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SEPARABLE BATHTUB APRON

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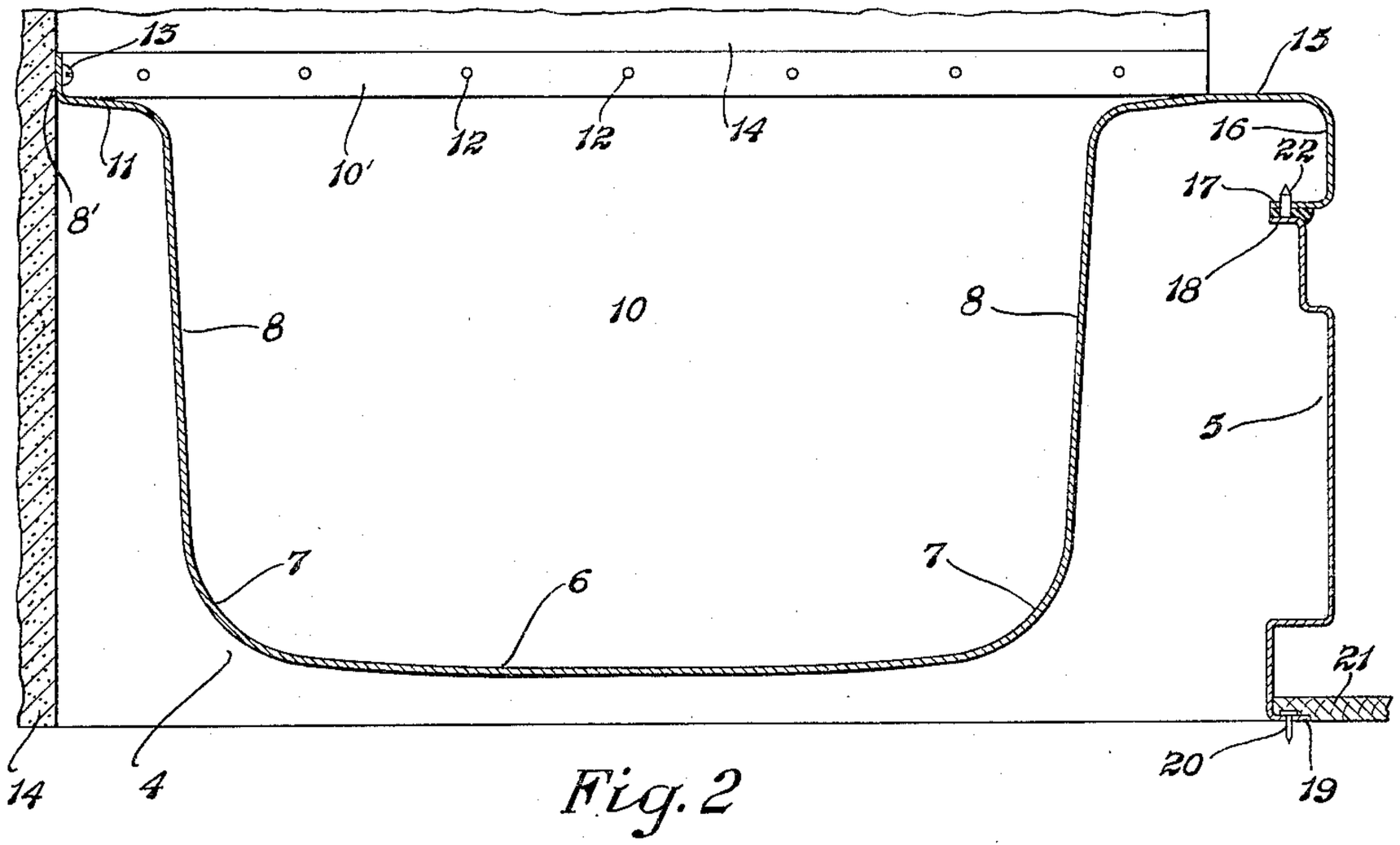

