Oct. 12, 1926. 1,602,556

J. L. SHROYER

TOILET WATER RECEPTACLE

Filed June 20, 1923 2 Sheets-Sheet 1

Fig. 1.

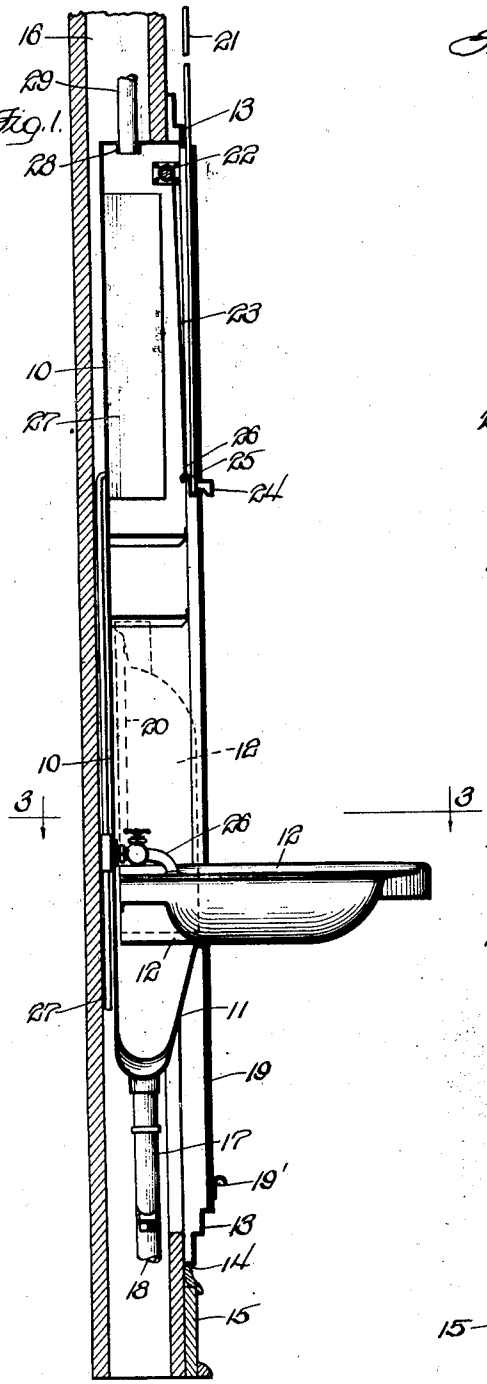
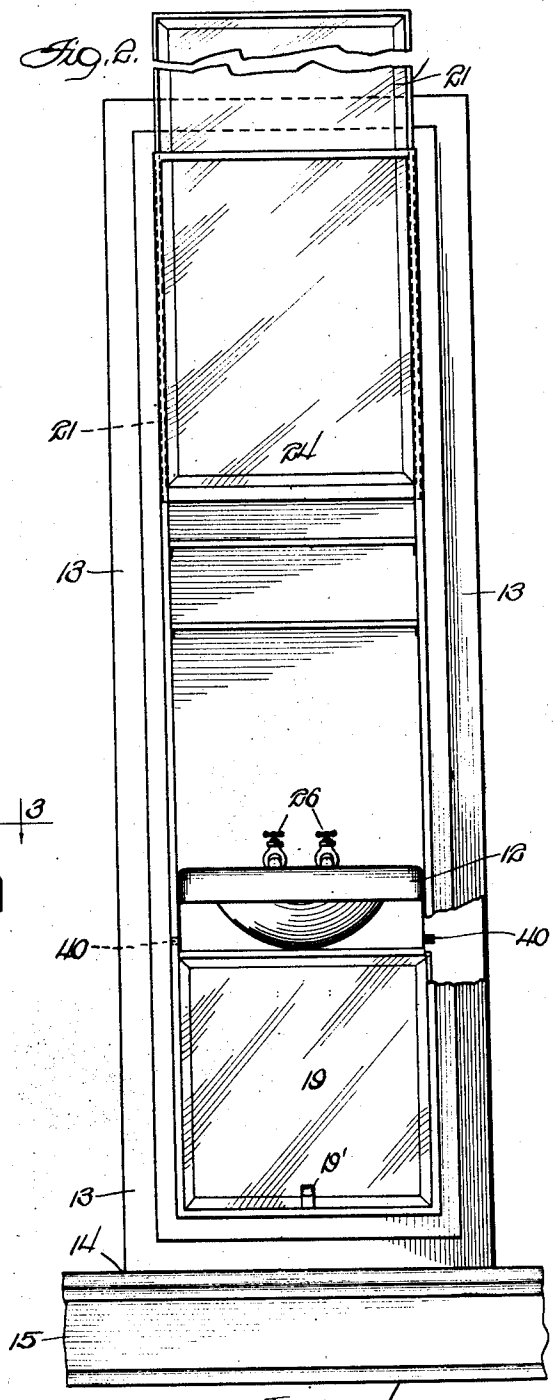


