Sept. 9, 1930. A. WIEBMER 1,775,301

HANDRAIL FOR BATHTUBS

Filed March 19, 1929 2 Sheets-Sheet 1

Fig. 1.

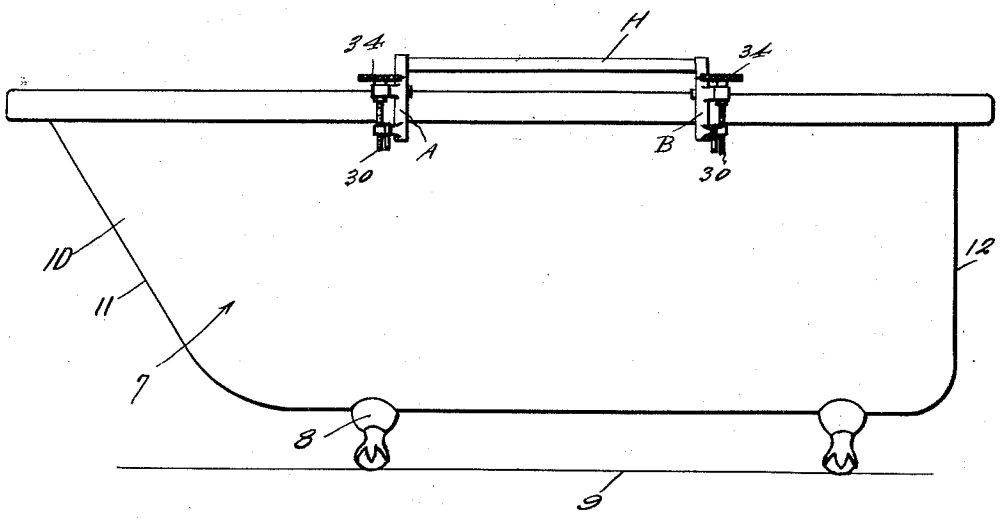
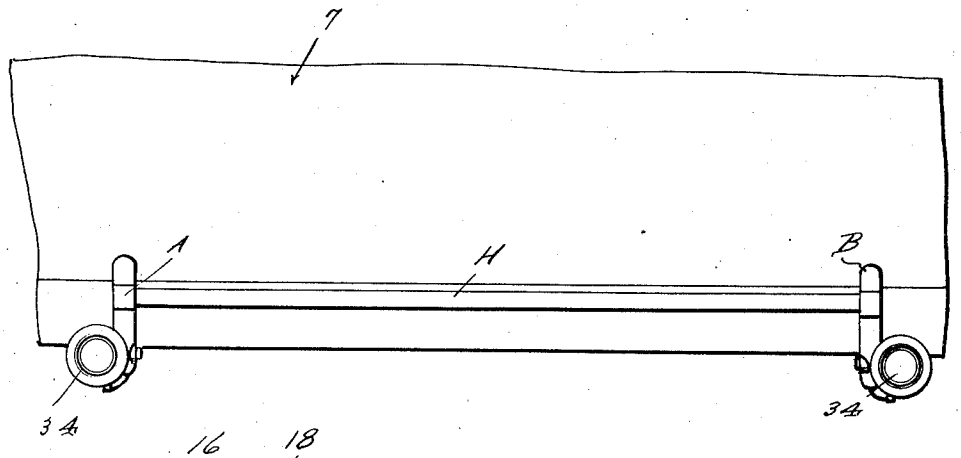



Fig. 2.



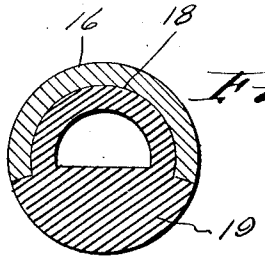




Fig. 6.

Inventor

Anton Wiebmer,

By Clarence A. O'Brien

Attorney

Sept. 9, 1930. A. WIEBMER 1,775,301

HANDRAIL FOR BATHTUBS

Filed March 19, 1929 2 Sheets-Sheet 2

Fig. 3.

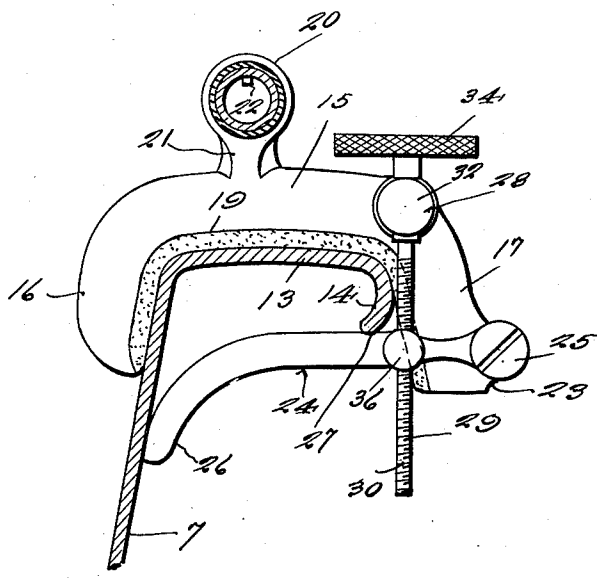



Fig. 4.

