No. 870,086. PATENTED NOV. 5, 1907.

W. C. DE CAMPS.

ATTACHMENT FOR BATH TUBS.

APPLICATION FILED MAR. 21, 1907.

Fig. 1.

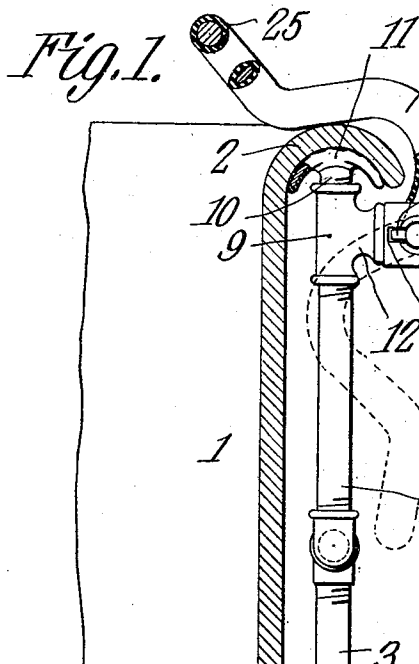


Fig. 2.

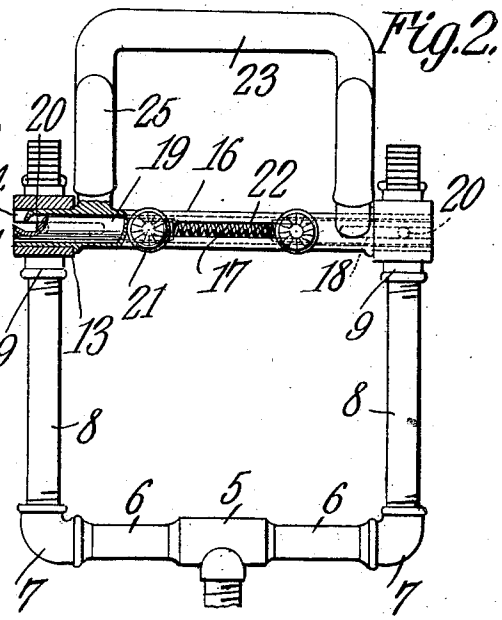


Fig. 4.

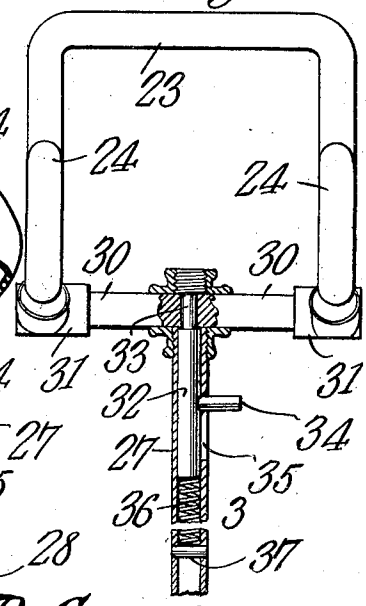
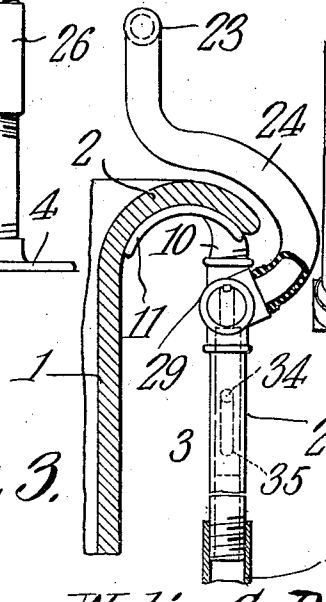


Fig. 3.



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ATTACHMENT FOR BATH-TUBS.

No. 870,086. Specification of Letters Patent. Patented Nov. 5, 1907.

Application filed March 21, 1907. Serial No. 363,586.

To all whom it may concern:

Be it known that I, WYLIE C. DE CAMPS, a citizen of the United States, residing at Parkersburg, in the county of Wood and State of West Virginia, have invented a new and useful Attachment for Bath-Tubs, of which the following is a specification.

This invention has reference to improvements in bath tub attachments, and its object is to provide a device which when not in use is out of the way but which for use may be moved into operative position so as to form a handle or support which may be grasped by the user of the tub to avoid danger of slipping on the smooth surface of the tub when entering or leaving or using the same, and thereby avoid serious injury from falls. The attachment may also have the function of a towel rack or may serve to hold other bathing conveniences.

The invention consists essentially of a frame or support designed to be secured firmly to the floor adjacent to the bath tub and to engage under the rim or roll of the tub and a frame or bracket so attached to this support as to be movable against or adjacent to the exterior wall of the tub out of the way, or to be moved and locked in a position overhanging the roll or rim of the tub and projecting far enough toward the interior of the tub to constitute a firm handhold which may be grasped by the bather and serve as a support to prevent the bather from slipping on the smooth interior of the tub.

