July 1, 1941. R. L. WONDERLY 2,247,720

CHAIR

Filed May 31, 1939 2 Sheets-Sheet 1

FIG. 1.

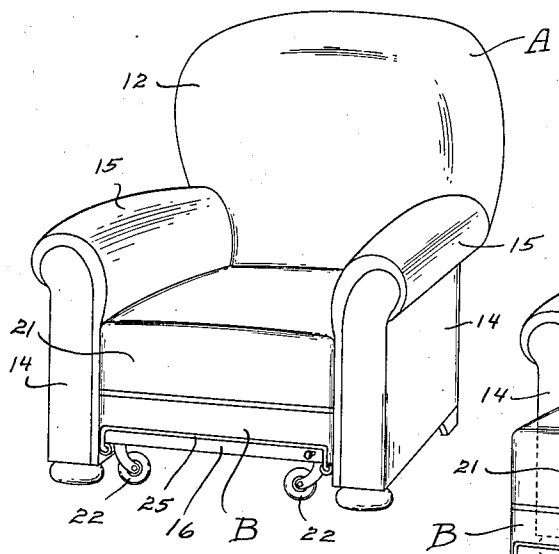


FIG. 2.

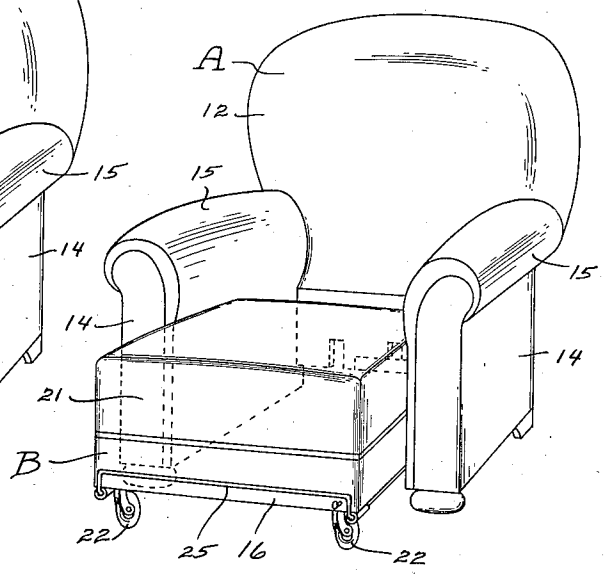


FIG. 7.

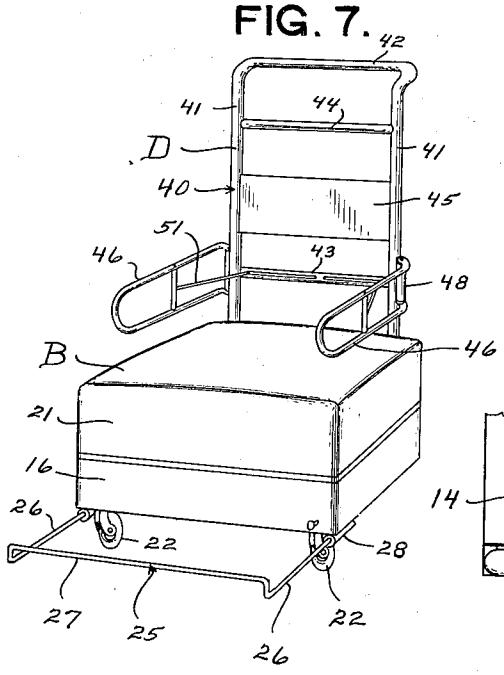


FIG. 3.

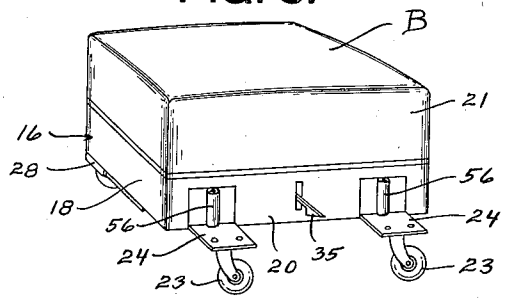
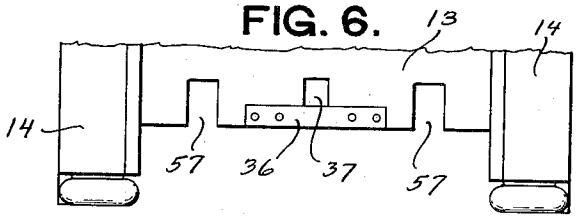


FIG. 6.



