May 20, 1958 D. R. HEFLEY 2,834,968

BATHTUB SEAT

Filed Aug. 30, 1957

FIG. 1

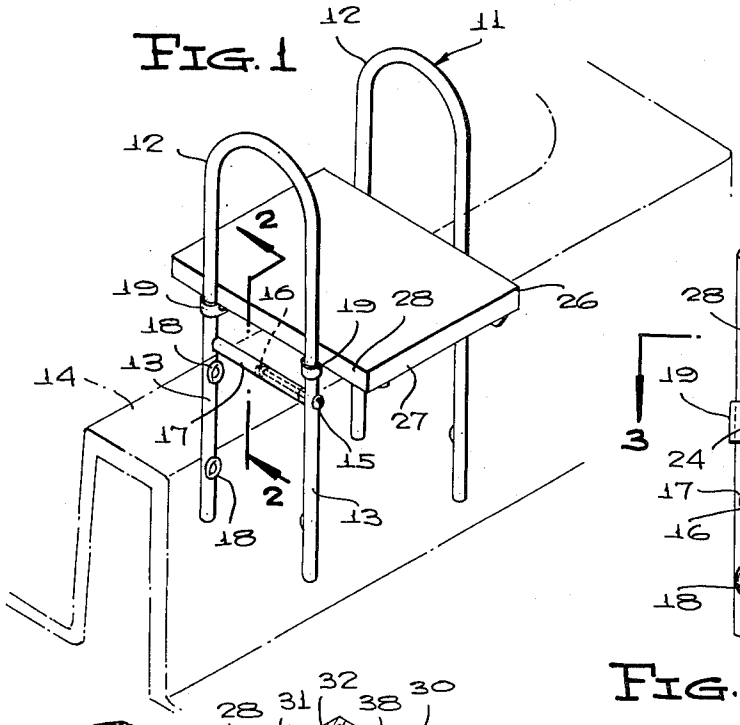


FIG. 2

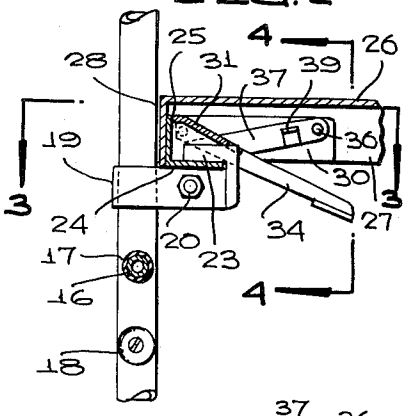


FIG. 3

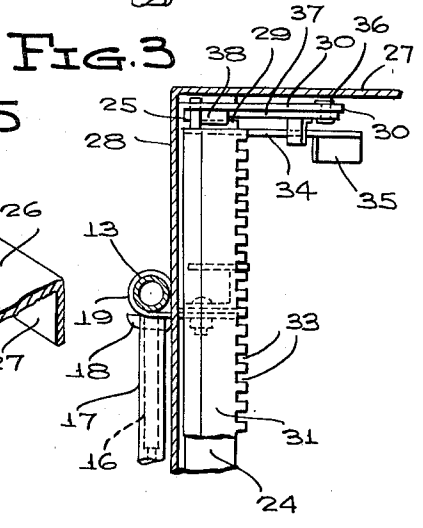


FIG. 5

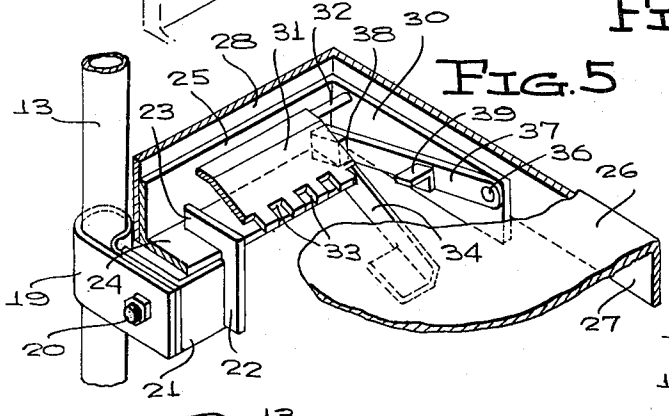
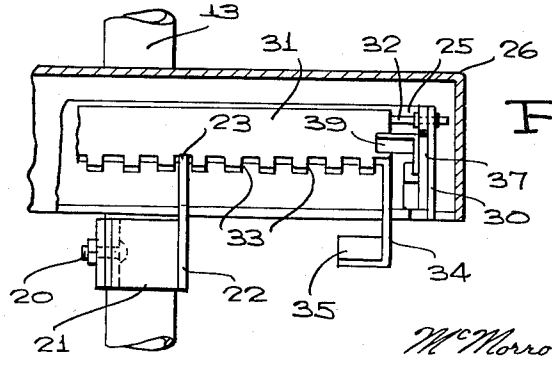


FIG. 4



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BATHTUB SEAT

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3 Claims. (Cl. 4—185)

This invention relates to bathtub attachments, and more particularly to a bathtub seat attachment.

