Sept. 9, 1924. 1,507,670

L. F. EISELE

SHOWER BATH STALL DOOR

Filed April 9, 1923 3 Sheets-Sheet 1

Fig. 1.

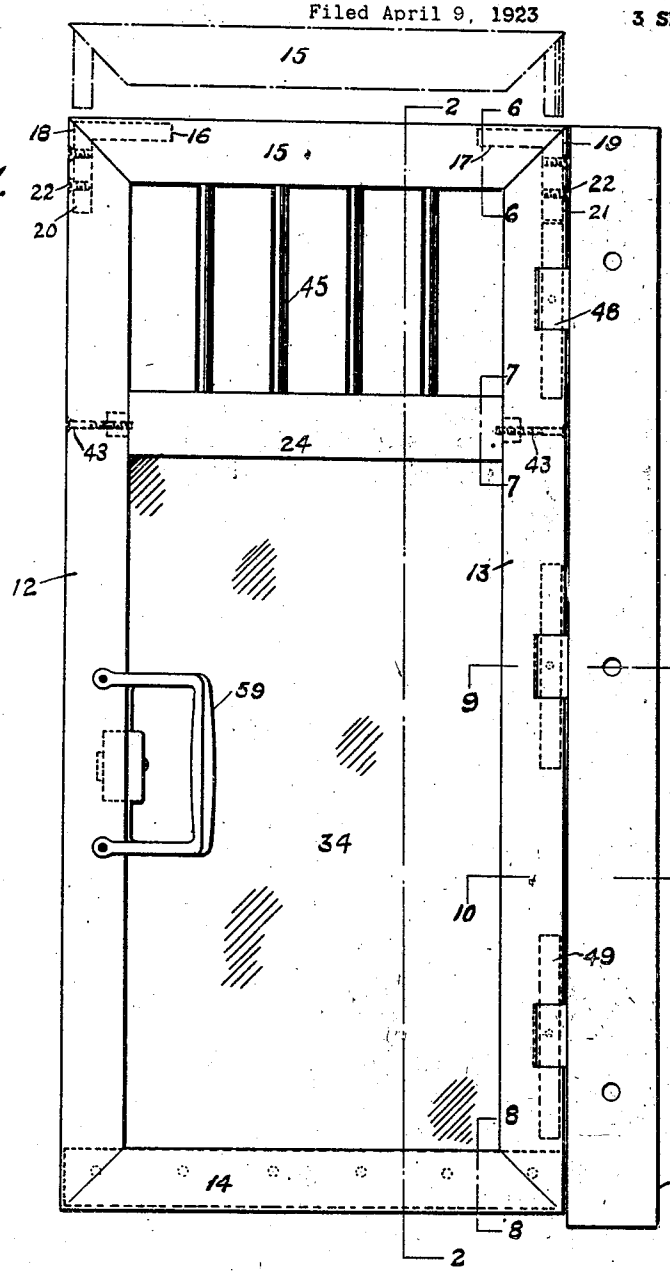
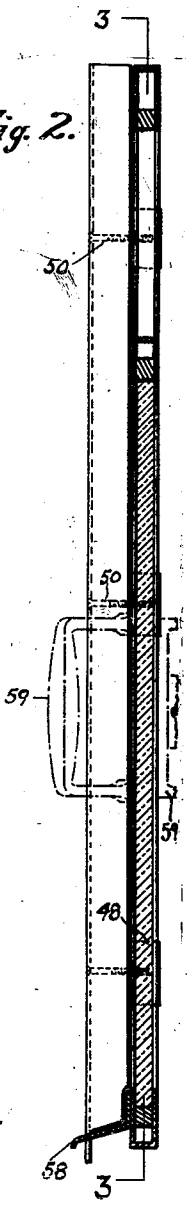


Fig. 2.



Witnesses
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Augustus B. Coppes

Inventor
Louis F. Eisele
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Fig. 3.