INVENTOR.
Ray L. Wonderly.

BY Lancaster, Allwine & Rommel
ATTORNEYS.

July 1, 1941. R. L. WONDERLY 2,247,720

CHAIR

Filed May 31, 1939 2 Sheets-Sheet 2

FIG. 9.

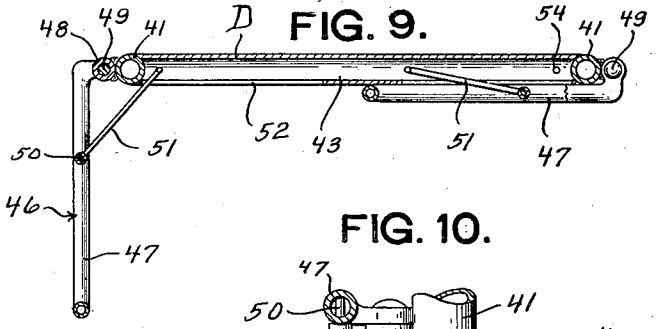


FIG. 4.

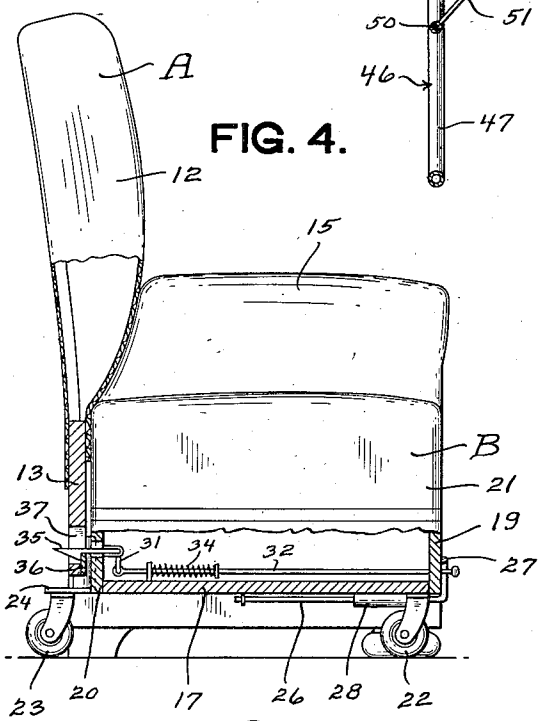


FIG. 10.

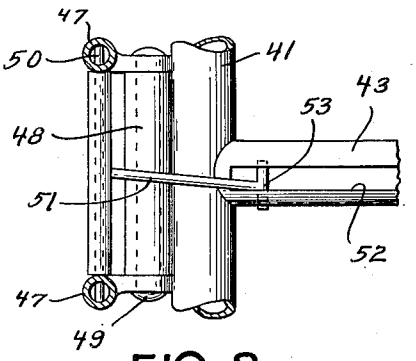


FIG. 8.

