

[54] LOUNGE CHAIR HAVING MOBILE BASE
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[22] Filed: Jan. 12, 1973
[21] Appl. No.: 323,137

[52] U.S. Cl. 280/43.24, 297/269, 297/270
[51] Int. Cl. B62d 21/14
[58] Field of Search 297/130, 131, 217, 261, 297/269, 270; 248/188.2; 108/18, 19; 280/9, 10, 43.14, 43.24

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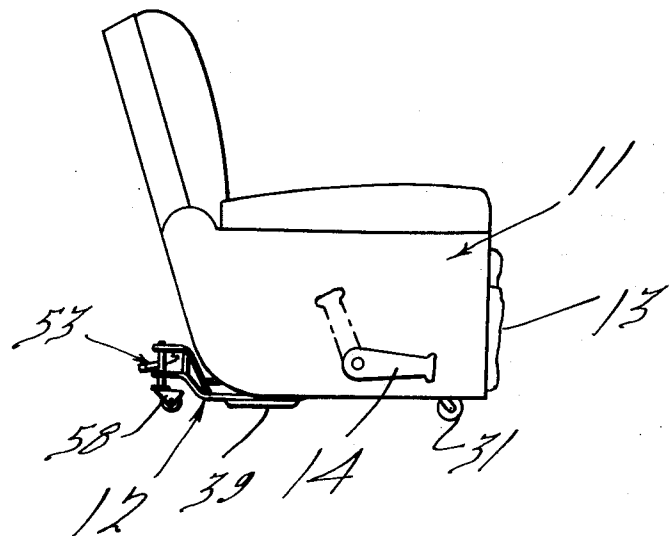
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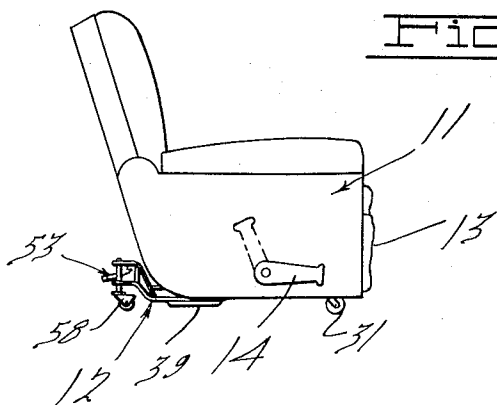
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[57] ABSTRACT
The base for a rockable lounge chair has wheels at the front end and pads and casters at the rear end. Lever means is employed at the rear end for raising the chair from the pads onto the casters which permits the occupant or other persons to move the chair to another location. When the lever is released, the chair is maintained in the new location by the pads thereon.

