March 20, 1962 A. R. FINKEL 3,025,937

SHOWER DOOR FOR BATHTUB

Filed July 14, 1958 2 Sheets-Sheet 1

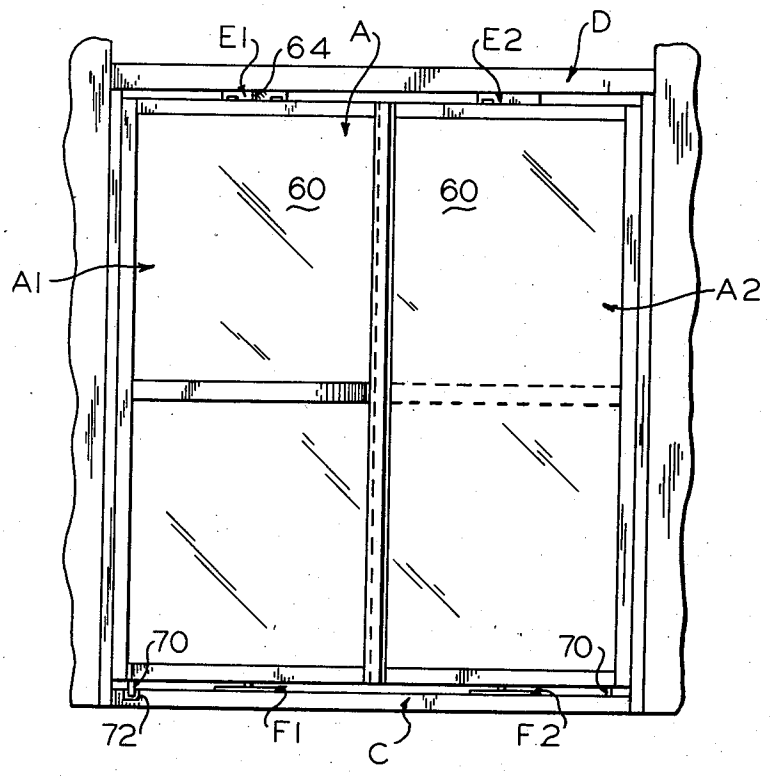


FIG. 1

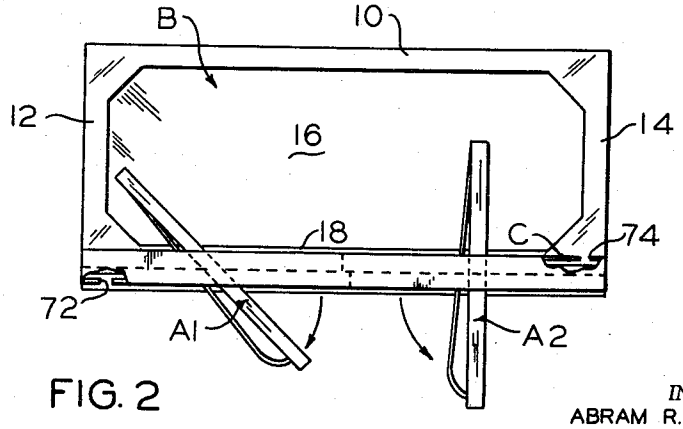


FIG. 2

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SHOWER DOOR FOR BATHTUB

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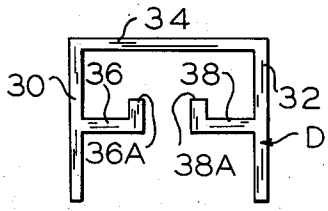


