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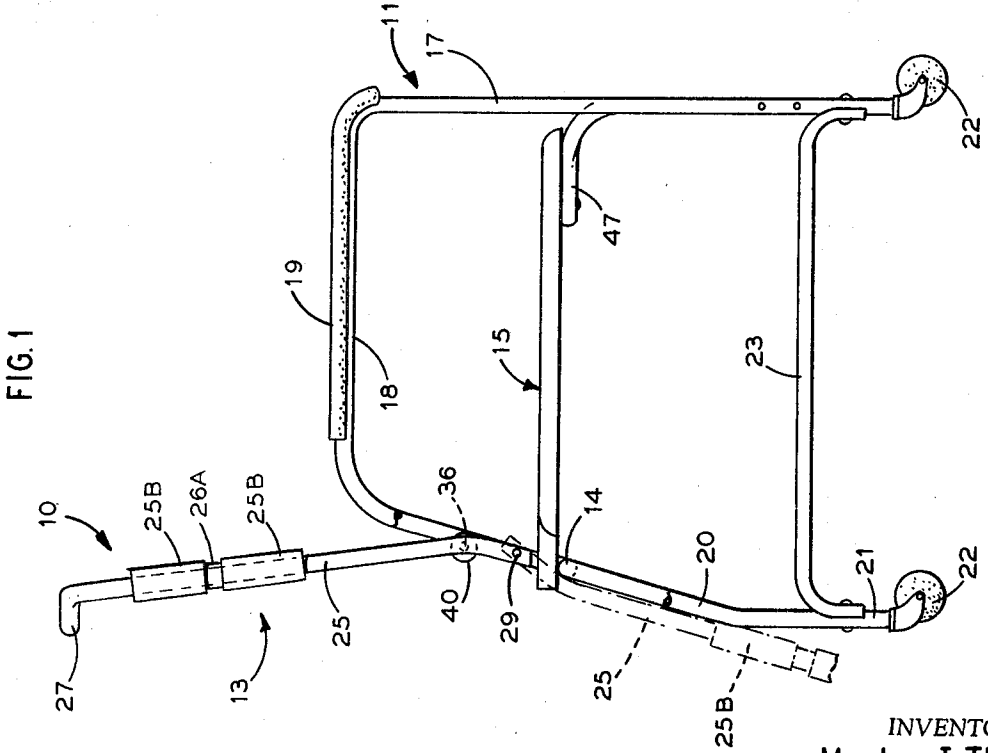
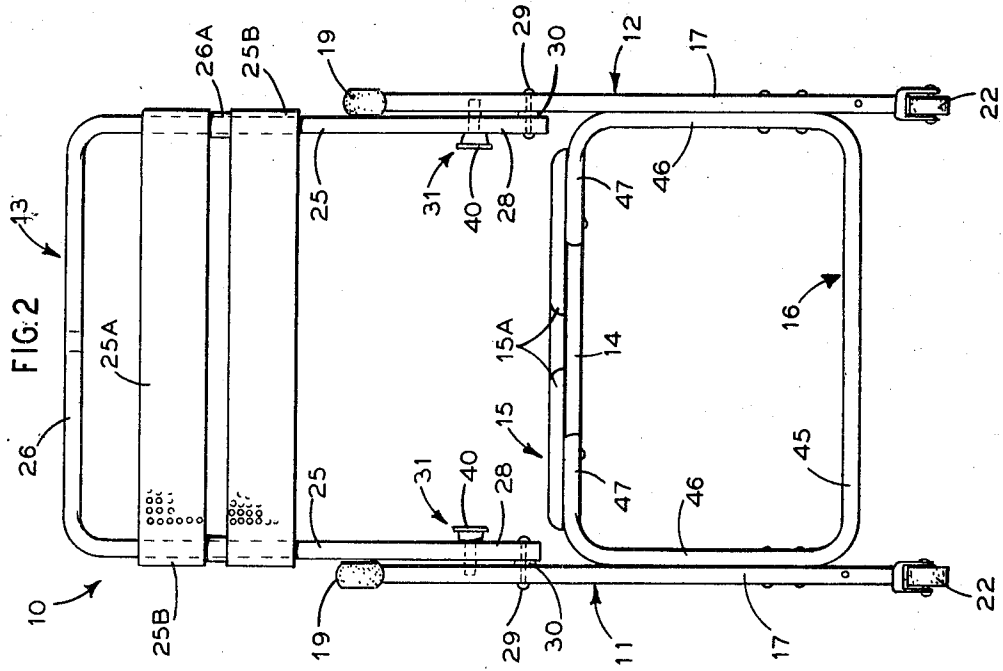
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3,512,187

