Nov. 19, 1935. R. M. DYAR 2,021,145

COMBINED WASHSTAND AND SHOWER BATH

Filed Oct. 8, 1934 2 Sheets-Sheet 1

Fig. 1.

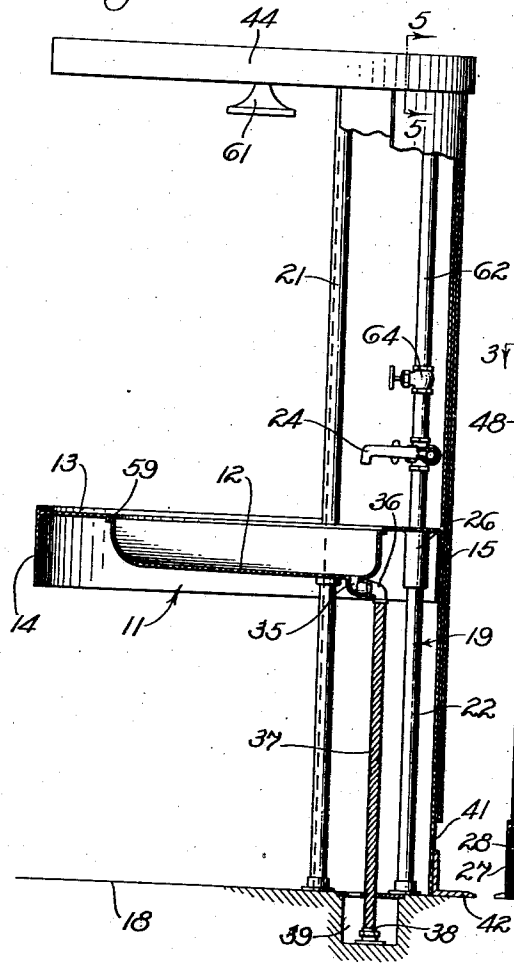


Fig. 2.

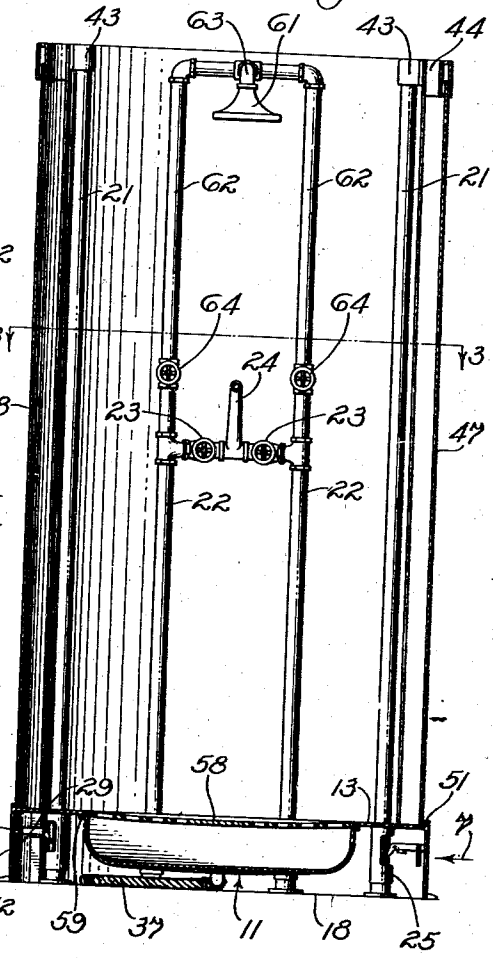
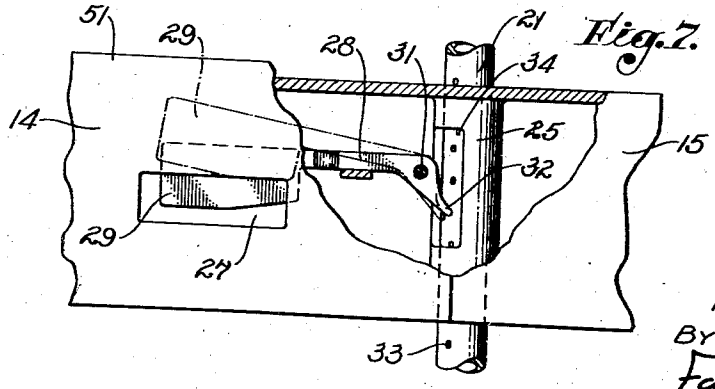


Fig. 7.