FIG. 3

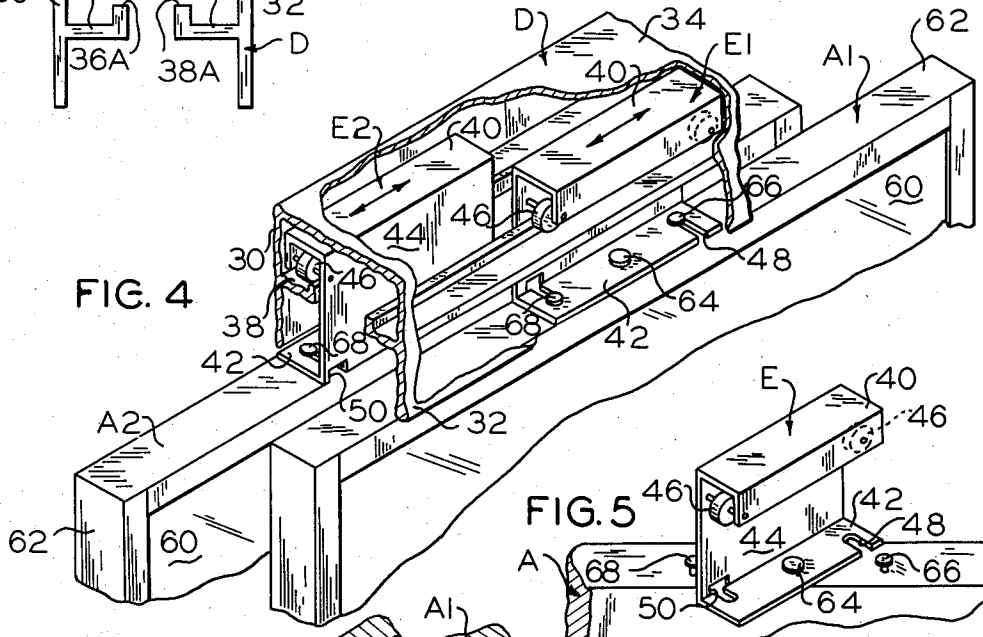


FIG. 4

FIG. 5

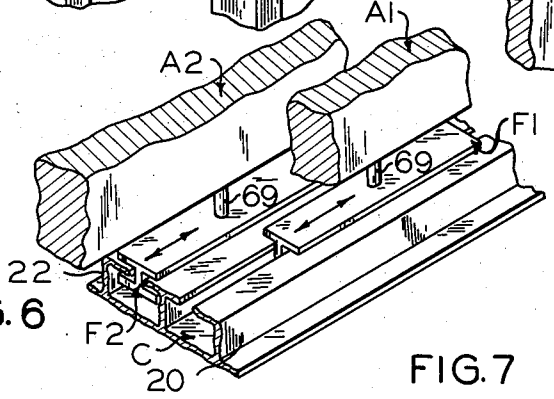


FIG. 6

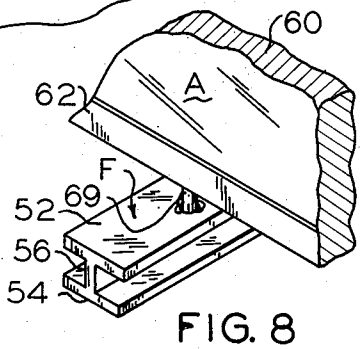
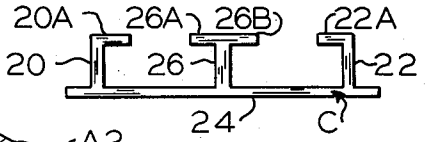


FIG. 8

FIG. 7



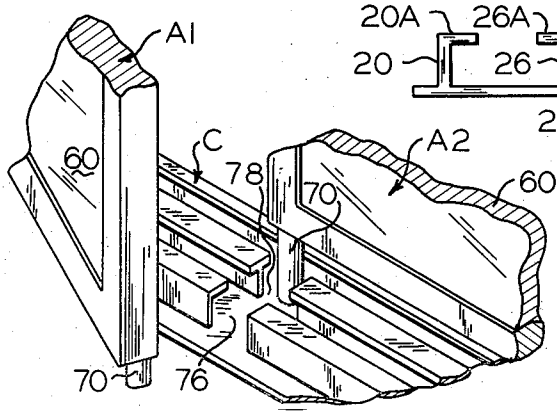


FIG. 9

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3,025,937

SHOWER DOOR FOR BATHTUB

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3 Claims. (Cl. 189—46)

My invention relates to a shower door for a bathtub and more particularly relates to cooperative sliding shower doors for enclosing the bathing facility when in use and permitting access to the interior of the tub by sliding one of the doors into face to face abutment with the other.

It is well known that the usual cooperative sliding shower doors for a bathtub only permit a limited open space for the bather to enter when one door is slidably engaged within the supporting track into face to face orientation with the other. Moreover, the only manner in which the interior of the prior art doors could be thoroughly washed was from the interior of the tub with the doors closed.

