May 28, 1935. E. F. NIEDECKEN 2,002,789

SHOWER BATH CABINET

Filed Feb. 13, 1933 2 Sheets-Sheet 1

Fig. 1.

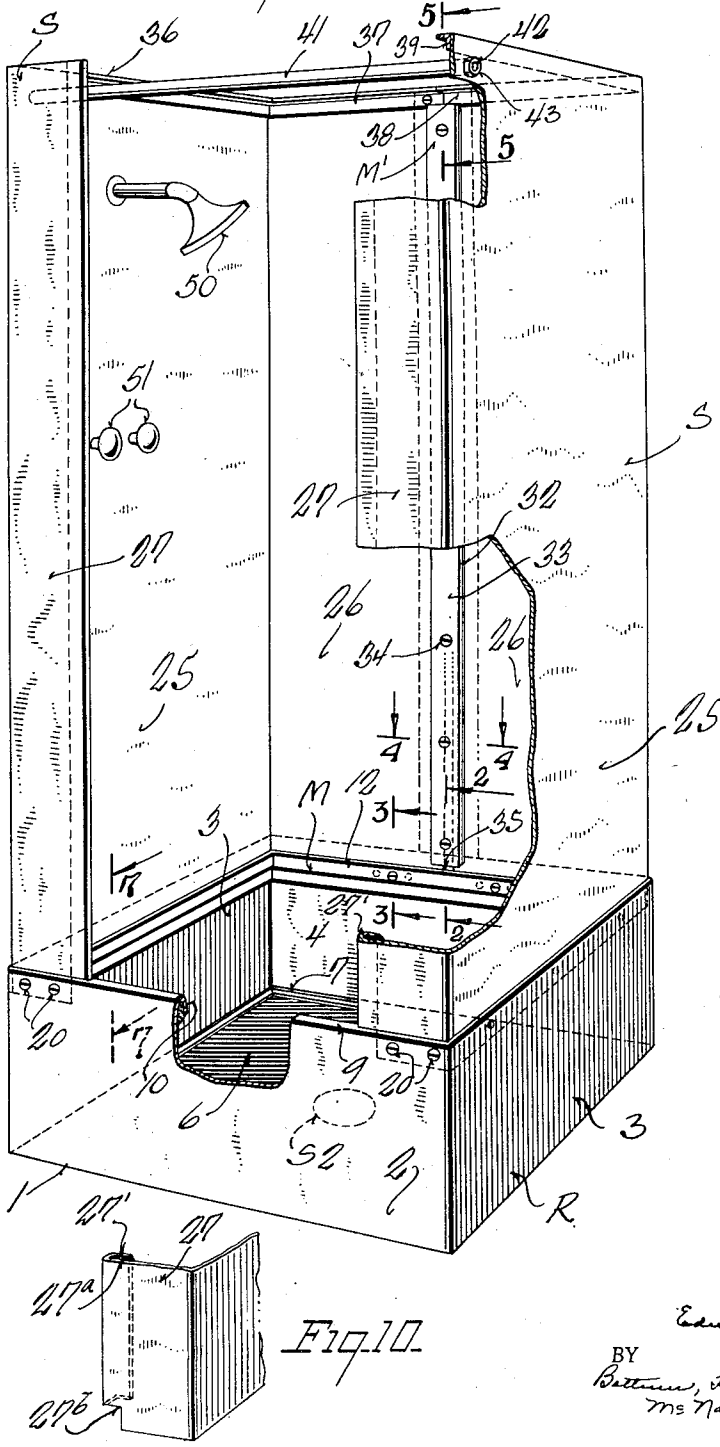



Fig. 10.




Fig. 2.