10 Claims, 7 Drawing Figures



1.1



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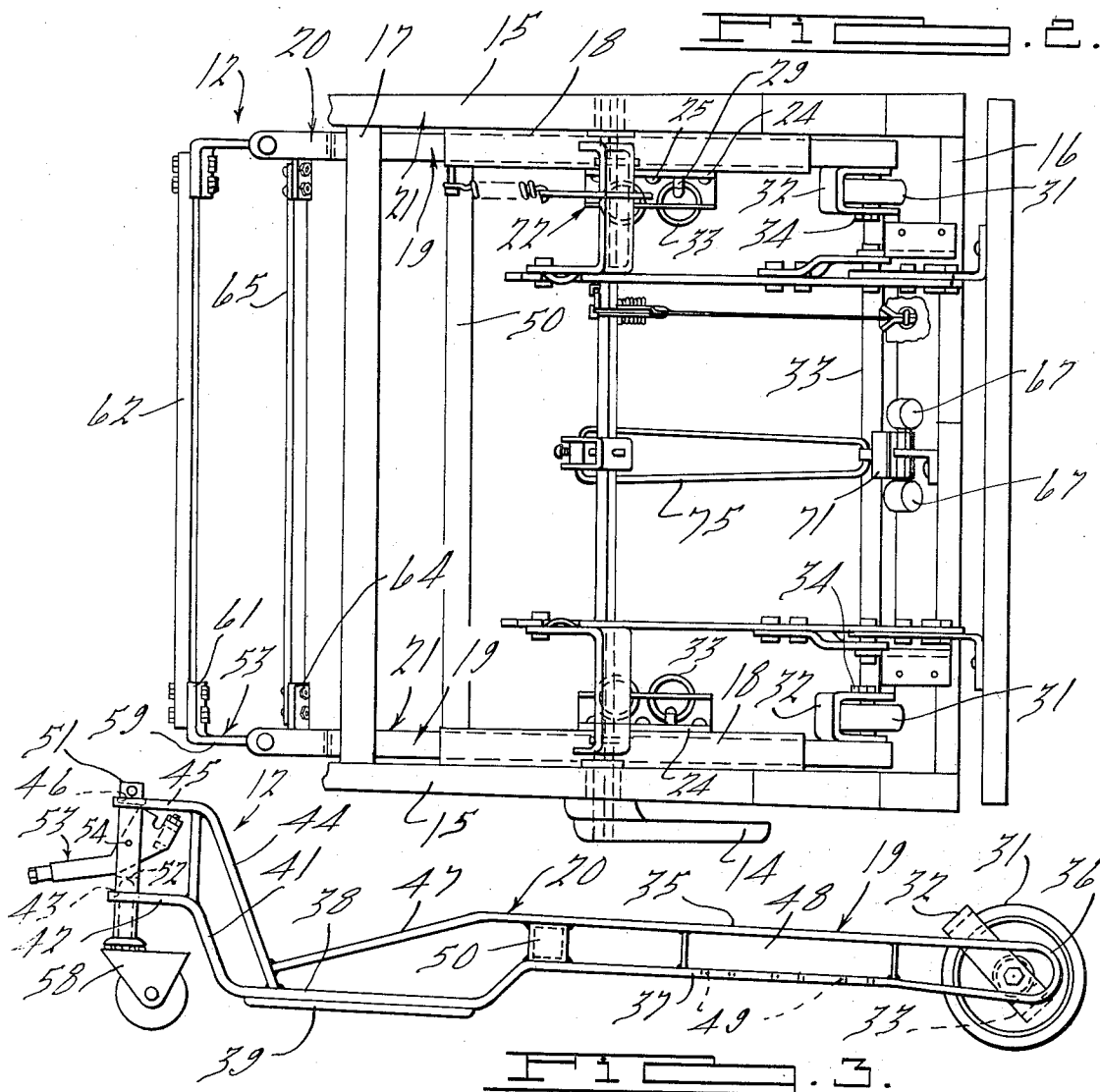


FIG. 4.