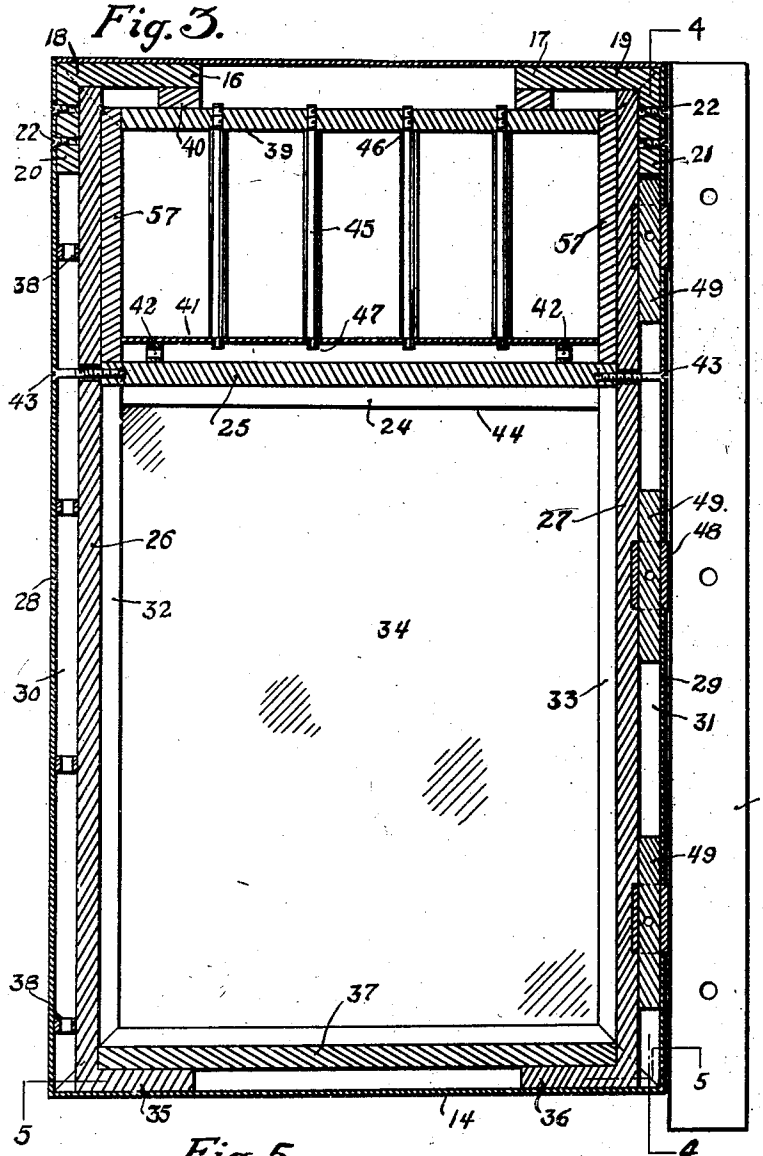


Fig. 4

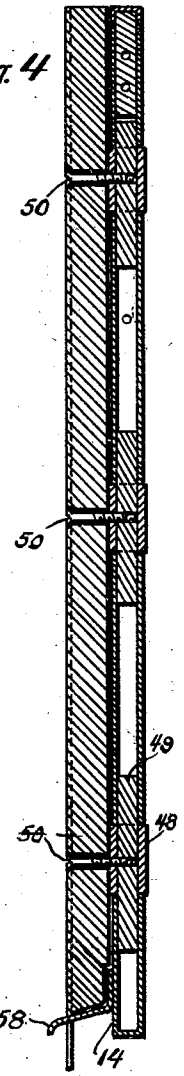
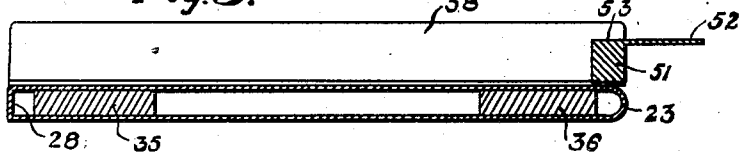


Fig. 5.



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Fig. 6.

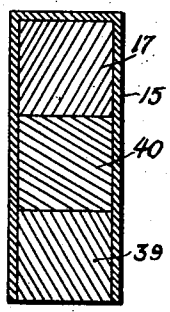


Fig. 7.

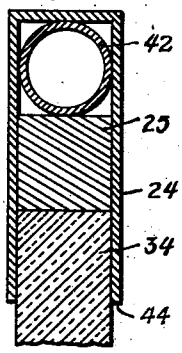


Fig. 8.

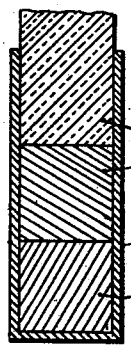


Fig. 11.