Fig. 2

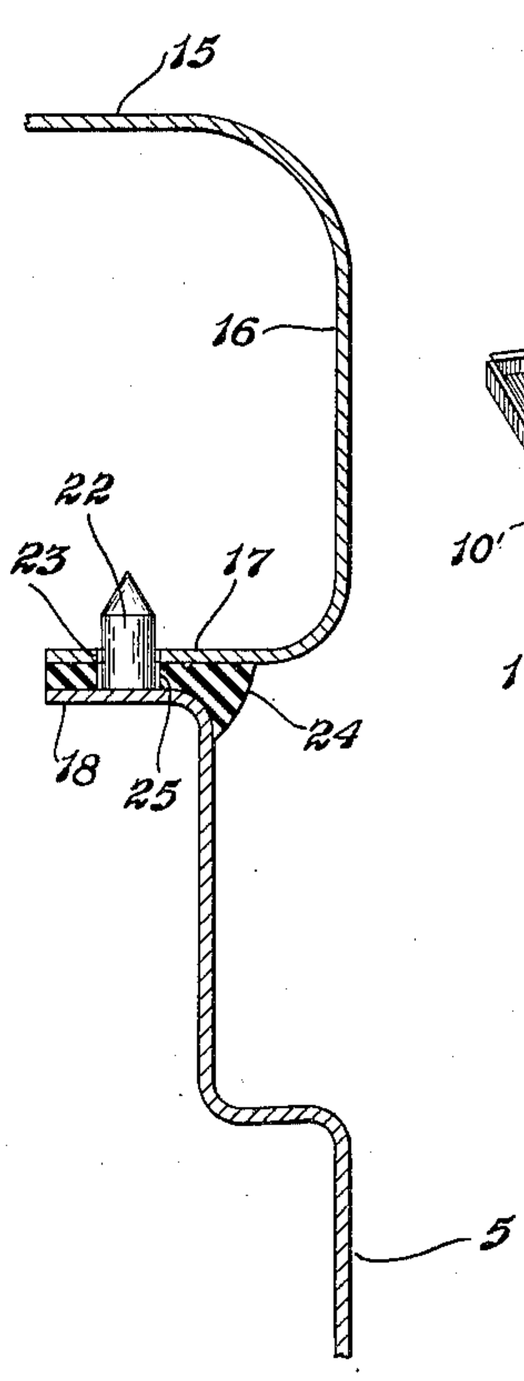

Fig. 3

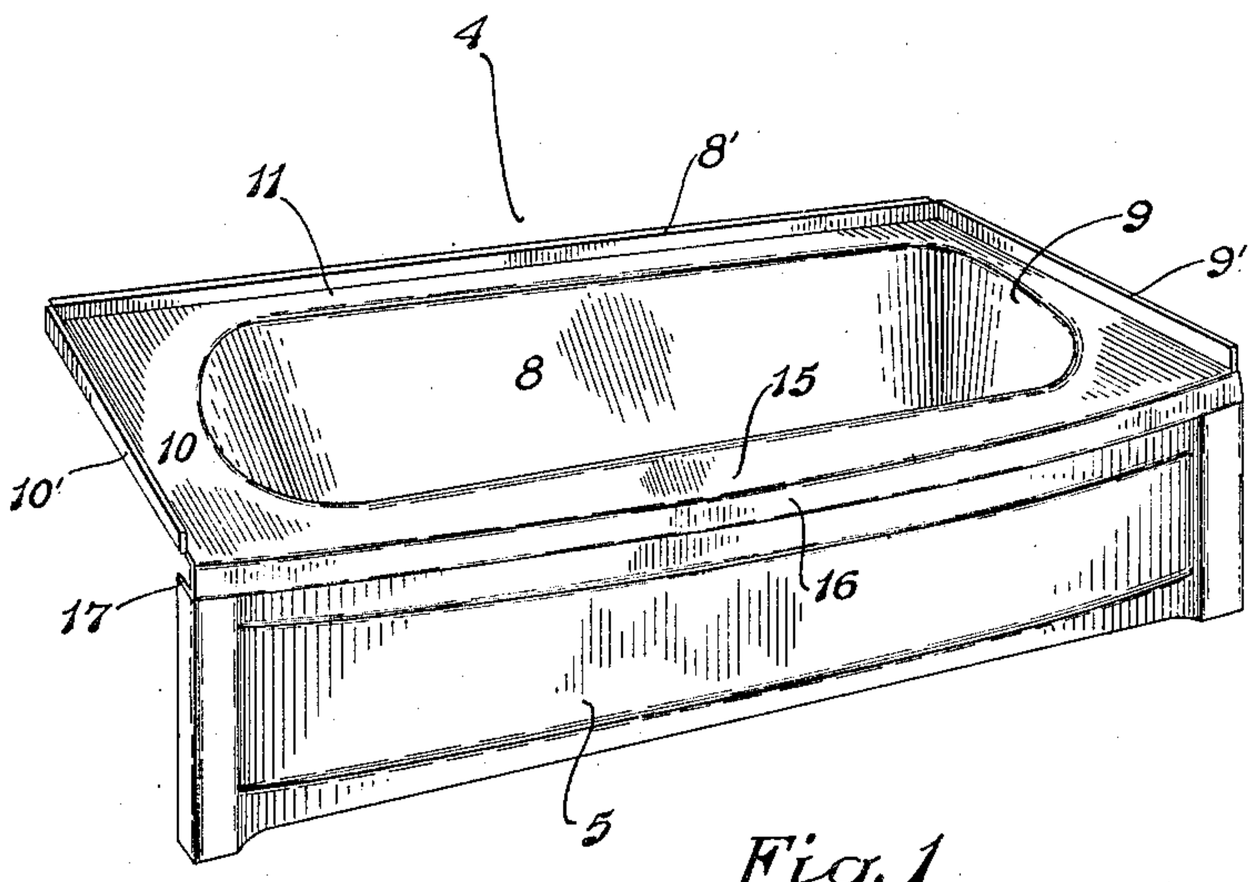

Fig. 1

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SEPARABLE BATHTUB APRON

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1 Claim. (Cl. 4—173

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The invention relates generally to sheet metal bathtubs and more particularly to sheet metal bathtubs with aprons for closing the space between the upper rim of the tub and the floor on the exposed side or sides of the tub.

Certain prior constructions have provided a tub with the apron integrally welded thereto before enameling, but it is difficult and expensive to obtain a satisfactory enameled surface over the welded joint. Moreover, in the case of enameled integral sheet metal tubs with aprons, complicated and expensive shipping crates or boxes are required for preventing distortion of the tub and apron during shipment, and consequent cracking, crazing or other damage to the enamel coating.

Other prior constructions have provided a tub with a separate apron adapted to be attached when the tub is installed, but such constructions require fastening means such as loose bolts or screws, which are apt to become lost or misplaced, and which are unsightly when attached. Furthermore, the attaching operation involves the likelihood of chipping or otherwise damaging the enamel adjacent to the fastening means.

Accordingly, it is an object of the present invention to provide a novel and improved separable sheet metal bath tub and apron construction which overcomes the disadvantages of prior constructions.

Another object is to provide a novel sheet metal bathtub and apron construction which is adapted for being separately packed and shipped with a minimum of trouble and expense.

A further object is to provide a novel separable sheet metal bathtub and apron construction which is adapted to be packed for shipping in such manner as to avoid distortion during shipment.

Another object is to provide a novel and improved separable sheet metal bathtub and apron which are quickly and easily joined together on the job without chipping or otherwise damaging the enamel.

A further object is to provide a novel separable bathtub and apron construction which is quickly joined together on the job without requiring any loose fastening parts such as bolts or screws and the like.

Finally, it is an object of the present invention to provide a novel and improved separable sheet metal bathtub and apron construction which is simple and inexpensive to manufacture, ship and install.

These and other objects are accomplished by the parts, constructions, arrangements and combinations, which comprise the present invention, the nature of which is set forth in the following general statement, and a preferred embodiment of which is set forth in the following description and illustrated in the accompanying drawing,