Fig. 2.



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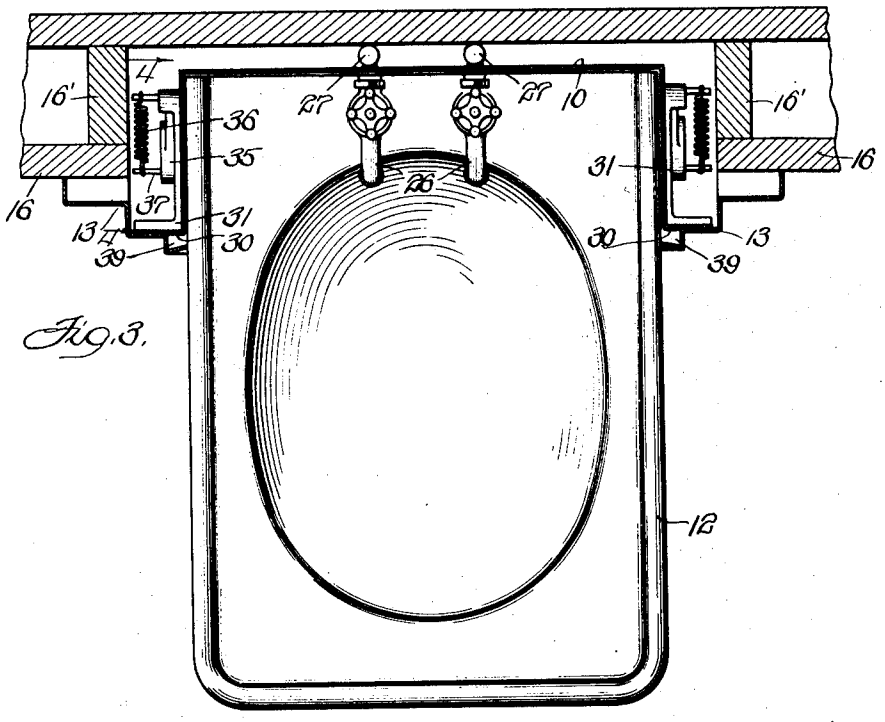


Fig. 3.

Fig. 4.

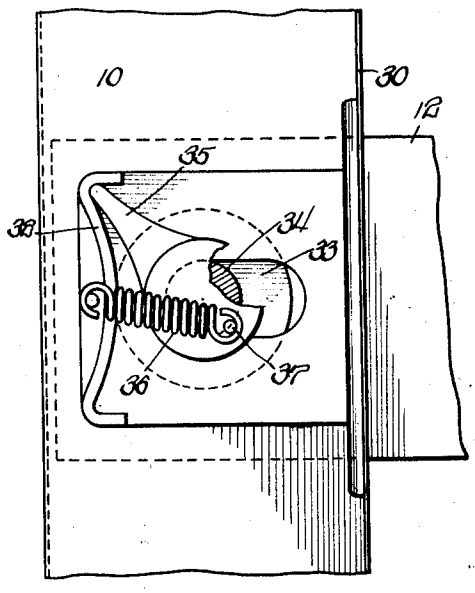
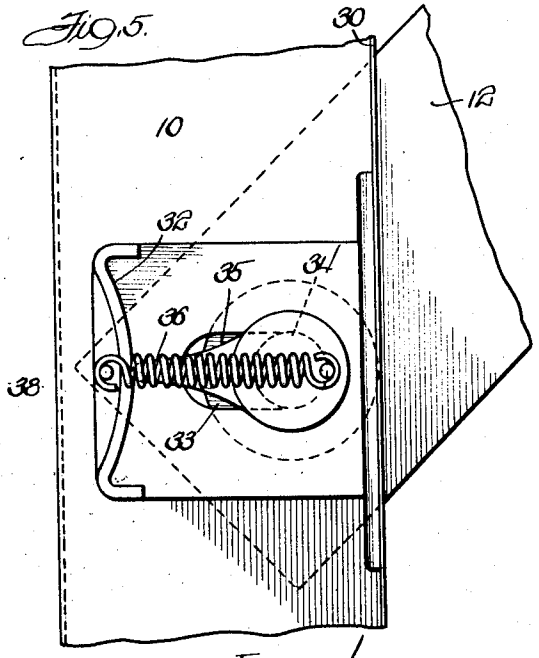