SHOWER BATH CHAIR

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2 Sheets-Sheet 1



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FIG. 3

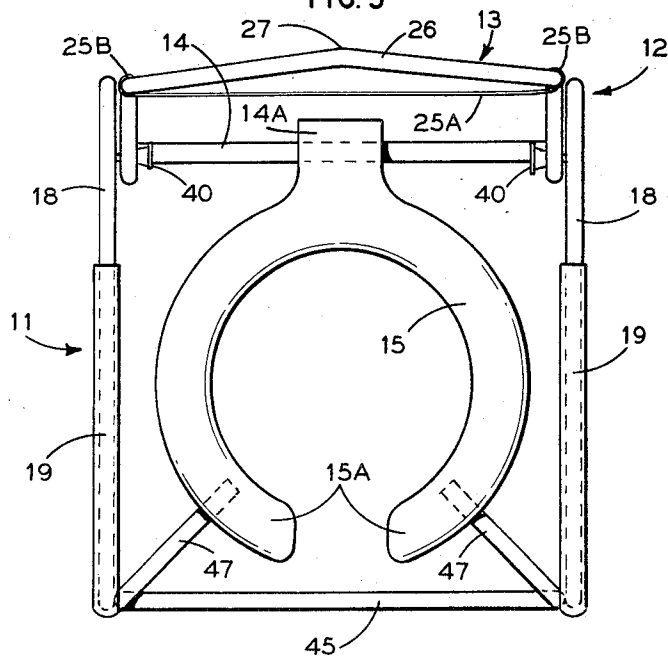
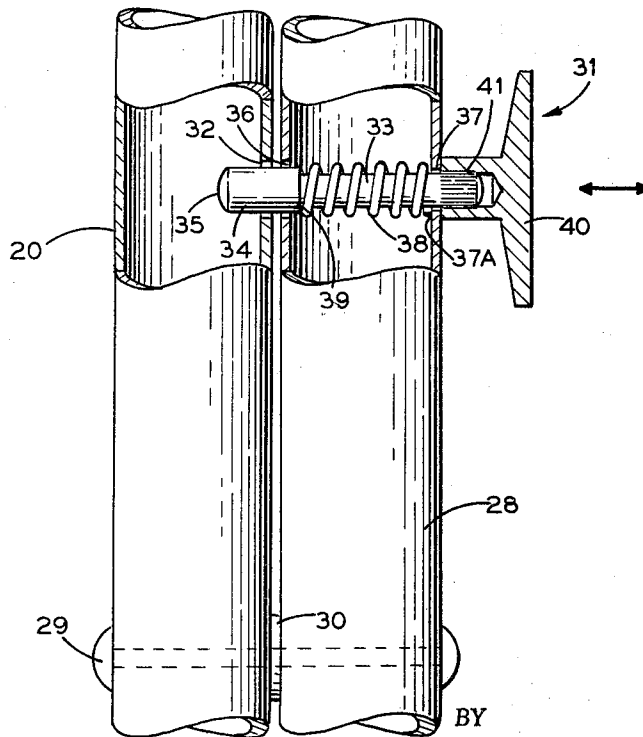


FIG. 4



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## SHOWER BATH CHAIR

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9 Claims

### ABSTRACT OF THE DISCLOSURE

A portable shower bath chair for conveying individuals in hospitals or the like to and from a shower bath for bathing operations, including constructional details for facilitating the bathing operations for an individual using the same.

### BACKGROUND OF THE INVENTION

In bathing hospital patients or elderly individuals, it is porttant that a chair for conveying such patients or individuals be of a construction which facilitates the bathing operation, and more particularly in bathing the back; and which provides for maximum comfort for the one seated in the chair.

Accordingly, an object of this invention is to provide a portable shower bath chair having improved back rest means which may be manipulated in a manner to expose the back of the one seated in such chair, to facilitate the bathing operation.

Another object of this invention is to provide in a chair of the character described, back rest means which is swingably mounted thereon for movement between a back supporting position, and a dropped position for fully exposing the back of the individual seated in the chair.

A further object of this invention is to provide a chair of the character described, with a toilet seat construction, allowing the chair to be used in conjunction with a standard toilet bowl and having improved foot rest means which provides for maximum comfort of the user of the chair.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side elevational view of a shower bath chair embodying the invention;

FIG. 2 is a front elevational view thereof;

FIG. 3 is a top plan view thereof; and

FIG. 4 is an enlarged elevational view, with parts broken away and parts in section, showing a detail of the chair.

