

May 12, 1959

E. R. SCOTT
BATHTUB RAILING

2,885,690

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2 Sheets-Sheet 1

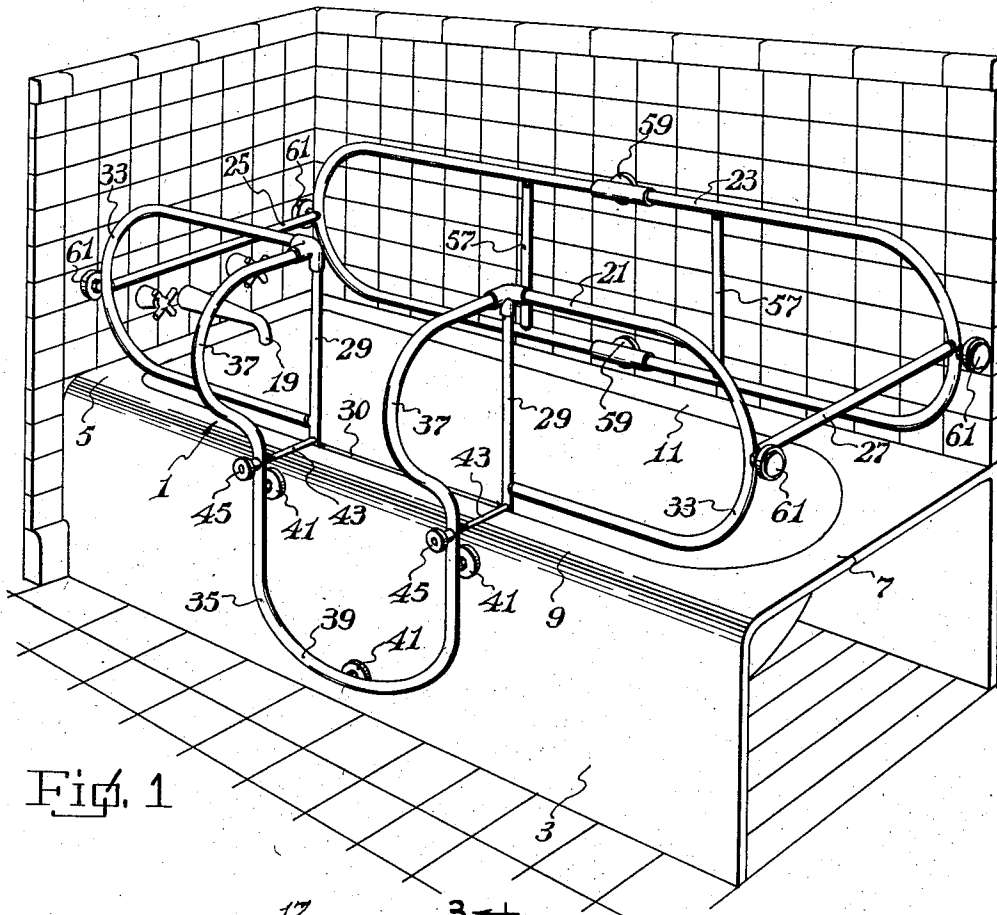


Fig. 1

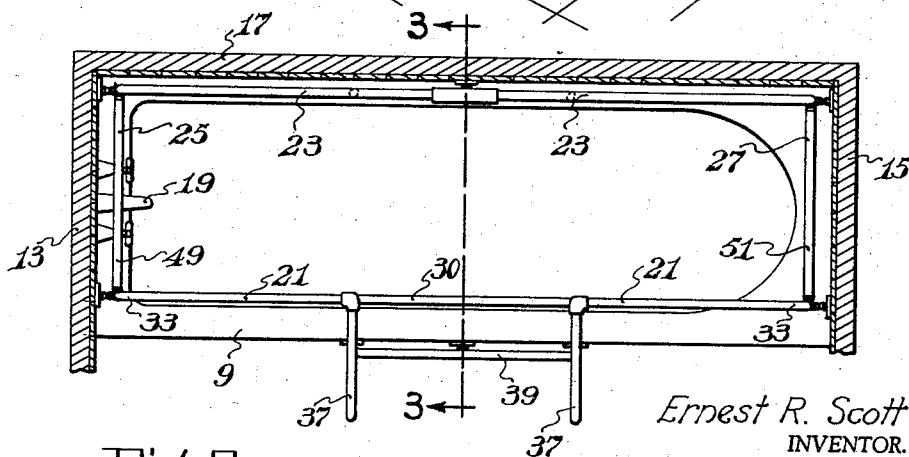


Fig. 2

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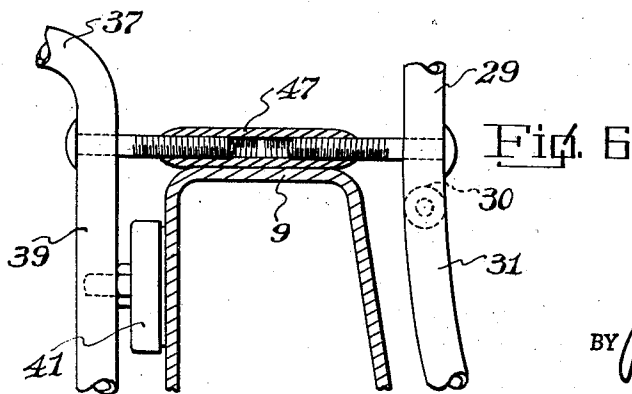
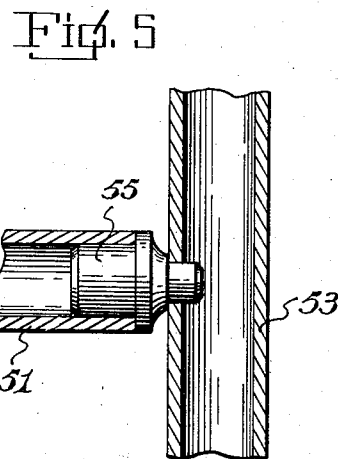
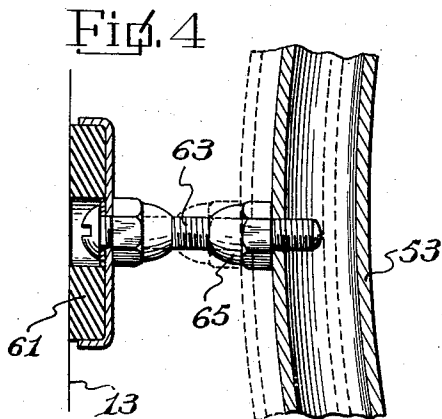
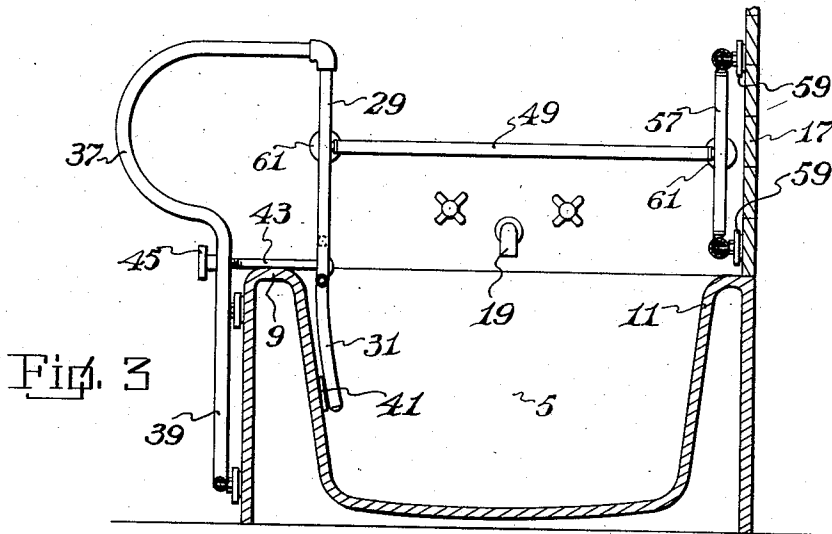
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1

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BATHTUB RAILING

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8 Claims. (Cl. 4—185)

The present invention relates to bathtub railings. Upon entering or leaving a bathtub, it is necessary to step over the edge of the tub. The bottom of the tub and the floor adjacent the tub are usually at different levels and one if not both are usually wet. The sides of the tub are usually rather high to contain an adequate quantity of water so that clearing the edge of the tub is in itself often quite a feat. Add to this the fact that the bather must find a wet footing at a different level and it will be apparent that entering or leaving a tub is often a difficult and even dangerous activity. This is particularly true for semi-invalids, overweight persons, crippled persons, hospital patients and the like. Moreover, when it is desired to use the tub for a shower bath or for some other reason to dry oneself while standing in the tub, the vigorous movements entailed often throw the occupant off balance or cause him to slip and fall.

Various attempts have been made to provide railings or handgrips or other support for use in connection with bathtubs, but none, as far as is known, has been entirely successful when put into practice.

Accordingly, it is an object of the present invention to provide bathtub railings which provide safe support for bathers not only while in the tub but also while entering or leaving the tub.

Another object of the present invention is the provision of bathtub railings which can be used in connection with existing bathing facilities with no alteration of those facilities.

Still another object of the invention is the provision of bathtub railings which provide support on all sides of the bathtub.

A still further object of the present invention is the provision of bathtub railings of which virtually all of the structure of the device is conveniently usable as lengths of railing.

