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E. W. BUSHNELL

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HOSPITAL CHAIR

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2 Sheets-Sheet 1

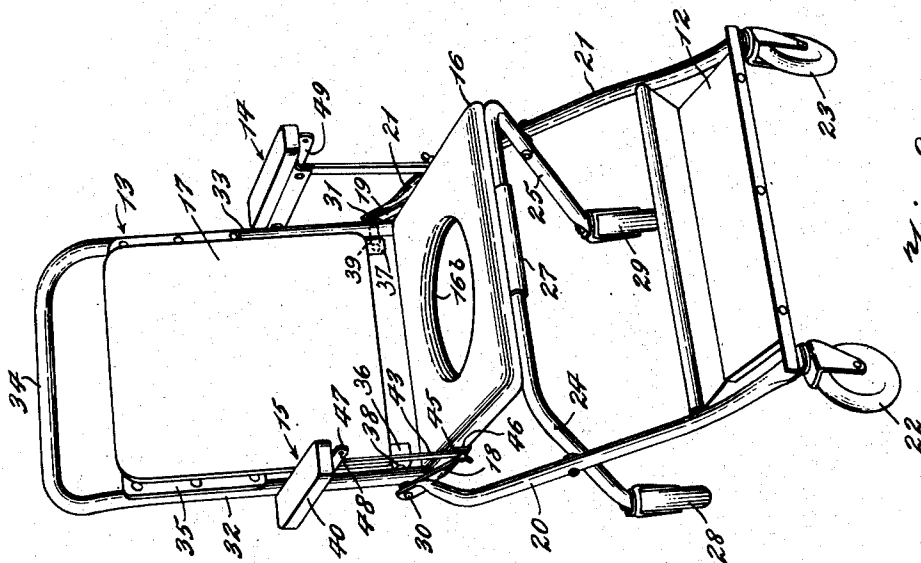


Fig. 2.

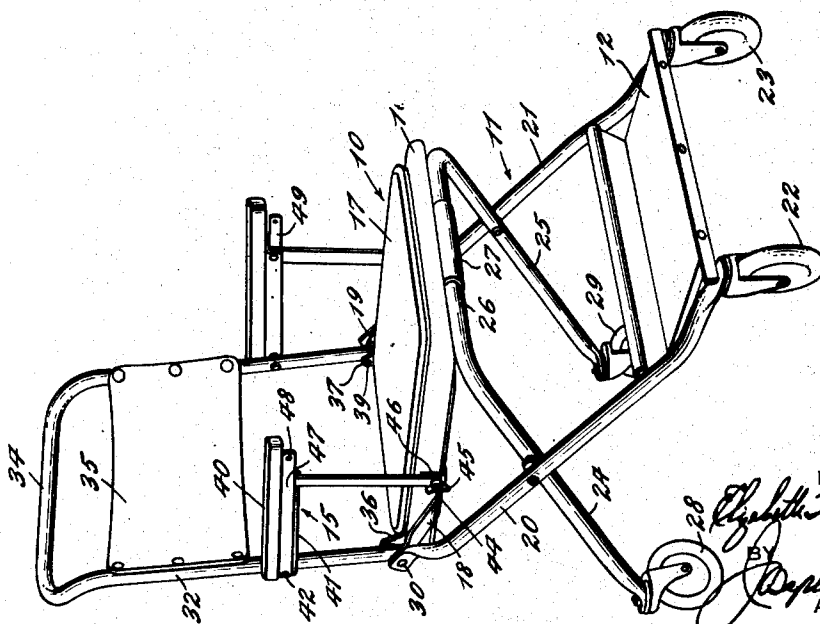


Fig. 1.

