June 23, 1942. M. H. DUVAL 2,287,419

SHOWER CABINET

Filed Sept. 30, 1940 2 Sheets-Sheet 1

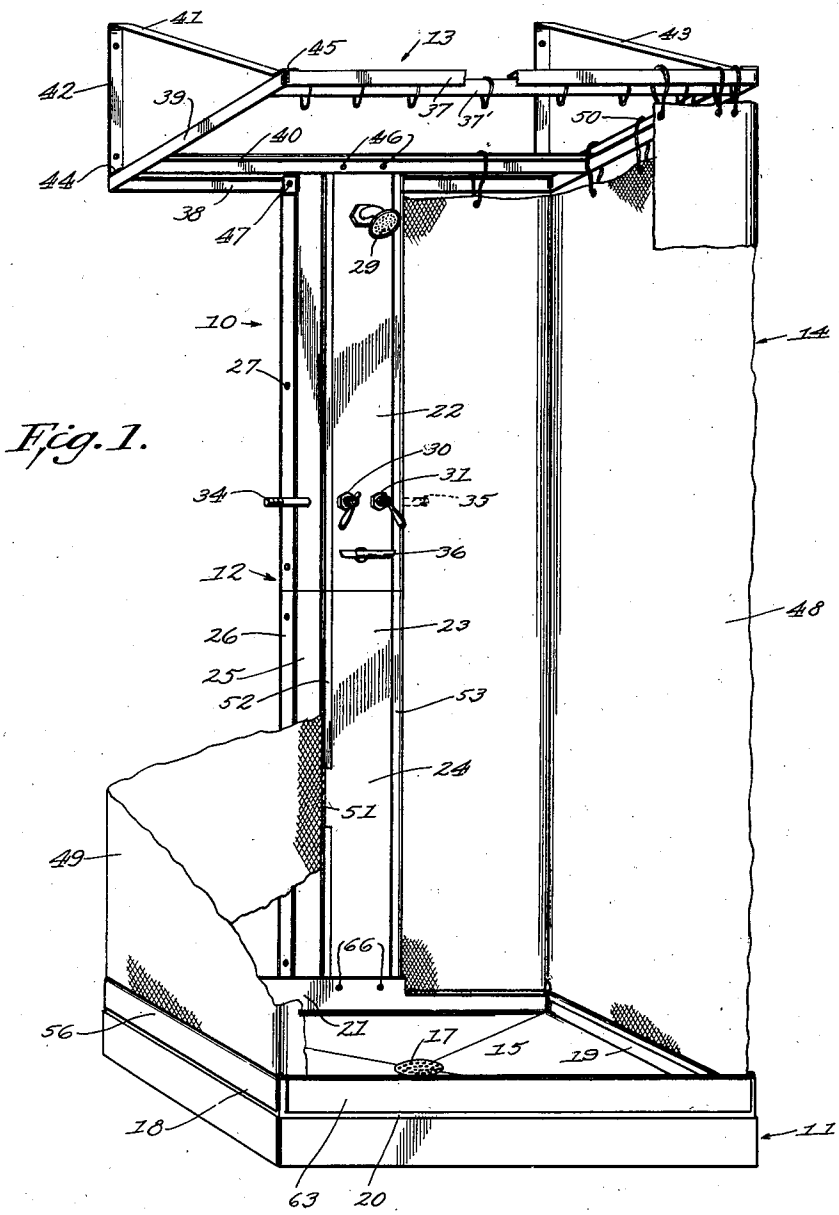
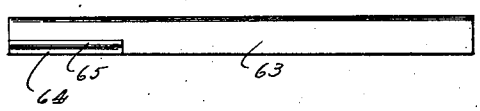


Fig. 1.

Fig. 9.



Inventor

Montague H. Duval.

By Lenlemeau, Darby, Lenlemeau

Attorneys

June 23, 1942. M. H. DUVAL 2,287,419

SHOWER CABINET

Filed Sept. 30, 1940 2 Sheets-Sheet 2

Fig. 2.

