June 28, 1927. 1,633,582

C. T. E. GOULD

BATHTUB

Filed June 2, 1926

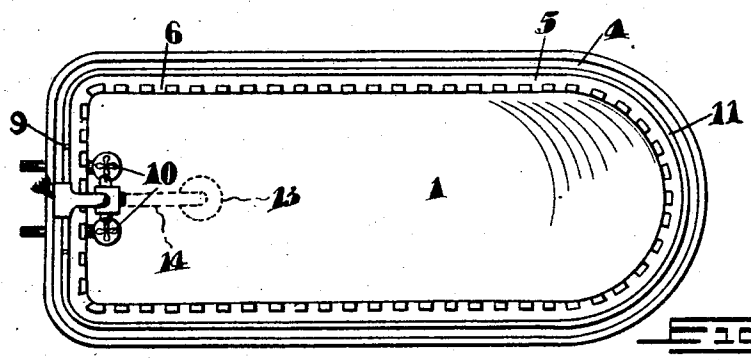


Fig. 1.

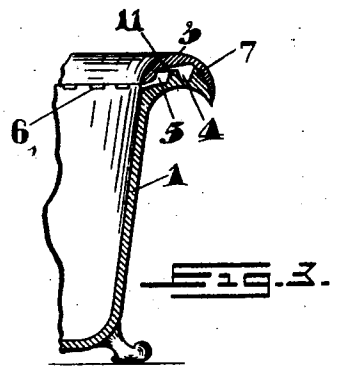


Fig. 3.

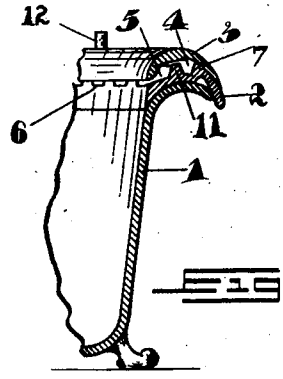


Fig. 2.

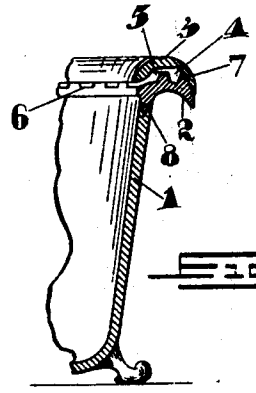


Fig. 4.

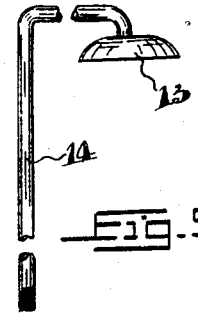


Fig. 5.

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UNITED STATES PATENT OFFICE.

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BATHTUB.

Application filed June 2, 1926. Serial No. 113,210.

This invention relates to bath tubs of the type disclosed in my prior Patent 1,438,373, issued December 12th, 1922, which disclosed the provision of a water passage about the rim of a bath tub in which openings were formed from which water was discharged to wash off the sides and bottom of the tub.

This prior construction had the disadvantage that if the water supply was not turned on full, there was liable to be a greater flow of water from the openings in the passage nearest the source of the water supply than from the openings near the opposite end of the passage, and if the water was turned on full there was likely to be an objectionable squirting of water from the openings in the passage.

My object therefore is to devise a construction by means of which the disadvantages just referred to may be overcome.

I attain my object by means of the constructions hereinafter described and illustrated in the accompanying drawings in which

Fig. 1 is a plan view of my improved tub with the cap removed;

Fig. 2 a sectional detail illustrating the method of applying my invention to old bath tubs;

Fig. 3 a sectional detail illustrating one method of applying my invention to new bath tubs;

Fig. 4 a sectional detail illustrating another method of applying my invention to new bath tubs; and

Fig. 5 a detail illustrating a spray or shower for use with my tub.

In the drawings like numerals of reference indicate corresponding parts in the different figures.

1 is a bath tub which is provided with the usual rim at the upper edge. Referring particularly to Fig. 2, I place on the rim the auxiliary rim 5, which will preferably be formed as a casting and be secured to the tub by any suitable clamping means (not shown). In this rim 2 are formed two waterways, the main waterway 4 and the auxiliary waterway 5 which are separated by means of a rib 11. Extending from the auxiliary waterway 5 are a plurality of outlets 6 formed as slots. Over the rim 2 is placed the cap or cover 3, which is secured in place in any convenient manner. A recess is formed in the rim 2 and also in the underside of the cover 3 in which is placed suitable packing 7 to prevent water passing out the wrong way between the rim and cover and dropping on to the floor.