### DESCRIPTION OF THE PREFERRED EMBODIMENT

As shown in the drawings, and particularly, FIGS. 1-3, 10 designates a shower bath chair embodying the invention, and useful for conveying hospital patients or elderly individuals to and from a shower for bathing operations; and further, for use in conjunction with a standard toilet bowl.

The chair 10 comprises a pair of similar, inverted U-shaped frames 11, 12; an inverted U-shaped back rest frame 13 pivotally mounted on side frames 11, 12 for movement between a normal, upright back supporting position, and a dropped position for exposing the back of the individual seated in the chair; a brace member 14 interconnecting rear portions of side frames 11, 12 and providing a rear support for a split type toilet seat 15; and a combination foot rest and toilet seat support 16

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which interconnects front portions of said side frames 11, 12.

The frames 11, 12, 13, as well as brace member 14 and foot rest 16 are formed of metal tubing suitably bent to required shape and formed of corrosion resisting metal or metal alloy, such as aluminum or the like. Such tubing also makes for a light weight, easily handled chair construction.

Each of the side frames 11, 12 comprises a vertical front leg portion 17, a horizontal top portion 18 carrying a covering 19 of suitable plastic or metal material, a rearwardly and downwardly inclined rear leg portion 20 terminating in a short vertical rear leg portion 21. The leg portions 17, 21 have casters 22 mounted thereon, such casters having conventional brake means for pedal operation, not shown. Tubular braces 23 interconnect the lower ends of leg portions 17, 21 in each of the side frames 11, 12.

The back rest frame 13 comprises parallel side arm portions 25 interconnected by a horizontal top portion 26; the side arm portions 25 terminate at their lower ends in short offset portions 28 which are located inwardly of and adjacent side frame portions 20. The top portion 26 may be centrally reentrant as at 27.

Back rest frame 13 is arranged for pivoted movement on side frames 11, 12 from a normal upright position as shown in full lines, in FIG. 1, to a drop position as indicated in dot-dash lines, in said figure, to thereby fully expose the back of the individual in chair 10, for bathing operations.

Accordingly, pivot screws 29 interconnect the lower ends of back frame portions 28 with side frame portions 20, washers 30 being interposed therebetween to assure smooth swinging movement of back rest frame 13. Further, means is provided for releasably locking back rest frame 13 in its normal, upright back supporting position.

To this end, detents 31 are slidably mounted in frame portions 28 above pivot screws 29, for reception in openings 32 in frame portions 20, see FIG. 4. Detent 31 comprises a stem portion 33 and a forwardly projecting enlarged head portion 34 having a bevelled forward end 35. Frame portions 28 are formed with horizontally aligned openings 36, 37 for mounting therein head portion 34 and stem portion 33 respectively.

Spiral spring means 38 is mounted on stem portion 33 of detents 31, bearing at the forward end thereof on shoulder 39 at the juncture of head portion 34 and said stem portion; and at the rear end thereof against the inner marginal surface 37A about opening 37 in frame member 28. A knob 40 having an axial recess 41 is force fitted on the rearwardly projecting portion of stem 33 to complete the assembly forming detents 31.

Spring means 38 is effective to urge the heads 34 of detents 31 into openings 32 in side frame portions 20 to thereby lock frame 13 in its normal, upright position. However, upon pulling knobs 40 toward each other against the bias of springs 38, head portions 34 of the detents 31 are withdrawn from openings 32 in frame portions 20, and allowing said frame 13 to be swung backward and downwardly about pivot screws 29, to the position indicated in dot-dash lines in FIG. 1; thus exposing the back of the person seated in chair 10, for washing or bathing.

Upon swinging the back frame 13 upwardly about pivot screws 29; the bevelled ends 35 of detents 31 will engage the rounded outer surface of frame portions 20 to retract the detents by a camming action, to allow the same to snap into openings 32 in said frame portions 20. Thus, the back frame 13 may be readily manipulated between its upright normal position and its dropped position.

The combination foot rest and seat support 16 comprises a lower, horizontally extending foot rest portion

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45, vertical side portions 46 secured to front leg portions 17 of side frames 11, 12; said side portions 46 terminating at their upper ends in inwardly and angularly directed horizontal portions 47 which converge toward each other to provide support means for the forwardly extending split arm portions 15A of seat 15.

While foot rest portion 45 is in the plane of front leg portions 17 there is no transverse obstruction at the level of seat 15 thus making for comfortable seating of the person in the chair. The chair 10 can be moved to positions registering with a standard toilet bowl.