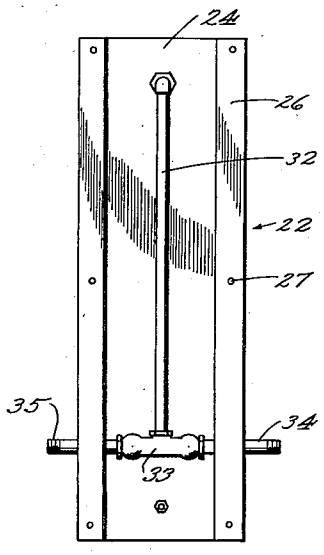


Fig. 4.

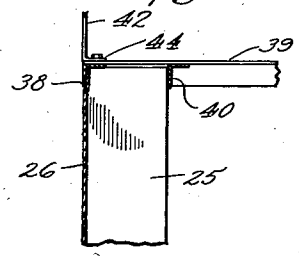


Fig. 5.

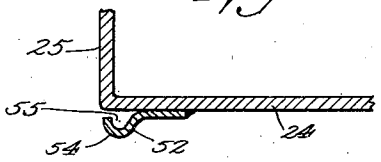


Fig. 3.

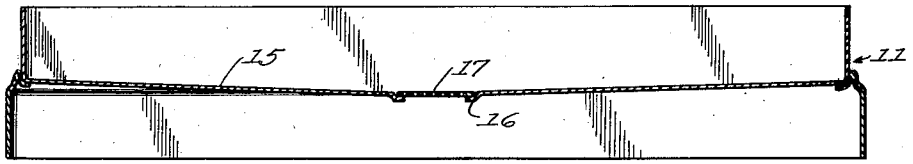


Fig. 7.

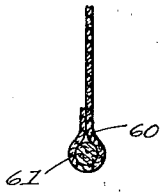


Fig. 6.

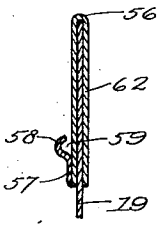
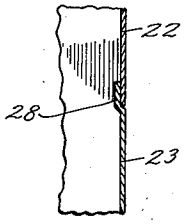


Fig. 8.



Inventor

Montague H. Duval.

By Lenahman, Darby, Lenahman

Attorneys

Patented June 23, 1942

2,287,419

UNITED STATES PATENT OFFICE

2,287,419

SHOWER CABINET

Montague H. Duval, Great Neck, N. Y.

Application September 30, 1940, Serial No. 359,150

10 Claims. (Cl. 4—146)

This invention relates to shower cabinets and refers particularly to curtain type shower cabinets.

An object of the invention is the provision of a cabinet which is economical to manufacture and which can be shipped and purchased in a compact package ready for installation. This cabinet, while adaptable for use in various types of buildings, is primarily designed for installation in camps, cottages and other places where a wood background is available. For the purposes of summer use, the cabinet embodies many advantages over the conventional steel cabinets. For instance, in summer camps or cottages the period of use is a matter of a few months which means that the cabinet remains unattended throughout the rest of the year. In the case of a steel cabinet, this involves the collection of dirt and possibly rust. With the present curtain shower cabinet, the user can remove the curtains at the close of the season and replace them in a clean and fresh condition the next year. When the curtains are removed, all the metal portions of the cabinet are completely exposed and can be thoroughly cleaned and washed.

In the usual curtain type shower cabinet, the lower ends of the curtain section or sections are left free and loose, so that they will tend to wrap around the occupant of the cabinet. This is an objectionable feature since the curtain sections not only interfere with the bathing operations, but also fail to produce a water-tight structure. These objections are eliminated in the present invention by the provision of a curtain supporting frame having means for detachably anchoring the bottom and side edges of the curtain to the frame.

As a further safeguard against leakage of water through the cabinet, I provide a pair of curtain sections, each extending around one side and a portion of the back of the cabinet. At the front, one section extends only a short distance from its respective side, while the other section is of sufficient width to be drawn entirely across the front and overlap with the short front portion of the other section. With this arrangement the joint or overlap between the curtain sections occurs toward one side of the cabinet and this avoids having the stream of water from the shower head strike the curtain sections directly at the joint, thus eliminating leakage at this point.

