

May 11, 1937.

J. M. ROBINSON

2,079,770

COMBINATION BATHTUB AND SHOWER

Filed March 31, 1936

2 Sheets-Sheet 1

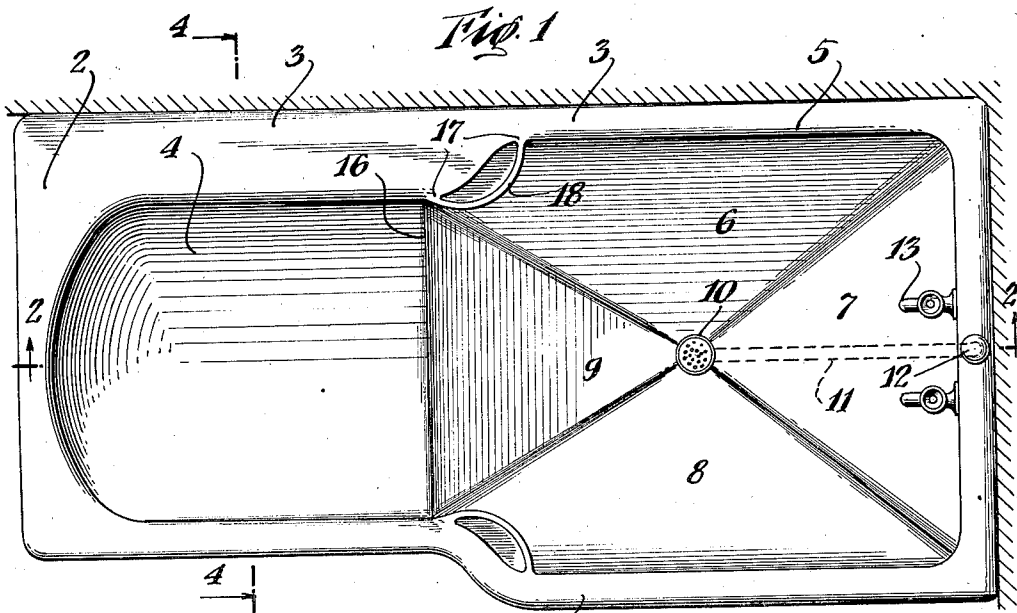
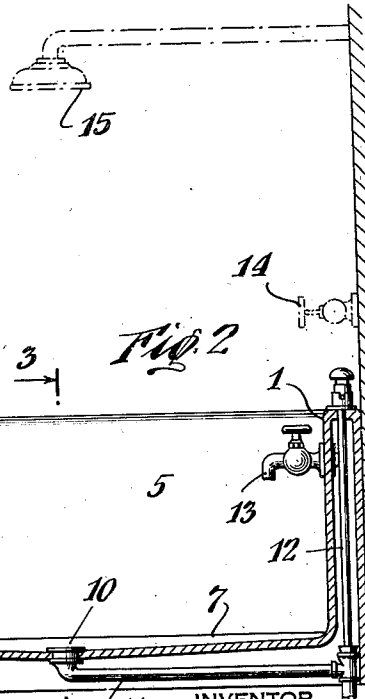
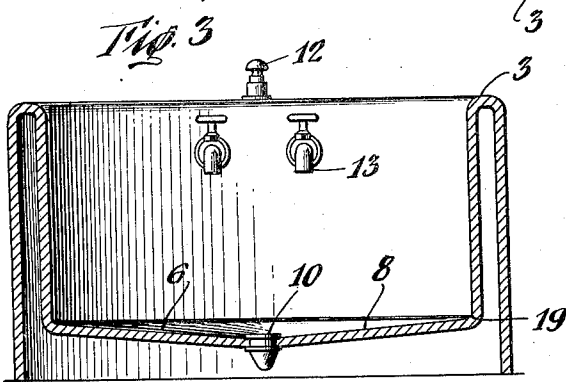