The method of operation is as follows. The waterway 4 is connected with the supply taps 10 in any suitable manner. The tap being turned on, the water flows into the waterway and flows over the rib 11 into the waterway 5. It will be noted, however, that the water does not flow into the waterway 5 until the water has first reached the extreme end of the waterway 4. From the waterway 5 the water passes through the outlets 6 and runs down the inside of the tub. The space between the top of the rib 11 is very restricted, being considerably less than the total area of the outlets 6. From the construction described it will be seen that there will only be a gentle flow of water out of the outlets 6 as any water squirted over the rib 11 strikes the opposite wall of the waterway 2 and loses its force before passing through the outlets 6.

In Fig. 3 I show the preferable method of applying my invention to new bath tubs. In this construction the waterways and outlets are formed directly in the main rim of the tub, thus doing away with the necessity of the auxiliary rim 2.

In Fig. 4, I show the tub proper and the main rim formed in separate parts, the upper edge of the tub being provided with a V-shaped groove 8 and the rim provided with a wedge adapted to be received in the groove. As a modification I may form the upper edge of the tub as a wedge and form the groove in the underside of the rim.

I may also, for example, make the attachment adjustable in length to suit tubs of various lengths.

As stated above, the auxiliary rim 2 will preferably be formed as a metal casting, but good results might be obtained if it were formed of molded rubber, and in this case, the auxiliary rim and cover might be formed integrally.

Various other modifications are possible, all of which would fall within the scope of my invention, the important features of which are the provision of the auxiliary water into which water flows over a rib between it and the main waterway, and the making of the outlets from the auxiliary waterway of greater area than the area of the space allowed for overflow from the main waterway into the auxiliary waterway to prevent squirting from the outlets 6.

In order that the main waterway may be drained I provide one or more very small passages 9 through the rib 11 as indicated in dotted lines in Fig. 1.

Both the ordinary hot and cold water supply pipes will be connected with the waterway 4 so that either hot water or cold, or a mixture of both may be supplied thereto.

When my invention is applied to new tubs the main waterway will be connected as shown in Fig. 1 with the special tap described in my prior patent hereinbefore referred to.

When my invention is applied to old tubs, the cap will be provided with an inlet 12 to which one end of a hose may be connected, the other end of the hose being adapted to be connected with or disconnected from the tap as desired.

I may, if desired, use with my improved bath a shower device such as 13, which is supported by a pipe 14 connected in a convenient manner with the tap of the bath.

The advantages of a bath constructed in accordance with my inventions as compared with baths in which the water is admitted through a tap at one end of the bath are numerous.

First of all, if the water be too hot or too cold additional cold or hot water may be added, and thus as this additional water is added at a large number of points throughout the length of the inner surface of the bath instead of at a single point, it is not necessary to paddle the water to and fro to obtain a satisfactory mixing of the hot and cold water.

This is of particular advantage when a person has had a hot bath and desires to cool off the water before getting out of the same, as the discomfort of having the water extremely hot at one end of the bath and extremely cold at the other end is avoided.

Further, after the dirty water has been run off, the bath may be thoroughly cleansed by running very hot water down the sides of the bath, thus avoiding the use of unsanitary brushes or cloths which are commonly employed for the purpose. Also, where hot water is not available, the bath may be disinfected by bringing the water into contact with a disinfecting agent before allowing it to pass into the channel 4.

It will be understood, of course, that various modifications may be made in the construction which will fall within the scope of my invention.

What I claim as my invention is:

1. A rim member for a bath tub having a main waterway and an auxiliary waterway, said waterways being separated by a rib over which water may flow from the main waterway into the auxiliary waterway, said rib having a restricted passage formed therein through which the main waterway may be drained; and a water outlet from said auxiliary waterway.

2. A rim member for a bath tub having a main waterway and an auxiliary waterway, said waterways being separated by a rib over which water may flow from the main waterway into the auxiliary waterway and a water outlet from said auxiliary waterway, the area of the overflow space at the top of said rib being less than the area of the water outlet from the auxiliary waterway.

3. A rim member for a bath tub having a main waterway and an auxiliary waterway, said waterways being separated by a rib over which water may flow from the main waterway into the auxiliary waterway and having a plurality of laterally directed slots adapted to direct water from said auxiliary waterway to the interior of the tub, the area of the overflow space at the top of said rib being less than the combined area of the slots.

Signed at Toronto, Canada, this 21st day of May, 1926.

CHARLES T. E. GOULD.