The invention will be fully understood from the following detailed description, taken in connection with the accompanying drawings forming part of this specification, in which,—

Figure 1 is a side elevation, partly in section, of one form of my invention in operative position with relation to a bath tub, which latter is shown only in part; Fig. 2 is a front elevation, partly in section, of a portion of the structure shown in Fig. 1 with the bath tub omitted; Fig. 3 is a view similar to Fig. 1, showing another form of the invention; and Fig. 4 is an elevation of the structure shown in Fig. 3, with parts shown in section and other parts omitted.

Referring to the drawings, there is shown an ordinary form of bath tub, indicated by the numeral 1, provided with a rim or roll 2 of ordinary construction. Alongside of the bath tub, exterior thereto, is a post 3 mounted upon a base or floor plate 4 which may be screwed to the floor alongside of the bath tub. The upper end of the post 3 is screwed into a T-coupling 5, from each side of which branch short connecting tubes 6 receiving at their outer ends elbows 7 from which rise other tubes 8 terminating in T-couplings 9 carrying at their upper ends short nipples 10 terminating in curved heads 11 adapted in shape to the under side of the rim or roll 2. The intermediate branch or neck 12 of each T-coupling carries a block 13 through which extends a horizontal perforation 14 having a groove or recess 15 formed along one side.

Bridging the space between the heads 13 and extending through the perforations 14 to the outer ends thereof is a hollow rod or tube 16 having a central longitudinal slot 17 on one side and short longitudinal slots 18 on the other side, and at the ends these slots 18 match the grooves or recesses 15 and extend for a distance beyond the inner faces or walls of the heads 13. Confined within the tube 16 near each end thereof is a bolt 19 having a tongue 20 passing through the corresponding slot 18 and arranged to enter the groove or recess 15. The inner contiguous ends of the bolts 19 are each provided with a manipulating handle 21 passing through the slot 17 to the exterior of the tube 16, and between the facing ends of the two bolts there is a helical spring 22 confined within the tube 16 and tending to press the bolts in opposite directions toward the ends of the tube until the manipulating handles 21 abut against the ends of the slot 17.

The construction is such that when the bolts are separated to their greatest extent the tongues 20 are engaged in the grooves 15 and the tube 16 is held against axial rotation thereby. When, however, the handles 21 are caused to approach each other against the action of the spring 22, the tongues 20 are ultimately carried out of the grooves 15 into the portion of the slots 18 beyond the inner faces of the heads 13; under which conditions, it will be seen, the tube 16 may be rotated upon a longitudinal axis and until the tongues 20 are again coincident with the ends of the slots 15 this tube 16 will not be held against axial rotation.

Fast on the tube 16 close to the inner faces of the heads 13 are the free ends of a U-shaped frame 23 with the legs 24 thereof appropriately bent so that this frame 23 may overhang the roll or rim 2 of the bath tub with the connecting portion thereof extending at a convenient angle to the horizontal or vertical for being grasped by the user of the tub. For strength, the frame 23 is made of metal and in order that it may not be unpleasant to the hand of the user it may be covered with rubber, as indicated at 25, or otherwise covered to protect the hand of the user from contact with the metal.

The description thus far given of my invention has assumed that the structure is made of piping with ordinary couplings, but it will be understood that the structure may be otherwise made and that the heads 13 may be supported in any manner adjacent to or from the tub, as, for instance, by suitable clamps attached directly to the rim of the tub, or, where the fixture is to be applied to the tubs when manufactured, suitable brackets cast directly upon the tub, in the case of metal tubs, may be used in place of the supporting frame herein shown and described.

When a structure substantially such as has been described is used, whether it be made of tubing or solid rods, the post 3 is preferably made of two parts joined by a threaded sleeve or turn-buckle 26 so that the two parts of the post 3 may be adjusted longitudinally relative one to the other to fit the structure to the tub and cause the heads 11 to be clamped firmly under the roll or rim 2 of the tub. The heads 11 are also longitudinally adjustable with relation to the coupling 9 and may be made of various sizes and curvatures so that the structure may be adapted to tubs of different design or make.

The frame 23 may be variously shaped, as desired, and may be used simply as a handhold or may be utilized as towel rack, or may be made of sufficient length initially to constitute a towel rack in itself, or the supporting structure may be utilized for supporting various bath tub fixtures which when not in use may be moved out of operative relation to the interior of the tub and allowed to depend close to the outside face of the tub out of the way.