Another object is the provision of a floating connection between the lower edges of the curtain sections and the cabinet. This construction, while insuring a water-tight joint, also compensates for shrinkage of the curtain sections and for any inaccuracy in the cabinet structure of the flooring.

A further object of the invention is to provide an easily assembled structure wherein all of the plumbing fixtures are concentrated in one unit ready for connection to the water supply of the cottage or camp. In this connection the cabinet, when installed, will conceal the piping and other plumbing connections so that the only plumbing visible to the occupant of the cabinet are the fixtures, that is, the shower head and the hot and cold water valves or faucets.

With the foregoing and other objects in view, the invention will now be more fully described, reference being had to the accompanying drawings, in which:

Figure 1 is a perspective view of the completely assembled shower cabinet with certain portions of the curtain removed.

Figure 2 is a rear view of a standard section upon which all of the plumbing fixtures are mounted.

Figure 3 is a vertical section of the base or receptor.

Figure 4 is an enlarged fragmentary view showing the connection between the upper portion of the standard and the curtain frame.

Figure 5 is an enlarged fragmentary sectional view through the standard, showing one of the curtain securing strips.

Figure 6 is a sectional view through one of the side walls of the receptor showing a curtain anchoring member in operative position.

Figure 7 is a sectional view of the lower end of a curtain showing the cord filled hem.

Figure 8 is a fragmentary view showing the joint between the upper and lower standard sections, and

Figure 9 is a detail view showing the inner face of the threshold.

Referring now to the drawings, the numeral 10 designates generally the curtain shower cabinet forming the subject matter of this invention. This cabinet consists of a base or receptor 11, a standard 12 extending upwardly from the base, a curtain supporting frame 13 connected to the upper end of the standard, and a curtain 14 suspended from the frame and anchored to the standard and receptor, as will be described in detail hereinafter.

The receptor 11 may be of any desired construction and in the present instance is shown as being of rectangular formation, consisting of

a floor 15 having a central drain opening 16 within which is positioned a strainer 17. The floor 15 is enclosed by vertically extending side walls 18 and 19 respectively, and front and rear walls 20 and 21 respectively. In assembling the cabinet, the receptor is adapted to be placed over the waste outlet in the cottage or other building in which the cabinet is installed.

The standard 12 preferably consists of upper and lower sections 22 and 23. It is to be understood, however, that this member may be formed as a unitary element and is made in sectional form primarily to permit the cabinet to be packed and shipped in a compact package. The standard is of substantially channel shape formation in cross section, consisting of the base or front wall 24, side walls 25 and flanges 26, each extending outwardly at right angles from a side wall. These flanges 26 are primarily provided to secure the standard sections to a wall of the building within which the cabinet is being assembled. The flanges are provided at spaced points with holes or openings 27 which permit the use of screws or other fastening means in securing the standard to a vertical wooden or other wall.

The top of the lower standard section 23 is provided with an indented portion forming a shouldered lip 28 which extends around the base and side walls of the lower section but terminates short of the flanges 26. With this construction, the upper standard section 22 may be easily and quickly joined to the lower section, with the lower end of the upper section overlapping and concealing the lip 28.

To facilitate assembly of the cabinet and to eliminate the necessity of securing a plurality of plumbing fixtures to the cabinet during or after assembly of the cabinet, the upper standard section 22 is so constructed that it will accommodate all of the plumbing fixtures. That is, the plumbing fixtures are preassembled on the section 22 so that the purchaser may install these elements as a single unit. Referring to Figure 1 it will be observed that the shower head 29 is secured adjacent the upper end of the base or front wall 24 of the section 22. Likewise the hot and cold water valves or faucets 30 and 31 are mounted on the front wall of the upper standard adjacent its lower end. Referring to Figure 2, it will be observed that a riser 32 connects the shower head 29 with the fixture 33 upon which the valves 30 and 31 are mounted. Hot and cold water nipples 34 and 35 communicate with opposite ends of the fixture 33 and each extends through one of the side walls 25 of the standard section 22. These nipples are adapted to be connected to the hot and cold water supply of the building in which the cabinet is being installed. Preferably, a soap dish 36 is mounted on the upper standard section 22 below the valves 30 and 31.