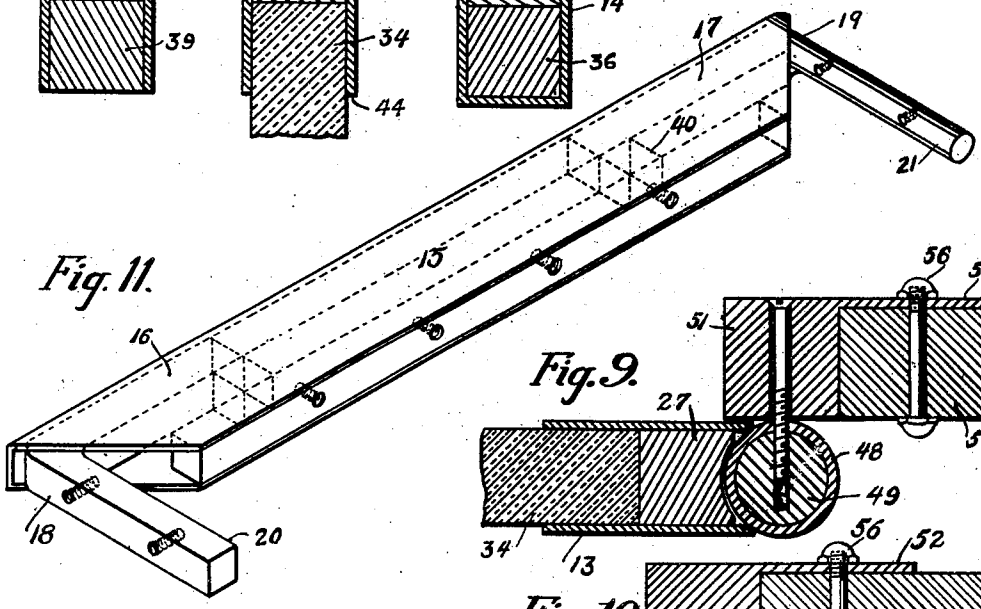
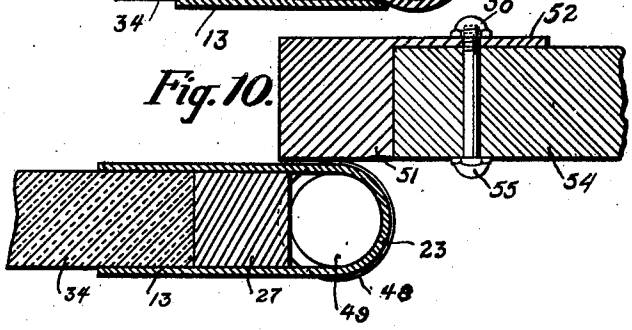


Fig. 9.

Fig. 10.



Witnesses

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UNITED STATES PATENT OFFICE.

LOUIS F. EISELE, OF PHILADELPHIA, PENNSYLVANIA.

SHOWER-BATH-STALL DOOR.

Application filed April 9, 1923. Serial No. 630,698.

To all whom it may concern:

Be it known that I, LOUIS F. EISELE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Shower-Bath-Stall Doors, of which the following is a specification.

One object of my present invention is to provide an improved door for shower bath stalls which will eliminate any exposed butt hinges and at the same time will be of an exceptionally strong and durable construction which can be neatly finished to provide a high class door.

Another object is to so form my improved door that even through the same includes a heavy glass panel, the mounting and hinging structure will provide a strong and efficient bearing which can be readily secured to marble or other material out of which the shower bath stall is made.

These objects, and other advantageous ends which will be described hereinafter, I attain in the following manner, reference being had to the accompanying drawings in which

Figure 1 is a front elevation of a door structure made in accordance with my invention,

Figure 2 is a section taken on the line 2—2 of Figure 1,

Figure 3 is a section taken on the line 3—3 of Figure 2,

Figure 4 is a section taken on the line 4—4 of Figure 3,

Figure 5 is a section taken on the line 5—5 of Figure 3,

Figure 6 is an enlarged section taken on the line 6—6 of Figure 1,

Figure 7 is an enlarged section taken on the line 7—7 of Figure 1,

Figure 8 is an enlarged section taken on the line 8—8 of Figure 1,

Figure 9 is an enlarged section taken on the line 9—9 of Figure 1 illustrating the same secured to a portion of a shower bath stall such for example as a marble slab forming a part of the shower bath stall,

Figure 10 is an enlarged section taken on the line 10—10 of Figure 1 illustrating the same attached to a shower bath stall, and

Figure 11 is a perspective view of the top of my improved door construction.