Finally, it is an object of the present invention to provide bathtub railings which will be relatively inexpensive to manufacture, assemble and emplace and will be rugged and durable in use.

Other objects and advantages of the present invention will become apparent from a consideration of the following description, taken in conjunction with the accompanying drawings, in which:

Figure 1 is a perspective view of a bathtub and its environment with a bathtub railing according to the present invention mounted on and over the tub;

Figure 2 is a plan view of the structure of Figure 1;

Figure 3 is a cross-section taken on the line 3—3 of Figure 2;

Figure 4 is a fragmentary cross-sectional detail of one of the mounting means;

Figure 5 is a view in cross-section showing the interconnection of various bars of the present invention; and

Figure 6 is an enlarged fragmentary view of a portion of Figure 3, showing an alternative form of the invention.

Referring now to the drawings in greater detail, there

2

is shown a bathtub railing indicated generally at 1 for use in connection with a conventional bathtub 3 having opposite ends 5 and 7 and elongated sides 9 and 11. Bathtub 3 is shown enclosed within three walls, walls 13 and 15 at the ends of the tub and wall 17 along the rear side of the tub so that side 9 of the tub is the entrance side. Set in wall 13 at end 5 of the tub are the conventional bathtub fixtures 19.

Railing 1 is generally in the form of a rectangular framework having a pair of opposed relatively long sides 21 and 23 interconnected at their ends by a pair of relatively short sides 25 and 27. Long side 21 forms in effect a front railing and includes a pair of spaced parallel vertical tubes 29 interconnected by a horizontal side spacer bar 30 and terminating downwardly in depending legs 31. Disposed in the same vertical plane as tubes 29 is a pair of U-shaped tubes 33 each of which is secured at its ends to a tube 29. Tubes 33 extend away from tubes 29 almost to walls 13 and 15 with the bend of each U adjacent a wall 13 or 15.

Secured at its ends to the tops of tubes 29 is a sinuous tube 35 which forms in effect an entrance railing. Viewed from the front, tube 35 is U-shaped; and viewed from the left rear side of Figure 1, tube 35 has the shape of a question mark. Thus, the upper portions of tube 35 comprise U-shaped portions 37 the legs of which are approximately horizontal and the bends of which extend laterally outward from tubes 29. U-shaped portions 37 terminate downwardly in and are joined by U-shaped portion 39 the legs of which are vertical and provide downwardly depending legs each spaced laterally outward from a corresponding downwardly depending leg 31. Each of tubes 29 and its associated depending leg 31, U-shaped portion 37 and leg of portion 39 comprises a portion disposed on one side of the entrance to the tub which lies in a vertical plane parallel to and spaced from the corresponding portion on the other side of the entrance to the tub, and these two spaced parallel planes are perpendicular to the length of the tub. These two planes are also perpendicular to the plane of portion 39.

The depending legs provided by the legs of portion 39 and legs 31 have mounted thereon in confronting relationship a plurality of pads 41 adapted to contact side 9 of tub 3 to support the railing on but space it from tub 3. A clamp screw 43 extends through each pair of depending legs on each side of the entrance to the tub and is provided at its outer end with a clamping knob 45 bearing against a leg of portion 35 selectively to draw the depending legs together to clamp the railing on side 9 of tub 3 or to release the railing for removal.

As seen in Figure 6, clamp screws 43 and knobs 45 may be replaced by turnbuckles 47 which perform the same function. It should be noted that in either embodiment, clamp screw 43 or turnbuckle 47 will rest upon the upper edge of side 9 of the tub thereby accurately positioning the railing relative to the tub.

An end spacer bar 49 comprises one short side 25 of the rectangular framework of the railing and an end spacer bar 51 comprises the other relatively short side 27 of the framework, these bars being disposed closely adjacent and parallel to walls 13 and 15, respectively. They are connected at their outer ends adjacent side 9 to the bends of tubes 33 and extend perpendicular to the plane of those tubes to the other side of tub 3 where they are interconnected at their other ends with the bends in a pair of U-shaped tubes 53 which are connected in endwise abutting relationship and together comprise the rear railing which is the other relatively long side 23 of the framework.

The sectional detail shown in Figure 5 illustrates the manner in which bar 51 is interconnected with tube 53. As there shown, a double-ended pin 55 has one cylindrical

end slidably received in the end of bar 51 and the other end slidably received in a hole through the side wall of tube 53. No positive interlocking mechanism is needed, as the framework is in compression throughout. This connection is illustrated in detail as it is the same connection as is used repeatedly for the various bars throughout the framework.

The tubes 53 of the rear railing are disposed in a common vertical plane parallel to the plane of tubes 33, and in fact tubes 53 are longitudinally coextensive with tubes 33 and in addition have a mid-portion at the location of the entrance between tubes 33. On either side of this mid-portion are rear rail spacer bars 57 which extend vertically between the legs of tubes 53 to strengthen them. Finally, about midway between the ends of the assembly of tubes 53 are vertically spaced pads 59 which extend laterally away from the remainder of the framework toward and into contact with wall 17 both to brace the framework and to space it away from wall 17 in the region of the rear railing so as to permit the rear railing to be used as a handrail along its entire extent.