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and which is particularly and distinctly pointed out and set forth in the appended claims forming part hereof.

In general terms, the improved separable bathtub and apron construction preferably includes a sheet metal bathtub having an inturned flange on the under part of the upper rim on the exposed side or sides of the tub, said flange being provided with a series of spaced holes, and a sheet metal apron adapted to extend between the floor and the tub rim on its exposed side and having an inturned flange for matching the tub rim inturned flange, said apron flange having a series of upwardly projecting studs secured thereto adapted to enter the holes in the rim flange, and a rubber gasket for fitting between the inturned flanges of the tub rim and apron and having a series of holes for registering with said studs.

Referring to the drawing forming part hereof, in which a preferred embodiment of the invention is shown by way of example;

Figure 1 is a detached perspective view of a separable sheet metal tub and apron embodying the invention;

Fig. 2 is an enlarged transverse sectional view of the tub and apron supported on the floor and against the wall of a room; and

Fig. 3 is a further enlarged fragmentary cross sectional view showing the joint between the rim of the tub and the top of the apron.

Similar numerals refer to similar parts throughout the several views of the drawing.

The sheet metal tub indicated generally at **4** is shown as a tub having one open or exposed side with an apron **5** covering the same, and the tub shown is therefore adapted for fitting in a recess in a wall. However, it will be understood that within the scope of the invention the tub **4** may have two or three exposed sides and an apron for each of the exposed sides.

The tub **4** is preferably formed from a single piece of sheet metal, and has a deep drawn tub portion including a substantially horizontal bottom wall **6** sloping slightly toward the drain outlet end of the tub, and merging by rounded corners **7** into the side walls **8** and end walls **9** and **10**. The front end wall **9** merges by rounded corners into the side walls **8** and the end wall **10** is rounded in the usual manner. The side and end walls terminate at their upper ends in an outturned flange **11** which extends continuously around the entire periphery of the tub and forms a substantially horizontal ledge or outer rim portion at the top of the tub.

At the sides of the tub which fit against walls, in this case the three walls of a recess, upturned securing flanges **9'** and **10'** are provided at the ends of the tub and an upturned securing flange **8'** is provided at the inner side thereof. These flanges may be provided as shown with spaced

holes 12 for attaching the tub by means of screws 13 and the like to the walls 14 of the recess into which the tub fits.

