March 15, 1949. F. J. LASSA 2,464,645

BATHTUB

Filed Dec. 18, 1945 2 Sheets-Sheet 1

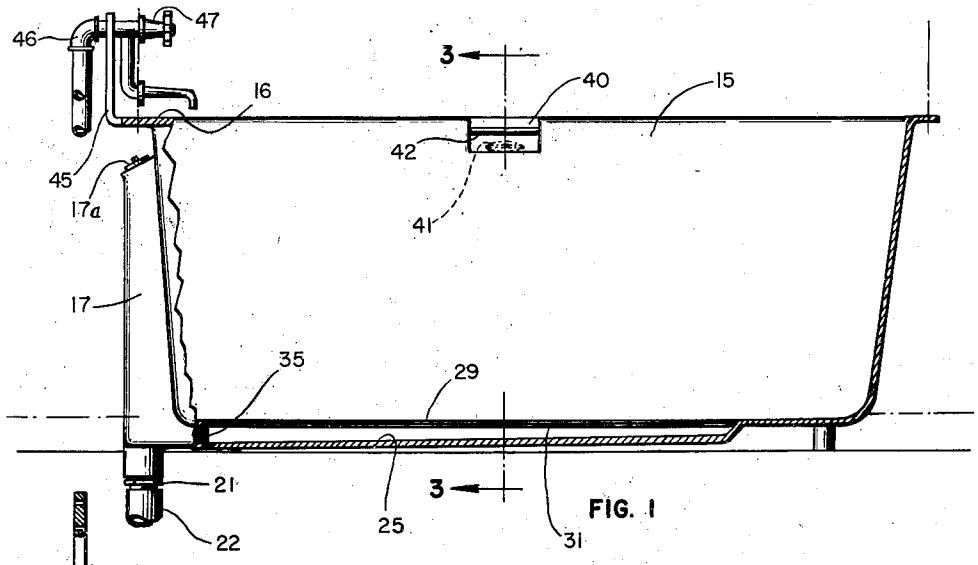


FIG. 1

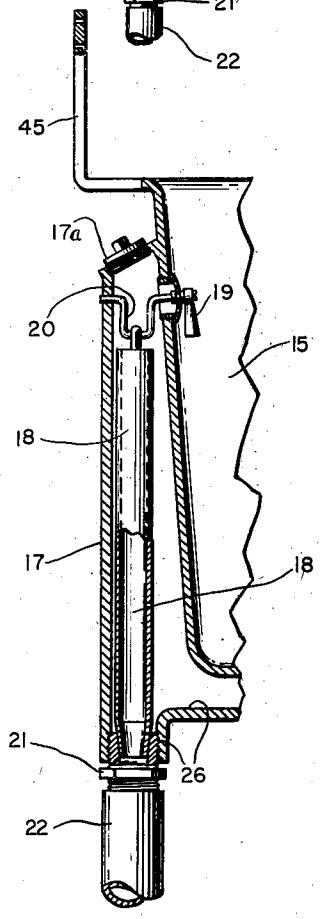


FIG. 2

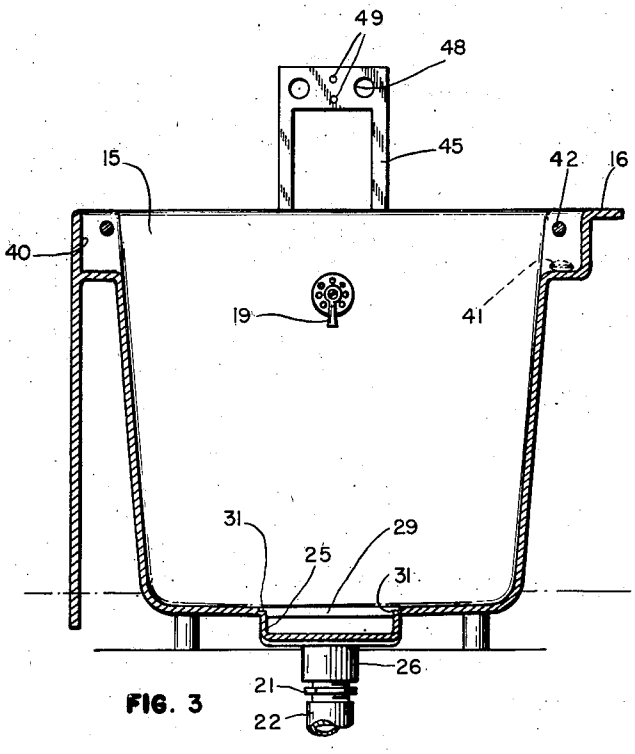


FIG. 3

INVENTOR:
FRANK J. LASSA
BY Miles B. Stevens & Co.
ATTORNEYS.