Fig. 3



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Fig. 4

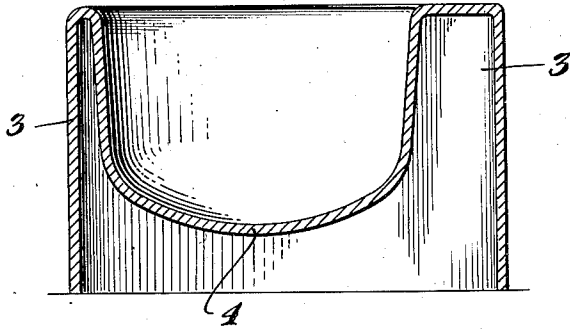


Fig. 5

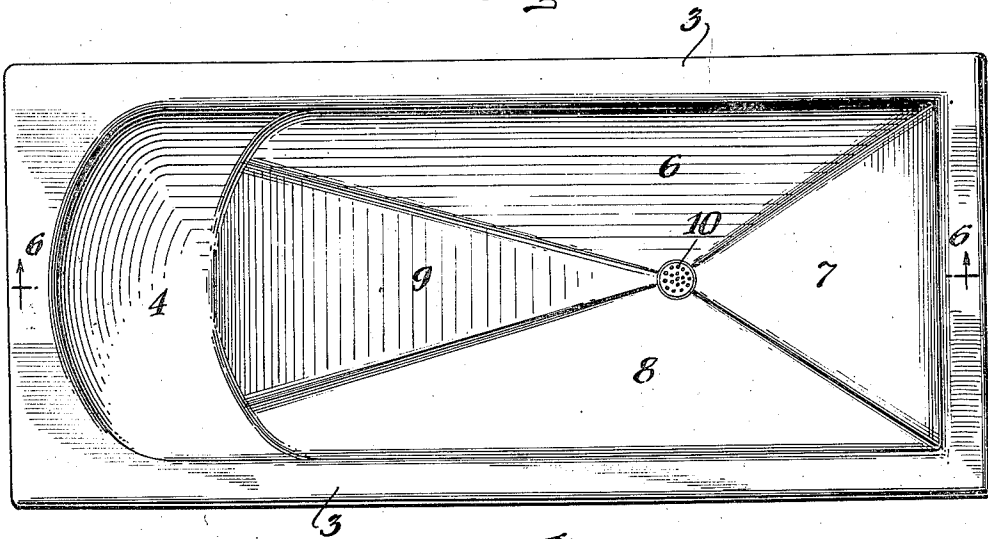
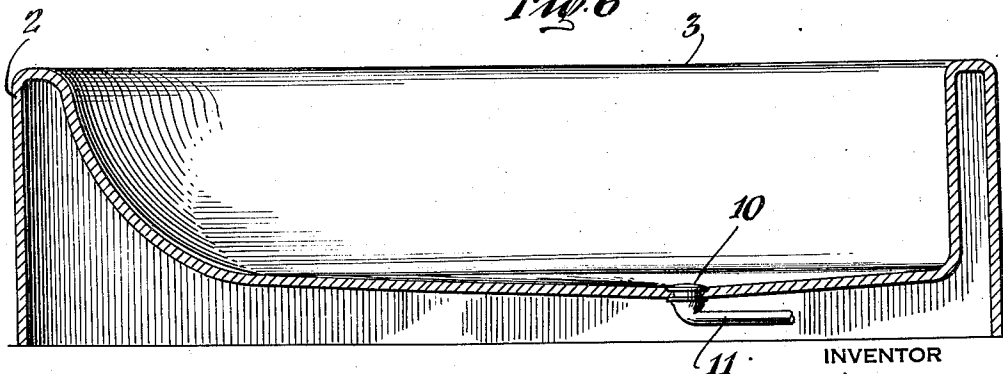


Fig. 6



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COMBINATION BATHTUB AND SHOWER

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10 Claims. (Cl. 4—148)

This invention relates to improvements in bathtubs which are designed for use either as bathtubs or with showers where the shower is placed over the tub permitting the user to stand therein and take a shower bath if he so desires, instead of sitting or lying in a tub of water.

One advantage of my bathtub designed for use with a shower is that it is equally useful, safe, comfortable and efficient whether it is used as a bathtub or as a shower bath. The disadvantages with the usual bathtub with shower attachment are that the tub is not well fitted for the user to take a shower in. The bottom of the usual bathtub is not flat, but is curved, especially near the sides and corners. This fact makes the tub unsuitable and dangerous for a person to stand in, as when taking a shower. It is a well-known fact that the curved bottom of the ordinary bathtub is the cause of innumerable accidents and this is especially so when it becomes covered with a film of soap which increases the danger of slipping and falling of the person using it.

