J. H. PUGH.

FOOTHOLD FOR BATH TUBS.

APPLICATION FILED FEB. 27, 1906.

921,734. Patented May 18, 1909.

Fig. 1

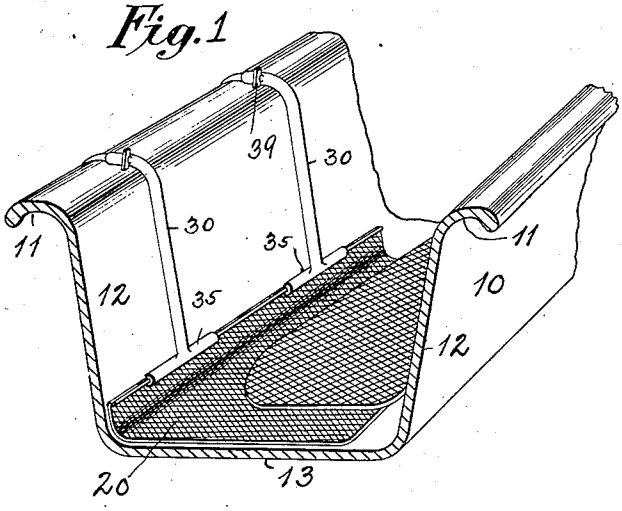


Fig. 2

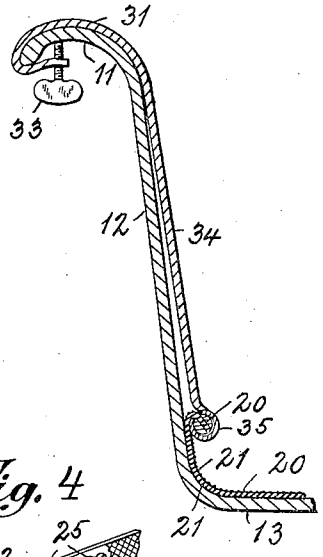


Fig. 3

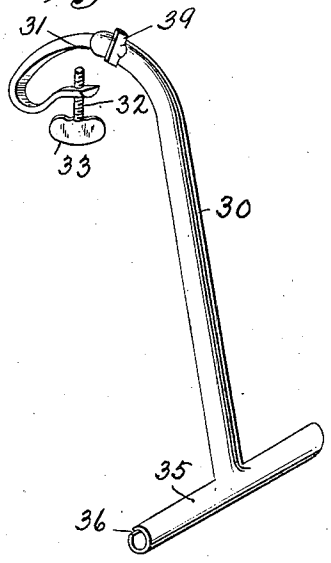


Fig. 4

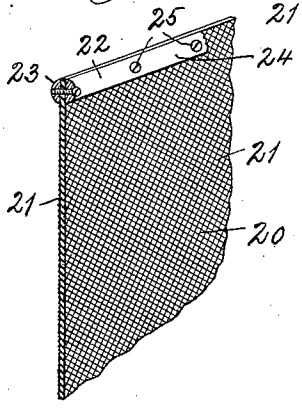


Fig. 5

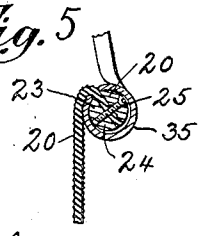
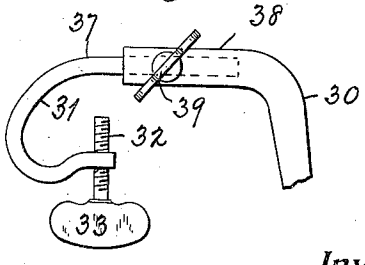


Fig. 6



Attest:
May Hughes
Alan McDonnell.

Inventor:
John H. Pugh
by William R. Baird his Atty.

UNITED STATES PATENT OFFICE.

JOHN H. PUGH, OF NEW YORK, N. Y.

FOOTHOLD FOR BATH-TUBS.

No. 921,734. Specification of Letters Patent. Patented May 18, 1909.

Application filed February 27, 1906. Serial No. 303,183.

To all whom it may concern:

Be it known that I, JOHN H. PUGH, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Footholds for Bath-Tubs, of which the following is a specification.

