March 19, 1935. J. H. SUNDSTROM 1,995,045

BATHTUB INCLOSURE

Filed April 21, 1933 2 Sheets-Sheet 1

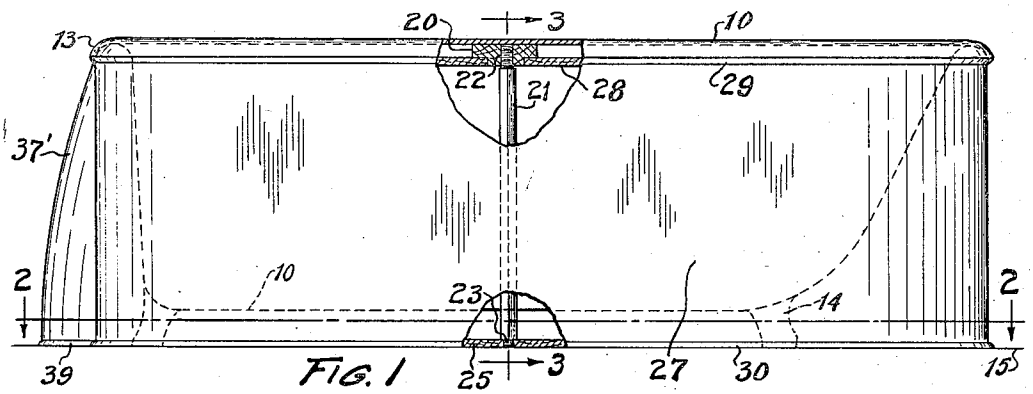


FIG. 1

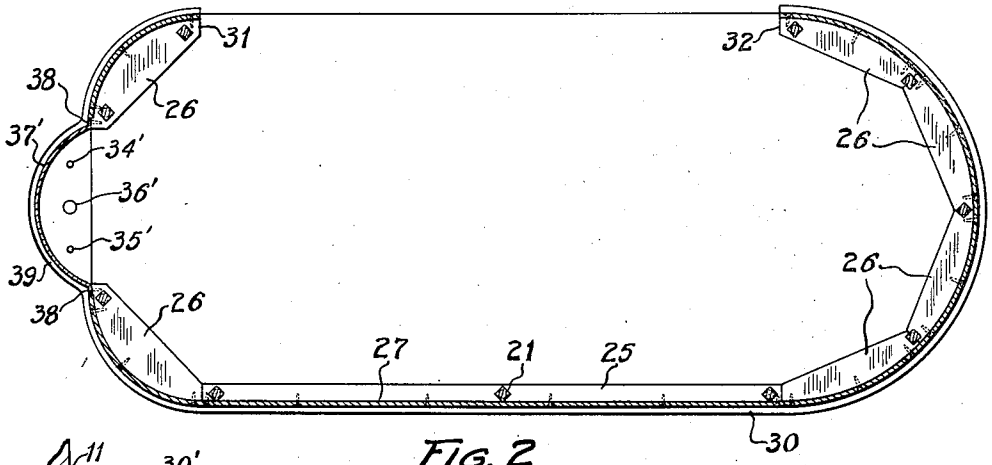
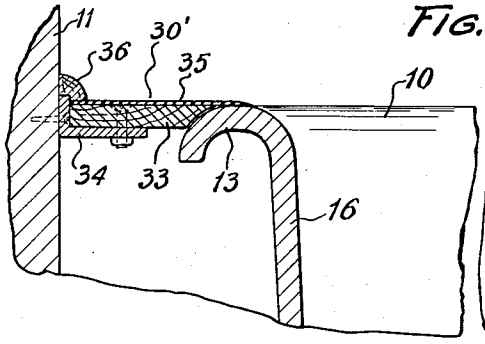