Fig. 5.



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UNITED STATES PATENT OFFICE.

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TOILET-WATER RECEPTACLE.

Application filed June 20, 1923. Serial No. 646,563.

This invention relates to receptacles for water adapted for use in toilet rooms, bed chambers and the like.

It will be explained as when used as a wash basin, although it is adaptable for other uses.

One of the objects of the invention is to provide an improved device, of the character to be described, which may be concealed within the wall of a room when not in use, and which may conveniently be moved into operative position when required for use.

Another object is to provide a device of this character which is self-contained, comprising organized assembled elements requiring only connections to service pipes when being installed.

A further object is to provide an improved hinging structure upon which the receptacle is to be oscillated, whereby to conserve space and to more firmly hold the receptacle in the two extreme positions of its movements.

A further object is to provide a chamber below the receptacle, and within the casing for containing a water trap, and the like, accessible thru an opening normally closed by a movable panel or door.

Another object is to include within the organized structure a flush-tank to be used, if required, and means to attach a vent pipe or stack leading upwardly from the closed casing.

Other objects, advantages and benefits will readily appear from a consideration of the following description when taken in connection with the drawings forming parts hereof, wherein:—

Fig. 1 is a substantial central vertical section showing the invention applied to a wash basin or bowl with the water receiving bowl extended for use and showing it in folded position in dotted lines.

Fig. 2 is a front elevation of the device as shown in Fig. 1.

Fig. 3 is an enlarged transverse section taken on line 3—3 of Fig. 1.

Fig. 4 is an enlarged section taken on line 4—4 of Fig. 3.

Fig. 5 is a similar section showing the receptacle in mid-position as it is moved outwardly while being raised or lowered.

In all of the views the same designating characters refer to similar parts.

The device consisting of a number of organized cooperating elements or parts are all included within the rectangular sheet metal casing 10, which terminates at its bottom end in a downwardly tapering hopper 11.

The upper end of the hopper terminates just below the hinged bowl 12. The front of the casing 10 is open and to the front open edge of the casing is attached a surrounding frame 13, also preferably, of sheet metal, and which extends to a point 14 just above the base board 15 of the room within which the device is to be included. 16 is one of the walls of the room. The casing may be placed within the wall between two adjacent studs spaced properly for the purpose.

To the lower end of the hopper 11 is connected a trap 17 to which a waste pipe 18 may be attached when the device is being installed.

The frame 13 is open in front of the trap, the opening being normally closed by the panel 19 which is arranged within the frame, so that it may be slid upwardly to expose and render accessible the trap and waste pipe when the bowl is in dotted line position within the casing, shown at 20 in Fig. 1.

A panel 21, which may carry a mirror on its front face, is also slidable in the frame 13. This panel and its mirror is movable upwardly thru the end of the frame to uncover the opening in the casing so that the bowl 12 may be moved on its hinges thru the opening in the casing and thru the frame into horizontal position, as shown, for use.

The panel 21 is substantially counterbalanced by a spring impelled winding drum 22 upon which a cable 23 is wound. The panel 21 carrying the mirror has a horizontally projecting bar 24 to serve as lifting means to be grasped when raising the panel.

To the rear of the bar 24 is attached a hook 25 to receive an eye attached to the

lower end of the cable 23.

Means for depositing water in the imperforate bowl 12 may consist of the faucets or bibbs 26—26.

However, a tank 27 may be located in the upper part of the casing and proper connections may be made therewith to flush the bowl as it is being raised and, about the time when the contents of the bowl is about to be dumped into the hopper 11, as the bowl approaches its vertical position behind the panel 21.