My invention relates to foot holds for bath tubs and its novelty consists in the construction and adaptation of the parts, as will be more fully hereinafter pointed out.

Stout persons and feeble persons frequently have trouble in getting in and out of the modern bath tubs having smooth and especially enameled interiors. They slip upon the bottom and are apt to injure themselves and therefore require assistance in using the bath. Attempts have been made to overcome this difficulty by placing a mat of rubber or a heavy towel on the bottom of the tub. The towel becomes wet and unsanitary and the rubber mat, while more useful, will, at times, slip away from the foot of the user just when its assistance is most required.

I have in my invention provided a sure foot hold for a smooth tub.

In brief, it consists of a foot piece of soft flexible water-proof material, preferably a sheet of soft rubber, provided with a roughened surface and provided with suitable means for holding it firmly at all times within the tub, so that it cannot slip under any circumstances. The means which I prefer for this purpose comprise one or more holders, each consisting of a dependent member, extending down into the tub along its side and to which the foot piece is attached, and a curved outwardly extending member adapted to encircle the rim of the tub and to be firmly secured in place by a set screw provided with a thumb piece, or similar means. I also prefer to make the connection between the holder and the foot piece a temporary or detachable one and I provide means for varying the length of the holder to suit bath tubs of different sizes. The holder is made smooth and without projecting parts so that the user cannot be injured by coming into contact therewith and the parts are preferably so placed that the foot piece is interposed between the holder and the smooth inner surface of the tub at the place of contact with the latter so that it cannot be injured.

In the drawings, Figure 1 is a perspective of a portion of a bath tub provided with a preferred form of my invention. Fig. 2 is an enlarged vertical section of a portion of the tub showing the same provided with a non-extensible holder for the foot hold. Fig. 3 is a perspective of the foot-hold holder shown in Fig. 1. Fig. 4 is a perspective and partial section of a portion of the foot piece. Fig. 5 is an enlarged sectional detail of the connection between the foot piece and holder and Fig. 6 is an elevation of a part of the holder shown in Fig. 1.

In the drawings, 10 represents a bath tub having curved rims 11, 11, sloping sides 12, 12, and a bottom 13, all of usual construction.

20 is a foot piece made of a sheet of soft flexible material, preferably rubber, and having corrugated or roughened surfaces 21 on each side. It is provided with a stiffening rod 22 along one edge which is made of two half round pieces 23 and 24 with the edge of the foot piece 20 firmly secured between them by means of screws 25 (counter-sunk flush with the outer surface of the rod) or other suitable means.

30 is the holder for the foot piece. It comprises a long rod preferably of half round metal, curved outwardly and reversed at 31 to embrace the rim of the tub and provided underneath with a set screw 32 having a thumb piece 33 by which it may be firmly secured to the rim on its under side. It depends along the side of the tub and terminates in a transversely placed sleeve 35 to which it is rigidly secured, or with which it is made integral. This sleeve is provided with a slit 36 traversing its entire length and placed so that it is above a horizontal plane passing through the axis of the sleeve. The reason for this is that when the sheet of material, comprising the foot piece, has been placed in position, it will be raised above such horizontal plane and be interposed between the holder and the inner surface of the tub.

The manner of using the device is as follows: The stiffening rod 22 is slid into the sleeve 35, the slit 36 receiving the sheet of material which falls down along the side and across the bottom of the tub. The curved member of the holder is then placed over the rim of the tub and fastened by means of the set screw 32.

It is usually best to place the sleeve 35 cen-

trally with respect to the foot piece, but if the latter is of considerable length two holders may be used.

In order to adapt the holder to tubs having rims of different width, I provide means for varying the length of the holder consisting in making the rod 30 of two telescopic members 37 and 38 provided with a set screw 39.

It is within the scope of the invention and claims to employ a non-extensible rod 34, as shown in Fig. 2.

If two holders are not at hand and a mat of considerable length is to be used, the small foot piece with a single holder may be employed and a large mat or sheet of material placed over it. The latter will not slip on the former on account of the friction between them.

What I claim as new is:—

1. A bath tub provided with a foot piece comprising a sheet of water-proof material, flexible to a degree sufficient to permit the same to lie with its one surface in uniform contact with the inner surface of the bottom of the tub, and having its surfaces roughened to permit its said contacting surface to positively engage the tub surface, and means securely connecting said flexible sheet to a portion of said tub and maintaining the former in position, substantially as described.

