof.

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A generally L-shaped arm rest 15 is carried by each side of the lounge, the upper end of each arm rest being pivoted at 16 to a side member 10 of the back rest and the lower end of each arm rest is juxtaposed to the side members 4. The lower ends of the members 10 extend below the side members 4 and each is connected to one end of a tension spring 18, the opposite end of which is connected to a cross-bar 20 secured to the legs 6. The design of the parts and tension of the springs 18 are such that the back rest 3 is normally held in upright position, as shown in Fig. 1, but when subjected to a slight pressure the back rest swings downwardly and may be locked in any desired position of adjustment by the mechanism presently to be described.

Mounted on the underside of each side member 4 and adjacent to the ends of the arm rests 15 are depending brackets 25 formed with aligned horizontal slots 26. A transverse bar or rod 28 extends from one bracket to the other with its end portions projecting through the slots 26 and openings in the arm rests 15. One end of the bar 28 carries a nut 30 and its opposite end is secured to a L-shaped lever 32, the free end of which is provided with an integral inwardly directed extension 34 (Fig. 2) engageable with the lower edge of the bracket to limit its swinging movement from one position to another. The length of the slots 26 is such that when the back rest 3 is in fully elevated position the end portions of the bar 28 are at one end of the slots and when the back rest is swung downwardly to horizontal position the end portions of the bar 28 move to the opposite ends of the slots.

The intermediate portion of the bar 28 is preferably downwardly offset to permit depression of the cushion 2 by the occupant, and the portions 36 of the bar which pass through the slots 26 have a cross-section which is so shaped that when in one position they have a free sliding fit within the slots, but when rotated through an angle of the order of 45° they engage the opposite sides of the slots, exerting a binding action thereon which locks the parts in position. Such locking portions or cams 36 are preferably of square cross-section with flattened corners, as shown in Figs. 3 and 4, and the walls of the slots 26 may either be plane, as shown in Fig. 3, in which case friction alone is relied on for the locking action, or at least one wall may be serrated, as shown at 27 in Fig. 4, in which case a positive locking action is provided. In either case the bar 28, lever 32 and the arm rest 15 move as a unit when the back rest is swung from one position to another and by swinging the lever 32 from one posi-

tion to another the locking portions 36 are rotated to and from locking position.

The force exerted by the springs 18 is merely sufficient to elevate the back rest from horizontal to substantially vertical position and hence a slight pressure, such as may be exerted either by the back of an occupant against the back rest or pressure applied to the arm rests 15, is sufficient to overcome the action of the springs 18. Hence, the occupant, while in a reclining position, may effect any desired adjustment of the back rest merely by applying slight pressure thereon or to the arm rests 15, and when the desired adjustment has been obtained, the occupant may then conveniently operate the lever 32 to lock the arm rests 15 which hold the back rest 3 in adjusted position.

While I have shown and described one desirable embodiment of the invention it is to be understood that this disclosure is for the purpose of illustration and that various changes and modifications may be made without departing from the spirit and scope of the invention as set forth in the appended claims.

I claim:

1. An article of furniture of the class described comprising a horizontal seat section, a back rest pivotally supported so as to be swung from a substantially vertical position to a horizontal position, arm rests pivotally connected at one end to said back rest with their opposite ends juxtaposed to the sides of seat section, and means for locking said back rest in a selected position of adjustment relative to said seat section, said means comprising brackets carried by said seat section and disposed adjacent to the lower ends of said arm rests, said brackets having aligned slots, a rotatable bar extending through the lower ends of said arm rests and slots, the portions of said bar passing through said slots having a cross-section which is so shaped that it has one dimension greater than another so that when in one position said portions have a free sliding fit within said slots and when rotated to another position they exert a binding action on the walls of said slots, thereby to lock the back rest in a selected position of adjustment, and an operating lever secured to one end of said bar for rotating it to and from locking position.

2. An article of furniture of the class described comprising a horizontal seat section, a back rest pivotally supported adjacent to the rear of said seat section so as to be swung from a substantially vertical position to a horizontal position, springs connected with said back rest and seat section so as to swing said back rest to and normally maintain it in an upright position, arm rests pivotally connected at one end to said back rest with their opposite ends juxtaposed to the sides of seat section, and means for locking said back rest in a selected position of adjustment relative to said seat section, said means comprising depending brackets carried by said seat section and disposed adjacent to the lower ends of said arm rests, said brackets having aligned slots,

a rotatable bar extending through the lower ends of said arm rests and slots, the portions of said bar passing through said slots having a cross-section which is so shaped that it has one dimension greater than another so that when in one position said portions have a free sliding fit within said slots and when rotated to another position they exert a binding action on the walls of said slots, thereby to lock the back rest in a selected position of adjustment, and an operating lever secured to one end of said bar for rotating it to and from locking position.

3. An article of furniture of the class described comprising a horizontal seat section having front and rear legs, a back rest pivotally connected to the rear of said seat section, said back rest having depending parts extending below said seat section, tension springs connected to said depending parts and rear legs so as to swing said back rest to and normally maintain it in upright position, arm rests pivotally connected at their upper ends to said back rest and having their lower ends juxtaposed to the central section of said seat section, and means for locking said back rest in a selected position of adjustment relative to said seat section, said means comprising depending brackets carried by said seat section and disposed adjacent to the lower ends of said arm rests, said brackets having aligned slots, a rotatable bar extending through the lower ends of said arm rests and slots, the portions of said bar passing through said slots having a cross-section which is so shaped that it has one dimension greater than another so that when in one position said portions have a free sliding fit within said slots and when rotated to another position they exert a binding action on the walls of said slots, thereby to lock the back rest in a selected position of adjustment, and an operating lever secured to one end of said bar for rotating it to and from locking position.

4. An article of furniture as set forth in claim 1, wherein the walls of said slot are substantially parallel and the portions of said bar passing through said slots have an approximately square-shaped cross-section.

5. An article of furniture as set forth in claim 1, wherein one of the walls of each of said slots is serrated to provide a positive locking action.

6. An article of furniture as set forth in claim 1, wherein the intermediate portion of said bar is downwardly offset.

7. An article of furniture as set forth in claim 1, wherein the fixed end of said operating lever is provided with an inwardly directed extension engageable with the lower edge of the adjacent bracket to limit the swinging movement of said lever.

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