Water service pipe 27 may be located behind the casing and properly connected to the means for depositing water in the bowl thru the rear wall of the casing.

A flange 28, screw threaded or otherwise, may be made attached to or a part of the upper wall of the casing to which to attach a vent stack or pipe 29.

The panel 19 may also carry a mirror so that when the panels 19 and 21 entirely close the opening in the casing 10, a mirror with only a slight dividing line will extend from the base board 15 to the top of the frame 13.

The side walls of the casing 10 have outwardly turned flanges 30 to which the frame 13 is attached and to which, on each side of the bowl, is attached a bracket 31. The bracket 31 on each side carries a cam plate 32 which is outwardly curved and which is located in rear of a longitudinally elongated opening 33 thru the bracket. A trunnion 34 is attached to each side of the bowl 12 and projects thru the opening 33 in each of the brackets.

The trunnions each carry an arm or finger 35 which bears on the face of the cam plate 32 and a spring 36 secured to the trunnion and to the bracket yieldingly holds it in contact with the plate to move the bowl back into the casing when the finger 35 and the cam plate push it out during the operation of raising or lowering, as shown in Fig. 5.

If the spring 36 be connected to a pin 37 on one side of the axis of the trunnion, it will operate to yieldingly hold the bowl in either of its terminal positions.

The hinge device moves the bowl outwardly to conserve space within the casing and to prevent the corner 38 of the bowl from frictionally engaging the rear wall of the casing. Its outward movement, while being raised and lowered, is limited by the dimensions of the elongated opening 33 and the trunnion 34 therein.

The panels 19 and 21 slide vertically in the spaces 39 between the frame 13 and the flange 30 of the casing.

The casing may be ventilated into the room by providing a slight opening between the panels 19 and 21 which may be accomplished by insertion of a bumper or cushion of rubber 40, or the like, in the grooves 39 above the panel 19. These bumpers can be either connected to the upper edge of the panel 19 or they may be left loose, so that they will move up and down with the panels.

This opening in connection with the opening in the frame thru which the panel 21 moves will induce a flow of air thru the casing which will prevent mold and mildew of towels, and the like, left in the casing.

I have used the word bowl in the claims as a word of description rather than as a limiting word and I desire it to be understood that any sort of water receptacle adaptable for the purpose is intended to be included in the claims.

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

1. A water receptacle structure comprising a casing and a bowl hinged therein, one hinge on each side of the bowl, each hinge comprising a bracket secured to the frame and having a horizontally elongated perforation therein; a trunnion connected to the bowl, rotatable in said perforation and outwardly movable therein; a curved cam plate having its mid-portion nearest the trunnion; a finger secured to the trunnion traversing said cam plate when the bowl is moved on its said hinges, whereby to move the bowl furthest outwardly when it is in mid-position, and a spring to yieldingly hold the end of the finger in contact with the cam plate.

2. A water receptacle structure comprising a casing and a bowl hinged therein, one hinge on each side of the bowl, each hinge comprising a bracket secured to the frame and having a horizontally elongated perforation therein; a trunnion connected to the bowl, rotatable in said perforation and outwardly movable therein; a curved cam plate having its mid-portion nearest the trunnion; a finger secured to the trunnion traversing said cam plate when the bowl is moved on its said hinges, whereby to move the bowl furthest outwardly when it is in mid-position, and a spring connected to one side of the axis of the trunnion and to the bracket to bias the bowl in both of its final positions.

3. In combination with a casing and a member hinged therein, one hinge on each side thereof comprising a support having therein an elongated perforation; a trunnion on the member rotatable in said perforation and outwardly movable therein, one on each side of the member; a curved cam plate having its convex side facing the trunnions; a finger secured to the trunnions, traversing said cam plate when the member is moved on its said hinges, whereby to move the hinged end of the member furthest outwardly when it is in mid-position, and means to

yieldingly oppose the outward movement of the member and to return it to its innermost position when permitted by the cam.

4. A water receptacle structure comprising a casing having an open front, and a bottom and a top vent opening, when the front is closed; a frame in front of the casing; a panel slidable vertically in the frame to open and close the casing; and a bowl hinged at one end to the casing arranged to be moved outwardly thru the opening and to fold into the casing behind the panel.

In testimony whereof I hereunto subscribed my name.

JACOB L. SHROYER.