

Aug. 27, 1963

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3,101,485

SHOWER CURTAIN AND INSTALLATION THEREFOR

Filed Jan. 24, 1961

3 Sheets-Sheet 2

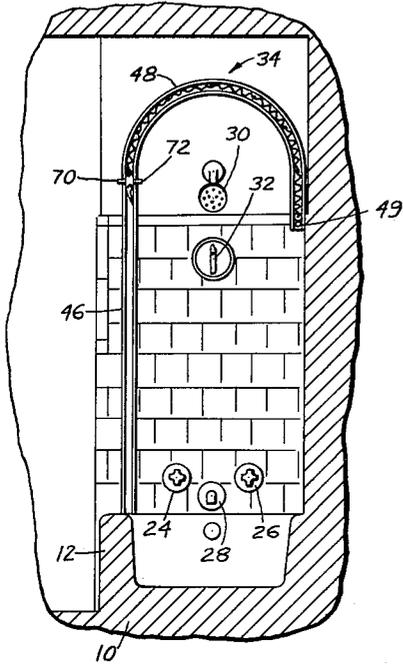


Fig. 4

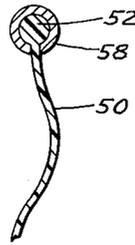


Fig. 5



Fig. 6

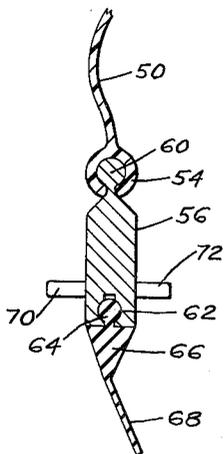


Fig. 7

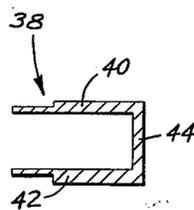


Fig. 8

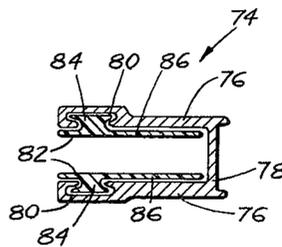


Fig. 9

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3 Sheets-Sheet 3

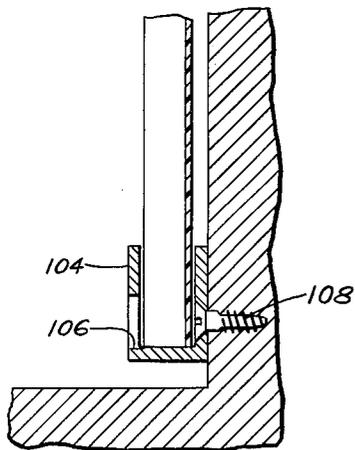
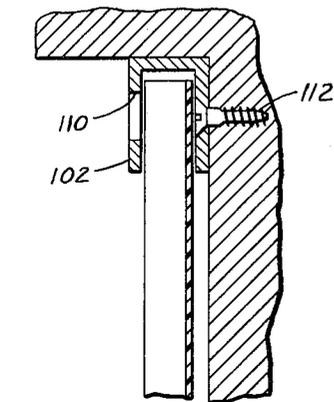