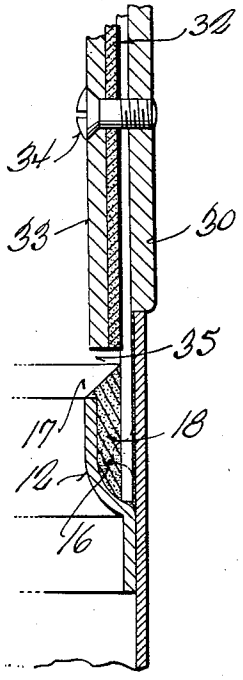
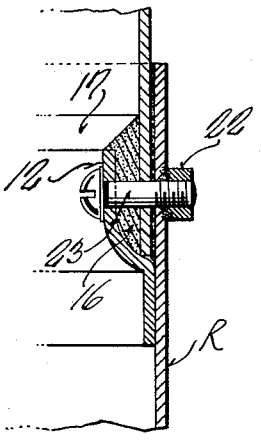



Fig. 3.




INVENTOR.

Edward F. Niedecken

BY

Bottum, Hudnall, Lesher, McNamara & Michael

ATTORNEYS

May 28, 1935. E. F. NIEDECKEN 2,002,789

SHOWER BATH CABINET

Filed Feb. 13, 1933 2 Sheets-Sheet 2

Fig. 7.

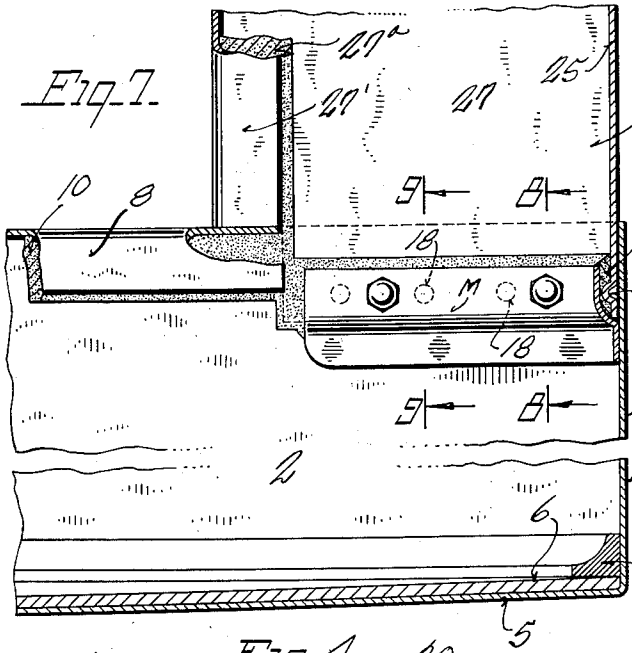



Fig. 8.

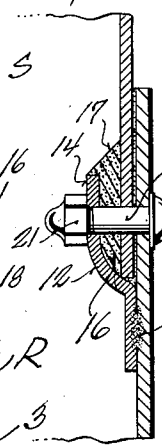



Fig. 9.

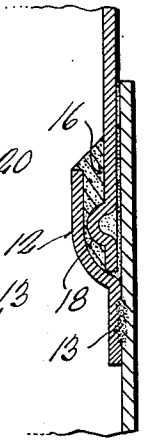



Fig. 4.

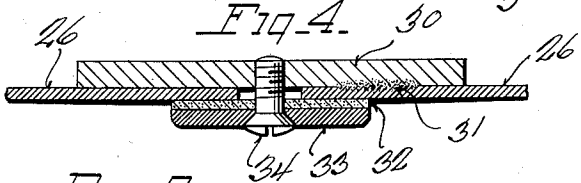



Fig. 11.

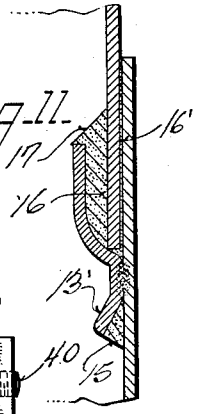



Fig. 6.