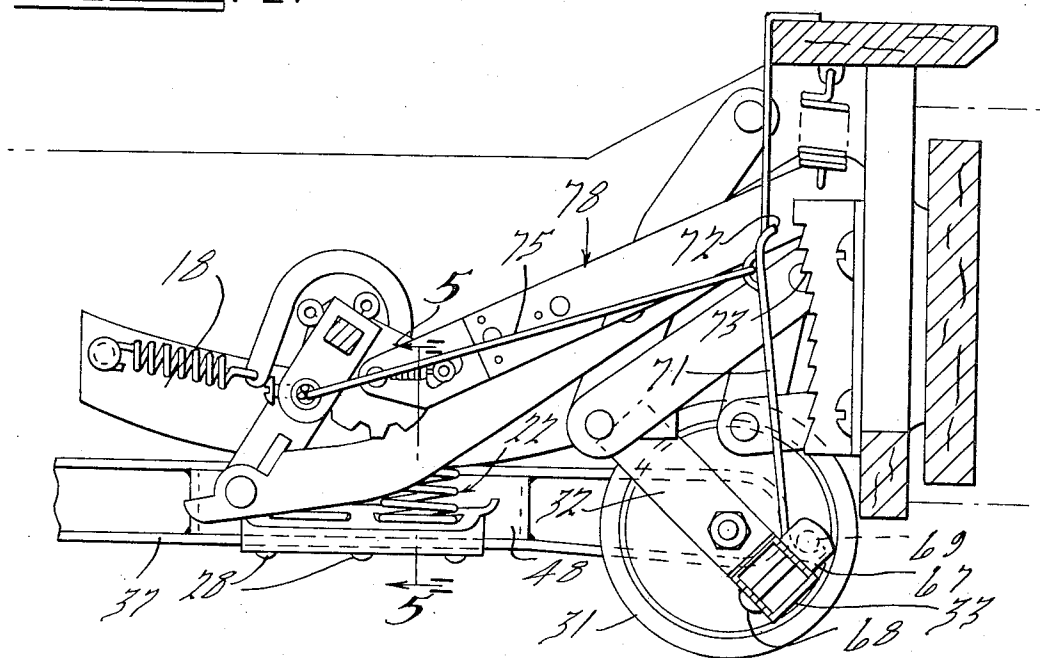


FIG. 5.

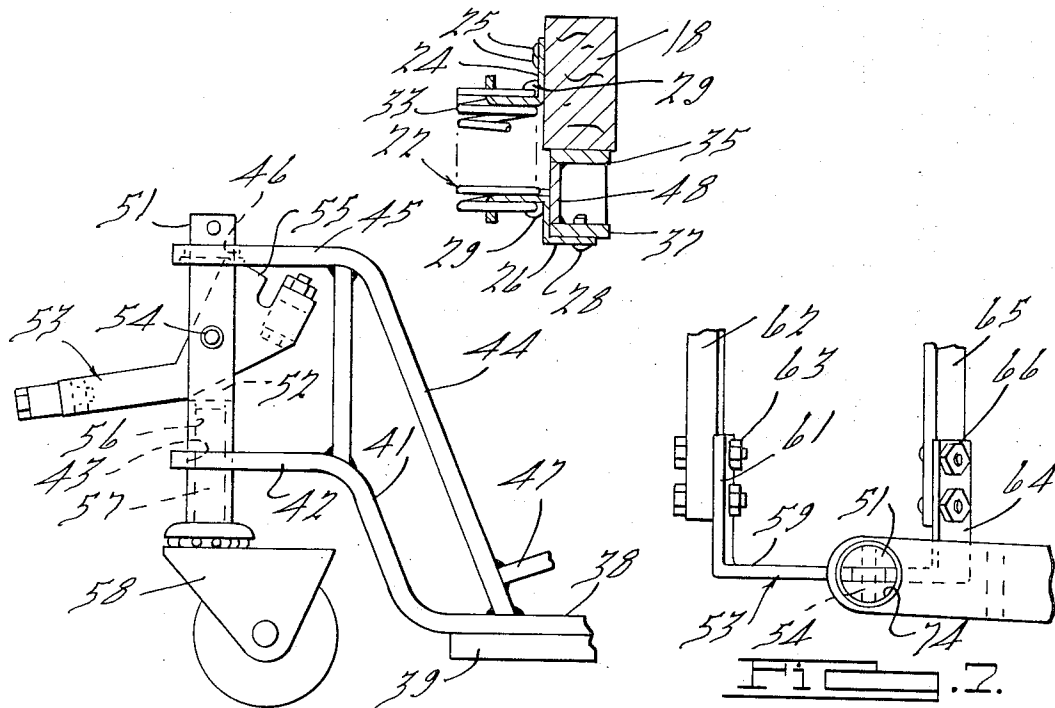


FIG. 6.

FIG. 7.

LOUNGE CHAIR HAVING MOBILE BASE

BACKGROUND OF THE INVENTION

Wheel chairs are usually provided in hospitals, nursing homes and for a disabled person to provide mobility for the occupant without providing the comfort of a lounge chair which has a degree of mobility when using the base of the present invention.

