United States Patent [19]

Finley

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[45] **Sept. 18, 1973**

[54] **CHAIR-BATH**

[76] Inventor: **Mary L. Finley**, 11440 S. Morgan St., Chicago, Ill. 60643

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[21] Appl. No.: **114,497**

[52] **U.S. Cl.** ..... **4/185 R**, 297/DIG. 4, 5/81

[51] **Int. Cl.** **A47k 3/12**

[58] **Field of Search** ..... 4/185 L, 185 S, 145, 4/146, 147; 297/DIG. 4, DIG. 10

[56] **References Cited**

UNITED STATES PATENTS

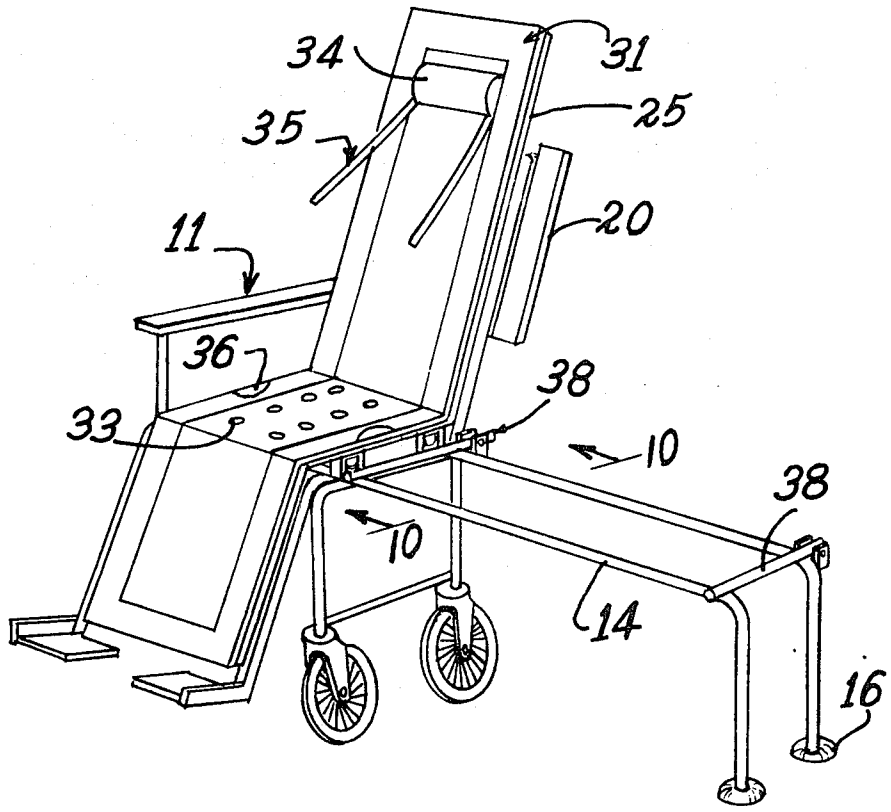
2,641,770	6/1953	Chapin	4/146
1,972,557	9/1934	Greene	297/DIG. 4
2,596,055	5/1952	Thomas	297/DIG. 4
2,648,849	8/1953	Webb et al.	4/185 L
2,678,083	5/1954	Dall et al.	4/185 S
2,729,272	1/1956	Lidge et al.	297/DIG. 4
2,986,200	5/1961	Nobile	297/DIG. 4
2,888,683	6/1959	Medlock	4/147
3,090,969	5/1963	Maling	4/185 S X
3,169,253	2/1965	Segar	4/145

Primary Examiner—John Petrakes
Assistant Examiner—Donald B. Massenberg
Attorney—Silverman & Cass

[57] **ABSTRACT**

A hospital type wheelchair with a connecting bathtub means, the device comprising a pivotable frame comprised of parallel gliding rods having a pair of legs at their outer end which are receivable within a conventional bathtub so that the gliding rods extend in a horizontal position from the wheelchair, a foldable inner chair member being glidable along the metal gliding rods, the inner chair being extendable to horizontal position and upon which a rubber tub is placeable for receiving a wheelchair patient and thus permit transporting the patient over the conventional bathtub or helping himself in taking a bath.