My invention does away with this danger because one end of the tub is substantially flat, so that the person taking the shower does not have to stand on curved surfaces. The flat end of the tub, where the shower is taken, forms the foot end of the tub. It is impossible to make the bottom of the ordinary bathtub with flat surfaces and still have the water drain properly. I obviate this difficulty by making the end of the bathtub where the shower is to be taken like the bottom of the ordinary shower. The drain is placed in that portion of the combination tub over which the shower apparatus is placed and is spaced from the walls. In this way that portion of the bottom of the tub may be constructed if desired, with four flat surfaces tapering and sloping from three sides of the tub and from the other portion of it, into the drain which is preferably spaced at a distance from the faucet end of the tub. This ensures the proper drainage of the waste water and also provides flat surfaces on which the bather stands while using the shower. I do not limit myself to rectangular flat surfaces in this portion of the tub for the bottom thereof may be in the form of a flattened funnel, with the drain at the lowest portion of it, without departing from my invention, for the funnel-like surface can be made substantially flat.

The advantages of having the foot-end of the tub with flattened surfaces are not confined to the use thereof for shower baths since it also cuts down the chances of slipping and falling

when used for an immersion bath. The user is enabled to step into and out of the tub on the same flattened surfaces.

The other end of the bathtub is formed in any number of ways as is usual in the art of making bathtubs, the only necessity being to provide for the water to run onto the shower portion for the purpose of drainage. However, the curves of the bottom and the side portions of the head-end adjacent the bottom should merge gently into the flat surfaces of the bottom of the shower end which is adjacent thereto. It is best to do this so that there will be no unevenness in the bottom of the tub to inconvenience the person using the bathtub when it is desired to become immersed in the body of the retained water.

With this construction the user may fill the tub with water and sit or lie in it in the usual manner with his feet and legs extended into that portion of the tub which is designed as the shower bath end.

An important feature of my invention is in the removal of the curves of the tub especially those near the drain end. It is a well known fact that when the drain is near one wall that there are steep curves in the corners near it to ensure drainage of waste water when the tub is emptied. These curves are usually necessary because of the fact that there must be a long slope from the head end of the tub in order to push the great body of water toward the drain. These steeply inclined curvatures are especially dangerous to a person standing in the tub. The preferred way in which I remove these objectionable steep curves is by removing the drain from the proximity of the end wall, and placing it a substantial distance away. By this means I am enabled to construct a long and gradual slope from the foot-end wall of the tub to the drain in place of the usual steeply curved surfaces.

In the drawings:

Figure 1 is a plan view of the preferred form of my bathtub.

Fig. 2 is a longitudinal section taken on the line 2—2 of Fig. 1.

Fig. 3 is a view partially in cross-section taken on the line 3—3 of Fig. 2.

Fig. 4 is a cross-section taken on the line 4—4 of Fig. 1.

Fig. 5 is a plan view of a different form of my invention showing the greater portion of the bottom of the bathtub with flattened surfaces.

Fig. 6 is a longitudinal section taken on the line 6—6 of Fig. 5.

Figs. 1, 2, 3 and 4 show the preferred form of

my bathtub with foot end wall 1, head end wall 2 and side walls 3. These four walls are the enclosure for the tub which is divided into head end 4 and foot end 5. Head end 4 is formed in any conventional way usual in the bathtub art for that end of the tub. Foot end 5 is composed of flat sector-like surfaces 6, 7, 8 and 9 which are slightly inclined toward drain 10 so that any water on them will gravitate into the drain and so will be taken away by drain pipe 11, which is controlled by stopper 12. The usual faucets 13 are for filling the tub when an immersion bath is desired. Faucets 14 control the water for shower 15 which is shown above the foot end 5 of the tub.

The flat sector-like surfaces 6, 7, 8 and 9 are but slightly sloped so that there will be little likelihood of the user slipping when standing thereon. The slopes of these flat surfaces are just sufficient to allow water to drain properly into drain 10. The proper degree of slope is well-known in the shower bath art.

Sector-like flat surface 9 extends from drain 10 to head end 4 of the tub and meets the sloping curved surface thereof. This sloping curved surface is made to merge into flat surface 9 gradually in any well known manner, as at 16, so that there will be no unevenness or humps in the bottom of the tub to inconvenience the user.

It will easily be seen from the above description that water will pass from the sloping curved surface of head end 4, down onto flat surface 9 and so to drain 10. Water can not collect on the other three flat surfaces, 6, 7 and 8 of the foot end since they slope away from their respective side walls 3 and foot end wall 1, toward the drain. Because of this and the further fact that the flat surfaces meet the vertical walls of the tub with but small roundings-off, as at 19 (Fig. 3) water is completely drained from the tub when the stopper 12 is opened, without having steep or sharply inclined curved surfaces for the user to step or stand on.