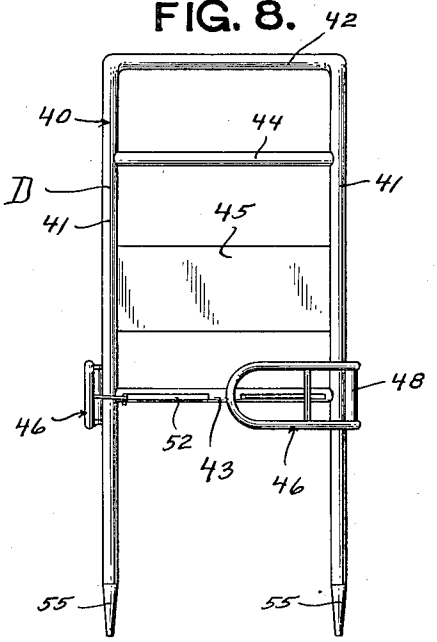
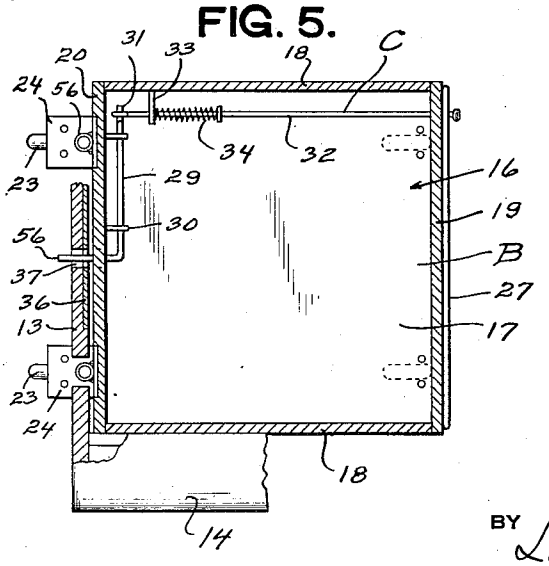


FIG. 5.



INVENTOR.
Ray L. Wonderly

BY Lancaster, Allwine & Rommel
ATTORNEYS.

Patented July 1, 1941 2,247,720

UNITED STATES PATENT OFFICE

2,247,720

CHAIR

Ray L. Wonderly, Sheridan, Wyo.

Application May 31, 1939, Serial No. 276,681

6 Claims. (Cl. 155—41)

The present invention relates to chairs and the primary object of the invention is to provide an improved chair of such construction as to render it especially well adapted for use by feeble and otherwise disabled persons whereby such persons may readily move about from place to place and perform such duties as caring for their own personal needs without requiring the constant care of an attendant.

A further object of the invention is to provide a chair embodying a separable wheeled seat structure which is readily removable as a unit from the chair so that the user may move about as desired.

A further object is to provide a chair of this character which will have the general appearance of an ordinary article of furniture and may be made to match other pieces of a living room suite.

A further object resides in the novel means of releasably retaining the wheeled seat unit in place in the chair structure, together with the arrangement providing a substantial wheel base for preventing the seat from tipping.

A still further object is to provide a detachable back rest and handle for the wheeled seat which not only affords comfort to the user when the seat is separated from the chair, but also permits of the seat being wheeled about by an attendant when such is required.

Other objects and advantages of the invention will be apparent from the following detailed description taken in connection with the accompanying drawings forming a part of this specification and in which drawings—

Figure 1 is a perspective view of a chair of the over-stuffed type constructed in accordance with this invention.

Figure 2 is a perspective view showing the wheeled seat unit partially rolled out of the chair.

Figure 3 is a perspective view looking at the rear of the seat unit.

Figure 4 is a vertical section thru the chair with the seat unit latched in place.

Figure 5 is a horizontal section thru the seat unit and showing a fragmentary portion of the chair body portion.

Figure 6 is a fragmentary view showing the lower portion of the chair body portion with the seat unit removed.

Figure 7 is a perspective view showing the seat unit detached and provided with the detachable back rest and handle.

Figure 8 is a plan view of the back rest and handle, showing one of its arm rests extended and the other folded.

Figure 9 is an enlarged horizontal section thru the back rest and handle.

Figure 10 is a still further enlarged fragmentary detail view of the hinge arrangement for the arm rests of the handle.

Referring to the drawings in detail and wherein like reference characters designate corresponding parts thruout the several views, the invention has been shown embodied in a chair of the over-stuffed type, including a chair body portion A having a separable wheeled seat unit B releasably retained in chair forming relation to the chair body portion by the latch means C. The letter D designates a combined back rest and handle for detachable connection with the seat unit B.