FIG. 2



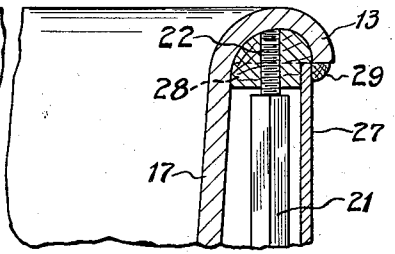


FIG. 3

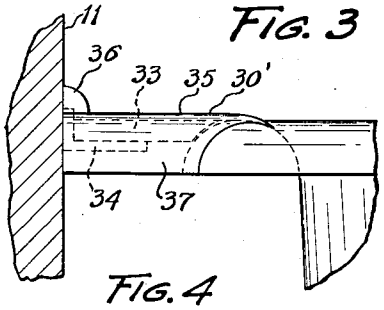
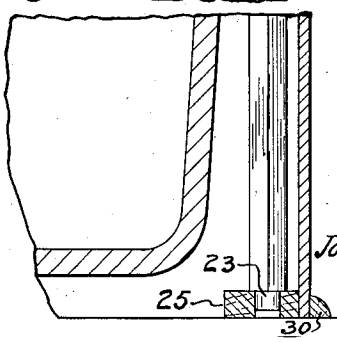


FIG. 4



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BATHTUB INCLOSURE

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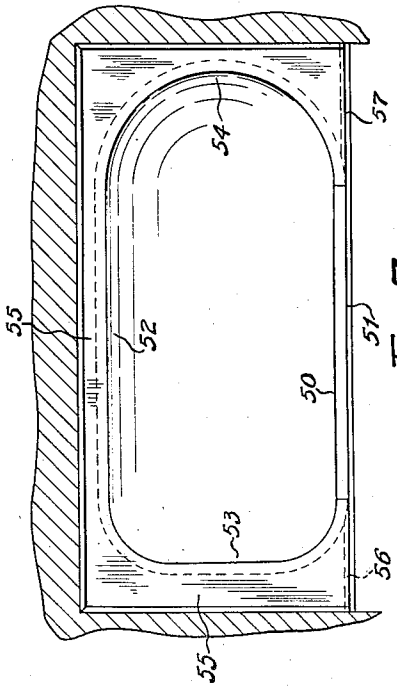