The curtain supporting frame 13 is of substantially the same general contour as the receptor 11 and consists of front and rear angle bars 37 and 38, side bars 39, and a bar 40 which extends parallel to and is positioned forwardly of the bar 38. All of these bars are of angle iron formation in cross section. A strip 37' is positioned in rear of and extends parallel to the bar 37. The ends of this strip are suitably secured to the side bars 39. The rear bar 38 is adapted to be screwed or otherwise fastened to the wall of the building and in order to adequately support the frame 13 there are provided a pair of brackets 41. Each bracket consists of a vertical wall engaging portion 42 and a forwardly inclined portion 43. The portion 42 of each bracket is provided with a foot 44 resting upon the horizontal portion of its side bar 39 and secured thereto by a nut and bolt or other fastening means. Likewise, each of the inclined portions 43 is provided with a front foot 45 which engages the horizontal flange of its respective side bar and is secured thereto in a manner similar to the foot 44.

The spaced bars 38 and 40 cooperate to receive and secure the top portion of the upper standard section 22 to the frame 13. As will be observed (see Figures 1 and 4) the front wall 24 of the upper section abuts the rear face of the vertical portion of the bar 40. These abutting portions are provided with aligned openings which receive suitable fastening elements 46. The space between the bars 38 and 40 is so proportioned that when the standard section 22 is positioned between these bars with the front wall 24 of the standard contacting the bar 40, the flanges 26 will contact the vertical flange of the rear bar 38. These abutting portions are also provided with aligned openings for receiving suitable fastening elements 47.

The curtain 14 consists of two sections 48 and 49, respectively. Each section is suspended from the frame 13 by a plurality of clips or snap fasteners 50. Section 48 extends across the back of the cabinet from the right hand side of the standard 12, then forwardly throughout the right hand side of the cabinet and terminates adjacent the front of the cabinet, extending just a slight distance along the front, as shown in Figure 1. Section 49, similar to section 48, is provided with a portion which extends across the back of the cabinet to the standard 12. This section also extends along the left hand side of the cabinet. However, section 49 is of greater area than section 48, in that it extends across substantially the entire front of the cabinet and overlaps with section 48 at the right hand side of the cabinet. Furthermore, the front of section 49 is suspended from strip 37', while the front of section 48 is supported from bar 37. It will be observed that the curtains are arranged so that the overlap between them occurs toward a side of the cabinet. This avoids having the stream of water from the shower head point directly at the joint between the curtains, and therefore obviates the possibility of leakage of water through the front of the cabinet.

To further insure against the leakage or passage of water between the curtain, standard and receptor, means are provided for detachably connecting the longitudinal rear edges of the curtain sections 48 and 49 to opposite sides of the standard 12. In this connection, the rear longitudinal edge of each curtain section is formed with a corded hem 51. Thus, hem 51 forms a pocket within which is threaded a cord 51'. This provides the edge of each curtain section with a thickened longitudinally extending edge portion. A pair of strips 52 and 53 are secured, each to one longitudinal edge of the front wall 24 of the standard. Each strip is, of course, divided into upper and lower sections to conform to the standard sections 22 and 23. As shown in Figure 5, the inner portion of each strip is secured to the wall 24, while the outer portion is curved to form a substantially semi-circular longitudinally extending recess 54, which cooperates with the standard to provide a curtain receiving channel 55. With this construction, the corded longi-

tudinal rear edge 51 of each curtain section may be easily and quickly attached to the standard to provide a water-tight rear wall. This may be easily accomplished by slipping the corded edge 51 of each section into the top of its respective channel 55 and then sliding the curtain section downward until it becomes fully engaged.