The chair body portion A is adapted to rest upon a floor or other supporting surface and comprises a back 12 provided at its lower portion with a cross member 13 having its lower edge spaced above the floor surface as shown in Figures 4 and 6. Extending forwardly in parallel spaced apart relation from the back 12 are side arms 14 having their upper portions forming arm rests 15. Thus the back 12 and side arms 14 form a chair body portion which is open at its front side between the forward ends of the side arms 14.

The seat unit B is adapted to be removably placed between the spaced side arms 14 and when in position forms a seat for the chair. This seat unit comprises a rectangular base frame 16 including a bottom wall 17, side walls 18, and front and rear walls 19 and 20 respectively. Mounted upon the upper side of the base frame 16 is a suitable box spring cushion 21 having a shape conforming to that of the base frame 16 whereby the seat unit will fit snugly between the side arms 14. The seat unit is supported for wheeled travel by means of a pair of front castors 22 and a pair of rear castors 23. The front castors 22 are suitably secured to the bottom wall 17 adjacent the front corners of the base frame so as to be substantially flush with the front side of the seat and out of the way of a person using the seat. The rear castors however, are mounted upon suitable angle iron brackets 24 which have their vertical flanges secured to the rear wall 20 of the seat base frame and have their horizontal flanges extending rearward from the seat as clearly shown in Figure 3 whereby the rear castors are disposed rearward of the rear side of the seat. This arrangement provides for

a greater wheel base between the front and rear castors and prevents the seat from tipping rearward.

As shown particularly in Figure 4, when the seat unit is rolled into the chair between the side arms 14 until the seat abuts the cross panel or member 13, the horizontal portions of the angle brackets will pass beneath the lower edge of the panel 13.

A sliding retractable foot rest 25 is provided on the seat unit and consists of a substantially U-shaped member formed from tubing to provide a pair of side bars 26 and a foot bar 27 which is upwardly offset from the forward ends of the side bars. Tubular guide sleeves 28 secured to the under side of the base frame 16 provide guides in which the side bars 26 slide whereby the foot rest may be extended for use as in Figure 7 or retracted with the foot bar 27 against the base frame as in Figures 1 and 2. Suitable stops may be provided on the free ends of the side bars 26 to limit outward movement of the foot rest.

Referring now to the latch means C, this latch means is designed to releasably retain the seat unit in place in the chair body portion and permit ready releasing of the latch when desiring to roll or wheel the seat unit out of association with the chair. The latch means C is enclosed within the hollow base frame 16 and embodies a rock bar 29 mounted horizontally upon the inner side of the rear wall 20 of the base frame as in suitable bearings 30. Formed on one end of the rock bar 29 is a crank arm 31 to which is pivotally connected the inner end of a sliding push rod 32 mounted upon one of the side walls 18 as by a bearing 33. The outer end of this push rod 32 extends slightly thru the front wall 19 of the base frame and is provided with a suitable operating knob which may be grasped for moving the push rod inwardly. A coil spring 34 acting between the bearing 33 and a stop on the push rod acts to normally urge the push rod outwardly. Provided on the other end of the rock bar 29 is a latch 35 which extends thru an opening in the central position of the rear frame wall 20 for latching engagement with a latch plate 36 secured to the cross panel 13. The cross panel may have a small opening 37 formed therein for receiving the latch 35. Upon forcing the push rod 32 inwardly against the action of the coil spring 34, the latch 35 will be swung upward out of holding engagement behind the latch plate 36 so that the seat unit may be wheeled or rolled from the chair body.