Fig. 13

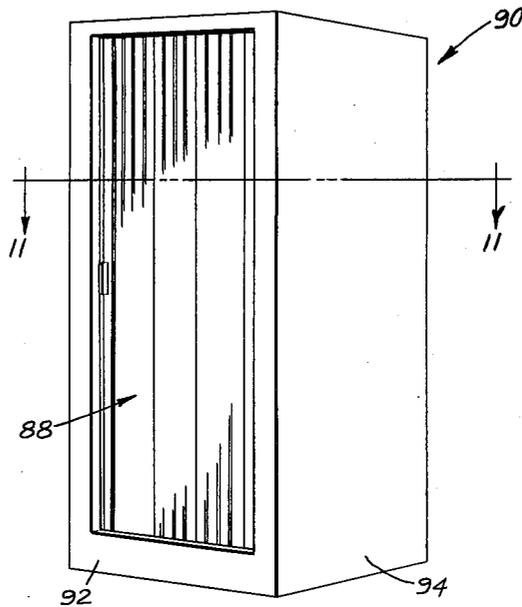


Fig. 10

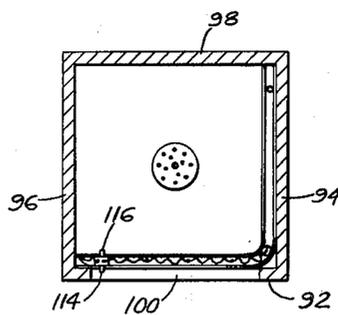


Fig. 11

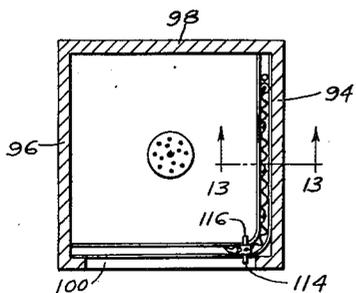


Fig. 12

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SHOWER CURTAIN AND INSTALLATION THEREFOR

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 4 Claims. (Cl. 4—146)

The present invention relates to a shower curtain and installation therefor. More particularly, the present invention relates to a water retaining curtain construction for use in a shower bath installation wherein the shower curtain is adapted to be moved from its position of use to a storage area, the position of the shower curtain in the storage area being nonparallel with respect to the water retaining position thereof.

In shower installations known heretofore, the water retaining curtain has been normally constructed of fabric and suspended from a top rail. The fabric type of shower curtain has been used both in bathtub shower installations and in the stall type of shower. Permanent types of shower installations have also been utilized wherein plate glass doors are either slidably mounted such as on a bathtub construction or pivotally mounted such as in a stall shower. In the sliding door type of shower curtain for use in conjunction with bathtubs, doors are normally mounted between trackways one of which is located on the top outer portion of the bathtub wall and the other of which is suspended between the end walls that define the walls between which the bathtub is installed. Although the sliding type of water retaining curtain is satisfactory for retaining the water within the bathtub enclosure when the shower fixture is utilized, it has been found objectionable because it reduces the entrance area when only the bathtub is to be used. Furthermore, the use of the sliding doors makes the cleaning of the tub difficult in that the entrance area of the bathtub is reduced. Moreover, the prior known sliding door construction restricts the effective use of the tub such as, for example, when bathing children. In addition, the cost of the sliding door type of curtain is relatively high and in many instances prohibits the use thereof.

The present invention is adapted to overcome the attendant difficulties experienced with the prior known types of shower curtains and sliding door constructions and incorporates a relatively inexpensive movable curtain assembly that is adapted to be used both with conventional bathtubs and stall showers. When used with the conventional bathtub, the shower curtain assembly embodied herein may be assembled on the bathtub without modifying the tub structure. The shower curtain of the present invention is constructed in a unique manner of interconnecting a plurality of flexible plastic panels to define a one-piece curtain construction that is not only decorative and ornamental in appearance but is also resistant to wear. In addition, the shower curtain defines a water repellent construction that effectively seals the bathtub and prevents leakage therefrom during the use of the shower spray fixture. In applying the present invention to a conventional bathtub construction, specially formed trackways are employed that are adapted to be secured to the end walls of the bathtub, the trackways being cut to size so as to be adaptable for any size bathtub. One of the unique features of the shower curtain of the present invention is that in the normal position of use when enclosing an entranceway to a shower bath installation it is located in a generally vertical plane, but when not in use it is located such that it is nonparallel with respect to its position of use. When employed in a conventional bathtub installation, the shower curtain is adapted to be elevated to a storage area and is moved in the trackways that are formed in an arcuate configuration to a position

wherein it defines a canopy that overhangs the bathtub. When used in a stall shower, the shower curtain is moved from the entrance opening to a nonparallel position with respect thereto, which position is defined by location of the shower curtain along a side wall of the stall shower.

It is therefore an object of the present invention to provide a curtain construction for use in a shower bath installation that is adapted to effectively cover the entrance area of the shower bath installation and is moved to a storage area when not in use, the storage area position being nonparallel with respect to the position of use.

Another object of the present invention is to provide a shower curtain for use in a shower bath installation that is formed of a plurality of plastic panels that are interlocked along the edges thereof to form a flexible, one-piece construction.

