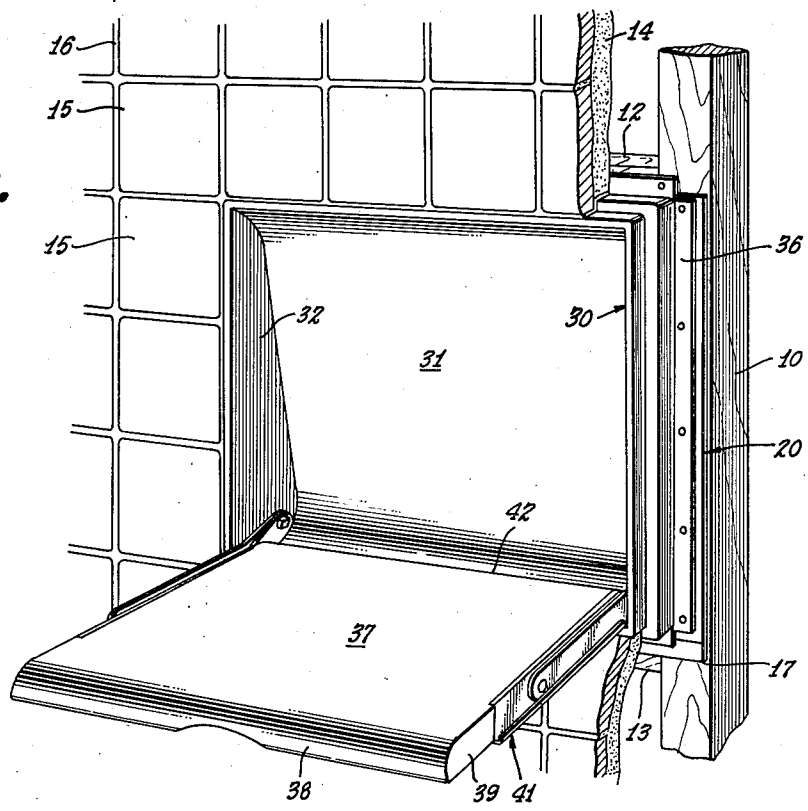
May 14, 1957 D. KURSMAN 2,792,053

STALL SHOWER SEAT

Filed Nov. 7, 1955 2 Sheets-Sheet 1

Fig. 1.



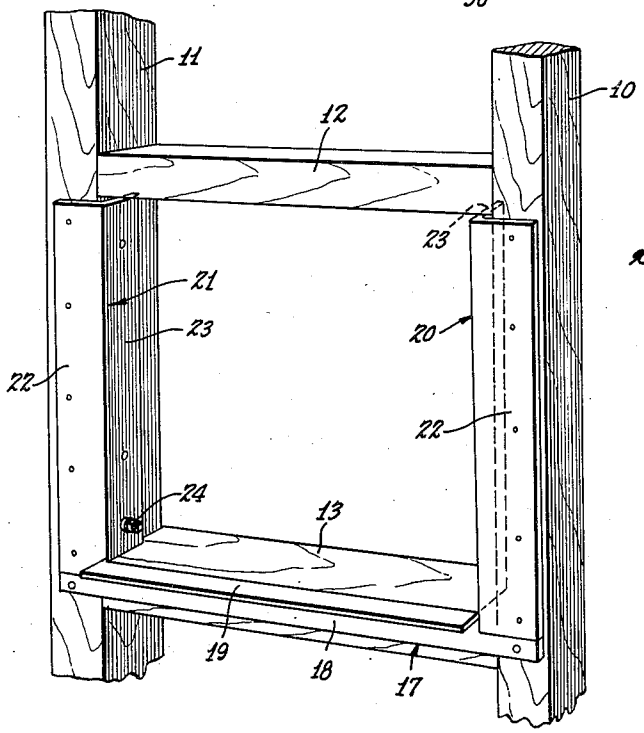


Fig. 2.