7 Claims, 10 Drawing Figures



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SHEET 1 OF 2

Fig. 1

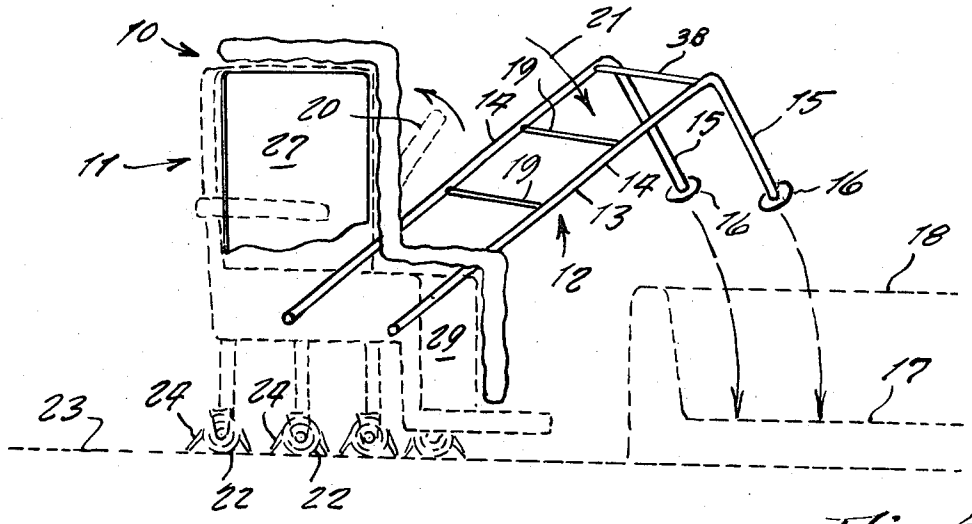


Fig. 2

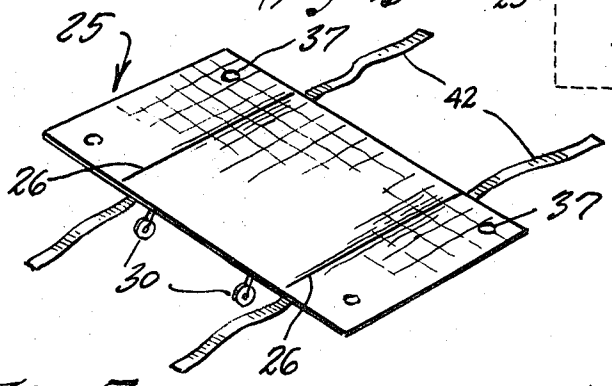


Fig. 5

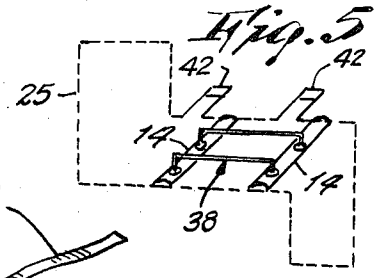


Fig. 3

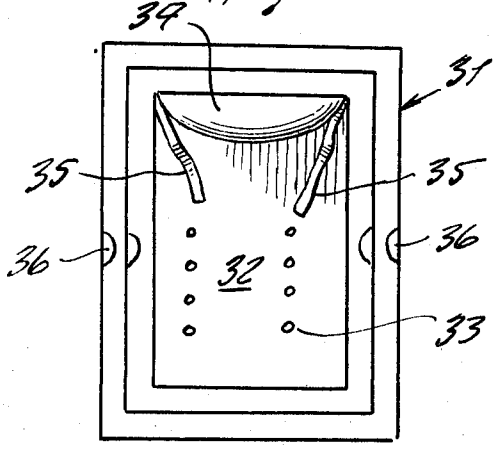
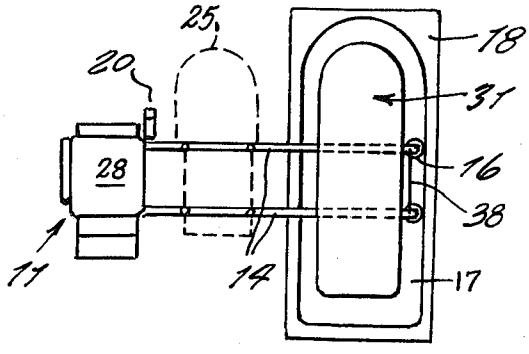