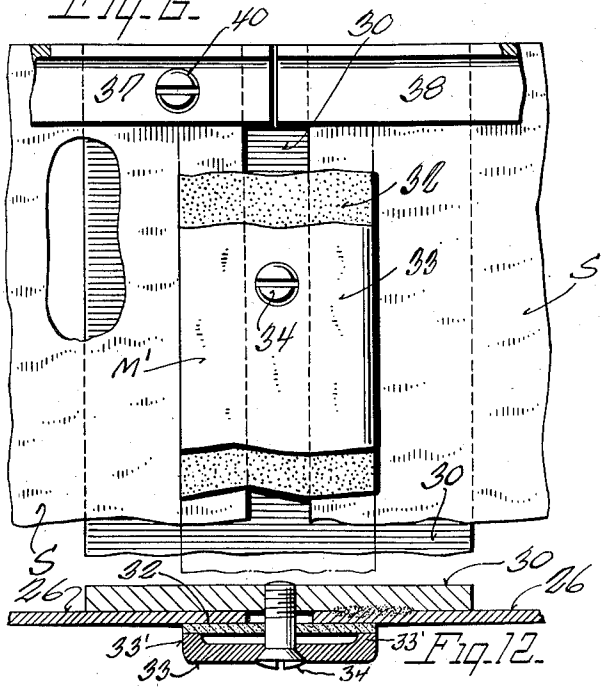
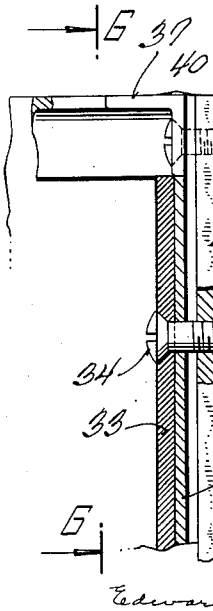



Fig. 12.

Fig. 5.




INVENTOR.

Edward F. Niedecken

BY Bottum, Hudnall, Lesher, McNamara & Michael

ATTORNEYS

Patented May 28, 1935 2,002,789

# UNITED STATES PATENT OFFICE

2,002,789

## SHOWER BATH CABINET

Edward F. Niedecken, Milwaukee, Wis.

Application February 13, 1933, Serial No. 656,513

3 Claims. (Cl. 4—146)

This invention relates to shower bath cabinets and more particularly to an all metal knock-down shower bath cabinet.

One of the objects of the present invention is to provide a knock-down shower bath cabinet of this character which is simple in its construction, of light weight and yet durable and leak-proof.

Another object is to provide a knock-down shower stall having these advantages and capable of being compactly crated and shipped and yet susceptible of ready and easy assembly at the place of installation.

Other objects and advantages reside in certain novel features of the construction, arrangement and combination of parts which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawings, forming a part of this specification, and in which:

Figure 1 is a perspective view showing a shower bath cabinet embodying the present invention, portions being broken away and shown in section for the sake of illustration;

Figures 2 and 3 are fragmentary views in vertical section taken on lines 2—2 and 3—3, respectively, of Figure 1 and looking in the direction of the arrows, parts being shown in elevation for the sake of illustration;

Figure 4 is a fragmentary view in horizontal cross section taken on line 4—4 of Figure 1 and looking in the direction of the arrows;

Figure 5 is a fragmentary view in vertical section taken on line 5—5 of Figure 1 and looking in the direction of the arrows, parts being broken away and parts being shown in elevation for the sake of illustration;

Figure 6 is a fragmentary view taken on line 6—6 of Figure 5 and looking in the direction of the arrows, parts being broken away for the sake of illustration;

Figure 7 is a fragmentary view taken on line 7—7 of Figure 1 and showing portions of the stall in elevation and portions in vertical section;

Figures 8 and 9 are fragmentary sectional views taken on lines 8—8 and 9—9, respectively, of Figure 7, parts in Figure 8 being shown in elevation for the sake of illustration;

Figure 10 is a fragmentary perspective view showing the construction at the lower end of each front wall member;

Figure 11 is a view similar to Figure 9 but showing a slight modification of the trough structure, and

Figure 12 is a view similar to Figure 4 showing another form of clamping strip.