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Fig. 4.

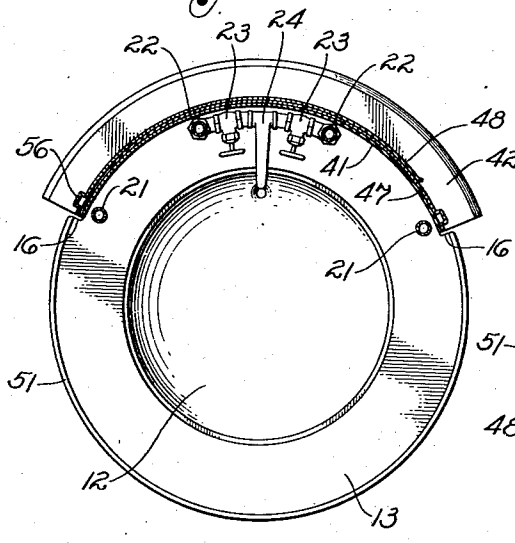


Fig. 3.

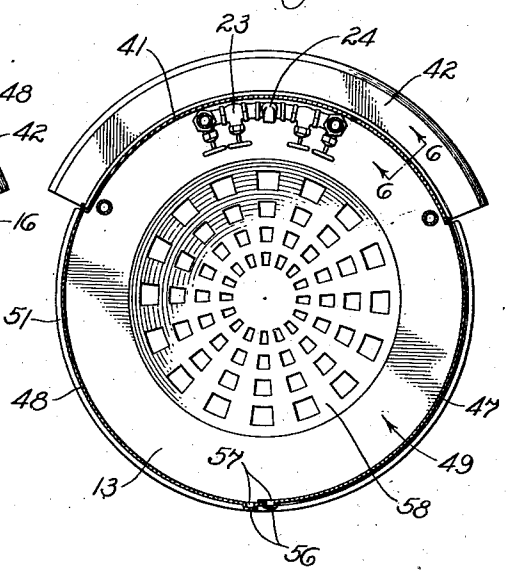


Fig. 5.

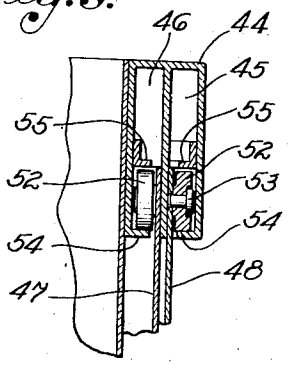
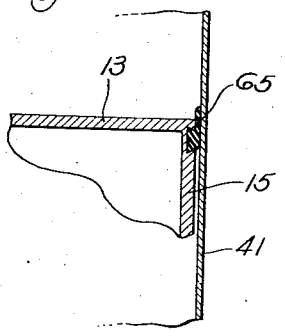


Fig. 6.



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COMBINED WASHSTAND AND SHOWER BATH

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Application October 8, 1934, Serial No. 747,373

17 Claims. (Cl. 4—145)

My invention relates to lavatory fixtures or equipment, and relates in particular to a device which may be used selectively as a washstand or shower bath.

The general object of the invention is to provide a simple means which will occupy a minimum of space and will provide complete facilities for bathing the entire human body. It appears to be generally acknowledged that the shower bath, as a bathing means, is gradually replacing the old bathing tub. Many of the newer hotels provide relatively few tub baths, and instead equip many rooms with washstands and shower baths. My present invention makes provision for both a washstand and a shower bath in approximately the same space ordinarily occupied by the standard form of washstand. At the same time, it provides a washstand and shower bath at less cost than the installation of a separate washstand and separate shower bath.