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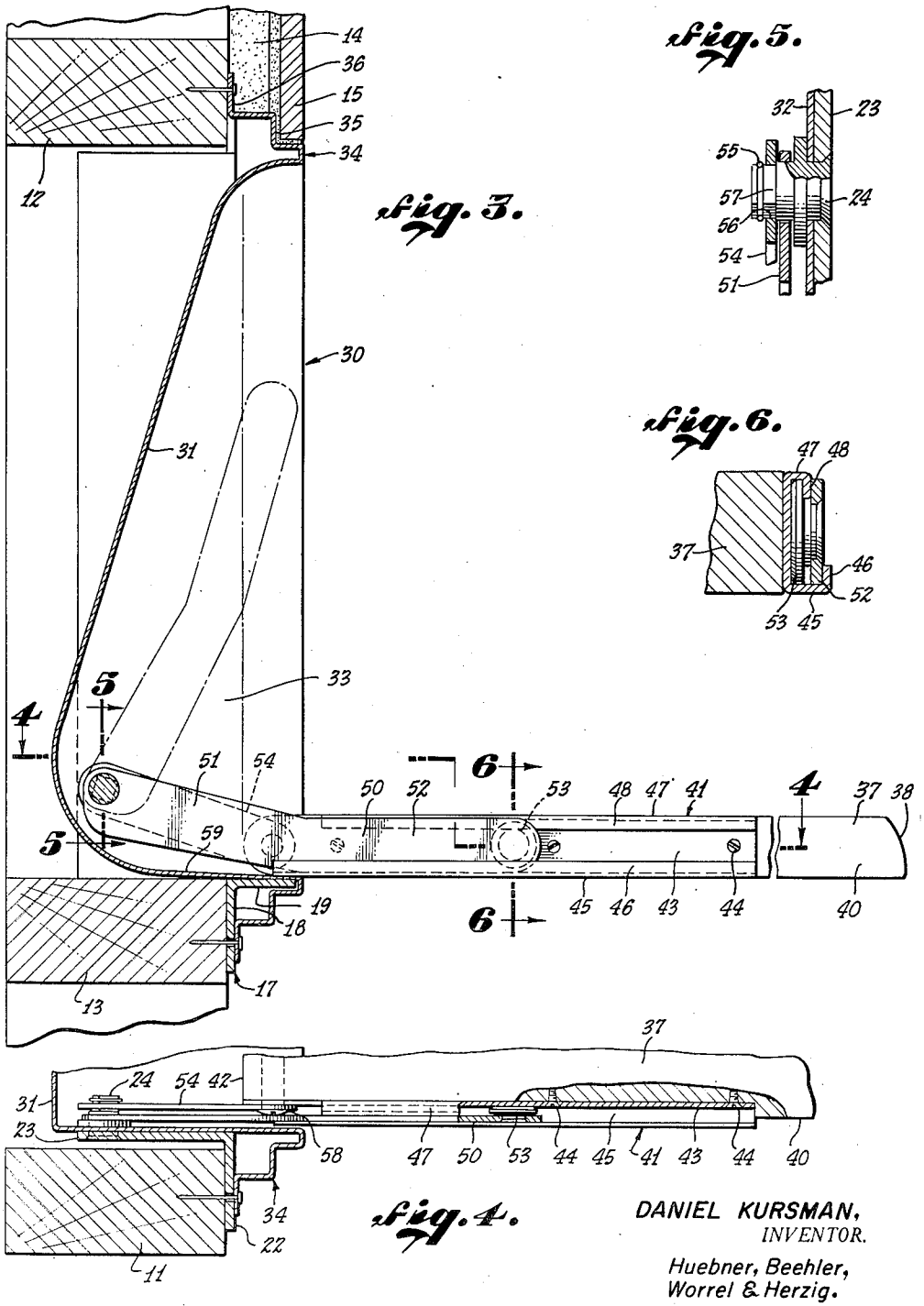


fig. 3.

fig. 5.

fig. 6.

fig. 4.

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2,792,053

Patented May 14, 1957

2,792,053

STALL SHOWER SEAT

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Application November 7, 1955, Serial No. 545,276

4 Claims. (Cl. 155—36.5)

The invention relates to bathroom appurtenances and has particular reference to a foldable seat adapted to be attached to the wall of a stall shower in such fashion that when not in use the seat can be folded into a suitable cabinet in the wall.

The current trend in building construction is to economize to an ever greater degree in space. The tendency to conserve space seems to be especially prevalent in bathroom accommodations and whenever innovations are proposed, if they are to become popular and acceptable to the buying public, they must be compact to the extent that when installed no extra room need be provided for them over and above the conventional construction requisites.

While some attempts have been made heretofore to provide collapsible wall seats, such structures, although capable of being compacted in a relatively flat package, have had sundry disadvantages in that they have necessitated employment of protruding braces which are objectionable. In other instances they have been so devised as to permit them to be applied to the outside of the wall construction without taking into consideration the necessity of a secure fastening to the building structure such as to permit continued use without fear of dislodgment of the fastenings. Seats of the prior art have been awkward in many instances in both closed and opened position and have further failed to take into consideration the necessity of draining the appurtenance so that the collection of moisture on the seat and the cabinet in both closed and opened position could be avoided.

It is therefore among the objects of the invention to provide a new and improved compact seat capable of being collapsed into a small flat package within the wall and which at the same time is of such sturdy construction as to permit long and continued use.