March 15, 1949. F. J. LASSA 2,464,645

BATHTUB

Filed Dec. 18, 1945 2 Sheets-Sheet 2

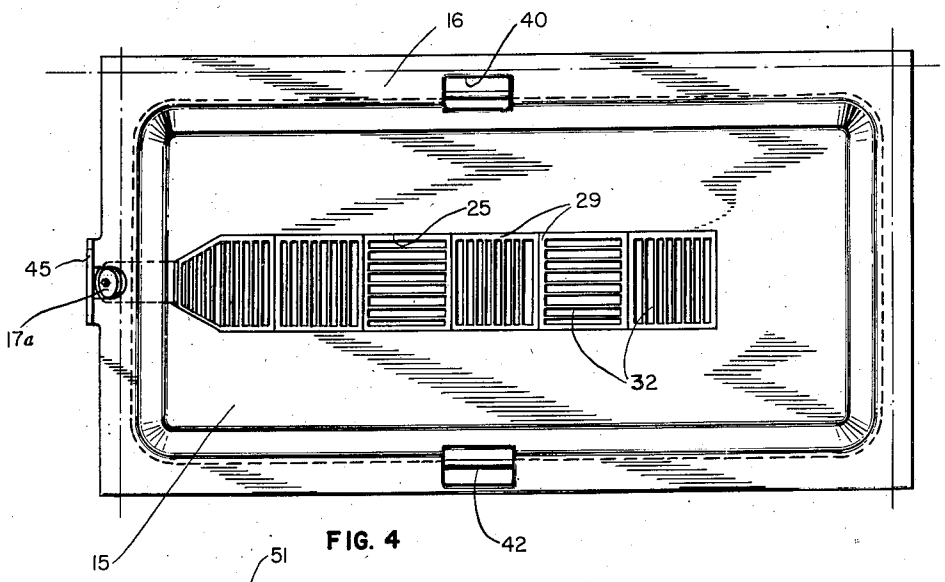


FIG. 4

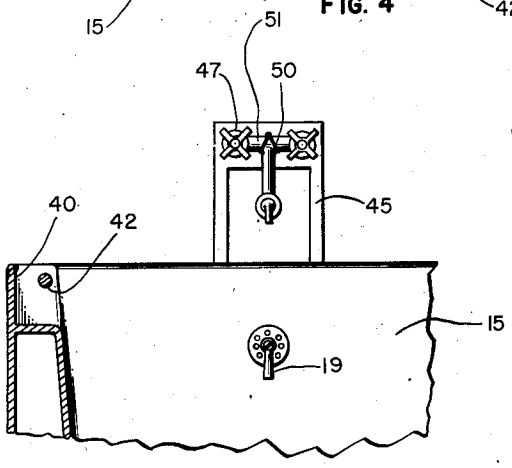


FIG. 5

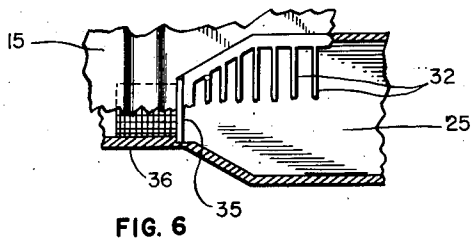


FIG. 6

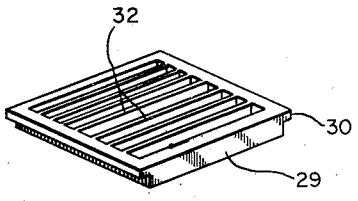


FIG. 7

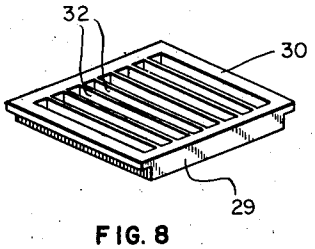


FIG. 8

INVENTOR:
FRANK J. LASSA
BY Miles B. Stoeckel & Co.
ATTORNEYS.

Patented Mar. 15, 1949 2,464,645

UNITED STATES PATENT OFFICE

2,464,645

BATHTUB

Frank J. Lassa, Chicago, Ill.

Application December 18, 1945, Serial No. 635,621

1 Claim. (Cl. 4—173)

1

My invention relates to bath tubs, and more particularly to features of utility therein. One such features is the waste overflow, which usually involves brass fittings, rubber washers and other parts which get out of order from use or corrosion and have to be repaired or replaced. Another feature deals with the drain opening in the bottom of the bath tub, which frequently becomes stopped up from hair, lint and other foreign matter. Also, bath tubs of current design are slightly sloping in a forward direction, making it dangerous for the occupant in case of a slipping or sliding movement. Finally, efforts to rise from or leave the bath tub, especially in the built-in type, may also result in a slip or fall.

In view of the above conditions, the present invention deals with certain improvements which will render the bath tub installation more durable and permanent, and its use safer. Thus, one object of the present invention is to provide a built-in or integral waste overflow, the same containing simple means for draining the bath tub.

A further object of the invention is to design the bath tub with a level floor, but provide a sloping draining conduit under the same faced with a removable grill.

A still further object of the invention is to design a pair of handy pockets integral with the bath tub to receive the soap, such pockets including a pair of handles to be grasped by the occupant when rising from or leaving the bath tub.