Means are also provided to securely anchor the lower side edges of the curtain sections to the receptor 11. For this purpose a pair of side anchoring members 56 are provided. Each member consists of a strip of metal which is return bent upon itself to provide a structure which may be slipped over the top edge of one of the side walls 18 or 19 of the receptor. Each member 56 has secured to its lower inner edge a second strip 57. These strips 57, similar to the strips 52 and 53, have their upper free ends curved to provide semi-circular recess portions 58 each of which cooperates with its respective member 56 to form a curtain receiving channel 59. In this arrangement, the lower edge of each curtain section is formed with a hem 60, similar to the hem 54, and a cord 61 is threaded into the pocket to provide a thickened lower edge which may be easily and quickly inserted into the channel 59 of one of the members 56. Thereafter, the member 56 may be slipped upon its respective side wall of the receptor.

Since the members 56 are not positively secured to the walls 18 and 19, it will be apparent that a floating connection is provided; that is, this arrangement allows for shrinkage in the curtain sections and for any inaccuracy in assembling the cabinet. For instance, if the cabinet is erected so that the base or receptor 11 is not on an absolutely level floor, the distance between the curtain supporting frame 13 and the top of each side wall 18 and 19 will vary from corner to corner. The lip 62 of each member 56 is sufficiently long to permit the member to remain adequately gripped to its respective side wall even though it does not engage the same to its maximum possible limit. It is merely necessary to press each member 56 onto its respective wall to draw the curtain taut. These members, therefore, automatically allow for any variation which may be necessary as between the receptor and the curtain supporting frame 13. In addition to cooperating with the hem of the curtain to provide an enlargement, the cord 61 forms a flexible attaching means which will not interfere with the laundering of the shower curtain.

Since the curtain sections are secured to the cabinet along their rear longitudinal edges as well as along their lower side edges, no attachment is necessary across the back of the receptor between the members 56 and the standard 12. Furthermore, due to the fact that each curtain section is adequately held at the center and at the sides there is no slack at the back between these points.

A threshold 63 is detachably secured over the top edge of the front wall 20 of the receptor. This constitutes a substantially U-shaped strip of metal which covers the upper edge of the front wall at the entrance to the cabinet. The right hand side of the threshold as viewed from Figure 1 is provided with a strip 64 corresponding to the strips 57, that is, the upper end of this strip is curved to provide a semi-circular recess forming a curtain receiving channel 65. The channel 65 receives the corded edge of the front of the curtain section 48 so as to securely anchor this narrow portion. The strip 64 is illustrated as extending inwardly only to a point to accommodate the front portion of section 48, but it may extend the entire length of the threshold, if desired. While this front portion is of sufficient width to form a water-tight joint with the overlapping front portion of the curtain section 49, it does not project far enough to interfere with an entrance and exit of a person using the shower cabinet.

The lower portion of the standard is secured to the rear wall 21 of the receptor by nuts and bolts 66 passing through aligned openings in these elements. The curtains may be formed of any suitable water-proof material and may be of any desired color or design. It is also to be understood that the invention is not limited to the details of construction shown in the drawings, and that the phraseology employed in the specification is for the purpose of description and not of limitation.

I claim:

1. In a shower cabinet, a receptor having upwardly extending side walls, a shower curtain, means for supporting said curtain so that its lower edges terminate within the receptor, a curtain engaging strip loosely slidable on said receptor, and means to detachably secure the curtain to the strip whereby a water-tight and floating connection is provided between the receptor and curtain.

2. In a shower cabinet, a receptor having vertically extending side walls, a shower curtain, means for supporting said curtain so that its lower edges terminate within the receptor, a curtain engaging strip having its upper end return bent to form with the body of the strip a longitudinally extending pocket receiving the upper edge of a wall of the receptor, and means to detachably secure the curtain to the strip whereby a water-tight and floating connection is provided between the receptor and curtain.

3. In a shower cabinet, a receptor having upwardly extending walls, a shower curtain having a thickened lower edge, means for supporting said curtain so that its lower edges terminate within the receptor, and means slidably carried by said receptor to detachably receive the thickened edge of the curtain whereby a water-tight and floating connection is provided between the receptor and curtain.

4. In a shower cabinet, a receptor having vertically extending walls, a shower curtain having a thickened lower edge, means for supporting said curtain so that its lower edges terminate within the receptor, a strip slidably mounted on the receptor, and a second strip mounted on the first strip and having its upper edge spaced from the first strip and forming therewith a channel for receiving the thickened edge of the curtain whereby a water-tight and floating connection is provided between the receptor and curtain.