INVENTOR
Elizabeth H. Bushnell
BY
Ralph C. Meigs
ATTORNEY

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E. W. BUSHNELL

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2 Sheets-Sheet 2

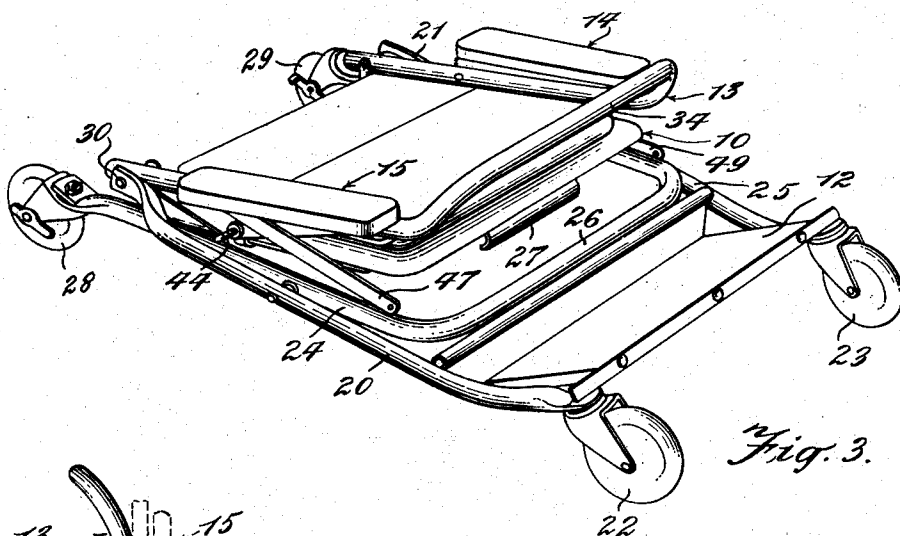


Fig. 3.

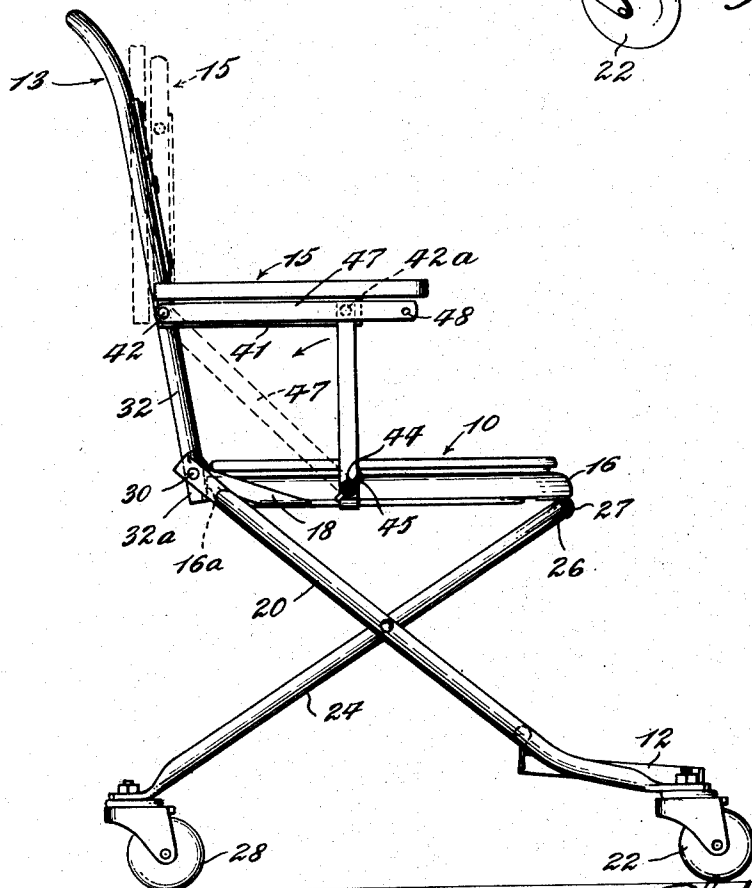


Fig. 4.

INVENTOR
Elizabeth H. Bushnell
BY
Joseph V. Driggs
ATTORNEY

UNITED STATES PATENT OFFICE

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HOSPITAL CHAIR

Elizabeth W. Bushnell, Bridgeport, Conn., assignor to Berkley A. Thomas and Harry G. Marquis, both of Scarsdale, N. Y.

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2 Claims. (Cl. 155—30)

This invention relates to chairs, and more particularly to chairs for use in hospitals or by invalids.