Another object of the invention is to provide a new and improved collapsible seat which makes advantageous use of a particularly sturdy rough-in cabinet securely anchored to the building structure and which moreover provides braces and hinges so designed and constructed that they transfer the weight of the occupant to a number of different locations, thereby to avoid strain at any one location, the braces and hinge structure being designed moreover in such fashion that they do not present a protuberance either above or below the seat especially in opened position.

Still another object of the invention is to provide a new and improved collapsible seat for a stall shower wherein the cabinet employed to house the seat in collapsed condition is especially formed to fit the curvature of the spine of the occupant and which special form is also taken advantage of in providing room for an unusual type of hinge and bracing principle which presents a minimum of obstruction to the user.

Still further among the objects of the invention is to provide a new and improved collapsible stall shower seat, the cabinet of which is advantageously drained whether the seat be in opened or closed position and one wherein

the hinge and brace elements are snugly compacted within the outlines of the seat in both opened and closed positions.

With these and other objects in view, the invention consists in the construction, arrangement and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter set forth, pointed out in the appended claims and illustrated in the accompanying drawings.

In the drawings:

Figure 1 is a front perspective view of a shower stall wall showing the seat installation and partially broken away to illustrate the means of attachment.

Figure 2 is a front perspective view of the building structure showing the rough-in portion of the device in place.

Figure 3 is a longitudinal sectional view of a complete seat installation with the seat shown extended for use in solid line position.

Figure 4 is a sectional view on the line 4—4 of Figure 3.

Figure 5 is a cross-sectional view on the line 5—5 of Figure 3.

Figure 6 is a cross-sectional view on the line 6—6 of Figure 3.

In a form of the invention chosen for the purpose of illustration the environment of the invention is shown as one consisting of a building structure formed of studs 10 and 11 placed at conventional stud intervals and provided with an upper cross brace 12 and a lower cross brace 13. The structure described is one having mounted thereon a plaster base 14 attached in conventional fashion for the support of tile 15 set in a suitable mastic 16.

The rough-in box for the collapsible stall seat consists of a transversely disposed angle element 17 having a vertical leg 18 affixed to the studding and cross brace 13 and a horizontal leg 19 protruding outwardly from the wall. Parallel vertical angle elements 20 and 21 are attached at their lower ends to the respective ends of the angle element 17. The vertical angle elements 20 and 21 are faced so that legs 22 and 23 are joined so that they encompass the adjacent corner of the respective studs 10 and 11. The vertical angle elements are secured to the studs by nailing or other suitable attachment. A pivot pin 24 extends horizontally inwardly into the rough-in box from each of the legs 23 near the lower end.

The outer portion of the device comprises a cabinet indicated generally by the reference character 30 and consisting more particularly of a curved back plate 31, side plates 32 and 33, and a molding 34. The molding may be stepped as indicated particularly in Figure 3, thereby to provide an outer step 35 for reception of the tile and an inner step 36 for reception of the plaster.

The seat itself may be described as a platform 37 of some appropriate material having a downwardly curved front edge 38 and having flat side edges 39 and 40.

On each side edge is mounted a channel 41 which extends throughout a substantial portion of the side edge from an innermost end 42. A web 43 of the channel is affixed by appropriate means such as the screws 44 to the platform. A lower leg 45 of the channel has a flange 46 turned upwardly whereas an upper leg 47 has a lip 48 turned downwardly but is located closer to the web 43 than the flange 46. On each side also is a brace 50 pivotally secured at its innermost end to the pin 24. The brace has a somewhat angular shape as best illustrated in Figure 3, there being an inner diagonal portion 51 and an outer portion 52 horizontal in position when the seat platform is extended. The portion 52 lies inside of the flange 46 and is adapted to rest upon the

leg 45 of the channel 41 in extended position of the seat platform.

To secure the brace 50 to the seat platform there is provided a sliding knob 53 which underlies the lip 48 and which is adapted to slide within the channel between the legs 45 and 47.

A hinge arm 54 is also pivotally connected at its inner end to the pivot pin 24, there being provided a clip 55 for holding both the hinge arm and the brace in place upon the pivot pin. The hinge arm more particularly is provided with a square aperture 56 adapted to fit over a squared end 57 of the pivot pin in order to prevent the hinge arm from pivoting about the pin. At its outer end the hinge arm is pivotally secured to the rearmost portion of the platform 37 by means of a screw 58.