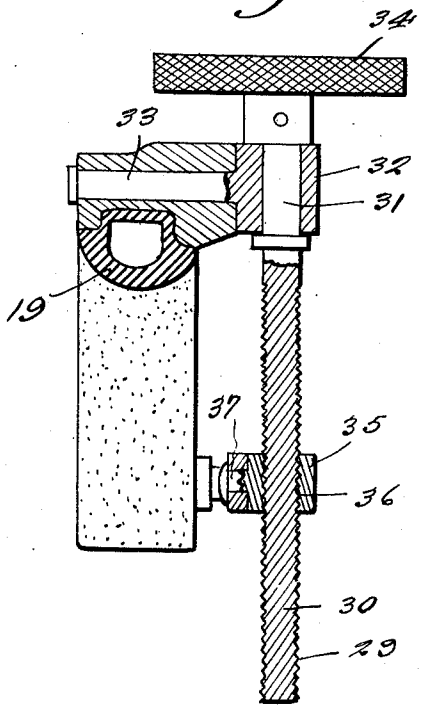
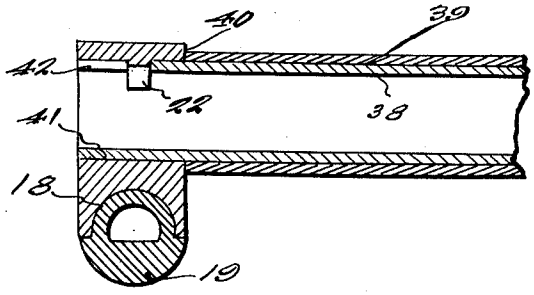



Fig. 5




Inventor

Anton Wiebmer.

By Clarence A. O'Brien

Attorney

Patented Sept. 9, 1930

1,775,301

# UNITED STATES PATENT OFFICE

ANTON WIEBMER, OF QUINCY, ILLINOIS

## HANDRAIL FOR BATHTUBS

Application filed March 19, 1929. Serial No. 348,225.

This invention relates to a hand rail for a bath tub and an object of the invention is to provide a demountable hand rail to support the body of bathers while raising or lowering themselves in the bath tub.

Another object of the invention is to provide a hand rail of the character referred to which is adapted to be attached to a standard bath tub having a laterally disposed flange at its upper edge which may be detachably secured to the bath tub in any position desired without marking or otherwise disfiguring the porcelain of the tub, while at the same time forming a strong and convenient support for the bather.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a device of the character referred to, which is strong, compact and durable, highly efficient for its intended purpose without detracting from the appearance of the bath room, which is very simple in its assembly and operation and comparatively inexpensive to manufacture and install.

With the foregoing and other objects in view, the invention consists of a novel construction, combination and arrangement of parts, as hereinafter more specifically described and illustrated in the accompanying drawings wherein is disclosed an embodiment of the invention, but it is to be understood that changes, variations and modifications may be resorted to without departing from the spirit of the claims hereunto appended.

In the drawings, wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is a side elevation of a bath tub, illustrating an adaptation therewith of a device in accordance with this invention,

Figure 2 is a broken away top plan view of a portion of the tub illustrating the adaptation of the invention therewith,

Figure 3 is a broken away section of a wall of a bath tub illustrating in end elevation an adaptation therewith of the invention,

Figure 4 is a central, detailed vertical sectional view of the bracket detached from a bath tub,

Figure 5 is a broken away sectional view of the hand rail and the body portion of the bracket, illustrating the method of securing the hand rail thereto, and

Figure 6 is a transverse sectional view through the body portion of the bracket.

Referring to the drawings wherein an embodiment of the invention is disclosed, 7 indicates generally a bath tub resting upon legs 8 and supported on the floor 9 of a bath room. The body portion of the bath tub is formed of side walls one of which is indicated at 10 and end walls 11, 12.

The bath tub is formed of porcelain or other well known materials used in the construction of bath tubs in the trade. Circumventing the upper edges of the side walls 10 and the end walls 11, 12 is an outwardly directed flange 13 merging with a curved depending extension 14.