FIG. 7

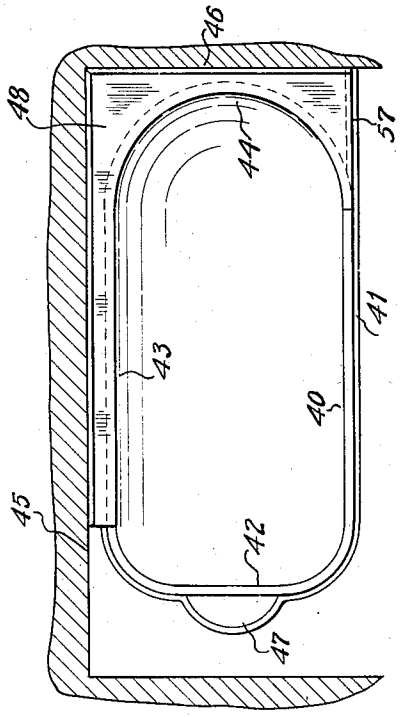


FIG. 6

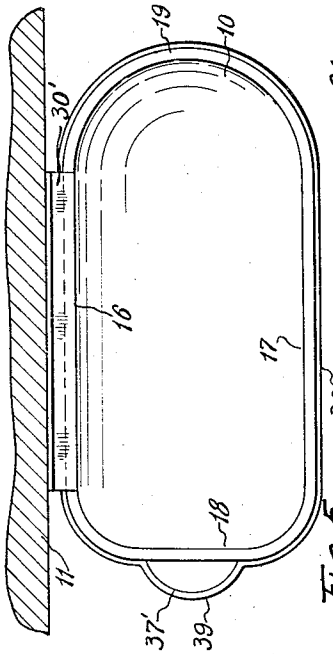


FIG. 5

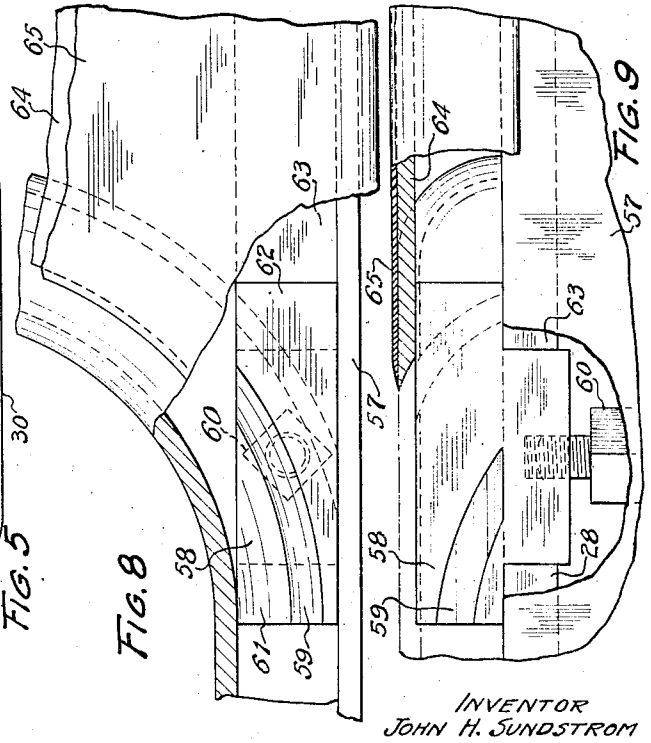


FIG. 8

FIG. 9

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Patented Mar. 19, 1935

1,995,045

UNITED STATES PATENT OFFICE

1,995,045

BATHTUB INCLOSURE

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Application April 21, 1933, Serial No. 667,213

10 Claims. (Cl. 4—173)

This invention relates to an inclosure for plumbing fixtures, such as bathtubs and the like, which can be economically constructed and readily applied to the fixture to thereby modernize and improve the appearance of the fixture.

An object of the present invention is to provide an inclosure for a plumbing fixture of the type having an external rim or flange along its upper edge, such inclosure including attaching means retained in place against the under side of said flange, and sheet material secured to said attaching means and extending between the flange and the floor.

Another object of this invention is to provide an inclosure for a bathtub of the type having a hollow external flange along the upper edge thereof, wherein attaching means is arranged to extend along within the recess of said flange and is retained in such recess by spaced posts which are adjustable in length, and wherein sheet material forming a panel or skirt is arranged between the flange and the floor and is secured to said attaching means.

A further object of this invention is to provide an improved bathtub inclosure, of the type referred to, comprising a panel or skirt formed from sheet material, and attaching means for the panel, and wherein the attaching means is arranged to extend along the under side of the flange of the tub and along the floor below said flange, and wherein spaced posts are provided having a pivotal connection with one of said attaching means and a screw thread connection with the other attaching means whereby the attaching means may be spread apart and the upper attaching means wedged against the flange of the tub.

It is also an object of this invention to provide an improved inclosure for a bathtub, having an external flange extending along its upper edge and disposed in spaced relation to a wall, wherein cover means is provided for the space between the flange and the wall comprising a shelf having one edge supported by the wall and its outer edge reduced in thickness and overlying the flange, and a waterproof covering for the shelf having a portion extending beyond the reduced edge of the shelf and overlying the flange.

Other objects and advantages of the invention will be apparent from the following description when taken in conjunction with the accompanying sheets of drawings wherein,

Fig. 1 is a side elevational view, with parts broken away, showing my improved inclosure applied to the bathtub.

Fig. 2 is a sectional plan view taken substantially as indicated by line 2—2 of Fig. 1.

Fig. 3 is a partial transverse sectional view taken substantially as indicated by line 3—3 of Fig. 1.

Fig. 4 is an end elevation of the cover shelf.

Figs. 5, 6 and 7 are plan views illustrating different installations of my improved bathtub inclosing means.

Fig. 8 is a partial plan view, with parts broken away, showing a detail of construction, and

Fig. 9 is a partial elevational view of such detail, with parts broken away.

In the accompanying drawings, to which detailed reference will now be made, I have shown an inclosure for plumbing fixtures which can be economically constructed and readily installed for improving or modernizing the appearance of bathtubs or other fixtures. Although I have illustrated in the drawings, what I now regard to be the preferred forms of my invention, it should be understood, however, that the invention is not to be regarded as limited in scope to the particular details of construction and arrangements of parts herein disclosed, but may be embodied in various arrangements and may be applied to various types of fixtures.