2. A bath tub of the kind described, having its interior provided with a flexible lining of water proof material arranged on the bottom thereof and provided with roughened surfaces, and means for securely connecting the same within the tub comprising a frame which extends into the tub and has one end secured to said tub and its opposite end secured to said lining to rigidly hold the latter, which frame is removable, substantially as described.

3. A foot hold for a bath tub comprising a foot piece made of flexible rough-surface material, and a rod extending within the tub and connected to the same and to said foot piece to rigidly hold the latter, and removable from the tub and the foot piece, substantially as described.

4. A foot hold for a bath tub, comprising a foot piece made of flexible water proof material having roughened surfaces and provided with a stiffened edge, and a holding rod therefor, having its lower portion provided with means which embraces the stiffened edge of the foot piece and its upper portion bent to extend over the rim of the tub.

5. A foot hold for a bath tub, comprising a foot piece made of flexible waterproof material having roughened surfaces and provided with a stiffened edge and a holding rod therefor, having its lower portion provided with means for detachably securing it to the stiffened edge of the foot piece and its upper portion bent to extend over the rim of the tub, and provided with a clamping device for securing it to the underside of said rim.

6. A foot hold for a bath tub, comprising a flat foot piece of flexible water-proof material provided with roughened surfaces and a stiffening rod, a depending holder adapted to be secured to the tub and a detachable connection between the holder and the foot piece consisting of a slitted sleeve carried by the holder and adapted to receive and embrace said stiffening rod.

7. A foot hold for a bath tub, comprising a flat foot piece of flexible water-proof material provided with roughened surfaces and a stiffening rod, a depending holder adapted to be secured to the tub and a detachable connection between the holder and the foot piece consisting of a slitted sleeve carried by the holder and adapted to receive and embrace said stiffening rod and to interpose the foot piece between the sleeve and the inner surface of the tub.

8. In a bath tub, the combination with a foot piece consisting of a sheet of flexible water-proof material having a stiffening rod along one edge and a roughened surface so that it will not readily slip, of a plurality of holders for securing it against the side and bottom of the tub, each of said holders comprising means as a slit sleeve whereby it may be detachably secured to the foot piece by its stiffening rod in such manner as to locate a portion of said foot piece, within its said edge, between said holders and the surfaces of the tub.

9. A foot hold for a bath tub, comprising a flat foot piece of flexible water-proof material, provided with roughened surfaces and a stiffening rod, a depending holder adapted to be secured to the tub and a detachable connection between the holder and the foot piece, consisting of a sleeve carried by the holder and adapted to embrace the stiffening rod and provided with a slit to permit of the passage of the foot piece arranged to interpose a portion of said foot piece between said sleeve and the surface of the tub.

10. A foot hold for a bath tub, comprising a flat foot piece of flexible water-proof material, provided with roughened surfaces and a stiffening rod, a depending holder adapted to be secured to the tub and a detachable connection between the holder and the foot piece, consisting of a sleeve carried by the holder and adapted to embrace the stiffening rod and provided with a slit to permit of the passage of the foot piece, said slit being arranged above a horizontal plane passing through the axis of the sleeve whereby to interpose a portion of the foot piece between said sleeve and the surface of the tub.

11. A foot hold for a bath tub, comprising a foot piece made of a sheet of flexible water-proof material having roughened surfaces and means for holding the same within the

tub, comprising a lengthwise adjustable rod whereby it may be adjusted to the tub, said rod provided with means by which it is attached to the foot piece in such manner as to interpose a portion of said foot piece between the same and the surface of the tub and bent to extend over the rim of the tub.

12 A foot hold for a bath tub, comprising a foot piece made of a sheet of flexible waterproof material having roughened surfaces and means for holding the same within the tub, comprising a lengthwise adjustable rod having its lower end provided with means by which it is attached to the foot piece in such manner as to interpose a portion of said foot piece between the same and the surface of the tub, and its upper end bent to extend over the rim of the tub, and provided with a clamping means to engage the under surface of said rim.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN H. PUGH.

Witnesses:

WILLIAM R. BAIRD,

HERMAN MEYER.