Still another object is to provide an improved shower bath curtain which is adapted to be installed with presently used shower installations.

Still another object is to provide a shower curtain that is adapted to be utilized with a conventional bathtub and is mounted in trackways that are secured to the end walls that define the bathtub installation.

Still another object is to provide a shower curtain for use in a conventional bathtub that is mounted in trackways that are secured to the end walls of the bathtub, a portion of the trackways being vertically located and a second portion of the trackways being arcuate in configuration so that when the shower curtain is removed from its position of use it defines a canopy over the bathtub.

Still another object is to provide a curtain for use in a shower installation that is formed of a plurality of panels that have a corrugated configuration and that have a bead formed on one end and a socket formed on the other end so that the panels may be interlocked in edge-to-edge relation.

Still another object is to provide a novel trackway for use in a shower bath installation in which a curtain is slidably mounted.

Other objects, features and advantages of the invention will become apparent as the description thereof proceeds when considered in connection with the accompanying illustrative drawings.

In the drawings which illustrate the best mode presently contemplated by me for carrying out my invention:

FIG. 1 is a perspective view of a portion of a bathroom area showing the installation of the shower curtain construction embodied in the present invention on a conventional bathtub;

FIG. 2 is a front elevational view of the invention illustrated in FIG. 1;

FIG. 3 is a sectional view taken along lines 3—3 in FIG. 2 and showing the shower curtain located in the water retaining position;

FIG. 4 is a sectional view similar to FIG. 3 and showing the shower curtain moved to the storage area thereof;

FIG. 5 is a sectional view taken along lines 5—5 in FIG. 2;

FIG. 6 is a sectional view taken along lines 6—6 in FIG. 2;

FIG. 7 is a sectional view taken along lines 7—7 in FIG. 2;

FIG. 8 is a sectional view taken along lines 8—8 in FIG. 2;

FIG. 9 is a view similar to FIG. 8 showing a modified form of a trackway;

FIG. 10 is a perspective view of a stall shower installation showing the shower curtain embodied herein covering the entranceway thereof;

FIG. 11 is a sectional view taken along lines 11—11 in FIG. 10;

FIG. 12 is a sectional view similar to FIG. 11 showing the shower curtain in the storage area thereof; and

FIG. 13 is a sectional view taken along line 13—13 in FIG. 12.

Referring now to the drawings and particularly to FIGS. 1 through 4, a bathroom arrangement is illustrated that includes a bathtub and shower combination that is adapted to be used with the shower curtain installation embodied in the present invention. It is understood, however, that the shower curtain installation embodied herein may be utilized with other known types of bathtub constructions. As illustrated in FIGS. 1 through 4, a bathtub 10 having an outer rim portion 12 is installed in a recess that is located between walls 14 and 16 of the bathroom. The recess is defined by end walls 18 and 20 and a rear wall 22 that form a three-sided enclosure for the bathtub 10. Projecting from the wall 18 are the usual hot and cold water valve handles 24 and 26 which are adapted to be adjusted to control the amount and temperature of water flowing through a spout 28. A shower spray head 30 is also mounted on the wall 18 in an elevated position with respect to the control handles 24 and 26, and the flow of water therethrough is controlled by a valve handle 32 positioned therebelow on the wall 18.

Referring particularly to FIG. 1, the shower curtain installation embodied in the present invention is shown mounted over the bathtub 10 and includes a curtain assembly generally indicated at 34 and opposed brackets generally indicated at 36 and 38 that define trackways for guiding the movement of the curtain assembly 34. As will be apparent from the description of the shower curtain installation hereinafter, the securement thereof in position over the bathtub 10 requires little mechanical ability and the use of only household tools, and furthermore does not necessitate any modification of the bathtub structure.