As will be explained more fully hereinafter, my invention contemplates the provision of a skirt or panel, which is disposed between the floor and the external marginal flange of a bathtub, and which extends along or follows the general outline demarked by the flange. That is to say, the skirt extends along the perimeter of the tub, or at least along that extent of the perimeter of the tub which is not too close to a wall, or other structure, to permit the skirt being installed. When a portion of the perimeter of the bathtub is in close proximity to a wall, or other structure, my invention contemplates the provision of a cover shelf extending along such portion or portions of the tub. My invention also contemplates the provision of a removable cover or panel section for exposed pipe connections, which may have the appearance of being a part of the inclosing skirt but which is removable to permit access to the piping.

In Figs. 1 to 5 of the drawings, I have shown a plumbing fixture 10, in this instance a bathtub, which is disposed adjacent a vertical wall 11 and to which my improved inclosure has been applied. The bathtub is of a type which is still extensively used in homes and hotels and is here shown as having a roll rim formed by an external hollow flange 13 extending along the upper edge of the

tub. As is usual in the case of bathtubs of this type, I have shown the tub 10 as having supporting means thereunder, such as the legs 14, by means of which the tub is supported upon the floor 15.

For the purpose of better understanding the invention, it is explained at this point that my improved tub inclosure is intended to be applied to previously installed bathtubs, of the type just described, without moving or disconnecting the tub. The inclosure is assembled or built up around the tub by arranging the various parts of the inclosure in their respective relative positions, as illustrated in the drawings and as explained more fully hereinafter. When installed, the inclosure constitutes a permanent part of the bathtub installation and imparts to this fixture the characteristics of the more modern "built-in" bathtubs.

In Fig. 5 of the drawings I have illustrated one condition which may be encountered in installing my improved inclosures, namely the condition wherein the tub 10 is arranged with the longitudinal side 16 thereof disposed in adjacent relation to the surface of the wall 11, and with its outer side 17 and its ends 18 and 19 exposed, or in other words, not having a wall in close proximity thereto. My improved inclosure, which will now be described in detail, is illustrated in Figs. 1 to 4 inclusive as the form of inclosure which would be applied to a bathtub occupying the relative position illustrated in Fig. 5.

As shown in Figs. 1, 2 and 3 of the drawings, the skirt or vertical wall portion of the inclosure, which extends along the exposed outer side and along the exposed ends of the tub, is arranged with its upper edge connected to the lateral flange 13 of the tub. To establish this connection I provide blocks 20 which are spaced along the external flange of the tub and are shaped to fit into the recess of the under side of the flange. These blocks may be formed of wood or of any other appropriate material. For retaining the blocks in position against the under side of the flange, I provide an upright post 21 for each block. These posts are provided at the upper end thereof with a threaded stem 22 which engages in a threaded opening provided in the blocks and, at their lower end, are provided with a plain stem or pivot portion 23 which engages in a suitable recess. The recesses for the pivot portions of the posts may be formed in the floor 15, but I prefer to locate them in attaching strips which are secured to the floor. These attaching strips extend along the floor beneath the external flange of the tub and, as shown in Fig. 2, of the drawings, may comprise one or more straight sections 25 located below the flange of the longitudinal outer side 17 of the tub, and a plurality of rounded sections 26 arranged in end to end relation below the flange at the ends of the tub.

The blocks 20 and the posts therefor may be provided in any desired number along the edges of the bathtub and, as shown in Fig. 2, they are arranged in suitably spaced relation along the exposed front and end edges of the tub. When the parts are in the position illustrated in Fig. 3 of the drawings the blocks 20 can be wedged upwardly into engagement with the under side of the flange of the tub by rotating the posts in a direction to cause an unscrewing between the posts and their respective blocks. In other words, by rotating the posts 21 the blocks are caused to move upwardly away from the attaching strips 25 and 26 whereby these strips are forced downwardly against the floor and the blocks are forced upwardly into the recess of the tub flange.