Fig. 4



INVENTOR
MARY L. FINLEY

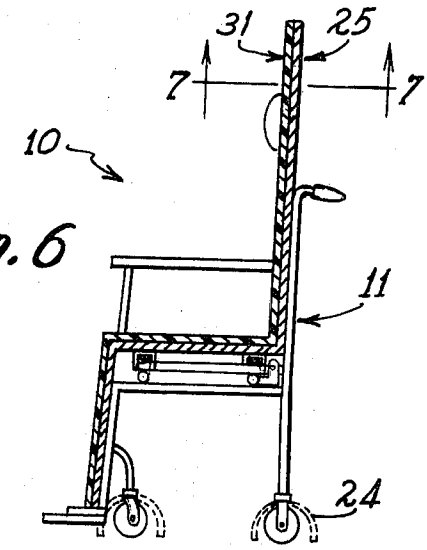


Fig. 6

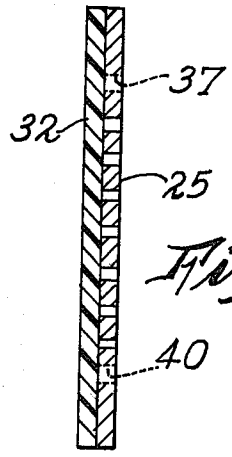


Fig 7

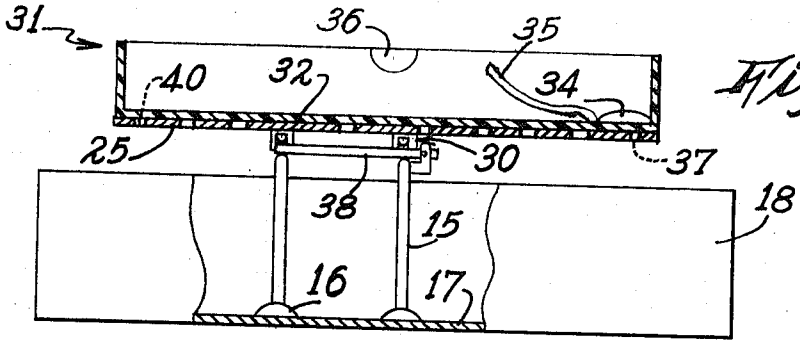


Fig 8

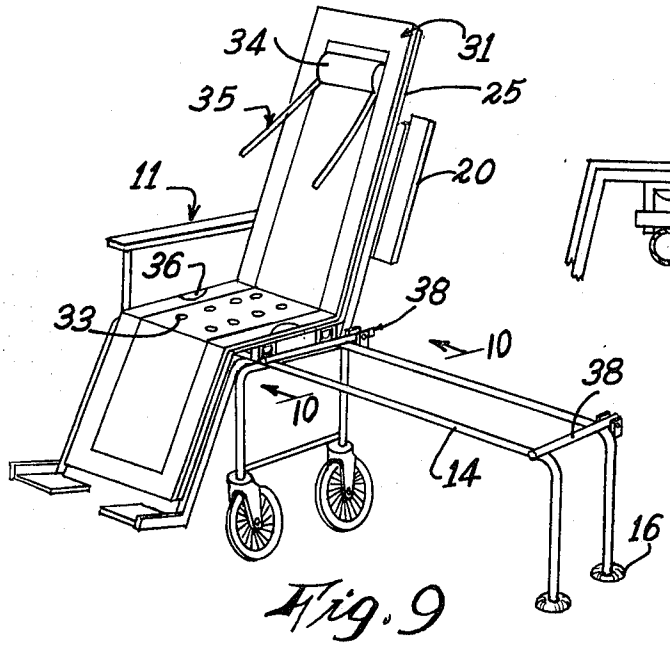


Fig. 9

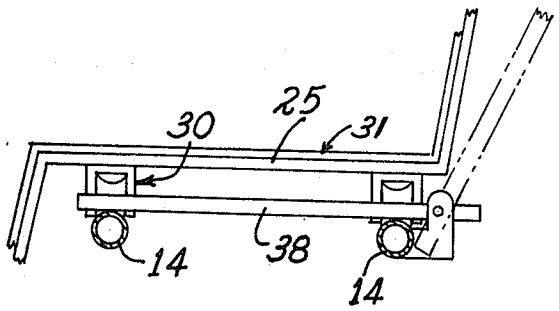


Fig. 10

CHAIR-BATH

This invention relates generally to invalid apparatus.

It is generally well known that it is a tedious task to wait upon a wheelchair confined patient, and particularly when attempting to assist the patient in taking a bath. Lifting a patient in and out of a bathtub requires considerable effort and comprises an ordeal for both the patient and the attendant. This situation is accordingly in want of improvement.

Accordingly, it is the principal object of the present invention to provide a chair-bath whereby a patient may help himself without the assistance of an attendant in order to transfer himself from a wheelchair into a tub for taking a bath.

Another object of the present invention is to provide a chair-bath which comprises an accessory to a conventional wheelchair.

Still another object of the present invention is to provide a chair-bath which does not interfere with normal operation of the wheelchair in the conventional manner at times when the person is not taking the bath.

Other objects of the present invention are to provide a chair-bath which is simple in design, inexpensive to manufacture, rugged in construction, easy to use and efficient in operation.

These and other objects will be readily evident upon a study of the following specification and accompanying drawing wherein:

FIG. 1 is a side elevation view of the present invention shown being transferred into an operative position,

FIG. 2 is a perspective view of an inner chair,

FIG. 3 is a top plan view of a rubber tub for placement over the inner chair,

FIG. 4 is a top plan view of the present invention shown in operative use, and