Another object of the invention is to provide an integral bracket for the faucet assembly of the bath tub serving to keep such assembly in place independently of the wall construction of the bath room.

An additional object of the invention is to provide a strainer between the bottom drain of the bath tub and the waste pipe in order to check the pasage of hair, lint and other foreign matter into the same.

With the above objects in view and any others which may suggest themselves from the description to follow, a better understanding of the invention may be had by reference to the accompanying drawings, in which—

Fig. 1 is a longitudinal section of the improved bath tub, partly in elevation;

Fig. 2 is an enlarged section of the overflow and waste portions of the bath tub;

Fig. 3 is a section on the line 3—3 of Fig. 1;

Fig. 4 is a top plan view;

2

Fig. 5 is a showing of a portion of Fig. 3, with the faucet assembly of the bath tub included;

Fig. 6 is a fragmental view of the left-hand central portion of Fig. 4, showing the strainer referred to; and

Figs. 7 and 8 are perspective views of grill sections employed in the floor formation of the bath tub.

In accordance with the foregoing, specific reference to the drawings indicates a built-in type of bath tub at 15, although the instant improvements are also applicable to the older or roll-rim type. The flat rim of the bath tub 15 is indicated at 16; and dot-and-dash lines in Figs. 1 and 4 (other than the section line 3—3) indicate the positions of the wall and floor surfaces after the bath tub installation has been completed.

Fig. 2 shows that the waste overflow in the novel bath tub is not a separate brass pipe, but a vertical conduit 17 cast in a single piece with the bath tub. The material of the bath tub is usually iron, although it may be porcelain or plastic if practicable. As noted, the conduit has a screw cap closure 17*a* at the top; and it contains the usual valve plunger 18 controlled by a handle 19 and a crank mechanism 20, the valve fitting in a bottom bushing 21 which connects with the waste pipe 22.