It is, therefore, an object of my invention to construct slidable shower doors for a bathtub wherein the doors may also be rotated into a position to provide the entire breadth above the tub as access space for the bather.

Another object of my invention is to provide a shower door for a bathtub wherein each side of the door is accessible from the exterior of the tub for cleaning purposes.

Another object of my invention is to provide a sliding enclosure for a bathtub wherein each door thereof is adapted to be pivoted into flush engagement with the end wall of the bathing facility or to present either surface of the door to the exterior of the tub.

Another object of my invention is to provide a slidable and pivoted shower door for a bathing facility which is readily operated into closed or maximum open position.

Another object of my invention is to provide a slidable and pivoted shower door which, when in closed position, assures against water splashing outwardly from the tub onto the floor.

Other objects of my invention are to provide an improved device of the character described, that is easily and economically produced, which is sturdy in construction, and which is highly efficient in operation.

With the above and related objects in view, my invention consists in the details of construction and combination of parts, as will be more fully understood from the following description, when read in conjunction with the accompanying drawings, in which:

FIG. 1 is a front view of a pivotally supported and slidable shower door embodying my invention.

FIG. 2 is a top plan view thereof showing the doors in pivoted position.

FIG. 3 is an end view of the upper track supporting the doors.

FIG. 4 is a perspective view and partly fragmentary of the upper track and carriage for the doors.

FIG. 5 is another perspective view of the carriage and pivotal operation thereof with respect to the upper portion of the door.

FIG. 6 is a perspective view of the lower track and guide bracket assembly.

FIG. 7 is an end view of the lower track.

FIG. 8 is another perspective view of the lower guide bracket, the door being in pivoted position.

FIG. 9 is a perspective view showing a modification of the lower track.

Referring now in greater detail to the drawings in which similar reference characters refer to similar parts, I show a pair of pivotally supported shower doors, generally designated as A, slidably cooperating to enclose a bathing facility, generally designated as B.

The bathing facility B includes a vertical rear wall 10 and spaced parallel vertical end walls 12 and 14 within which a bathtub 16 is installed. The bathtub 16 has a front wall 18, and a bottom track C is supported upon the upper surface thereof intermediate the end walls 12 and 14. An upper track D is horizontally disposed between the end walls 12 and 14 spaced above the track C whereby the doors A are supported and guided between the two tracks.

The lower track C is substantially W-shaped in cross-section having outer rails 20 and 22 upwardly extending from the edges of a medial base portion 24. Inwardly turned lips 20A and 22A horizontally project from the upper portions of the rails 20 and 22 respectively. A central rail 26 having flanges 26A and 26B outwardly extending therefrom upwardly projects from the base 24 intermediate the rails 20 and 22. The flanges 26A and 26B are on the same level with and spaced from the respective lips 20A and 22A and define therewith longitudinally extending, spaced parallel lower guides for the doors A.

The upper track D is substantially A-shaped in cross-section having arms 30 and 32 downwardly extending from a closed bight portion 34. The cross bar of the A is split to define inwardly facing horizontal members 36 and 38. A head 36A upwardly projects from the interior portion of the member 36 while a similar head 38A correspondingly projects from the member 38.

A carriage E1 supporting door A1 longitudinally rides within the upper track D upon the member 36 and a carriage E2 supporting door A2 longitudinally rolls on the member 38.

Each of the carriages E comprises a channel shaped member having spaced horizontal portions 40 and 42 extending from a vertical leg 44. Spaced rollers 46 are supported on a horizontal axis in the vertical leg 44 and ride within the upper track D upon the member 36 or 38. A notch 48 is formed in one end of the horizontal member 42 extending from the edge thereof to a medial portion adjacent the vertical member 44. A notch 40 is formed in the other end of the horizontal member 42 from a medial portion therein and extending through the vertical leg 44. Each of the notches 48 and 50 act as bracing stop for the upper portion of the doors to maintain planar alignment thereof with the upper and lower tracks during sliding operation. A lower bracket F1 supports the door A1 upon the flanges 20A, 25A whereas a bracket F2 similarly supports door A2 upon flanges 26B, 22A.

The lower brackets F are each substantially I-shaped in cross-section having spaced parallel horizontal arms 52 and 54 interconnected by a necked portion 56. As is apparent, each bracket F is longitudinally slidable by the slotted portions on the sides of the neck 56 upon the spaced adjacent flanges on the lower track C.