If desired, the blocks 20 may be made to extend along the rim of the tub for a considerable distance so as to serve as an attaching means for the sheet material forming the skirt or panel portion 27 of the inclosure but, as shown in Fig. 1 of the drawings, I prefer to form the blocks with step-cut ends and to provide attaching strips 28, which may be generally similar in shape to the strips 25 and 26, and which extend along beneath the flange of the tub and have their ends secured to the step-cut ends of the blocks. The blocks and the attaching strips 28 thus provide a substantially continuous attaching means extending along immediately beneath the external flange of the tub, and the strips 25 and 26, which are secured to the floor, provide a substantially continuous lower attaching means extending along the floor and conforming substantially in outline with the upper attaching means.

The skirt or panel portion 27 of the inclosure comprises sheet material which, as shown in Figs. 1 and 3 of the drawings, is arranged in upright relation to extend between the flange of the tub and the floor, and which follows or extends along the desired portion of the perimeter of the tub. This sheet material may be formed of any appropriate substance, as for example vulcanized rubber, composition, wood, fiber or sheet metal. The sheet material used for the panel portion of the inclosure should preferably be of a flexible character so that it can be readily bent to conform to the curved outline provided at the ends of the tub by the upper and lower attaching strips. It is not altogether necessary however that the sheet material be of flexible character since, in some instances, the curved sections of the panel may be molded or otherwise preformed to the desired curved shape.

The panel portion of the inclosure is arranged against the upper and lower attaching strips, as shown in the drawings, and is secured along its edges to these attaching strips by suitable means such as screws, nails, or other attaching devices. After the panel portions have been thus secured in place along the perimeter, or a portion of the perimeter, of the tub, suitable moldings such as the quarter-round moldings 29 and 30 may be secured in place so as to extend along adjacent the upper and lower edges of the panel portion. These moldings give the inclosure a neat and finished appearance and also provide a border for the panel portion.

As shown in Fig. 5 of the drawings, and as explained above, one side of the tub, for example the side 16, may be in close proximity to the wall 11, thereby making it impossible to extend the panel portion of the inclosure along the back of the tub and, to provide a closure for the narrow space or opening between the back of the tub and the wall, I provide the laterally extending cover or shelf 30'. This cover extends along that portion of the perimeter of the tub from which the panel portion of the inclosure is omitted, or in other words, between the ends 31 and 32 of the panel portion. The cover may consist of a board or shelf 33, having one edge thereof extending along the wall 11 and supported on angle brackets 34 secured to the wall, and having its other or outer edge overlying the flange 13 of the tub. The edge of the shelf which overlies the flange of the tub is tapered in thickness, as shown in Fig. 3, so that the top sur-

face of the shelf may lie in a plane which is substantially tangent to the surface of the flange. This cover may also be provided with a waterproof layer or sheet 35 of vulcanized rubber or other suitable material, which extends over the top surface of the shelf, and which also extends beyond the tapered outer edge of the shelf and overlies the flange of the tub. This overlying portion of the layer 35 is preferably tapered to a thin edge so as to closely hug the surface of the flange and, if desired, may be cemented to the flange. If desired, a suitable molding 36 may be arranged to extend along in the corner formed between the shelf and the wall so as to secure the layer 35 in place and give a finished appearance to the inclosure.

For concealing the brackets 34 and the ends of the shelf 33, the waterproof layer 35 may be arranged to extend or hang down at the ends of the shelf in the form of the flap 37 illustrated in Fig. 4.

It is not unusual for bathtubs, of the type to which my inclosure is to be applied, to have exposed piping connected thereto at one end, such as the hot and cold water supply pipes 34' and 35' and the drain pipe 36' represented in Fig. 2, and for concealing these exposed pipes, I provide a hollow cover 37' which may be constructed from sheet metal or any other suitable material, and which is removably secured in place around the pipes and between spaced sections of the panel portion of the inclosure. This removable cover is preferably rounded in form as shown in Figs. 1 and 2, and is constructed of such height that it extends between the floor and the flange of the tub and, when in place, presents the appearance of a smooth bulge in the inclosure. If desired, this cover may be formed with flanges 38 at the edges thereof and may be removably secured in place by suitable attaching devices extending through these flanges into the attaching strips 26 and 28. This cover may also be provided at the lower edge thereof with an integral molding portion 39 which appears to be a continuation of the molding 30 when the cover is in place around the pipes.