The back rest frame 13 is provided with flexible back rest members 25A which span the space between frame portions 25. Members 25A are formed of molded plastic with integral tubular end portions 25B which are slidably mounted on frame portions 25. Collars 26A on frame portions 25 separate members 25A which are perforated to pass moisture and perspiration, thus making the same comfortable to the user of the chair 10.

It will be apparent that with the seat 15 located in rearwardly offset relation to front leg portions 17 and foot rest portion 45, one seated in chair 10 can rest his feet comfortably on foot rest portion 45 with his legs extending in normal uncramped positions.

Also, the rearwardly directed seat supporting portions or arm portions 47 leaves the space between leg portions 17 and at the level of seat 15 open, thereby allowing for easy access for bathing the perineal region of one seated in chair 10.

As various changes might be made in the herein disclosed embodiment of the invention without departing from the spirit thereof, it is understood that all matter herein shown or described shall be deemed illustrative and not limiting except as set forth in the appended claims.

We claim:

1. A shower chair comprising a pair of side frame members having front and rear leg portions, back rest means mounted between said side frame members, brace means connecting the rear leg portions of said frame members, combination seat support and foot rest means connecting the front leg portions of said frame members, said combination means including a horizontal foot rest portion extending between the lower portions of the front leg portions of the frame members, a toilet seat having split forwardly extending arm portions, said brace means including a horizontal portion for supporting rear portions of said seat, said combination means further including a pair of arm portions extending upwardly from opposite end portions of said foot rest portion respectively and terminating in covering rearwardly directed horizontal portions respectively supporting the forwardly extending arm portions of said seat.

2. A chair as in claim 1, wherein said foot rest portion is in a plane including the front leg portions of said side frame members and said rearwardly directed seat supporting portions converge toward a point rearwardly of said plane to provide a clear spacing between the upper ends of the upwardly extending arm portions of said combination means for providing access for bathing the perineal region of one seated in said chair.

3. A chair as in claim 1 wherein said back rest means comprises a back support member, means for pivotally mounting lower side portions thereof on intermediate portions of the rear leg portions of said side frame members, and means for releasably retaining said back support member in an upright position.

4. A chair as in claim 3 wherein said back support member comprises an inverted U shaped frame, flexible

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back supporting means spanning the side arms of said inverted U shaped frame, said retaining means comprising slidable detent means mounted on the side arms of said inverted U shaped frame and means on the rear leg portions of said side frame members for engageably receiving said detent means in a projected position thereof.

5. A chair as in claim 4 wherein said detent means includes spring means for biasing said detent means to the projected position thereof and the means for receiving said detent means comprises an opening in the rear leg portions of said side frame members for passing the forward end of said detent means.

6. A chair as in claim 5, wherein the forward end of said detent means terminates in beveled surface portions for engaging surface portions of said side frame members in a camming relation thereto whereby to retract said detent means against the bias of said spring means as said back rest means is moved from a dropped position thereof to its normal upright position wherein said detent means is effective to retain said back rest means in said upright position.

7. A shower chair comprising a pair of side frame members having front and rear leg portions, brace means interconnecting the rear leg portions of said frame members, combination seat support and foot rest means interconnecting the front leg portions of said frame members, seat means between said side frame members, said brace means including a horizontal portion for supporting a rear portion of said seat means, said combination means including portions for supporting a front portion of said seat means, back rest means mounted between said side frame members for pivoted movement between a normal upright position thereof and a dropped position to expose the back of one seated in said chair, and means for releasably retaining said back rest means in said normal upright position thereof.

8. A chair as in claim 7 wherein said retaining means comprises retractable spring pressed detent means on said back rest means and recesses on the rear leg portions of said side frame members for receiving the projected ends of said detent means.

9. A chair as in claim 1 wherein said seat is in rearwardly offset relation to the front leg portions of said side frame members and said foot rest portion.

#### References Cited

##### UNITED STATES PATENTS

755,183	3/1904	Spanjer	4—239
1,029,807	6/1912	Hinsky	4—185
1,132,939	3/1915	Jaubard	4—237
1,197,657	9/1916	Orofino	4—185
1,638,040	8/1927	Killen	4—254
1,752,499	4/1930	Meath	4—254
2,411,137	11/1946	Neufeld	4—239
2,582,321	1/1952	Farrell	4—254
2,607,926	8/1952	De Puy	4—254
2,903,714	9/1959	Grondona	4—254
3,209,376	10/1965	Drury	4—254

##### FOREIGN PATENTS

1,208,432 9/1959 France.

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U.S. Cl. X.R.

4—254