In Figs. 3 and 4 is shown a slightly modified form of supporting structure. The post 3 is in this structure composed of one element 27 threaded into another element 28, the two together being long enough to extend from the floor plate 4 to a double crosshead coupling 29, which latter carries a nipple 10 and head 11 thereon, although in the structure shown in Fig. 3 the head 11 is connected at one edge to the nipple 10 instead of at the center, as in Fig. 1. The member 28 of the post 3 takes the place of the adjusting sleeve or turn-buckle 26, and the threaded connection between this member 28 and the member 27 permits the longitudinal extension of the post 3 to cause the structure to clamp under the rim 2 of the tub. The crosshead 29 carries about midway of its length an arm 30 which, when the structure is made of piping, is simply a long nipple of sufficient length, and at its outer ends receives T-couplings 31 carrying the ends 24 of the frame 23. Within the member 27 of the post 3 is a longitudinally sliding bolt 32 terminating in a reduced end 33 arranged to enter diametrically oppositely arranged perforations through the walls of the arm 30. If the arm 30 be made of a solid bar, this extension 33 will simply fit a seat in a diametrical perforation therethrough. Fast on the arm 30 is a manipulating pin or handle 34 extending laterally therefrom through a slot 35 formed in the member 27, and a spring 36 bearing at one end against the end of the bolt 32 and at the other end against a pin 37 tends to urge this bolt continually toward the upper end of the member 27. The construction is such that when the end 33 of the bolt 32 is seated in the bar or arm 30, the ends 24 of the frame 23 extend over the rim or roll 2 of the bath tub and then directly upward so that a cross member of the frame is directly over the rim 2 and constitutes a conveniently located handhold for the user of the tub. When, however, it is desirable to move the frame 23 out of the way, the bolt 32 is moved by means of the pin 34 against the action of the spring 36, thus withdrawing the end 33 from engagement with the bar or arm 30. The frame 23 is then turned upon the longitudinal axis of the bar or arm 30 and its upper end may be brought downward until it strikes the member 27. The head 11 is in this instance made fast to the nipple 10 at one edge so that the post 3 sits away from the exterior face of the tub for a sufficient distance to accommodate the curved portion 24 of the frame 23 when the latter is in the pendent or inoperative position.

I claim:—

1. A bath tub fixture adapted for attachment to a bath tub comprising journal supports arranged adjacent to the rim or roll edge of the bath tub, a frame having journals adapted to said supports and having portions curved to overhang the roll or rim of the bath tub, and a locking means constructed to lock the frame against movement when in position to overhang the rim of the tub.

2. An attachment for bath tubs comprising a longitudinally extensible support having a floor plate at one end and a curved head at the other end adapted to fit under the roll edge of a bath tub, journal bearings carried by said support below but adjacent to the head engaging under the roll edge of the tub, said frame being bent to a shape to overhang the roll edge of the tub, and means for locking said frame in the overhanging position.

3. An attachment for bath tubs comprising a longitudinally extensible support having a floor plate at one end and a curved head at the other end adapted to fit under the roll edge of a bath tub, journal bearings carried by said support below but adjacent to the head engaging under the roll edge of the tub, said frame being bent to a shape to overhang the roll edge of the tub, and a spring-retained lock for the frame active to lock the frame when the latter is in a position to overhang the roll of the bath tub and inactive in any other position of the frame.

4. An attachment for bath tubs comprising a longitudinally adjustable post or support having a floor plate at one end and a curved head at the other end adapted to engage under the edge or roll of a bath tub, journal bearings formed on this support below the curved head thereof, a frame having journals in said journal supports and curved to overhang the edge of the tub when in a predetermined position, and spring-actuated lock bolts carried by said frame and arranged to engage fixed portions of the support when the frame is in the predetermined overhanging position.

5. An attachment for bath tubs consisting of a post or support having means at one end for engaging the floor and at the other end for engaging under the roll edge of a bath tub, means for adjusting the length of the support to adapt it to clamp between the edge of the tub and the floor, journal bearings carried by the support below the upper end thereof, a frame having a tubular portion provided with journals adapted to said journal supports, and oppositely-moving, spring-actuated lock bolts in said tubular portion of the frame, each bolt being provided with a tongue extending through slots in the tubular portion of the frame and arranged to enter recesses in the journal bearings.

6. An attachment for bath tubs comprising a two-part tubular support having at one end a curved head adapted to engage under the roll edge of a bath tub, a floor plate for the other end of said support, a coupling or turn-buckle uniting the two parts of the support and adapted to adjust them longitudinally relative one to the other, a frame journaled in said support and appropriately bent to overhang the roll edge of the tub when moved to a predetermined position, and a spring-actuated locking means coacting with the frame and support for locking the frame against movement on its journals when in the predetermined overhanging position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WYLIE CROTHERS DE CAMPS.

Witnesses:
J. W. N. Brown,
S. H. Maguire.