The trackways 36 and 38 are similarly formed and for purposes of the description thereof reference will be made to trackway 38, a section of which is illustrated in FIG. 8. It is understood that the trackway 36 differs from the trackway 38 only in the direction of curvature of the top portion thereof, as will be described. The trackways 36, 38 are formed in a channel configuration, the open side of each channel facing in the direction of the other trackway. Referring to FIG. 8, the channel section of trackway 38 is shown being defined by side walls 40 and 42 that are joined integral to a rear wall 44, the rear wall 44 being placed in flush engagement against the end wall 20 of the bathtub enclosure. Both the trackways 36 and 38 include a generally vertical portion 46 that extends in a linear direction upwardly from the outer rim 12 of the bathtub 10. A generally arcuate portion 48 extends in a nonparallel direction with respect to the vertical portion 46 and is formed integral therewith, curving inwardly with respect to the bathtub so that it terminates adjacent the rear wall 22. A pin 49 is mounted at the extreme inner end of the arcuate portion 48 and defines a stop for limiting movement of the curtain assembly when it is moved to the storage position thereof. The trackways 36, 38 are secured to their respective end walls by any suitable screws or bolts that extend through openings that are formed in the rear wall 44 of the trackways. It is seen that in mounting the trackways 36, 38 on the end walls 18 and 20, it is not necessary to modify the end walls or the bathtub 10, and the installation is easily accomplished by extending the screws or bolts through the openings formed in the rear walls 44 of the trackways thereby securing the trackways to their respective end walls.

Referring now to FIGS. 2, 5, 6 and 7, the curtain assembly 34 is illustrated in detail and as shown is defined by a plurality of panels indicated at 50 that are adapted to be disposed in interlocking relation along the edges thereof. The panels 50 are preferably formed of a water resistant material such as linear polyethylene and cooperate together to define a relatively flexible curtain construction. Referring to FIGS. 5 and 6, the construction of

the panels 50 is more clearly illustrated, and as shown, each of the panels is formed with a beaded edge 52 at the upper end thereof that is of a solid construction and is further formed with a socket portion 54 at the lower end thereof. In assembling the panels 50, the upper beaded edge 52 is telescopically engaged with the socket portion 54 of the adjacent panel, and normally about seven panels are required to obtain the height necessary to adequately cover the entrance area to the shower bath installation over the tub 10. In order to increase the strength of the curtain assembly, each panel is molded with an undulating surface, the undulating surface not only adding rigidity to the complete curtain assembly but further adding to the ornamental effect thereof. The curtain assembly is completed by providing a metallic strip 56 at the lower end thereof and a hollow rod 58 at the upper end thereof, the metallic strip 56 being formed with a beaded portion 60 that coacts with the hollow socket portion 54 of the lowermost panel 50. The strip 56 is further formed with a slot 62 in the lowermost edge thereof for receiving an upstanding bead 64 of a sealing member 66. The sealing member 66 defines the lower edge of the curtain assembly and includes a downwardly and inwardly directed flap 68 that projects within the bathtub enclosure when the curtain assembly is in the position of use as shown in FIG. 3 and thereby directs downwardly gravitating water within the interior of the bathtub 10 that emanates from the shower head 30. As shown in FIG. 5, the beaded edge of the uppermost panel 50 telescopically fits within the hollow rod 58, which cooperates with the metallic strip 56 to lock the panels therebetween.

The panels 50 are vertically dimensioned such that when they are interconnected in edge-to-edge relation they define a complete curtain assembly that when disposed in the position shown in FIG. 1, completely enclose the entrance to the bathtub, the upper rod 58 being disposed somewhat vertically above the shower spray head 30. The rod 58, socket portions 54 and the metallic strip 56 are constructed and arranged such that the outer ends thereof are slidably received within the trackways 36 and 38, the dimensions of the walls 40, 42 of the trackways being sufficient to effectively retain the panels 50, rod 58 and metallic strip 56 in proper aligned relation.

In order to produce the sliding movement of the curtain assembly 34 within the trackways 36, 38, handles 70 and 72 are provided and are secured to the outer and inner surfaces of the metallic strip 56. Either of the handles 70 or 72 may be grasped and moved in the desired direction to effect movement of the entire curtain assembly.