FIG. 5 is a diagrammatic view of the locks that fasten over the tracks when the inner chair is in place,

FIG. 6 is a side elevational view of the present invention with portions thereof being shown in section,

FIG. 7 is an enlarged detail sectional view taken through line 7—7 of FIG. 6 and in the direction indicated by the arrows,

FIG. 8 is a side elevational view of the present invention shown in operative use, portions being shown in sectional representation,

FIG. 9 is a perspective view of the present invention as shown in one stage of its operation,

FIG. 10 is a fragmentary detail of the locking means shown in FIG. 5.

Referring now to the drawing in detail, the reference numeral 10 represents a chair-bath according to the present invention wherein thereis a conventional hospital-type wheelchair 11 to which there is secured an accessory 12 which includes a pivotable frame 13 of generally L-shaped configuration and which includes a pair of parallel spaced apart metal gliding rods or tracks 14, the outer ends of the gliding rods each being integral with a leg 15 extending at right angles thereto, and the terminal end of the legs 15 each being provided with a conventional vacuum cup 16 adaptable for placement against the bottom 17 of a conventional bathtub 18.

The gliding rods 14 are interconnected by cross bars 19 so to form a rigid construction.

The wheelchair 11 is provided with one side arm 20 which is upwardly pivotable out of the way so to permit the frame 12 to be downwardly pivotable as is indicated by the arrow 21.

The wheelchair 11 is mounted upon conventional wheelchair wheels 22 for traveling upon a floor 23, each of the wheels 22 being prevented from rolling when the chair is desired to be maintained in a stationary position by means of a series of wheel locks 24, thus permitting the wheelchair to remain in a stationary position when the patient desires to take a bath.