In Figs. 6 and 7 of the drawings, I have shown other conditions which may be encountered when my improved inclosure is to be applied to previously installed bathtubs. In Fig. 6 I have illustrated the condition wherein a bathtub 40 has been installed with the front 41 and the end 42 thereof in relatively exposed positions, but with the rear side 43 and round end 44 thereof in close proximity to the respective wall surfaces 45 and 46. In applying my improved inclosure to a bathtub installation of this kind, I construct the inclosure with panel sections extending along the front edge 41 and around the end 42, which sections are substantially identical with the corresponding sections already described and illustrated in Figs. 1 and 2 of the drawings. A removable cover 47, similar to the cover 37' of Figs. 1 and 2, may be provided around the exposed piping connected to the end 42 of the tub. Along the edges 43 and 44 which are in close proximity to the walls 45 and 46 I provide the cover shelf 48. This shelf extends along the back of the tub and also across the end 44 thereof and, aside from the fact that the shelf extends across the end of the tub as well as along the back thereof, it is identical in construction with the cover shelf 30 illustrated in Figs. 2 and 5 of the drawings.

In Fig. 7 of the drawings I have illustrated the condition wherein the previously installed tub 50 is arranged in a wall recess with only the front edge 51 thereof in an exposed condition. In other words the rear of the tub 52, and the ends 53 and 54 are disposed in close proximity to the vertical side walls of the recess. In constructing my inclosure for a tub arranged in this position I provide a panel section along the front edge 51 of the tub, similar to the panel section provided along the front edge of the tub installation illustrated in Figs. 1 to 3 of the drawings. Along the edges 52, 53 and 54 of the tub I provide a cover shelf 55 which is similar in construction to the cover shelf 30' shown in Fig. 2. In this arrangement the portion of the cover shelf adjacent the end 53 of the tub is disposed above the pipe connections for the tub and, to afford access to these pipe connections, I provide a removable section or door 56 in the front panel portion of the inclosure, such section or door being located below the cover shelf 55.

As shown in Figs. 6 and 7 of the drawings, the panel portion of the inclosure extending along the front of the tub is extended beyond one or both of the ends of the tub and over to the adjacent side wall. Since the attaching means for the upper edge of the panel portion is disposed in the recess of the flange of the tub it will be seen that provision must be made for extending this attaching means outwardly beyond the straight portions of the front of the tub.

In Figs. 8 and 9 of the drawings I have illustrated an arrangement wherein a portion of the upper attaching means lies in the recess of the tub flange and a portion of this attaching means extends outwardly from beneath the rim of the tub so that the sheet material forming the panel sections 57 can be secured thereto. To this end I construct the block 58 with a curved recess 59 therein which receives the edge of the flange of the tub when the block is held upwardly against the flange by means of the post 60. When the block is thus held in position the end 61 of the block lies in the recess of the tub rim and the end 62 of the block lies outside of the rim recess. The block itself may be made long enough to extend over and be connected to the adjacent wall or, if desired, a suitable attaching strip 63 may be secured to the end 62 of the block and may extend over to the adjacent wall of the tub recess. The sheet material forming the panel section 57 may be a continuation of the panel section extending along the front of the tub and may be secured along its upper edge to the attaching strip 63.

The portion of the block 62 which projects beyond the rim of the tub is preferably recessed at its top, as shown in Fig. 9, to receive the cover shelf 64 and so that the top surface of the cover shelf will be substantially tangent to the top surface of the tub flange.

As explained in connection with the cover shelf 48, the cover shelf 55 shown in Figs. 6 and 7 may also be provided with a waterproof covering 65 of vulcanized rubber or other suitable material, which extends over the top surface of the cover shelf and engages the rim of the tub.

From the foregoing description and accompanying drawings it will now be readily seen that I have provided an improved inclosure for a bathtub, or other plumbing fixture, which can be economically constructed and readily applied to the fixture without disconnecting or moving the fixture. This improved inclosure imparts to the plumbing fixture, to which it is applied, a finished and modernized appearance which is

especially desirable in the bathrooms of homes and hotels but which heretofore has been unattainable for the older types of bathtubs. My improved inclosure renders these older types of bathtubs similar in appearance to the more modern "built-in" tubs, and also provides a sanitary inclosing means which conceals the piping and eliminates much of the difficult cleaning work heretofore required around bathtubs.