In the position of use, the curtain assembly 34 encloses the entranceway to the bathtub 10 as seen in FIGS. 1 and 3 and defines a water retaining curtain that is adapted to effectively retain water within the bathtub enclosure when the shower spray head 30 is used. When the occupant of the bathtub either enters or leaves the bathtub enclosure, the curtain assembly 34 must be moved to the upper or stored position thereof, and this is accomplished by simply elevating the curtain assembly to the position shown in FIG. 4, the pin 49 limiting the movement thereof. In moving the curtain assembly to the stored position, the flexibility of the interconnected panels 50 enables the curtain assembly to assume a curved configuration as the panels follow the arcuate formed sections 48 of the trackways 36, 38. In this stored position of the curtain assembly, the entranceway to the bathtub is completely exposed so that the occupant may easily enter or leave the bathtub. Within the curtain assembly disposed in the stored position as seen in FIG. 4, the bathtub may also be utilized in the conventional manner, without any encumbrance such as would be present in the prior known sliding glass panel constructions.

Referring now to FIG. 9, a modified form of a trackway is illustrated and is generally indicated at 74. The trackway 74 is defined by side walls 76 and an end wall 78, the side walls 76 being formed with slots 80. A plastic

insert 82 is adapted to be slidably mounted in each side wall and for this purpose is provided with a projection 84 that extends into the slot 80. An extension 86 projects inwardly into the trackway and in effect lines the side wall, the opposed extensions 86 being adapted to slidably receive the ends of the panels 50 therebetween. It is seen that the use of the plastic inserts 82 provides a more effective bearing surface for the sliding panels and will aid in producing a more quiet and smooth operation of the curtain assembly during movement thereof.

Referring now to FIGS. 10 through 13, a modified form of the invention is illustrated wherein a curtain assembly generally indicated at 88 is adapted to be installed in a conventional shower stall generally indicated at 90. The shower stall 90 is defined by a front wall 92, side walls 94 and 96, and a rear wall 98, the front wall 92 being formed with a conventional opening 100 that defines the entranceway to the stall shower. The side wall 96 may have the conventional shower head and controls mounted thereon as is well known in the art. Brackets 102 and 104 that are formed in an L configuration are secured to the top and bottom portions of the front wall 94 in spaced relation and are further secured to the side wall 96 to form nonparallel but continuous trackways for receiving the curtain assembly 88. The curtain assembly 88 is constructed similarly to the curtain assembly 34 except that the longitudinal axes of the panels thereof extend in a generally vertical direction as opposed to the generally horizontal arrangement illustrated in FIGS. 1 and 2. As shown in FIG. 13, the lower trackway 104 is provided with suitable openings 106 which not only enable screws 108 to be conveniently inserted into the walls of the stall shower 90 but further define relief openings for permitting water that has fallen into the trackway 94 to drain to the shower floor. The upper trackway 102 is also formed with suitable openings 110 that provide access to screws 112 for securing the trackway 102 to the walls of the stall shower. In the position of use, when the shower is in operation, the curtain assembly 88 is located in the position illustrated in FIGS. 10 and 11, wherein the entranceway defined by the opening 100 is closed, thereby enclosing the interior of the stall shower. When the user is either desirous of entering or leaving the stall shower, the curtain assembly is slidably moved within the trackways 104 and 106 to the position shown in FIG. 12 wherein it is disposed in parallel relation with respect to the side wall 94. The entranceway 100 is then opened for exposing the interior of the shower. In order to facilitate movement of the curtain assembly, outer and inner handles 114 and 116 are provided and are similar to the handles 70 and 72 described above in connection with the curtain assembly 34.

The construction of the shower curtain installation in both forms of the invention is unique in that it includes trackways, each of which are formed with a first section that extends in a linear direction, the linear first sections defining a space therebetween that forms the entrance to the shower installation. The remaining portion of each trackway is continuous with the linearly extending portion and extends in a nonparallel direction with respect thereto. The linear sections of the trackways support the curtain assembly in the water retaining position whereas the remaining sections that are nonparallel with respect to said linear sections define a storage area and are adapted to support the curtain assembly in a position that is nonparallel with respect to the normal position of use thereof.

By providing for the complete removal of the curtain assembly from the entrance of the bathtub, for example, a more flexible use of the tub is provided since the tub can be more easily adapted for tub or shower purposes. It is seen, furthermore, that the curtain assembly is readily adaptable to any bath installation without requiring special installation skills or special tools. If necessary, the installation may be easily detached and mounted in another similar bath installation.