Another object of this invention is to provide a chair for use in hospitals or by invalids which is simple and inexpensive in construction, yet capable of withstanding extensive, rigorous use. Another object is to provide a chair of the above nature which may be collapsed into relatively compact form to facilitate storage or transportation thereof. Another object is to provide a chair of the above nature which is not only provided with arms adjustable into and out of usable position, but also a seat construction which renders the chair readily adaptable to toilet purposes. A still further object is to provide a wheel chair of the above nature of such light though strong construction that a patient or invalid in the chair may readily be moved about as desired. Other objects will be in part apparent, and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts, as will be exemplified in the structure to be hereinafter described, and the scope of the application of which will be indicated in the following claims.

In the drawings, wherein there is shown one form of the invention,

Figure 1 is a perspective of the chair adjusted for use as a wheel chair;

Figure 2 is a perspective of the chair adjusted for toilet usage;

Figure 3 is a perspective of the chair collapsed for storage or transportation; and,

Figure 4 is a side view of the chair.

Similar reference characters refer to similar parts throughout the views of the drawings.

As shown in Figure 1, the chair comprises a seat 10, legs 11, foot rest 12, a back 13 and arms 14 and 15, the seat, legs, back and arms being pivotally connected to one another in such a fashion, all as will be described in detail hereinafter, that the chair may be collapsed or folded into the compact form shown in Figure 3.

More specifically, seat 10 (Figure 1) comprises a rest 16 and a padded cover 17 hingedly related to rest 16 and movable between the positions shown in Figures 1 and 2, in the first of which the cover provides a measure of upholstery for rest 16 when down, and in the second of which uncovers an opening 16b (Figure 2) in rest 16 when up, thus adapting the chair for toilet usage.

Fastened to opposite sides, respectively, of seat rest 16 are a pair of straps or supporting

members 18 and 19 (Figure 1), the outer ends of which are pivotally connected respectively to the upper ends of front legs 20 and 21. The lower ends of these legs have fastened thereto foot rest 12 as well as front wheels or casters 22 and 23. Substantially at their mid portions, legs 20 and 21 are pivotally connected to rear legs 24 and 25 which comprise a portion of a U-shaped member, the horizontal cross piece 26 of which not only joins the legs, thus contributing to their supporting function, but also provides an anchor or catch for an arcuate spring clip 27 which is fastened to seat rest 16. The lower ends of legs 24 and 25 have respectively pivotally connected thereto wheels or casters 28 and 29. It will now appear that spring clamp 27 may be forced out of engagement with cross piece 26 to permit collapsing of the chair into the Figure 3 position, the front and rear legs (Figure 1) pivoting at their mid portions and the seat rest 16 pivoting at the upper ends of front legs 20 and 21, so that the seat and legs may be collapsed to a relatively compact form.

The pivotal connection between straps 18 and 19 and the upper ends of legs 20 and 21 are formed by suitable pins, such as pins 30 and 31 (Figure 2), and the inner ends of these pins are fastened in uprights 32 and 33, respectively, of the chair back 13, the chair back thus being pivotally associated with seat 10. As shown in Figure 4, the chair back uprights, for example, upright 32, includes a portion 32a which extends below pivot pin 30 so as to engage the back edge 16a of seat rest 16, thus to prevent counterclockwise pivotal movement of the seat back 13 beyond the position shown in Figure 4, the parts being so proportioned that the seat back is positioned at any desired comfortable angle. As shown in Figure 1, seat back uprights 32 and 33 are integrally connected by a cross piece 34, a back rest 35 having its opposite vertical edges fastened respectively to uprights 32 and 33, the cross piece and back rest thus rendering the chair back strong and comfortable. At opposite ends of the rear edge of cover 17 are fastened small brackets 36 and 37 by which the cover is pivotally connected to the chair back uprights 32 and 33 as by pins 38 and 39 which may be extensions of the pivot pins 30 and 31.