SUMMARY OF THE INVENTION

The invention pertains to a base for a lounge chair of the rocking type interconnected by spring units in the usual manner. The base is provided with wheels at the front end which contact the floor and rubber strips or pads at the rear end which, when engaging the floor, retains the chair in fixed location. The rear end of the base is also provided with casters, on which the rear end of the base is raised or lowered by a lever system which locks the casters in lowered position in which the pads are raised from the floor. When the chair is supported on the two wheels at the front end and on the pair of casters on the rear end, it can be moved by the occupant or by another person to different locations where the chair will again be retained against movement when the lever system is reversed to permit the casters to be retracted and to have the rear end of the chair rest upon the pads.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a view in elevation of a lounging chair mounted for rocking movement on the base of the present invention;

FIG. 2 is a plan view of the base, the rocker parts and foot-rest structure of the chair illustrated in FIG. 1;

FIG. 3 is a view in side elevation of the structure illustrated in FIG. 2;

FIG. 4 is an enlarged view of the front end portion of the structure illustrated in FIG. 3;

FIG. 5 is a sectional view of the structure illustrated in FIG. 4, taken on the line 5—5 thereon;

FIG. 6 is an enlarged view of the rear end portion of the structure illustrated in FIG. 3, and

FIG. 7 is a broken plan view of the structure illustrated in FIG. 6.

DESCRIPTION OF THE PREFERRED EMBODIMENT

A chair 11, as illustrated in FIG. 1, is of the lounging type, rockable upon a base 12 which embodies features of the present invention. The chair has a leg rest 13 which is operated by a handle 14 to extended and retracted positions. The rockable chair frame 21 has side frame elements 15 interconnected by cross members 16 and 17 at the front and rear end respectively. The side frame elements 15 of the chair frame 21 have the convex bottom surface of the rocking members 18 resting upon the top section 19 of the base frame 12. The rocking members 18 are connected to the side frame elements 15 and to the base 12 by spring units 22 of conventional construction. The springs of the units have the top turns secured in slots in metal brackets 24 which are attached to the inner face of the rocking member 18 by a plurality of screws 25, as illustrated in FIG. 5. The bottom turns of the springs are secured in slots in a metal bracket 26 which is secured to the bottom section 27 of the side frame elements 20 of the base 12 by a plurality of screws 28. The endmost turns

of the springs are retained within the slots of the brackets 24 and 26 by struck-out tabs 29 which are bent thereover in the conventional manner. At the front of the frame elements 20 of the base 12 a pair of wheels 31 are mounted within inverted U-shaped brackets 32 the outer leg of which is welded to the side frame elements 20, the inner longer legs of which are secured to the end of the square cross member 33. A bolt 34 extends through the legs of the U-shaped brackets 32 and through the wheels 31 on which they are mounted for rotation. The side frame elements 20 are herein illustrated as being made of strap steel having a top section 35 which is reversely bent at 36 at the front end and extending rearwardly at 37 and being offset at 38 downwardly to form the pad at the rear end. The pad is completed by a strip of rubber 39 which is adhered or otherwise secured thereto.

Beyond the pad section the bottom strap is bent upwardly at 41 and rearwardly at 42 and provided with an aperture 43. An L-shaped strap 44 has an end portion 45 disposed parallel to the portion 42 and provided with an aperture 46 aligned with the aperture 43. The strap 44 is welded to the pad portion 38 and to the end of the downwardly sloping portion 47 of the top section 35. The rear cross member 50 is welded between the top and bottom sections 35 and 37 of the side elements 20. To provide more strength where the springs are attached to the bottom section 37 at the point where the rocking occurs, a U-shaped strip 48 is placed between the two sections 35 and 37 and welded thereto. The bottom section 37 has a plurality of threaded apertures 49 for receiving the screws 28 which secure the spring bracket 26 thereto.