An inner chair 25, shown in FIG. 2 is made of thin sturdy material and is perforated, as shown. The inner chair is made of rigid material that is foldable about fold joints 26 so that it may be altered between a flat position and a step configurated position for placement against the back rest 27, seat 28 and lower front portion 29 of the wheelchair as shown in FIG. 1 of the drawing.

The underside of the inner chair 25 is provided with a means 30 adaptable for traveling on the metal gliding rods 14 so that the inner chair can be transported from upon the wheelchair to a sidewardly direction upon and over the bathtub 18 as is shown in FIG. 4 of the drawing.

Upon the inner chair 25 there is removably placed a collapsable bath tub 31 made of rubber material. It includes a flat bottom panel 32 which is of a same size as the inner chair and placed directly thereupon. The panel 32 includes a series of drain openings 33 therethrough which may be closed when the tub 31 is used as a tub bath or selectively wherein the openings 33 may be opened when used with a shower.

A head rest 34 is placed at one end upon the panel 32 and convenient straps 35 are provided on each side so to help a patient to turn himself over. The straps 36 are provided for pulling the sides up into position.

It is to be noted that the inner chair 25 is also provided with openings 37 through which securing means such as a screw-like tube 40 will fit from the back of the bottom of the rubber bathtub, thus holding the inner chair and the bottom of the rubber bathtub together As shown in FIG. 2, straps 42 may be provided on the inner chair for securement to the bath tub 31.

As shown in FIG. 4 of the drawing, it is now evident that in operative use, the wheelchair arm 20 may be raised upwardly and the frame 12 pivotably lowered until the vacuum cups 16 at the bottom of the legs 15 rests upon the bottom 17 of the bathtub 18.

In FIG. 5 there are shown diagrammatically a pair of metal clamps or locks 38 on the chair 39, that serve to lock over the tracks 14 when the inner chair is in place, thus preventing the inner chair from rolling off. The clamps or locks 38 may be pivotable rods as diagrammatically illustrated in FIG. 5 arrangeable so as to block the path of means 30.

The inner chair 25 is then moved outward along the gliding rods and is opened out into a horizontal position as shown in FIG. 2 after which the rubber tub 31 placed thereupon is adaptable for a patient to lie thereupon. This is then moved sidewardly from the wheelchair until it is located on top of the bathtub 18 as shown in FIG. 4 were a patient may take his own bath.

When he is through bathing, he is able to again return himself to the wheelchair and also return the equipment back to its original position without the assistance of an attendant.

Thus there is provided a chair-bath that serves a useful purpose.

What I now claim is:

1. In a chair-bath, the combination of a wheelchair and an accessory for permitting a patient to take a bath without the necessity of an attendant to assist him, said accessory comprising a frame pivotable sidewardly from said wheelchair and attached to one end of said wheelchair, said wheelchair having a side arm which is upwardly pivotable so as to clear the pivotable travel of said frame, said frame including a pair of parallel, metal gliding rods each of which at the outer end is integral with a leg extending at right angles downwardly therefrom, said legs at their lower ends being provided with vacuum cups.

2. The combination as set forth in claim 1 wherein a separate inner chair is positionable upon said wheelchair, said inner chair being comprised of a thin sturdy rigid material that is perforated and an underside of said inner chair capable of traveling along said metal gliding rods and movement between the opposite ends thereof.

3. The combination as set forth in claim 2, and a collapsible bathtub, said bath tub including a flat bottom panel having the same size as said inner chair and said panel having a plurality of selectively closable openings therethrough, a head rest at one end of said bottom panel and a pair of side straps to permit a patient to help himself in turning, opposite side edges of said bathtub being provided with straps to pull the sides up into position.

4. The combination as claimed in claim 3 and means for securing said inner chair to said collapsible bath tub.

5. The combination as claimed in claim 3 wherein said bath tub is formed of a rubber-like material.

6. The combination as claimed in claim 4 wherein said securing means comprises straps secured to said inner chair.

7. The combination as claimed in claim 6 in which said bath tub is formed of rubber material.

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