Referring to the drawings, my improved door includes two upright channel sections 12 and 13 and a transversely extending bottom channel section 14 which, at its opposite ends, connects with the lower portions of the upright sections 12 and 13 preferably by a miter fit. A top section 15 is also made of channel mitered at its opposite ends and abutting the upper mitered ends of the upright sections 12 and 13. Within the channel of the top section 15 are soldered or otherwise suitably secured the leg portions 16 and 17 of two angle members 18 and 19 respectively. These angle members have other leg portions 20 and 21 extending at right angles thereto and are adapted to be projected into the channels of the upright sections 12 and 13 and secured thereto by screws 22 which pass through the opposed edges of the upright sections. The portion 20 of the angle member 18 is preferably made angular in cross section to flatly fit against the angular inner surfaces of the channel section 12 and the angular portion 21 of the angle member 19 is preferably made circular in cross section so as to fit against the curved end portion 23 of the upright member 13. I have illustrated a transverse channel bar 24 having its opposed ends abutting the inner edges of the upright sections 12 and 13; said transverse channel bar including a metallic filler strip 25 which has its opposite ends abutting filler strips 26 and 27 which are soldered, brazed or otherwise secured within the upright channel sections 12 and 13 at positions located a distance from the inner surfaces 28 and 29 so as to provide spaces 30 and 31 between the filler strips and the inner surfaces 28 and 29 and also to provide spaces 32 and 33 for the accommodation of the opposed side edges of a glass panel 34. The lower ends of the filler strips 26 and 27 are bent at an angle within the bottom section 14 and are opposed to

each other as shown at 35 and 36. A filler strip 37 is positioned within the bottom channel section 14 and has its opposite ends abutting the filler strips 26 and 27; said filler strip 37 resting on the angular portions 35 and 36 of the filler strips 26 and 27.

The filler strip 37 is spaced below the top edges of the bottom channel section to provide room for the bottom edge portion of the glass panel 34. The filler strip 26 is spaced from the surface 28 of the upright section by spacing rings 38 which are placed within the channel before the filler strip is inserted so as to form gages for the proper location of the filler strip 26.

A filling strip 39 is placed within the top channel section 15 between the sides thereof with its bottom surface flush with the lower edges of the top section and this filler strip is spaced by inserting gaging blocks 40 between the angular portions 16 and 17 of the members 18 and 19; said parts being brazed or soldered in position.

The filler strip 25 is spaced from the innermost surface 41 of the transverse channel bar 24 by gaging rings 42 and screws 43 lead inward through the upright sections into tapped holes in the opposite ends of the filler strip 25 to secure the latter in position and also to hold the transverse bar 24 to the upright members of the frame. The filler strip 25 is spaced inward from the lower edges 44 to provide room for the upper edge portion of the glass panel 34. The filler strip 39 and the top of the transverse bar 24 are provided with oppositely disposed holes; the holes in the filler strip 39 being screw threaded to allow grating bars 45 to be screwed therein; said grating bars providing shoulders 46 for abutment with the lower surface of the filler strip 39 and having portions 47 of reduced diameter for entering the holes in the top of the transverse bar 24 so that a ventilating space is provided above the panel 34 which is desirable when the door is used in a shower bath or vapor bath stall.

After the filler strip 27 has been inserted the upright section 13 is cut out or recessed at portions within its length through the part 23 and also partway into the filler strip 27 to provide recesses in which are inserted metallic sleeves 48; there being three of these sleeves and recesses illustrated. Then three pins 49 are inserted before the top section 15 is attached and these pins are pushed through the space 31 into and partway through the respective sleeves 48. After this action screws 50 are inserted through a mounting bar 51 which extends upright; said screws also passing through the sleeves into the respective hinged pins 49. The mounting bar 51 has an upright plate portion 52 extending at an angle therefrom in alignment with the inner side surface 53 and this plate portion can be attached to any upright structure such for example as a marble slab 54 which constitutes a part of the bath stall and which provides the doorway. This securing of the plate portion 52 can be accomplished by the use of bolts 55 which on their outer ends may be provided with fancy or ornamental heads and the inner ends of the bolts are provided with cap nuts 56 as clearly shown in Figures 9 and 10. It will be noted that the top section 15 can be readily attached or removed and there will be no exposed hinge plate sections. At the same time an extremely strong and well mounted door is provided in which the panel 34 can be slid into position after which the transverse bar can be inserted.