A further advantage of the invention is that it enables the modernizing of the present hotel rooms having washstands only. In addition to this, it constitutes an inexpensive, sanitary equipment for encampments, barracks, bunk houses, etc.

It is an object of my invention to provide a washbasin supported so that it may be readily moved from a raised position wherein it will serve as a washstand to a lowered position wherein it may serve as a base member of a shower bath.

A further object of the invention is to provide means for readily enclosing the space above the basin member, when it is in lowered position, so as to produce an enclosed shower bath chamber from which the water will not splash during the use thereof as a shower bath.

It is a further object of the invention to provide door means adapted to be folded into a compact, retracted relationship adjacent one side of the basin, such as at the back of the basin, this door means being adapted to be moved into a position enclosing the space above the basin so as to enclose a shower chamber.

A further object of the invention is to provide a lavatory device of the general character above set forth having a support above the basin member to which the door means are slidably or movably connected in such a manner that they may be readily moved from retracted to extended position.

A further object of the invention is to provide a basin member adapted to be moved from an elevated position to a position at or engaging the floor, this basin member having a collapsible drain pipe adapted to automatically adjust itself to the various positions of elevation in which the basin member may be employed.

A further object of the invention is to provide a basin member such as set forth in the preceding paragraph having guide means on which it may be moved from lowered to raised position, and having simple, manually released latch means for holding the basin member in a selected position of elevation. The basin member may be raised to its extreme height when being used by a tall person, may be placed in an intermediate position so as to be used as a child's washstand, or may be lowered to a position near the floor so that it will be capable of use as a foot bath. In addition to this, the basin member may be brought down to a position engaging the floor, where it may be used as the base of the shower bath which the invention provides in combination with the washstand.

A further object of the invention is to provide a basin member having a cover plate adapted to be placed over an upper portion of the basin member and to serve as a floor for the shower bath chamber.

A further object of the invention is to provide a faucet for the basin which may be moved into a retracted position when the device is being used as a shower bath.

Further objects and advantages of the invention will be made evident throughout the following part of the specification.

Referring to the drawings, which are for illustrative purposes only,

Fig. 1 is a partly sectioned side elevation of a preferred form of my invention.

Fig. 2 is a vertically sectioned front view of the invention with the basin member thereof in lowered position and with the door means in a position to enclose a shower bath chamber above the basin member.

Fig. 3 is a horizontal section on a plane indicated by the line 3—3 of Fig. 2.

Fig. 4 is a sectional view similar to Fig. 3 but showing the door members in retracted position.

Fig. 5 is an enlarged fragmentary section taken as indicated by the line 5—5 of Fig. 1.

Fig. 6 is an enlarged fragmentary section taken as indicated by the line 6—6 of Fig. 3.

Fig. 7 is a fragmentary, partly sectioned elevational view of the portion of the basin member indicated by the arrow 7 of Fig. 2, showing a simple form of latch means for holding the basin member in a desired position of elevation.

As shown in the drawings, I provide a basin

member 11 which, in order to be of minimum weight, may be made of pressed metal or cast from a light-weight metal such as duralumin. In the preferred form of the invention shown, the basin member has a basin 12 connected by a horizontal wall 13 with peripheral walls 14 and 15. The peripheral wall 14 is formed on a radius greater than the peripheral wall 15, the definite shoulders or offsets 16, as shown in Fig. 4, are formed between the ends of the walls 14 and 15.