As arm rests 14 and 15 are identical, the following description will be limited to arm rest 15. This rest comprises a rail or arm 40 fastened in any suitable manner to a support 41 which may be right-angular in cross section. The rear end of the support is pivotally fastened to upright 32

(Figure 4) as by a pivot pin 42, the front end of the support having pivotally connected thereto, as by a pin 42a, an upright or strut 43. The lower end of strut 43 is detachably mounted on a pin 44 whereon it may be releasably secured by a wing nut 45, and about which it may pivot when the chair is collapsed into the Figure 3 position. Pin 44, as shown in Figure 1, is conveniently attached to an angle 46 which is secured to seat rest 16 in any suitable manner. It may now be seen that when it is desired to collapse the chair spring clamp 27 is sprung from cross piece 26 (Figure 4), the legs pivoting into collapsed position in the aforesaid manner, and the arm rest 15 collapsing into the Figure 3 position by reason of the pivotal movement of its component parts about pins 42, 42a and 44 as back rest 13 is swung clockwise. Arm rest 14 (Figure 1), of course, collapses in the same manner.

Pin 42 (Figure 4) also pivotally supports a strut or brace 47, the outer end of which is provided with a hole 48. This strut or brace is pivotable about pin 42 between the solid and dotted line positions shown in Figure 4, and when in its dotted line position pin 44 may be extended through hole 48 and the wing nut 45 threaded over the end of the brace, the strut thus forming in this position a brace between the chair back and chair seat to prevent pivotal movement of the chair back, i. e. collapse thereof clockwise, as viewed in this figure. The other arm rest 14 (Figure 1) is similarly provided with a strut or brace 49 which may be adjusted in the same manner. It should be noted that braces 47 and 49 may be so contoured in relation to their associated supports as to remain in the upper position shown in Figure 1 by frictional engagement therewith.

Under certain circumstances it may be desirable to dispense with arm rests 14 and 15. Under such circumstances, with reference to Figure 4, wing nut 45 is removed, the lower end of strut 43 is slipped off pin 44, whereupon the several component parts of the arm rest may be pivoted about pin 42 counterclockwise into the dotted line position shown in this figure, wherein the arm rest is completely out of the way to facilitate entrance into the chair from either side thereof. Brace 47 may also be similarly pivoted out of the way, or may be refastened to pin 44 in the manner described, to brace the chair back against collapse.

Inasmuch as the lower ends of rear legs 24 and 25 (Figure 2) are unconnected by any cross piece, it will appear that the chair may be readily rolled over a toilet bowl, as desired.

It will now appear that there has been provided a wheel chair for use in a hospital or by an invalid which, through its ready adaptability into a number of convenient forms, attains the several objects set forth hereinabove in a thoroughly practical and efficient manner.

As many possible embodiments may be made of the above invention, and as many changes might be made in the embodiment above set forth, it is to be understood that all matter hereinbefore set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

I claim:

1. In chair construction, in combination, a seat, legs fastened to said seat, support members secured to said seat adjacent the rear edge thereof and extending diagonally upwardly from the bottom plane of said seat to a position beyond the rear edge of said seat, a back rest including opposed uprights, pivot means respectively connecting said uprights to the free ends of said supports, said uprights extending below said pivot means to provide at the lower ends of said uprights portions adapted to engage the back edge of said seat below said pivot means to limit pivotal movement of said back rest relative to said seat, arm rests pivotally connected to said back rest, means detachably securing a portion of said arm rests to said seat whereby upon detachment of said portions from said seat said arm rests may be pivoted into a substantially vertical position relative to said back rest to facilitate entry onto said chair from either side thereof, bracing means extending between said back rest and said seat, means pivotally connecting said bracing means to said back rest, and means detachably connecting said bracing means to said seat.

2. In chair construction, in combination, a seat having an opening formed therein, front legs, means fastening the upper ends of said front legs adjacent the rear edge of said seat, a foot rest secured to and connecting the lower ends of said front legs, an open-ended inverted U-shaped member forming rear legs, thereby to provide a rearwardly open framework adapted to permit the chair to be backed over a low lying object, means fastening the cross piece of said U-shaped member to said seat adjacent the front edge thereof, and a caster secured to the end of each of said legs, the front and rear legs at each side of said seat being crossed and connected at their point of intersection.

ELIZABETH W. BUSHNELL.