If desired, a suitable frame or support member may be provided for supporting the tub proper on the floor of the room, but the same forms no part of the present invention and is not shown or described herein.

At the open side of the tub 4, the rim flange 11 is provided with a horizontal portion 15 forming an extension of the rim 11, and the portion 15 has a downwardly turned rim 16 terminating in an inturned flange 17. The apron 5, which is adapted for closing the space between the floor and the rim of the tub on its exposed side, has an inturned flange 18 at its upper marginal edge or end for matching the inturned flange 17. As shown in Fig. 3, the upper marginal edge of the apron is spaced inwardly of the plane of the downturned tub rim wall 16 to provide a recess at the upper end of the apron beneath the tub rim. At its lower edge the apron 5 is preferably provided with an outturned flange 19 for resting on the sub-floor and being secured thereto as by nails or the like 20. The finished flooring indicated at 21 may overlap the flange 19 and cover the attaching means, as indicated in Fig. 2.

As shown, the inturned flange 18 of the apron is preferably provided with studs 22 projecting vertically upward therefrom, and these studs are preferably projection welded to the top of the flange 18 at desired intervals along the same. The inturned tub rim flange 17 is provided with a series of holes 23 which register with the studs 22 when the apron is properly positioned with respect to the tub, so that the studs 22 will enter the holes 23. Preferably, a strip of substantially soft yielding material, such as a rubber gasket indicated at 24, is interposed between the flanges 17 to prevent any chipping or crazing or other damage to the enameled surfaces of the flanges and portions adjacent to the joint, and also to preclude water entering the joint. As shown, the gasket 24 preferably has holes 25 adapted for registering with the holes 23 of the tub rim flange 17.

When the improved separable tub and apron construction is manufactured, the tub 4 and the apron 5 can be enameled separately by the manufacturer and then packed for shipment in separate crates or compartments to insure them against distortion during shipment, which would cause damage to the enamel coating. When the separable tub and apron are installed, the tub may be first secured in position by attaching the securing flanges 8', 9' and 10' to the walls, and the apron can then be placed in position by entering the studs 22 into the holes 23 of the tub rim flange 17, the gasket 24 having first been placed in position with its holes 25 over the studs 22.

By means of this novel joint construction, the tub and apron are fitted together without any chipping or crazing of the enamel surfaces at or adjacent to the joint, because the soft rubber gasket 24 protects the joint surfaces. Moreover, there are no loose bolts or screws or other fastening means to become lost or misplaced or to require the use of tools in the fastening operation which would cause damage to the enamel at or around the joint. After the improved joint has been made, it is inconspicuous and results in presenting a pleasing appearance, because the only part of the joint which is visible is the front edge of the gasket 24 which is recessed under the rim portion 16 of the tub.

Accordingly, the novel and improved separable sheet metal bathtub construction is simple and inexpensibe to manufacture and ship, is quickly and easily installed on the job without damage to the enameled surfaces of either the tub or apron, and provides a water-tight joint.

In the foregoing description, certain terms have been used for brevity, clearness and understanding, but no unnecessary limitations are to be implied therefrom beyond the requirements of the prior art, because such words are used for descriptive purposes herein and are intended to be broadly construed.

Moreover, the embodiment of the improved construction illustrated and described herein is by way of example, and the scope of the present invention is not limited to the exact details of construction.

Having now described the invention, the construction, the operation and use of a preferred embodiment thereof, and the advantageous new and useful results obtained thereby; the new and useful constructions, and reasonable mechanical equivalents thereof obvious to those skilled in the art, are set forth in the appended claim.

I claim:

In an enamel-coated sheet metal bathtub construction having a tub supported at least at one side by an apron, the combination of a one-piece, enamel-coated, sheet metal tub member having bottom, side and end walls forming a tub receptacle terminating integrally at the top of said side and end walls in an outturned flange providing a ledge extending continuously around the top of the tub receptacle, said outturned flange being formed at least on one side of the tub with a downturned rim terminating in an inturned flange; and an enamel-coated, sheet metal apron member supporting the tub member beneath said inturned flange having an upper marginal edge terminating in an inturned flange; gasket means; said inturned tub flange resting upon said inturned apron flange with said gasket means interposed therebetween; said upper apron marginal edge being spaced inwardly of the plane of the downturned tub rim to provide a recess at the upper end of the apron beneath the tub rim; and there being a series of longitudinally spaced holes formed in one of said inturned flanges, and a series of longitudinally spaced vertically projecting studs carried by the other of said inturned flanges extending into said holes; whereby the apron may be assembled with the tub after the tub is installed to support the tub beneath and behind the tub rim with a water-tight joint free of damage to the enameled surfaces of the tub and apron members.

HARRY M. HECKATHORN.

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