In Fig. 1, the foot end 5 is greater in width than head end 4, for greater convenience in allowing more room for the user when taking a shower. This construction makes corners 17 which may conveniently be used for soap or brush holders or the like.

In Figs. 5 and 6 I have shown a modification of my improved bathtub which differs from my preferred form shown in Figs. 1, 2, 3 and 4 in that the foot end of the tub is the same width as the head end, and is longer in proportion thereto. Flat sector-like surfaces 6, 8 and 9 have been lengthened and head end 4 has been shortened.

The flat sector-like surfaces 6, 7, 8 and 9 may be replaced by a flattened conical or funnel-shaped surface which will effectively drain off the water and still provide a substantially flat surface for the bather to step upon when stepping into a tub full of water or to stand on when taking a shower.

From the above description it will be seen that the foot end 5 of the bathtub, which is made up of flat sector-like surfaces 6, 7, 8 and 9, is free from steep curvatures and so forms a substantially level flooring on which the user may conveniently and safely stand when taking a shower. It is also apparent that my bathtub, in appearance, is much like the ordinary tub and may be used as conveniently for an immersion bath.

I claim:

1. A bathroom device comprising a receptacle with a portion thereof defining a shower bath

base formed of a plurality of sector-like surfaces which incline to a drain point, said shower bath base having an extension therefrom and cooperating therewith to define a bathtub, said extension sloping toward said shower bath base for complete drainage into said shower bath base.

2. A bathroom device comprising a receptacle with a portion thereof defining a shower bath base formed of a plurality of sector-like surfaces which incline to a drain point which is spaced from the sides of said shower-bath base, said shower bath base having an extension therefrom and cooperating therewith to define a bathtub, said extension sloping toward said shower bath base for complete drainage into said shower bath base.

3. A bathroom device comprising a receptacle with a portion thereof defining a shower bath base formed of a flattened funnel-shaped surface inclining to a drain point, said shower bath base having an extension therefrom and cooperating therewith to define a bathtub, said extension sloping toward said shower bath base for complete drainage into said shower bath base.

4. A bathroom device comprising a receptacle with a portion thereof defining a shower bath base formed of flattened funnel shaped surface inclining to a drain point, which is spaced from the sides of said shower bath base, said shower bath base having an extension therefrom and cooperating therewith to define a bathtub, said extension sloping toward said shower bath base for complete drainage into said shower bath base.

5. In a bathtub including in combination, a head end portion provided with a curved bottom portion, a foot end portion to which said curved bottom portion slopes for complete drainage into said foot end portion, said foot end portion having a bottom portion formed of a plurality of sector-like surfaces which incline to a drain point which is spaced from the sides of the foot end portion, said foot end portion providing a shower bath base.

6. In a bathtub including in combination, a head end portion provided with a curved bottom portion, a foot end portion to which said curved bottom portion slopes for complete drainage into said foot end portion, said foot end portion having a bottom portion formed of a plurality of sector-like surfaces which incline to a drain point in said foot end portion, which said foot end portion provides a shower bath base.

7. In a bathtub including in combination, a head end portion provided with a curved bottom portion, a foot end portion to which said curved bottom portion slopes for complete drainage into said foot end portion, said foot end portion having a bottom portion formed of a flattened funnel-shaped surface inclining to a drain point, said foot end portion providing a shower bath base.

8. In a bathtub including in combination, a head end portion provided with a curved bottom portion, a foot end portion to which said curved bottom portion slopes for complete drainage into said foot end portion, said foot end portion having a bottom portion formed of a flattened funnel-shaped surface inclining to a drain point which is spaced from the sides of said foot end portion, said foot end portion providing a shower bath base.

9. In a bathtub including in combination a head end portion provided with a curved bottom portion, a foot end portion of greater width than and to which said curved bottom portion slopes for complete drainage into said foot end portion,

said foot end portion having a bottom portion formed of a plurality of sector-like surfaces which incline to a drain point which is spaced from the sides of said foot end portion, said foot end portion providing a shower bath base.

5 10. In a bathtub including in combination, a head end portion provided with a curved bottom portion, a foot end portion of greater width

than and to which said curved bottom portion slopes for complete drainage into said foot end portion, said foot end portion having a bottom portion formed of a flattened funnel-shaped surface inclining to a drain point which is spaced from the sides of said foot end portion, said foot end portion providing a shower bath base.

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