Referring to the drawings, it will be seen that the knock-down shower bath cabinet embodying the present invention comprises generally a basin or receptor designated generally at R, a pair of stall forming sections, designated at S, means designated generally at M for interconnecting the stall forming sections and the receptor so as to support the stall forming sections in position on the receptor and afford a leak-proof joint therebetween, and means designated generally at M' for connecting the adjacent portions of the stall forming sections and sealing the joint therebetween.

The receptor R is constructed of sheet metal and has a rectangular body portion designated generally at 1 and made up of front wall 2, side walls 3 and a back wall 4. To the lower edges of these walls 2, 3 and 4 the margin of a metallic bottom 5 is welded or otherwise suitably secured. The upper surface of this bottom 5 may have a suitable covering 6 and the corners between the covering and the vertical walls of the receptor may be provided with a filling or molding 7. The central portion of the front wall 2 is provided with a bead or flange 8 to provide a rounded upper edge 9. A filling 10 of plastic material, such as caulking cement, may be used to fill up the space between the flange 8 and the front wall of the receptor.

The means provided for interconnecting the lower ends of the stall forming sections and the receptor and affording a leak-proof joint therebetween comprises a trough designated generally at 12. The trough 12 consists of a strip of metal extending around the side and back walls of the receptor and around portions of the front wall thereof, the lower portion of the strip being welded as at 13 to the vertical walls of the receptor and the upper portion being extended inwardly and vertically as at 14 to provide an upwardly opening trough, the entrance to which is located below the upper end of the receptor. The welding 13 may be spot welding and in some instances the extreme lower edge 13' of the strip may be bent outwardly and a filling of caulking cement designated at 15 may be provided in the space between such outwardly bent edge and the adjacent portion of the receptor to preclude ingress of moisture into any interstices that may occur between the lower portion of the strip 12 and the adjacent walls of the receptor. In either structure, the trough is filled with a plastic sealing compound which may be caulking cement and which is designated at 16. In assembling the structure, the lower ends of the stall forming sections are forced down into the plastic sealing compound which fills the trough until the lower edges of the stall forming sections engage the bottom of the trough. This, of course, displaces some of the plastic sealing compound, but after the assembly the filling is troweled off to provide a finished and inwardly and downwardly inclining surface 17. Some slight portion of the compound 16 may be forced up between the outer

surface of the lower ends of the stall forming sections and the receptor. To insure close proximity of the outer surfaces of the lower ends of the stall forming sections to the adjacent surfaces of the receptor, camming bosses 18 may be pressed inwardly from the sections and are designed to coact with the inner wall of the trough to effect this proximate relation or actual contact. These bosses 18 are provided at intervals around the lower end of the stall forming sections. Fastening devices are provided for securing the stall forming sections in position in the trough. At the front of the structure these fastening devices consist of bolts 20 passing through openings provided therefor in the receptor, stall forming sections and trough, the heads of the bolts engaging the receptor or washers interposed between the heads and the receptor. Nuts 21 are threaded on the inner ends of the bolts and engage the trough. At the rear, nuts designated at 22 are welded to the back wall of the receptor and bolts 23 are extended through openings in the trough, stall forming sections and receptor and are threaded into these nuts 22.

The stall forming sections S are of similar construction, each being made up of a single piece of sheet metal which is formed into a side wall 25, a back wall section 26 and a front wall member 27. The edges of the front wall forming members 27 are bent back or flanged as at 27' and the spaces under the flanges 27' are filled with caulking cement $27^a$ or other suitable filling compound. Flanges 27' terminate just above cut-outs $27^b$ provided at the lower corners of the front wall members 27 (see Figure 10).