While there is shown and described herein certain specific structure embodying the invention, it will be manifest to those skilled in the art that various modifications and rearrangements of the parts may be made without departing from the spirit and scope of the underlying inventive concept and that the same is not limited to the particular forms herein shown and described except insofar as indicated by the scope of the appended claims.

What is claimed is:

1. In a water retaining curtain construction for use in a shower bath installation, a pair of trackways secured to the walls of said bath installation in spaced relation, a portion of both said trackways extending in a linear direction and defining a space therebetween that forms an entranceway to said shower bath installation, the remaining portion of each of said trackways being continuous with the linearly extending portion thereof and extending in a nonparallel direction with respect thereto, a curtain assembly comprising a plurality of flexible interconnected panels that extend between said trackways, the opposed ends of said panels being received within said trackways for slidable movement therein, the height of said curtain assembly being substantially equal to the linear portion of said trackways, said curtain assembly being locatable in a first position wherein said panels span said entranceway to enclose said shower bath installation for retaining water therein when said shower bath installation is in use, and being movable in said trackways from said first position in a nonparallel direction with respect to the location thereof in said first position to a second position, the flexibility of said panels permitting the movement thereof in said nonparallel direction and said second position defining a storage area for said curtain assembly when the shower bath installation is not in use, each of said panels being formed with an integral longitudinally extending solid beaded edge on one side thereof and an integral longitudinally extending hollow socket portion on the other side thereof, the socket portion of each panel receiving the solid beaded edge of the adjacent panel in snug fitting relation therein so as to define a substantially continuous flexible curtain assembly.

2. In a shower of the stall type having a base, a front wall, rear wall, a first side wall and a second side wall, a shower fixture secured to said first side wall, an opening formed in said front wall and defining an entranceway to the stall shower, a pair of vertically spaced trackways, linear sections of each trackway mounted on said front wall on opposite sides of said entranceway, both said trackways having continuous portions joined to said linear sections defined by a short arcuate section that spans the intersecting area between said front wall and said second side wall and a second linear section secured to said second side wall, the second linear section of each trackway being disposed in a plane that is perpendicular to a plane in which the first linear section is disposed, and a flexible curtain mounted for slidable movement in said trackways, said flexible curtain including a plurality of flexible panels interconnected in edge-to-edge snug fitting relation, said flexible curtain being movable from a first position on said front wall wherein said entranceway is covered to a second position adjacent said second side wall wherein access through said entranceway is provided, the width of said curtain being substantially as wide as said entranceway.

3. In a shower of the stall type as set forth in claim 2, the longitudinal axes of said panels extending in a generally vertical direction.

4. In a water retaining curtain construction for use in a shower bath installation, a pair of trackways secured to the walls of said bath installation in spaced relation, a portion of both said trackways extending in a linear direction and defining a space therebetween that forms an entranceway to said shower bath installation, the re-

maining portion of each of said trackways being continuous with the linearly extending portion thereof and extending in a nonparallel direction with respect thereto, a curtain assembly comprising a plurality of flexible interconnected panels that extend between said trackways, the opposed ends of said panels being received within said trackways for slidable movement therein, the height of said curtain assembly being substantially equal to the linear portion of said trackways, said curtain assembly being locatable in a first position wherein said panels span said entranceway to enclose said shower bath installation for retaining water therein when said shower bath installation is in use, and being movable in said trackways from said first position in a nonparallel direction with respect to the location thereof in said first position to a second position, the flexibility of said panels permitting the movement thereof in said nonparallel direction and said second position defining a storage area for said curtain assembly when the shower bath installation is not in use, each of said trackways being formed in a U shaped configuration that is defined by spaced side walls and an integral end wall, the side walls of each trackway having a longitudinally extending slot formed therein into which an insert projects, each of said inserts including an extension that is positioned interiorly of a

side wall in adjacent relation therewith to form an inner liner therefor, said extensions thereby defining bearing surfaces for receiving said panels in sliding relation therein, and each of said panels being formed with an integral longitudinally extending solid beaded edge on one side thereof and an integral longitudinally extending hollow socket portion on the other side thereof, the socket portion of each panel receiving the solid beaded edge of the adjacent panel in snug fitting relation therein so as to define a substantially continuous flexible curtain assembly.

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