The bath tub rail in accordance with this invention is combined with the bath tub 7 and consists of a pair of spaced brackets A, B which are disposed on the side walls 10 of the bath tub in a manner to be presently described. Although the brackets are shown attached to the side walls 10 it is within the contemplation of the invention to be able to attach the brackets to either of the end walls 11, 12.

The brackets are detachably mounted on the wall 10 and a rail H is secured at its opposite end to the brackets A, B in spaced relation to the upper edge of the flange 13 and extends longitudinally thereof.

Both of the brackets A, B are formed the same with the exception that one is the right hand and the other is a left hand bracket as will be clearly understood by reference to Figure 1 of the drawings. Each of the brackets is formed with a U-shaped body portion having a bight portion thereof indicated at 15 and depending legs extending approximately at right angles to the bight portion and indicated at 16, 17.

In cross section the inner face of the body portion of the bracket is provided with a concaved semi-circular cavity 18, in which

is seated hollow cushioning member 19. The cushion member 19 projects beyond the lower edge of the body portion of the bracket and abuts the inner face of the side walls, the upper face of the flange 13 and the outer face of the extension 14, by reason thereof the body portion of the bracket straddles the flange 13 with the leg 16 in abutment with the inner face of the side wall 7 and the leg 17 in abutment with the extension 14 and the bight portion superimposed upon the upper face of the flange 13.

Intermediate the ends of the bight portion 15, the upper edge thereof is formed with an annular supporting ring 20 which merges on its bottom with the neck 21 which is formed integral with the bight 15.

The inner peripheral wall of the annular shoulder 20 is formed with a radially disposed pin 22 for a purpose presently to be described. The shoulders 20 of each bracket and the pins 22 thereof are in longitudinal alinement.

The outer edge of the leg 17 is formed with a raised and inwardly directed boss 23 provided with a threaded circular cavity, not shown in the drawings for supporting the outer end of the gripping member indicated generally at 24 which is rockable on the stud screw 25 which extends through the outer end and is secured in the cavity.

The gripping member 24 is curved on its inner end 26 so as to provide a substantial surface on the inner face thereof for abutment against the outer face of the side wall 7. The gripping member 24 also abuts the lower edge of the extension 14 as at 27 thereby providing two points of attachment when mounted on the bath tub, that is to say the gripping member has a point of attachment with the outer face of the side wall 7 and the lower edge of the curved extension 14.

A means for rocking the gripping member 24 is indicated generally at 28 which consists of a cylindrical rod 29 threaded a portion of its length from the lower end thereof as indicated at 30 having a spindle 31 adjacent the upper end thereof journaled in a rockable bearing 32.

A bearing 32 extends laterally of the body portion at a point where the leg 17 merges with the bight portion 15 and said bearing is rockable on the shaft 33 which extends transversely through the bight portion 15. The upper edge of the rocking means 29 is formed with a circular disk 34 which is secured thereto in fixed relation to provide a means for turning the rocking member.

The threaded portion 30 threadably engages with another rockable bearing 35 which is capable of vertical alinement with bearing 32. The threaded portion 30 extends through a threaded opening 36 in the bearing 35 and said bearing 35 is rockably mounted laterally of the gripping member 24 and secured thereto on a shaft 37.

Since the annular shoulders 20 are in alinement with each other they support longitudinally the rail H in spaced relation to the upper face of the flange 13. The rail H is tubular in cross section formed of rigid metallic material and indicated at 38, the outer face of the tubular rail 38 is covered with resilient material 39 of rubber or other material to prevent bruising the body while at the same time providing a soft gripping means for the hand which will not cause the hand to slip therefrom.

The rubber cover 39 is secured to the tubular metallic body 38 by means of a layer of waterproof glue or other adhesive material. The opposite ends of the cover 39 abut against the opposed inner edges 40 of the annular flange 20 so as to prevent longitudinal movement thereof.

The tubular rail 38 is such that it slides freely in the opening 41 in the annular shoulders 20 and to prevent the turning thereof and also to promote the method of assembling the same, the walls thereof are provided with a pair of oppositely disposed slots, one of which is clearly shown at 42, in Figure 5 of the drawings.

The slots are disposed in longitudinal alinement with each other and extend inwardly from the opposite ends of the body portion a length equivalent to the distance from the inner edge of the pin 22 to the outer edge of the shoulder 20 so that the tubular rail member 38 when assembled will not only be seated with the opening 41 but will be secured against radial and end thrust by reason of the pin 22 being in abutting relation to the sides of the slot and the inner end thereof.

In the application of the invention, a novel method of assembling the same on tho bath tub will be readily appreciated from a course of the following description.