As hereinbefore set forth, a feature of the invention resides in the provision of a basin member 11 which may be moved from a position at the floor 18 to a raised position. To avoid the forming of a recess in the floor to receive the basin member, I prefer to have the basin member 11 rest upon the floor 18, as shown in Fig. 2, when it is in extreme lowered position. When the basin member 11 is in the position in which it is shown in Fig. 2, it may serve as a base for a shower bath, or it may readily serve as a foot bath. When it is to be used as a washstand, it is adapted to be raised to an elevated position such as shown in Fig. 1, guide and supporting means 19 being provided which consist of a pair of vertical pipes 21 placed near the offsets 16 and a pair of vertical pipes 22 spaced relatively close together and also serving as hot and cold water conduits connected through valves 23 with a vertically swingable faucet 24. The vertical pipes 21 and 22 extend respectively through tubular members 25 and 26 which are connected to the basin member 11 in positions adjacent the rearward wall 15. Being of light weight, the basin member 11 may be readily lifted by manual engagement of hand holes 27 in the peripheral wall 14 and at the sides of the basin member, as shown in Fig. 2. To releasably lock the basin member 11 in any desired position of elevation, I provide latch members 28 having handle portions 29 lying inside the holes 27 so as to be readily raised by projecting one or more fingers inwardly. These latch members 28 extend rearwardly along the end portions of the wall 14 and are mounted on pivots 31, as shown in Fig. 7, carried by the wall 14 near the tubular members 25 through which the vertical pipes 21 slide. Each latch member 28 has a dog or pawl 32 formed on the inner end thereof which projects through an opening 34 in the adjacent tubular member 26 and is adapted to engage a selected one of a vertical series of spaced notches or holes 33 in the adjacent vertical pipe 21. The latch means 28 are so formed that they will ordinarily engage the ratchet means formed by the openings or notches 33 and will serve, unless manually released, to prevent downward movement of the basin member from any elevation to which it has been raised. It will be noted that the handle 29 of each latch member 28, as shown in Fig. 2, is spaced inwardly from the cooperating hand hole 27 so that in raising the basin member 11 the latch member need not be actuated.

For drainage of the basin 12, I provide an outlet member 35 which bends rearwardly and has an elbow 36 swivelly or turnably connected thereto. Extending downwardly from the elbow 36 is a flexible or collapsible conduit 37, the lower end of which connects to a fitting 38 mounted in a recess 39 in the floor 18. In Fig. 1, the basin member is shown in its highest position. As it is lowered from this position, the drain member 37 will collapse, and when the basin member 11 is in position on the floor 18, as shown in Fig. 2, the drain member 37 will lie in the form of a loop on the floor 18.

Extending upwardly from the floor 18 in a position adjacent the rear wall 15 of the basin member is a wall member 41 of arcuate cross section, as shown in Figs. 3 and 4, so as to conform to the curvature of the rearward portion of the basin member 11. The lower end of the wall member 41 may be secured to the floor 18 by such means as a flange 42, and the upper end of the wall member 41 may be connected to the upper ends of the pipes 21 by use of fittings 43, as shown in Fig. 2. Connected to the upper end of the wall member 41 is a supporting means in the form of a ring 44 having channels 45 and 46 receiving respectively the upper edges of door members 47 and 48 which are of arcuate form so that they will lie in overlapping relation against or adjacent the rearward face of the wall member 41, as shown in Fig. 4, or may be moved forwardly into the positions in which they are shown in Fig. 3, in which they cooperate with the arcuate rear wall member 41 to enclose a shower chamber 49. As shown in Fig. 1, the door members 47 and 48 have the lower edges thereof raised from the floor 18 to a level corresponding to the upper face of the horizontal wall 13 of the basin member 11, when such basin member 11 is in its lowermost position as shown in Fig. 2. Accordingly, when the basin member 11 is lowered, the door members 47 and 48 may be moved through curved paths along the forward peripheral portions of the wall 13 into closed relation, as shown in Fig. 3. To act as a guide means for the lower edges of the door members 47 and 48 as they are being so moved, I provide a track means on the basin, which in its simplest form may consist merely of an upstanding flange 51 which may appear as an upward continuation of the peripheral wall 14. This flange 51 extends from one shoulder or offset 16 to the other, as clearly shown in Figs. 3 and 4. The wall member 41 and the door members 47 and 48 may be made of thin sheet material, such, for example, as sheet metal or pressed woodfiber board. So that the door members will move easily between extended and retracted positions, as shown respectively in Figs. 3 and 4, I provide rollers 52 which are connected to the upper edges of the door members 47 and 48 by means of pins 53, and the ring 44 is provided with flanges 54 and 55 between which the rollers 52 roll. Handles 56, whereby the door members 47 and 48 may be moved, are formed by pressing a small portion of the metal wall near the edge of each door member 47 and 48 forwardly so that a projection or knob will be formed externally of each member 47 and 48, and a depression or pocket 57 will be formed on the inside thereof, each of these pockets 57 being engageable to open the door members 47 and 48 from the inside of the shower chamber 49. I employ a cover plate 58 which may be mounted on the upper portion of the basin member 11 so as to cover the basin 12 when it is desired to employ my device as a shower bath. The member 58 is perforated so that water will flow therethrough, and the periphery thereof is adapted to engage an annular shoulder 59 formed around the upper edge of the basin 12. This plate 58 serves as a floor on which the bather may stand.