I preferably provide facing pieces or strips 57 at positions within the upright sections above the filler strip 25 so as to close the portions of the upright sections between the filler strips 25 and 39.

This door is particularly serviceable for high class installation work in the making of bath stalls where exceptionally accurate work is required and where the finished appearance of the door is of first consideration. By arranging the sleeve structure with the hinge pins and securing the hinge pins to the sleeves and to the mounting bar by the screws 50, an extended bearing is provided to allow the door proper to swing on the comparatively long hinge pins so that the wear will be distributed over a comparatively great area and for this reason the possibility of sagging due to wear is reduced to a minimum.

A water shed plate 58 is secured to the inner surface of the bottom section 14 and serves to deflect the water when the latter is used in connection with a bath stall and I provide handles 59 which are secured to the upright section 12 against opposite surfaces and the screws or other securing means can extend through the filling strip 27 so as to provide a secure mounting for the handles.

While I have described my invention as taking a particular form, it will be understood that the various parts of my invention may be changed without departing from the spirit thereof, and hence I do not limit myself to the precise construction set forth, but consider that I am at liberty to make such changes and alterations as fairly come within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A door having recesses therein; mount-

ing means having sleeves extending into said recesses; and pins projecting from said sleeves into said door at positions beyond the confines of said recesses; substantially as described.

2. A door having a frame provided with a channel portion, said channel portion having recesses spaced apart; mounting means having sleeves extending into said recesses; and pins in said channel portions secured to said sleeves and projecting into the space within the channel portion beyond the confines of said recesses; substantially as described.

3. A door having a frame with a channel portion provided with recesses; mounting means; sleeves projecting into said recesses; pins extending through said sleeves and into the space within said channel portion at positions beyond the confines of said recesses; and means for securing said mounting means, sleeves, and pins together; substantially as described.

4. A door having a frame with a channel portion provided with recesses; mounting means; sleeves projecting into said recesses; pins extending through said sleeves and into the space within said channel portion at positions beyond the confines of said recesses; and screws leading into said mounting means, sleeves and pins whereby said pins, sleeves and mounting means are secured together; substantially as described.

5. A door structure including a frame having upright channel sections and a bottom channel section secured to said upright sections; filling strips within said upright sections and spaced inward from the innermost edges thereof, said filling strips having angular portions fitting within said bottom section; and a panel fitting within said frame between said filler strips; substantially as described.

6. A door structure including a door frame having upright channels and a top section having angular members projecting into the top portions of the upright channels; and means for detachably securing said angular members within said upright channels; a panel mounted within the upright channels, substantially as described.

7. A door structure including a door frame having upright channels and a top section having angular members projecting into the top portions of the upright channels; means for detachably securing said angular members within said upright channels; a transverse channel bar spaced below said top section, said frame including a bottom channel section opposed to said transverse channel bar; and a panel fitting within said upright sections, transverse channel bar and bottom channel section; substantially as described.

8. A door structure including a door frame having upright channel portions and a top section having angular members projecting into the top portions of the upright sections; means for detachably securing said angular members within said upright sections; a transverse channel bar spaced below said top section, said frame including a bottom channel section opposed to said transverse channel bar; a panel fitting within said upright sections, transverse channel bar and bottom channel section, said top section including a filling strip provided with holes, the top of said transverse channel bar having holes therein; and bars having portions fitting within the holes in said filling strip and said transverse channel bar; substantially as described.

9. A door structure including a channel frame; filler strips within the channels of the frame; a panel within the channels between the filler strips, one side of the channel frame being recessed; mounting means having sleeves fitting within the recesses, and pins secured to the sleeves and extending into the frame between the channel and the filler strip.

10. A door structure including a channel frame; filler strips within the channels and spaced from their inner surfaces; a panel mounted within the frame between the strips, one side channel and its filler strip being recessed; mounting means having sleeves fitting within the recesses, and pins secured to the sleeves and having their ends extending within the frame between the channel and the filler strip.

11. A door structure including a door frame comprising a bottom channel, upright channels and a top section; filler strips having angular parts at the lower ends mounted within the upright channels and their lower ends within the bottom channel; a filler strip within the bottom channel resting on the angular parts; angular members on the top section fitting between the filler strips and the inner surfaces of the upright channels; means detachably securing the angular members to the upright channels; a panel within the channels between the filler strips, and means connecting the top channel with the upper edge of the panel.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS F. EISELE.

Witnesses:

ELIZABETH GARBE,

CHAS. E. POTTS.