It is also pointed out that the length of the rail 8 may be extended as desired. Having determined the length of the rail H, the body portion of the bracket is superimposed over the upper edge of the bath tub with the legs 16, 17 and the bight portion thereof straddling the side wall 7, flange 13 and extension 14 with the cushion member 19 in abutment thereof. The bracket 18 may be approximately spaced and the rubber covered rail member 38 is inserted in the alined openings 41 on each bracket with the pin 22 riding in the opposed slots 42.

When the pin 22 is in abutment with the inner end of the slots and the rubber cover 39 is in abutment with the shoulder 40 on the supporting collar, the disk cap 34 may be screwed moving the gripping member 24 into engagement with the outer face of the wall 7 and the lower end of the curved ex-

tension 14 whereby the rail is very easily and conveniently assembled in any desired position on the wall of the bath room.

The gripping member being rockably mounted on the body portion of the bracket swings in a radius away from that shown in Figure 3 of the drawings to detach the same from the bath room. The curvature of the radius is accommodated by means of the rockable bearing 35 and 32 which rotatably supports the rocking means 28 on the body portion and the gripping member.

What I claim as new is:

1. A bath tub having in combination a wall, a hand rail parallel to the wall, means for detachably securing the hand rail to the wall, said means including a bracket straddling the wall of the bath tub, a gripping member pivoted to the bracket for movement into and out of engagement with the wall of the bath tub, a bearing rockably mounted on the bracket, an internally threaded bearing rockably mounted on the gripping member, and an actuating rod rotatably supported in the first mentioned bearing and having a threaded portion threadably engaging the bearing on the gripping member.

2. A bath tub having in combination a wall having a lateral flange projecting therefrom, a hand rail in spaced parallelism to the flange, means for supporting said hand rail in spaced parallelism to the flange and including an inverted U-shaped bracket, resting on the flange and having one leg thereof bearing against the inner face of the wall of the bath tub and the other leg thereof bearing against the outer edge of the flange for retaining said bracket against lateral movement relative to the wall of the bath tub, a gripping member pivoted at one end to that leg of the bracket bearing against the outer edge of said flange for movement into and out of engagement with the wall of the bath tub, an internally threaded bearing rockably mounted on said gripping member laterally of the gripping member, an actuating rod having its upper portion rotatably mounted on said bracket, means for rotatably mounting the upper portion of said actuating rod on said bracket, said actuating rod having a threaded portion threadably engaging said bearing, said gripping member having two points of contact, one with the wall of the bath tub and the other with said flange.

3. In combination with a bath tub, a hand rail, means for supporting said hand rail on the wall of said tub, said means comprising a bracket including a stationary part engaging the wall of the bath tub, said stationary part provided with an annular sleeve for receiving the hand rail, a movable part pivoted to the stationary part for movement into and out of engagement with the wall of the bath tub, a bearing rockably mounted on said stationary part, an internally threaded bearing rockably mounted on said movable part and adapted for alignment with said first mentioned bearing, a rod having an upper end portion rotatable in the bearing on the stationary parts, and a lower threaded portion engaging the internal threads of the bearing on said movable part.

4. A bracket adapted to be secured to the wall of a tub and comprising a substantially U-shaped part for straddling the wall of the tub to be retained thereon against lateral movement with respect to the wall, a gripping member pivoted to one leg of said U-shaped part for movement into engagement with the wall of the tub, an actuating rod for said gripping member, means for rockably and rotatably mounting said actuating rod on said bracket, a bearing rockably mounted on said gripping member, means for rockably mounting said bearing, and said bearing provided with internal threads for threaded reception of one end of said rod, a fixed annulus mounted on said bracket member, for receiving one end of a hand rail, and an inwardly extending radial lug on said annular member for engaging with the hand rail to limit movement of the hand rail through the annulus in one direction.

5. In combination with a bath tub having a laterally extending flange on the top edge of the wall thereof, a pair of demountable spaced brackets secured to the upper edge of the wall of the bath tub, a rail slidably secured at its opposite end to said brackets, said brackets comprising a U-shaped bottom portion superimposed upon and straddling a flange for engagement with the flange and wall against lateral movement with respect to the wall, a gripping member rockably secured to one leg of said body portion and adapted for movement into and out of engagement with the walls of the bath tub, a cushioning member interposed between said body portion and the adjacent portions of the wall and flange, a bearing rockably mounted on said body portion adjacent one leg thereof, an internally threaded bearing rockably mounted on said gripping member, and a rod having one end portion rotatably mounted in the first mentioned bearing, and a threaded end portion threadably engaging with the last mentioned bearing.

In testimony whereof I affix my signature.

ANTON WIEBMER.