Each door A comprises a central plastic or glazed portion 60 peripherally enclosed by a metal frame 62. A pin 64 upwardly projects from the central upper portion of the frame 62 and is pivotally supported within the longitudinal center of the upper carriage E. Stop pins 66 and 68 projecting upwardly from the frame 62 outboard of the pivot pin 64 engage within the notches 48 and 50 respectively of the carriage and maintain the upper portion of the door rigid when oriented co-planar with the lower and upper tracks C and D. A pivot pin 69 rotatably supports each door A in the bracket F while a guide pin 70 downwardly projects from the lower end of each door frame 62 and slidably engages the respective guide in the lower track C.

It is to be observed that the lower and upper edges of the door frame 62 are adjacently spaced from the respec-

tive lower and upper tracks whereby rotation of the doors A may be accomplished when the guide pins 70 are not restrained within the track C. Accordingly, the track C has a notch 72 in the outer rail 20 adjacent the end wall 12 to permit pin 70 in door A1 to be withdrawn therethrough and a notch 74 in the outer rail 22 allows pin 70 of door A2 to be withdrawn when rotation of either door A is desired.

As is apparent from the foregoing description, engaging the upper pins 66 and 68 with the upper carriage notches 48 and 50 respectively and the guides pin 70 within the lower track guideway will enable the doors A to be operated as a conventional sliding shower enclosure. However, by disengaging the respective guide pin 70 through the end notch in lower track C, each door may be rotated through 180° and present the opposed surface thereof to the exterior of the bathing facility. Furthermore, by rotating the doors through 90°, each door may be slidably positioned into a plane parallel to the vertical end walls 12 and 14 imediately adjacent to either whereby the full width of the tub wall 18 is available for access to the bather.

In a modification of the invention shown in FIG. 9, a centrally disposed notch 76 in the lower track rail 20 permits the guide pin 70 of door A1 to be withdrawn therethrough while a registering notch 78 in the center rail 26 enables the door A2 to be rotated by passing the pin 70 on the latter door through both notches 78 and 76. When it is desired to support the doors co-planar within the tracks C and D, the reverse procedure is performed.

Although my invention has been described in considerable detail, such description is intended as being illustrative rather than limiting, since the invention may be variously embodied, and the scope of the invention is to be determined as claimed.

I claim:

1. A shower enclosure for a bathtub comprising upper and lower tracks affixed in vertically spaced parallel orientation at the front of the bathtub, a carriage having rollers thereon riding in said upper track, a bracket longitudinally slidable upon said lower track, a shower door vertically disposed intermediate said carriage and said bracket, and pivotal means securing said shower door at the upper and lower edges thereof to said carriage and said bracket respectively, and wherein said carriage has oppositely disposed notches therein outward of said pivotal means, and pins upwardly extending from the top of said shower door in detachable engagement with said notches.

2. A shower enclosure for a bathtub comprising upper and lower tracks affixed in vertically spaced parallel orientation at the front of the bathtub, a carriage having rollers thereon riding in said upper track, a bracket longitudinally slidable upon said lower track, a shower door vertically disposed intermediate said carriage and said bracket, and pivotal means securing said shower door at the upper and lower edges thereof to said carriage and said bracket respectively, and wherein said carriage has oppositely disposed notches therein outward of said pivotal means, and pins upwardly extending from the top of said shower door in detachable engagement with said notches, and wherein a guide pin downwardly extending from the bottom of said shower door is slidably engaged in said track, and a notch in said track to permit withdrawal of the pin therethrough whereby said shower door may be rotated.

3. A shower enclosure for a bathtub comprising upper and lower tracks at the front of the bathtub, upper and lower carriages longitudinally slidable within said upper and lower tracks respectively, a shower door pivoted at the center portion thereof to said upper and lower carriages respectively, said sliding carriage having an elongated member with a pair of slots therein, one of said slots being at each end of said elongated member each carriage having a central pivotal member, pins with heads thereon and being securedly mounted upon said enclosure and being adapted to slide into said notches whereby the heads of the pin may rest upon the elongated members having said notches therein, the turning of the enclosure disengaging said pins from said notches, and said carriage and said enclosure being adapted to slide along the lower tracks or upper tracks.

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