The means which interconnects the back wall sections 26 and affords a seal therebetween comprises an outer connecting plate 30 welded as at 31 to one of the back wall sections 26 and overlapping the other in the assembly as illustrated in Figure 4. A packing strip 32, which may be of sheet rubber overlaps the adjacent marginal edges of the back wall sections 26, and overlying this packing strip 32 is a clamping strip 33. Screws 34 engage the clamping strip 33 and pass through openings provided therein and in the packing strip and through the space between the edges of the sections 26. The shanks of these screws 34 are threaded into the connecting plate 30 and when the screws are tightened up the clamping strip 33 places a sealing compression on the packing strip 32 and also holds these parts in position. The lower ends of the strips 32 and 33 terminate just above the inclined surface 17 of the filling 16 of the trough, thus affording an opening 35 through which any liquid that may seep past the packing strip may drain back into the cabinet. The upper edges of the stall forming sections are stiffened and reinforced by angle irons 36, 37, 38 and 39, which are welded to the stall forming sections. The angle iron 37 and the stall forming section, to which it is welded, are secured to the connecting plate 30 by means of a screw 40 engaged with the angle iron and threadedly connected with the plate 30. The side walls 25 are connected and held in spaced relation at their upper ends by means of a cross bar or member 41, having shoulders at its ends abutting the side walls and having reduced extensions 42 extending through openings in the side walls and engaged with nuts 43.

If desired, the clamping strip may be constructed as illustrated in Figure 12. When so constructed it is of channel form in cross section and the flanges 33' of the channel are adapted to have effective compressing and sealing engagement with the packing strip.

The cabinet may be provided with the usual shower head 50 and control devices 51. The bottom of the receptor is also equipped with a suitable drain connection indicated diagrammatically at 52 in Figure 1.

The shower bath cabinet constructed in the manner described may be readily and easily fabricated, compactly crated and shipped and yet quickly and easily assembled into a strong, rigid and leak-proof structure, one of pleasing appearance and of light weight and yet simple and durable in construction.

While I have shown and described constructions in which the invention may be embodied, it is to be understood that these constructions have been selected merely for the purposes of illustration and that various changes in the size, shape and arrangement of the parts may be made without departing from the spirit of the invention or the scope of the subjoined claims.

The invention claimed is:

1. A knock-down shower bath cabinet comprising a receptor, a trough secured to the inner wall of the receptor, a plurality of stall forming sections having their lower ends received in and supported by said trough, a filling of packing material in said trough to form a leak-proof joint between the lower ends of said sections and said trough, fastening means for securing the lower ends of said sections in position in said trough, means for connecting adjacent portions of said sections and sealing the joint therebetween, and interengaging means between said trough and said stall forming sections for forcing said section outwardly toward the receptor.

2. A knock-down shower bath cabinet comprising a receptor, a trough secured to and having its entrance below the upper end of the inner wall of the receptor, a plurality of stall forming sections having their lower ends received in and supported by said trough, means coacting with said trough and said lower ends for forming a leak-proof joint therebetween, and means for connecting adjacent portions of said sections and sealing the joint therebetween, said means communicating at its lower end with the interior of the cabinet whereby any seepage into said last-named means will flow back into the cabinet.

3. A knock-down shower bath cabinet comprising a receptor, a plurality of stall forming sections, means interconnecting the stall forming sections and the receptor to support said sections thereon and form a leak-proof joint therebetween, means for forming a seal between adjacent portions of said sections and comprising an outer connecting plate secured to one of said sections and overlapping the other, a packing strip overlapping the inner surfaces of adjacent portions of the sections, a clamping strip overlying said packing strip, and fastening devices between said clamping strip and said outer plate for placing sealing compression on said packing strip and holding said strips in position, said strips terminating above said leak-proof joint to provide for drainage of seepage into the interior of the cabinet.

EDWARD F. NIEDECKEN.