In extended position, as illustrated by the solid lines in Figure 3, the platform 37 is horizontal. The end of the platform nearest the cabinet is prevented to a degree from tilting outwardly when an occupant is seated thereon by reason of the fact that the hinge arm will not pivot upwardly, being restrained by the square connection at the pivot point. The platform is further restrained by the positioning of the portion 52 of the brace 50 in the channel at a location where, should there be a tendency to tilt the platform about the axis of the knob 53, movement upward of the inner end of the platform will be resisted by the lower leg 45 of the channel. At the same time the tendency for the brace 50 to be tilted downwardly is resisted by the horizontal leg 19 of the channel 17. Mounted in this fashion it will become apparent that the weight of the occupant is supported by a number of different portions of the structure, namely, the pivot pins 24 and the leg 19 of the angle element 17 at two different points.

When the seat platform is to be collapsed to the position illustrated by the broken lines in Figure 3, the front edge of the seat platform is elevated. During elevation the knob 53 slides outwardly and upwardly within the channel 41. In the meantime the inner end of the seat will be retained in its initial position but will be permitted to pivot about the screw 58. In collapsed position the seat platform lies within the outermost edge of the molding 34.

Whether the seat platform be in extended usable position or in collapsed position, any moisture which may tend to collect in the cabinet will flow outwardly and downwardly because of the outward and downward pitch of a bottom wall 59 of the cabinet 30.

There has been described herein an appurtenance for installation in the building structure of a shower stall wall, which appurtenance is complete in itself. The manner of attachment moreover is such that it is firmly anchored to the building structure with points of support for the foldable seat platform so arranged that they offer a minimum of obstruction to the user when extended but without sacrifice in any manner of a sturdiness of support and bracing such that the appurtenance will not be dislodged nor strained to the point where the edges might be loosened around the finished tiling.

While I have herein shown and described my invention in what I have conceived to be the most practical and preferred embodiment, it is recognized that departures may be made therefrom within the scope of my invention, which is not to be limited to the details disclosed herein but is to be accorded the full scope of the claims so as to embrace any and all equivalent devices.

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

1. A retractible seat for mounting on wall studs comprising a horizontal element adapted for attachment to the studs, supports at opposite ends of the horizontal element, a water-tight cabinet extending inwardly toward the wall, a seat platform adapted in retracted position to form a front wall of said cabinet, and means for supporting said seat platform comprising a pivot pin extending through each side of the cabinet into engagement with the respective support, a brace pivotally secured to each pin and adapted to extend outwardly beyond the cabinet, a side member at each side edge of the cabinet having a leg thereof underlying said brace and a sliding attachment in each side member fixed to the respective brace, and a hinge arm at each side secured at one end to the pivot pin and secured at the other end to the seat platform.

2. A retractible stall shower seat for mounting on wall studs of a shower stall comprising a horizontal element adapted for attachment to the studs, parallel vertical elements at opposite ends of the horizontal element and adapted to be secured to adjacent studs, said elements forming a rough-in box, a water-tight cabinet extending inwardly toward the wall, a seat platform adapted in retracted position to form a front wall of said cabinet, and means for supporting said seat platform comprising a pivot pin extending through each side of the cabinet into engagement with the respective vertical element, a brace pivotally secured to each pin extending outwardly beyond the cabinet, a channel at each side edge of the cabinet having a leg thereof underlying said brace and a sliding attachment in each channel fixed to the respective brace, and a hinge arm at each side secured at one end to the pivot pin and secured at the other end to the seat platform.

3. A retractible stall shower seat for mounting on wall studs of a shower stall comprising a horizontal angle element having an outwardly extending leg, parallel vertical angle elements at opposite ends of the horizontal element and turned to embrace adjacent corners of adjacent studs, said elements forming a rough-in box, a water-tight cabinet curved inwardly toward the wall, a seat platform adapted in retracted position to form a front wall of said cabinet, and means for supporting said seat platform comprising a pin extending through each side of the cabinet into engagement with the respective vertical angle element, brace means secured at one end to each pin and at the other end to the platform, said platform in extended position having a bearing against and through the brace means on each pin and having a separate bearing downwardly against said outwardly extending leg.

4. A retractible stall shower seat for mounting on wall studs of a shower stall comprising a horizontal angle element having an outwardly extending leg, parallel vertical angle elements at opposite ends of the horizontal element and turned to embrace adjacent corners of adjacent studs, said elements forming a rough-in box, a water-tight cabinet curved inwardly toward the wall and downwardly sloping to fit the spinal curve of a seated body, a seat platform adapted in retracted position to form a front wall of said cabinet, and means for supporting said seat platform comprising a pivot pin extending through each side of the cabinet into engagement with the respective vertical angle element, a brace pivotally secured to each pin extending downwardly and outwardly beyond the cabinet, a channel at each side edge of the cabinet having a leg thereof underlying said brace and a sliding attachment in each channel fixed to the respective brace, and a hinge arm at each side fixed at one end to the pivot pin and pivotally secured at the other end to the seat platform at the rearward side edge.

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