While the standard bath tub is made with a bottom sloping in forward direction, the bottom in the present case is made level. However, a draining conduit 25 is sunken in a longitudinal direction along the middle of the bath tub, such conduit sloping toward the front of the bath tub. Here it makes a downward connection 26 jointly with the overflow conduit 17 to connect with the waste pipe 22. The opening into the draining conduit 25 is fitted at floor level with a series of grill plates 29. These have side flanges 30 resting in rabbets 31 in the top edges of the conduit walls, and are flush with the floor of the bath tub when laid in. Figs. 7 and 8 show that the plates 29 are made with grilling 32 either in the longitudinal or the transverse direction to afford a safe footing when the occupant attempts to rise from the bath tub. Needless to say, the grilling may be of different designs if that is desirable. However, the plates 29 are easily removable in case the conduit 25 is to be inspected or cleaned.

Before connecting with the outlet 26, the conduit 25 receives a strainer 35 which is in the form of a cup opening rearwardly and designed to trap solid matter on its way into the drain pipe. Fig. 6 shows the form of the strainer, indicating that it

may be drawn in a rearward direction to remove it from the neck 36 of the conduit 25.

Fig. 3 shows more clearly that the side walls of the bath tub are set back at the top with opposed pockets 40 which are suitable to receive the soap as indicated at 41. Also, the side walls of these pockets receive between them integral bars 42 which serve as convenient handles, either or both of which may be gripped by the occupant when rising from or leaving the bath tub to avoid a slip or fall.

The rim 16 of the bath tub is extended with a vertical bracket 45 at the front. This bracket is behind the wall surface line and serves as a support for the pipes 46 leading to the faucets 47. Since the pipes and faucets are apt to get out of line when the wall finishing is done, the bracket 45 is provided as a backing for the faucets and made with openings 48 for the pipes 46 and vertically spaced apertures 49 in the center. These serve for a tie wire 50 to secure the spout header 51 to the bracket and keep the assembly rigid.

It will be evident from the above description that the novel bath tub includes several features of novelty and efficiency. Thus, the integral overflow installation is exceedingly simple and does not include special fixtures and fittings which are apt to corrode or get loose. Outside of the valve 18, only the standard bushing 21 is required to connect the overflow conduit to the waste pipe 22. Further, the provision of the sunken conduit 25 enables the bath tub floor to be made level while permitting the easy drainage thereof, the latter being controlled by the strainer 36 to keep solid matter from clogging the entrance to the waste pipe. Further, the provision of a grilled floor surface along the central zone of the bath tub renders the latter safe against slipping or sliding. Further, the pockets 40 place the soap in a handy position at either side of the tub, while providing the handles 42 for a firm grip when the occupant has to rise from or leave the bath tub, this feature being of particular importance in the case of the built-in bath tubs, where a good grip or hold of the bath tub walls is impossible. Further, the installation of the bracket 45 to render the faucet assembly rigid is an important feature in the case of built-in bath tubs, which require the finishing of the wall to be done after the bath tub has been installed. Finally, the several features entering into the invention do not complicate the bath tub or detract from its appearance, but rather improve the design thereof.

While I have described the invention along specific lines, various minor changes or refinements may be made therein without departing from its principle, and I desire to consider such changes and refinements as coming within the scope and spirit of the appended claim.

I claim:

A bath tub having a body, a vertical overflow conduit integral with said body and extended from one end wall thereof, the floor of the bath tub being level and formed with a longitudinal opening along a medial course, a draining conduit under the bath tub integral with said body and in communication with said opening, one end of such draining conduit joining the bottom of said overflow conduit, and a surface grill in the opening, and a removable strainer at the point where the draining conduit joins the overflow conduit.

FRANK J. LASSA.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
714,677	Combs	Dec. 2, 1902
1,426,046	Cohen	Aug. 15, 1922
1,856,318	Clarke	May 3, 1932
2,094,840	Groeniger et al.	Oct. 5, 1937