The apertures 43 and 46 at the rear end of the side frame elements 20 contain a slidable rod 51 having a slot 52 therein in which a lever 53 is secured by a pivot 54. The lever has a cam surface 55 which engages the underside of the strap end portion 45 to move the rod 51 downwardly. The end of the rods has an aperture 56 extending thereinto for receiving and supporting the stem 57 of the casters 58. When the casters are moved down, as illustrated in FIG. 6, the pad 38 with the rubber strip 39 are raised from the floor to have the base and therefor the chair supported on the two front wheels and the two casters. The casters, as well as the tires on the wheels are preferably made of elastomeric material to reduce any noise and eliminate marring of the supporting surface. The lever 53 has an operating arm 59 which is bent at right angles at 61 to which a cross bar 62 is secured by bolts 63 at both sides of the base 12. Similarly, a laterally extending portion 64 on the opposite end of the lever 53 has a cross bar 65 secured thereto at both sides of the base 12 by a plurality of bolts 66. By using the foot, the bars 62 or 65 may be engaged to rock the levers 53 and operate the rods 51 to move the casters 58 into engagement with or away from the floor on which the chair is supported.

While the side frame elements 20 of the base 12 have been illustrated and described as being built up of strap steel, it is to be understood that the side frame elements 20 could be cast as a unit from aluminum, plastic or the like materials. Similar cross members 33 and 50 would interconnect the side elements 20 and the levers 53 would operate the rods 51 to move the casters 58 to and from the floor in the manner described above.

The cross bar 33, as illustrated in FIGS. 2 and 4, has a pair of spaced posts 67 secured thereto by screws 68.

A shaft 69 is supported in aligned apertures in the two posts for pivotally supporting a latch lever 71 which has an end 72 in position to engage one of a plurality of teeth 73 for locking the chair against forward tilting movement when the leg rest is extended. By moving the operating handle 14 to retract the leg rest, a wire loop 75 connected to the latch lever 71 releases the end 72 from the teeth 73 and permits the chair to again rock in the normal manner. This and other novel features of the chair can be studied in detail in the E. M. Knabusch et al U.S. Pat. No. 3,096,121 which discloses the same chair as that of the present invention except for the mobile base.

It will be noted in FIG. 7 that a hardened ring 74 is mounted within the aperture 46 in the top section 45 of the side frame elements 20 against which the cam edge 55 of the lever 53 operates to prevent wear. The leg rest operating mechanism 78 is not herein illustrated or described in detail as this is found in the above mentioned patent.

We claim:

1. In a base for a chair, a base frame having side elements with a pair of cross members therebetween, a wheel mounted at the front end of each side element, a fixed floor engaging section at the rear of said side elements, a pair of casters at the rear of said side elements, and means for lowering said casters and raising the floor engaging sections from the floor when the casters move into engagement therewith.

2. In a base for a chair as recited in claim 1, wherein said side elements are of unit construction having pivot means at the front end of said wheels, the rear end of said elements having aperture means, a rod in said aperture means for supporting said casters, and lever means for forcing the rods downwardly in said aper-

tures for raising the rear end of the chair onto said casters.

3. In a base for a chair as recited in claim 2, wherein said rods are slotted, and pivot means supporting said lever means in said slots for moving the chair to raised or lowered position.

4. In a base for a chair as recited in claim 2, wherein the lower end of the rods has an aperture in which the stems of the casters are supported.

5. In a base for a chair as recited in claim 1, wherein a rocking element is mounted on the inner face of the chair frame having a downwardly presenting arcuate surface, and a flat top central section on said base engaged by said arcuate surfaces of said rocking elements.

6. In a base for a chair as recited in claim 5, wherein spring units interconnect the rocking elements and the base side elements.

7. In a base for a chair as recited in claim 1, wherein an elastomeric strip is secured on the underside of the floor engaging section of the side elements.

8. In a base for a chair as recited in claim 2, wherein cross bars interconnect the levers for moving them in either direction by a downward movement on one or the other cross bars.

9. In a base for a chair as recited in claim 1, wherein interconnecting means are secured to said lowering means to have them operate in unison.

10. In a base for a chair as recited in claim 1, wherein a pair of spaced posts are supported on the front cross bar, and a latching lever pivoted to the posts when supported therebetween in position to engage the teeth on the chair to prevent it from rocking.

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