5. In a shower cabinet, a receptor, an elongated fixture supporting standard of substantially channel shape formation in cross section extending upwardly from said receptor, a shower head mounted on said standard adjacent its upper end, hot and cold water valves mounted on said standard intermediate its ends, hot and cold water nipples connecting the valves and extending through opposite side walls of the standard for connection to supply pipes, piping connecting the shower head with the hot and cold water valves and forming with said shower

head, valves, nipples and standard a complete plumbing unit ready for assembly with the rest of the shower cabinet, a curtain supporting frame detachably connected to the upper end of said standard above the shower head, a shower curtain supported by said frame, said curtain comprising two sections, and means for detachably connecting the rear longitudinal edges of said curtain sections to said standard in front of said nipples, whereby the piping connecting the shower head, valves and nipples will be concealed from view when the shower cabinet is assembled.

6. In a shower cabinet, an elongated fixture supporting standard of substantially channel shape formation in cross section, and a curtain supporting frame connected to the upper end of said standard, said frame having a rear wall engaging bar and a second bar extending parallel to said rear bar and spaced forwardly thereof a distance equal to the depth of the standard, the upper end of said standard being positioned between and secured to said bars.

7. In a shower cabinet, an elongated fixture supporting standard of substantially channel shape formation in cross section, the side walls of said standard having outwardly projecting flanges extending parallel to the front face of the standard, and a curtain supporting frame connected to the upper end of said standard, said frame having a rear wall engaging bar and a second bar extending parallel to said rear bar and spaced forwardly thereof a distance equal to the depth of the standard, the upper end of said standard being positioned between and secured to said bars, with the front wall of the standard secured to the forward bar, and the outwardly projecting flanges of the side walls of the standard secured to the rear bar.

8. In a shower cabinet, an elongated fixture supporting standard of substantially channel shape formation in cross section, the side walls of said standard having outwardly projecting flanges extending parallel to the front face of the standard, and a curtain supporting frame connected to the upper end of said standard, said frame having a pair of spaced parallel rear bars of angle iron formation in cross section, the upper end of said standard being positioned between and secured to said bars, with the front wall of the standard secured to the vertical flange of the forward bar, and the outwardly projecting flanges of the side walls of the standard secured to the vertical flange of the rear bar, the horizontal flange of said rear bar resting upon and covering the tops of the flanges of the standard.

9. In a shower cabinet, a substantially rectangular receptor, a standard extending upwardly and centrally from the rear of the receptor, a shower head mounted adjacent the top of the standard, curtain supporting means positioned adjacent the top of the standard, a shower curtain supported from said means and comprising two sections, one section being of greater width than the other, means for detachably securing the rear longitudinal edges of said curtain sections to opposite sides of said standard, the smaller curtain section extending forwardly along one side of the cabinet and across the front a short distance from its side, and means for detachably securing the lower side edge of said smaller curtain section to the receptor, the larger curtain section extending forwardly along the other side of the cabinet and having its lower edge detachably secured to the receptor, said larger curtain section having a front portion of sufficient width to extend entirely across the front of the cabinet and overlap the short front portion of the smaller curtain section at a point to one side of the shower head, said larger curtain section having its lower front edge unattached to the receptor whereby the front portion thereof may be freely moved from open to closed position in overlapping relation to the front portion of the other curtain section.

10. In a shower cabinet, an elongated fixture supporting standard of substantially channel shape formation in cross section, a curtain supporting frame connected to the upper end of said standard, said frame having a rear wall engaging bar and a second bar extending parallel to said rear bar and spaced forwardly thereof a distance equal to the depth of the standard, the upper end of said standard being positioned between and secured to said bars, said frame having side bars connecting the rear bars, and a pair of spaced front bars connecting the side bars and constituting means for supporting the front end portions of a shower curtain whereby the rear front bar will support one front end portion of the curtain and the foremost bar will support the other front end portion of the curtain to permit these portions of the curtain to be moved relative to each other on said front bars to a closed overlapping position and provide a water-tight joint.

MONTAGUE H. DUVAL.