Means are provided for locking the railing in position endwise of the tub between walls 13 and 15, comprising adjustable compression fixtures in the form of pads 61 each mounted on a screw-threaded shank 63 freely fitting into a hole in the bend of each tube 33 and 53. Thus, there are four pads 61 disposed each adjacent a corner of the rectangular framework and extending endwise away from the remainder of the framework. Disposed about each screw-threaded shank 63 is an adjustment nut 65 which upon turning will regulate the depth to which shank 63 will penetrate the hole in its associated tube and hence will regulate the distance between those tubes and the pads 61. The tubes, and indeed the entire framework, are resilient so that the long sides 21 and 23 may be somewhat compressed endwise as indicated by dotted lines in Figure 4. In this way, no further securement of pads 61 is needed since the spring action of the framework keeps them firmly pressed against the walls and seated in their mountings.

It will thus be seen that there is provided by the present invention a bathtub railing which may be quickly assembled and disassembled without the use of locking parts and which may be readily adapted to tubs of various sizes, which may be quickly clamped firmly in position and which will remain in that position against heavy loads, and which presents a maximum of useful length of railing.

It will therefore be obvious that all of the initially recited objects of this invention have been achieved.

Although the present invention has been described and illustrated in connection with preferred embodiments, it is to be understood that modifications and variations may be resorted to without departing from the spirit of the invention, as those skilled in this art will readily understand. Such modifications and variations are considered to be within the purview and scope of the invention as defined by the appended claims.

What is claimed is:

1. A bathtub railing for use with a bathtub disposed between a pair of walls at either end of the tub, comprising an open rectangular resilient framework having a pair of opposed relatively long sides interconnected by a pair of arcuately U-shaped relatively short sides opening toward each other, each said relatively short side having means mid-way between said relatively long sides extending away from each other engageable with the walls at the ends of the tub, and means for moving at least one

of the last named means and the framework away from each other thereby to clamp the framework resiliently in compression between the walls at each end of the tub.

2. A bathtub railing for use with a bathtub disposed between a pair of walls at either end of the tub, comprising a pair of open rectangular parallel spaced resilient frameworks each having a pair of opposed relatively long sides interconnected by a pair of arcuately U-shaped relatively short sides opening toward each other, means interconnecting the ends of the frameworks and maintaining the frameworks spaced and parallel, each said relatively short side having means mid-way between its associated said relatively long sides extending away from each other engageable with the walls at the ends of the tub, and means for moving at least one of the last named means of each said framework and its associated framework away from each other thereby to clamp the framework resiliently in compression between the walls at each end of the tub.

3. A bathtub railing comprising a U-shaped frame member having a first pair of generally horizontal legs, one said leg being substantially shorter than the other said leg, and a second pair of legs one on the end of each of said first legs, said second legs extending in the same direction at a substantial angle to said first legs, and means for supporting the railing on a bathtub with a side of the tub disposed between said second legs.

4. A bathtub railing as claimed in claim 3, said first and second legs being substantially uniplanar.

5. A bathtub railing as claimed in claim 3, and means for moving said second legs closer to each other to clamp the side of a bathtub releasably therebetween.

6. A bathtub railing comprising a pair of spaced parallel frames each having a U-shaped frame member having a first pair of generally horizontal legs, one said leg of each said frame being substantially shorter than the other said leg of the associated frame, each frame having a second pair of legs one on the end of each of the said first legs of the associated frame, said second legs extending in the same direction at a substantial angle to the associated said first legs, means interconnecting each said second leg of one frame with the corresponding said second leg of the other frame and maintaining the frames spaced and parallel, and means for supporting the railing on a bathtub with a side of the tub disposed between said second legs of each frame.

7. A bathtub railing as claimed in claim 6, said first and second legs of each frame being substantially uniplanar.

8. A bathtub railing as claimed in claim 6, and means for moving said second legs of each frame closer to each other to clamp a side of a bathtub releasably therebetween.

References Cited in the file of this patent

UNITED STATES PATENTS

819,582	Newton	May 1, 1906
1,261,758	Brown	Apr. 9, 1918
1,685,180	Sheller	Sept. 25, 1928
1,997,249	Dobbs	Apr. 9, 1935
2,092,426	Riddell	Sept. 7, 1937
2,243,794	Dunn	May 27, 1941
2,502,957	Jero	Apr. 4, 1950
2,714,728	Bloch	Aug. 9, 1955
2,736,904	Suggs	Mar. 6, 1956
2,815,513	Tilson et al.	Dec. 10, 1957