The main object of the invention is to provide a novel and improved bathtub seat attachment which is simple in construction, which is easy to install, and which is easy to adjust.

A further object of the invention is to provide an improved bathtub seat attachment which is inexpensive to manufacture, which is durable in construction, which is readily adjustable so that the seat board portion thereof may be placed in any desired position with relation to the wall of the bathtub on which the attachment is mounted, and which may be securely mounted on the bathtub wall without any danger of causing damage to the bathtub.

A still further object of the invention is to provide an improved bathtub seat attachment which includes safety hand rail elements, facilitating the entry of a person into the bathtub or leaving the bathtub, and serving to reduce hazards of injury from slipping or falling.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a perspective view of an improved bathtub seat attachment constructed in accordance with the present invention, and shown mounted on a bathtub wall, the bathtub wall being illustrated in dotted view.

Figure 2 is a fragmentary cross-sectional view taken on the line 2—2 of Figure 1.

Figure 3 is a horizontal cross-sectional view taken on the line 3—3 of Figure 2.

Figure 4 is an enlarged vertical cross-sectional detailed view taken on the line 4—4 of Figure 2.

Figure 5 is a fragmentary perspective view on a corner portion of the bathtub seat attachment of Figures 1 to 4, parts of the seat attachment being broken away and being in cross section to illustrate the details of construction.

Referring to the drawings, 11 generally designates a bathtub seat attachment according to this invention. Said attachment comprises a pair of vertical side frames 12, 12, said side frames being of inverted U-shaped configuration, and having resilient depending legs 13, 13, shaped to fit over the wall 14 of a conventional bathtub. The intermediate portions of the legs 13, 13 are connected together by the provision of a clamping bolt 15 pressing through one of the legs and threadedly engaged in an internally threaded sleeve member 16 threadedly secured to the opposing leg, whereby the legs 13, 13 may be flexed inwardly toward each other by tightening the bolt 15. The bolt 15 and sleeve portion 16 are covered by a suitable tubular sheathing of resiliently deformable material, such as rubber tubing or the like, to prevent damage to the top surface of the bathtub wall 14 on which the attachment is mounted. Said resiliently deformable sheathing is illustrated at 17 in Figure 2.

The inwardly opposing portions of the legs 13 are provided with spaced bumper elements 18 of resiliently deformable material, such as rubber or the like, engageable with the respective opposite surfaces of the bathtub wall 14, and being resiliently deformable to prevent marring of said bathtub surfaces.

Secured on the upper portions of the legs 13, above the bolt 15 and sleeve 16 of each side frame 12 are clamping straps 19, 19 which are clampingly secured to the associated legs 13 as by clamping bolts 20 passing through the end portions of the straps, the intermediate portions of said straps surrounding the legs 13, as is clearly shown in Figure 5. Secured to the end portions of the straps are the respective angle brackets 21, said angle brackets projecting inwardly and being formed at their ends with vertical flanges 22 terminating at their top ends with horizontally extending arms 23 which are spaced above the top edges of the angle bars 21 and straps 19 by sufficient distance to receive the horizontal flange 24 of a seat board supporting bracket 25, as will be presently described.

Designated at 26 is a generally rectangular seat board which is provided at its opposite end edges with depending flanges 27 and at its longitudinal side edges with depending flanges 28. Secured to the inside surfaces of the flanges 28 are the angle bars 25, previously mentioned, with horizontal flanges 24 which are slidably received between the arms 23 and the top edges of angle brackets 21 and straps 19, as shown in Figure 5. Thus, the arms 23 and the angle brackets 21 and straps 19 define guide means on the side frames 12 engageable with the flange portions 24 on the seat board and guiding said seat board for horizontal adjustment between the side frames 12, 12, preventing the seat boards from moving vertically.

As shown in Figure 3, the ends 29 of the flanges 24 are spaced inwardly from the respective depending end flanges 27 so that the seat board may be at times disengaged from the side frames if so desired.