Referring now to the combined back rest and handle D, the same is intended to be detachably associated with the seat unit B when removed from the chair body A whereby a person using the seat may be rolled or wheeled about by an attendant. The back rest and handle D comprises a U-shaped frame member 40 preferably formed from tubular material to provide uprights 41 joined at their upper ends by a hand grip or rail 42. Connecting the uprights 41 at a point suitably spaced from the lower ends of the uprights is a tubular cross bar 43. Connecting the upper portions of the uprights is a tubular brace 44, while connecting the uprights between the bars 43 and 44 is a panel 45. Provided on each of the uprights 41 is a folding arm rest 46 which may be folded flat against the frame 40 when not in use. These arm rests 46 each comprise a tubular U-shaped frame providing arms 47 adapted to be pivotally connected at their free ends to the uprights 41. Welded or otherwise secured longitudinally to each upright 41 beyond the ends of the cross bar 43 is a short piece of tubing 48 forming hinge barrels for receiving hinge pins 49 serving to pivotally support the arm rests 46. Pivotally connected between the intermediate portions of the arms 47 as by a hinge pin 50 is a brace arm 51, and these brace arms extend thru slots 52 provided in the cross bar 43. Within the cross bar 43 the brace arms 51 are provided with T-shaped heads 53 which are adapted to drop into holes 54 in the cross bar, see Figure 9, for holding the arm rests in extended position in right angular relation to the frame 40 as shown in Figure 7. The arm rests 46 may be folded against the frame 40 by merely raising the T heads 53 out of holes 54.

The lower ends of the uprights 41 are tapered into conical shape as at 55 for fitting into conical sockets 56 mounted upon the rear side of the seat unit B. These conical sockets 56 in the example shown have been shown secured as by welding or the like to the upright flanges of the angle brackets 24. In order that the seat unit B may abut the cross panel 13, the panel may be provided with notches 57 for receiving the sockets 56.

Thus it will be seen that the seat unit B may be readily rolled out of the chair body A by releasing the latch 35 and permit the user to travel about as desired. Since the weight of the chair body is upon the floor surface, the chair body will remain stationary when the seat unit is rolled out. The seat unit may be easily associated with the chair body by merely rolling the seat unit between the side arms 14 until the latch 35 engages the latch plate 36.

Changes in detail may be made to the form of the invention herein shown and described, without departing from the spirit of the invention or the scope of the following claims.

I claim:

1. An article of furniture comprising a wheel mounted seat unit, and a combined back rest and handle detachably connected to the seat unit and including folding arm rests.

2. A chair comprising a body portion embodying spaced apart side arms providing arm rests, a one person seat unit fitting between the side arms, front and rear castors for the seat unit, angle brackets for the rear castors for disposing the rear castors rearwardly of the seat unit, latch means releasably retaining the seat unit in position between said side arms, sockets on said angle brackets adapted to receive therein upright members of a combined back rest and handle when said latch means is released and said seat unit is withdrawn from said body portion whereby said seat unit may be converted for use as a wheel chair.

3. A chair comprising a body portion including a back having a cross panel at its lower end spaced above the floor surface and spaced apart side arms for resting upon a floor surface, a seat unit fitting between the side arms, front castors for the seat unit, angle brackets secured to the rear of the seat unit including horizontal flanges extending beneath the cross panel, rear castors mounted on said flanges, a latch plate on the cross panel, a latch on the seat unit engageable with the latch plate for holding the seat unit between the side arms, and releasing means for the latch.

4. A chair comprising a seat unit, castors supporting the seat unit, sockets mounted upon the rear of the seat unit, and a back rest and handle

for the seat unit comprising a frame embodying uprights for fitting in said sockets, cross bracing for the uprights, and a folding arm rest pivoted on each upright.

5. In combination with a wheeled seat unit, a combined back rest and handle for the seat unit comprising a U frame providing spaced uprights for detachable connection with the seat unit, a tubular cross bar connecting the uprights and provided in its front side with slots and a hole in the lower side of the bar adjacent each end thereof, a hinge barrel on each upright, an arm rest pivoted on each hinge barrel, and a brace arm for each arm rest and extending thru said slots, said brace arms each having a T head within the tubular cross bar engageable in said holes for retaining the arm rests extended for use.

6. A combined back rest and handle for mobile seats, comprising a U frame providing spaced apart uprights, a brace rod and a back panel connecting the uprights, a tubular cross bar connecting the uprights below the panel having slots in its front side and a hole in its lower side at each end of the cross bar, a U-shaped arm rest pivoted on each short tube, a brace arm pivoted at one end on each arm rest and extending thru said slots, and a T head on the other end of each brace arm and engageable in said holes for holding the arm rests extended for use.

RAY L. WONDERLY.