While I have illustrated and described the improved inclosure of my invention in a detailed manner, it should be understood that I do not intend to be limited to the precise details of construction and arrangements of parts illustrated and described, but consider my invention as including such changes and modifications as come within the spirit of the invention and the scope of the appended claims.

Having thus described my invention, I claim:

1. An inclosure for a plumbing fixture of the type having means thereunder for supporting the fixture on a floor and also having a lateral external flange extending along its upper edge, comprising means extending between said flange and the floor and retained in place by wedging engagement thereof with the floor and the under side of said flange, and sheet material attached to said means.

2. An inclosure for a bathtub of the type having means thereunder for supporting the tub on a floor and also having a hollow rim extending along its upper edge, comprising attaching means disposed in the recess of said rim, means extending between the floor and said attaching means for retaining the latter in the rim recess, and a panel extending between said rim and the floor and secured to said attaching means.

3. The combination with a bathtub having a hollow rim extending along its upper edge, of attaching means extending along in the recess of said hollow rim, means extending between the floor and said attaching means for retaining the latter in said recess, and flexible sheet material disposed in upright relation between the hollow rim and the floor, said sheet material being arranged to extend along said rim and being secured to said attaching means.

4. The combination with a bathtub having a lateral flange extending along the upper edge thereof, of attaching means extending along said flange and engaging the under side thereof, attaching means on the floor disposed below and conforming substantially in outline with the first mentioned attaching means, means extending between the lower and upper attaching means for holding the latter in engagement with said flange, and flexible sheet material arranged between said flange and the floor and secured to the upper and lower attaching means.

5. The combination with a bathtub having a lateral flange extending along the upper edge thereof, of attaching means extending along said flange and engaging the under side thereof, attaching means on the floor disposed below and conforming substantially in outline with the first mentioned attaching means, spaced posts extending between the lower and upper attaching means for holding the latter against said flange, and sheet material arranged between said flange and the floor and secured to the upper and lower attaching means.

6. The combination with a bathtub having a lateral flange extending along the upper edge thereof, of attaching means extending along said flange and engaging the under side thereof, attaching means on the floor disposed below and conforming substantially in outline with the first mentioned attaching means, spaced posts extending between the lower and upper attaching means, means for lengthening said posts whereby the upper and lower attaching means are spread apart and the upper attaching means is held against said flange, and sheet material arranged between said flange and the floor and secured to the upper and lower attaching means.

7. The combination with a bathtub having means thereunder for supporting the tub on a floor and also having a lateral flange extending along the upper edge thereof, of attaching means extending along said flange and engaging the under side thereof, attaching means on the floor disposed below and conforming substantially in outline with the first mentioned attaching means, spaced posts extending between the lower and upper attaching means for holding the latter against said flange, said posts having one end thereof pivoted on one of said attaching means and having at the other end a screw-thread connection with the other attaching means, whereby upon rotation of the posts the upper attaching means is pressed against said flange, and sheet material arranged between said flange and the floor and secured to said attaching means.

8. In combination with a bathtub having means thereunder for supporting the same on a floor and also having a hollow roll rim extending along its upper edge, an inclosure extending along the side of the tub between said rim and the floor and comprising a plurality of members spaced along said rim and shaped to engage in the recess in the under side of the rim, a plurality of posts having their lower ends pivoted at the floor and their upper ends threaded into said members whereby upon rotation of the posts said members are wedged against said rim, attaching strips secured to said spaced members and extending between said posts beneath said rim, other attaching strips secured to the floor between said posts, and sheet material disposed outwardly of said posts and secured to said attaching strips.

9. An inclosure for a bathtub, of the type having exposed pipe connections thereon and also having a hollow external flange along its upper edge, comprising panel sections disposed on opposite sides of said piping and extending along the side of the tub between the floor and said flange and having their upper edges disposed in the recess of the flange, and a removable hollow cover extending around said piping outwardly thereof, said cover being arranged between said panel sections and between said flange and the floor.

10. An inclosure adapter for modernizing plumbing fixtures of the type having a lateral external flange thereon, comprising an upright framework extending between said flange and the floor, and sheet material attached to said framework adjacent said flange and adjacent the floor.

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