The faucet 24 projects forwardly, as shown in Figs. 1 and 4, when the basin member 11 is being used as a washstand. When it is desired to use the device as a shower bath, the faucet 24 is

rotated upwardly into the position thereof shown in Figs. 2 and 3 so that danger of injury to the bather due to striking the projecting faucet will be avoided. The invention also provides means for producing the customary jet or spray of water. For the purpose of simply disclosing the invention, I have avoided the illustration of needle showers and have merely shown a spray nozzle 61 supported in a position substantially centralized within the ring 44. The pipes 22 may be connected to pipes 62 which extend upwardly along the wall member 41 and are connected by means of piping 63 with the spray nozzle 61, valves 64 being provided to control the streams of hot and cold water which are to pass through the pipes 62 and be combined in the pipe 63 before discharge from the nozzle 61.

My invention also provides means for preventing leakage of water downwardly between the wall member 41 and the rearward arcuate wall 15 of the basin member 11, such sealing means being shown in Fig. 6 as a rubber lip or gasket 65 which is secured to the basin member 11 and is adapted to slide along the inner face of the wall member 41 as the basin member 11 is raised or lowered. This member 65 diverts into the basin such water as may flow down the inner face of the wall member 41.

Although I have herein shown and described my invention in simple and practical form, it is recognized that certain parts or elements thereof are representative of other parts, elements, or mechanisms which may be used in substantially the same manner to accomplish substantially the same results; therefore, it is to be understood that the invention is not to be limited to the details disclosed herein but is to be accorded the full scope of the following claims.

I claim as my invention:

1. A lavatory of the character described, including: guide means extending upwardly relative to a floor; a basin member movable on said guide means from an operative bathing position close to said floor to a raised position wherein said basin member may be used as a washstand, there being means in addition to said guiding means for resting said basin member on the floor and means for holding said basin member in a desired position of elevation; and a collapsible drain member connected to the basin member.

2. A lavatory of the character described, including: guide means extending upwardly relative to a floor; a basin member movable on said guide means from an operative bathing position resting on said floor to a raised position wherein said basin member may be used as a washstand, there being means for holding said basin member in a desired position of elevation; a flexible drain member operatively connected to the basin member through said range of movement; and a cover plate for said basin member.

3. A lavatory of the character described, including: guide means extending upwardly relative to a floor; a basin member movable on said guide means from a position close to said floor to a raised position wherein said basin member may be used as a washstand; latching means for holding said basin member in a desired position of elevation; a collapsible drain member connected to the basin member; hand gripping means for effecting raising and lowering of said basin member; and latch operating means positioned to be manually actuated simultaneously with engagement of said hand gripping means.

4. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position, wherein it may serve as a shower bath base; door means movable into a position to enclose a shower chamber above said basin member; and means for producing a shower spray in said shower chamber.

5. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a drain pipe connected to said basin member and being of a character for adjustment to the different positions of said basin member; door means movable into a position to enclose a shower chamber above said basin member; a faucet for discharging into said basin member; and means for producing a shower spray in said shower chamber.

6. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a drain pipe connected to said basin member and being of a character for adjustment to the different positions of said basin member; door means movable into a position to enclose a shower chamber above said basin member; a faucet for discharging into said basin member, said faucet being swingable from a position projecting over said basin member to a retracted position; and means for producing a shower spray in said shower chamber.

7. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a cover plate adapted to be supported on the upper part of said basin member; door means movable into a position to enclose a shower chamber above said basin member; and means for producing a shower spray in said shower chamber.

8. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a cover plate adapted to be supported on the upper part of said basin member; a drain pipe connected to said basin member and being of a character for adjustment to the different positions of said basin member; door means movable into a position to enclose a shower chamber above said basin member; a faucet for discharging into said basin member, said faucet being swingable from a position projecting over said basin member to a retracted position; and means for producing a shower spray in said shower chamber.

9. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a circular track member above said basin member; door means movably connected to said track member so as to be moved through a circular path into position cooperating to enclose a shower bath chamber above said basin member; and means for producing a shower spray in said shower chamber.

10. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may

serve as a washstand to a lowered position wherein it may serve as a shower bath base; a cover plate adapted to be supported on the upper part of said basin member; a drain pipe connected to said basin member and being of a character for adjustment to the different positions of said basin member; a circular track member above said basin member; door means movably connected to said track member so as to be moved through a circular path into position cooperating to enclose a shower bath chamber above said basin member; a faucet for discharging into said basin member, said faucet being swingable from a position projecting over said basin member to a retracted position; and means for producing a shower spray in said shower chamber.

11. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a circular track member above said basin member; door means slidably suspended from said track member so as to be moved through a circular path into position cooperating to enclose a shower bath chamber above said basin member; and means for producing a shower spray into said shower chamber.

12. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a cover plate adapted to be supported on the upper part of said basin member; a drain pipe connected to said basin member and being of a character for adjustment to the different positions of said basin member; a circular track member above said basin member; door means slidably suspended from said track member so as to be moved through a circular path into position cooperating to enclose a shower bath chamber above said basin member; a faucet for discharging into said basin member, said faucet being swingable from a position projecting over said basin member to a retracted position; and means for producing a shower spray in said shower chamber.

13. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a circular track member above said basin member; door means movably connected to said track member so as to be moved through a circular path into position cooperating to enclose a shower bath chamber above said basin member; and track means carried by said basin member for guiding the lower extremities of said door means.

14. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lower position wherein it may serve as a shower bath base; a wall member extending upwardly adjacent said basin member; a supporting member at the upper end of said wall member; and door means movably supported by said supporting member so as to move from a retracted position adjacent said wall member to a position defining a shower chamber above said basin member.

15. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a wall member extending upwardly adjacent said basin member; a supporting member at the upper end of said wall member; door means movably supported by said supporting member so as to move from a retracted position adjacent said wall member to a position defining a shower chamber above said basin member; and means on said basin member for engaging and guiding the lower portion of said door means.

16. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a washstand to a lowered position wherein it may serve as a shower bath base; a wall member extending upwardly adjacent said basin member; a supporting member at the upper end of said wall member; door means movably supported by said supporting member so as to move from a retracted position adjacent said wall member to a position defining a shower chamber above said basin member; means for producing a shower spray in said shower chamber; and means forming a seal between said basin member and said wall member.

17. A lavatory of the character described, including: a basin member supported so as to be movable from a raised position wherein it may serve as a wasnstand to a lowered position wherein it may serve as a shower bath base; an arcuate wall member extending upwardly adjacent said basin member; a supporting member at the upper end of said wall member; arcuate door means movably supported by said supporting member so as to move from a retracted position adjacent said wall member to a position defining a shower chamber above said basin member; arcuate track means on said basin member for engaging and guiding the lower portion of said door means; means for producing a shower spray in said shower chamber; and means forming a seal between said basin member and said wall member.

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