The respective bracket members 25 are formed at their ends with the arms 30 extending parallel to the adjacent depending seat board end flanges 27, and hinged to the arms 30 adjacent the junctions of the arms 30 with the main portions of the members 25 are respective locking plates 31. The longitudinal edges of the locking plates 31 are fastened to hinge pins 32 which are pivoted at their opposite ends to the arms 30 so that the locking plates are pivotally connected to the arms 30 adjacent the underside of the seat board on axes parallel to the vertical planes of the respective side frames 12. The free edges of the locking plates 31 are formed with the spaced notches 33 adapted to lockingly engage with the upwardly retaining arms 23 of the flanges 22, whereby to lock the seat board 26 against horizontal movement between the side frames 12, 12. The ends of the locking plates 31 are formed with the lever portions 34 formed at their ends with the finger tabs 35, whereby the portions 34 may be readily manipulated to rotate the locking plates 31, whenever desired. As shown in Figure 5, the levers 34 extend beneath the seat board 26 and normally project below the plane of the seat board by a sufficient distance to be easily reached by a person desiring to release the seat board.

Pivoted at 36 to the end portion of each arm 30 at its inside surface is a retaining lever 37 carrying a weight 38 at its free end, the retaining lever 37 being provided at its intermediate portion with an inwardly projecting lug 39 overlying the top edge of the adjacent release lever 34, and being engageable with the top edge of the release lever to normally prevent the associated locking plate 31 from being rotated upwardly to unlocking position. However, the weighted lever 37 is readily yieldable responsive to manual upward force exerted on the subjacent release lever 34, to allow the associated locking

plate **31** to be rotated upwardly toward unlocking position, whenever desired.

As will be readily apparent, the position of the spaced notches **33** along the free edges of the locking plates **31** allows the seat board **26** to be readily adjusted horizontally to a desired position between the side frames **12, 12**, namely, to a position overlying the interior of the bathtub, overlying the top surface of the bathtub wall **14**, or to a position extending laterally outwardly from the bathtub.

As will be further apparent, the seat board **26** may be readily removed for cleaning, whenever desired, by sliding same sufficiently so that the arms **23** clear the space between the ends **29** of the flanges **24** and the adjacent depending end flange **27**, whereby the seat board may be disengaged from the side frames **12, 12** and removed for cleaning. The disassembly of the attachment may be further facilitated by loosening the bolts **20**, whereby the arms **23** may be moved vertically downwardly through the space between the flange ends **29** and the adjacent depending flanges **27**, whereby the flanges **24** may be disengaged from the arms **23**.

The arcuate top ends of the side frames **12** serve as safety hand rail elements, facilitating the entry of a person into the bathtub or leaving the bathtub, and serving to reduce hazards of injury from slipping or falling while entering or leaving the bathtub.

While a specific embodiment of an improved bathtub seat attachment has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. In a bathtub seat, a pair of vertical side frames shaped to fit over the wall of a bathtub, a seat board adapted to be disposed horizontally between said side frames, guide means on the side frames slidably engageable with opposite side marginal portions of said seat board and being formed and arranged to guide said seat board for horizontal adjustment between said frames, and pivoted locking means on the seat board lockingly engageable with said guide means to releasably secure said seat board in a horizontally adjusted position between said side frames.

2. In a bathtub seat, a pair of vertical side frames having resilient depending legs shaped to fit over the wall of a bathtub, clamping means on each frame connecting the legs thereof and being formed and arranged to flex said legs into clamping engagement with the wall of the bathtub, a seat board adapted to be disposed horizontally between said side frames, guide means on the side frames slidably engageable with opposite side marginal portions of said seat board and being formed and arranged to prevent said seat board from moving vertically and to guide said seat board for horizontal adjustment between said frames, and pivoted locking means on the seat board lockingly engageable with said guide means to releasably secure said seat board in a horizontally adjusted position between said side frames.

3. In a bathtub seat, a pair of vertical side frames having resilient depending legs shaped to fit over the wall of a bathtub, clamping means on each frame connecting the legs thereof and being formed and arranged to flex said legs into clamping engagement with the wall of the bathtub, a seat board adapted to be disposed horizontally between said side frames, guide means on the side frames slidably engageable with opposite side marginal portions of said seat board and being formed and arranged to prevent said seat board from moving vertically and to guide said seat board for horizontal adjustment between said frames, and a locking plate pivotally connected at one edge to the underside of said seat board on an axis parallel to the vertical planes of the side frames and being formed at its free edge with spaced notches lockingly engageable with said guide means to releasably secure said seat board in a horizontally adjusted position between said side frames.

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