March 5, 1940. W. W. KROLOP 2,192,383

LAVATORY

Original Filed June 15, 1936

Fig. 2.

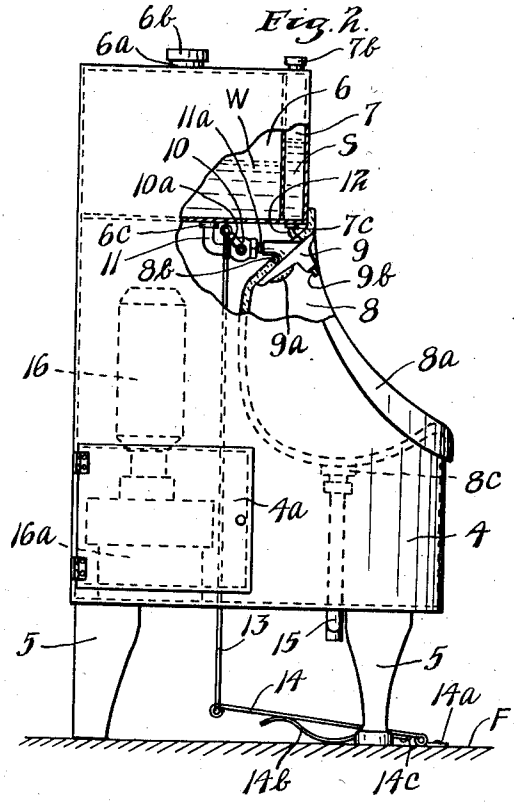


Fig. 1.

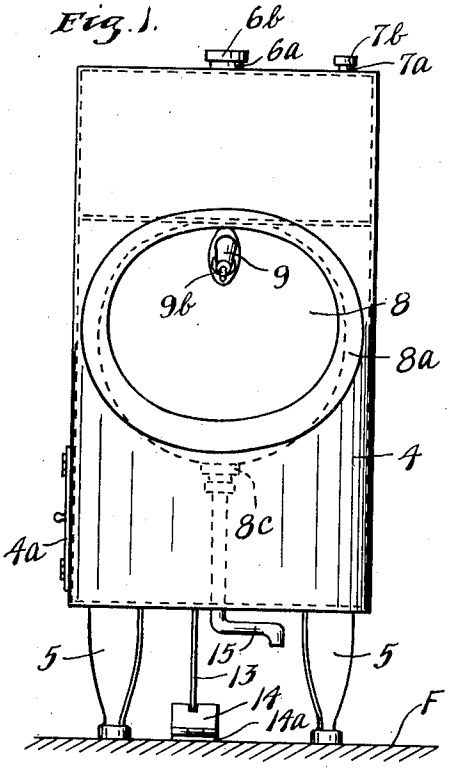
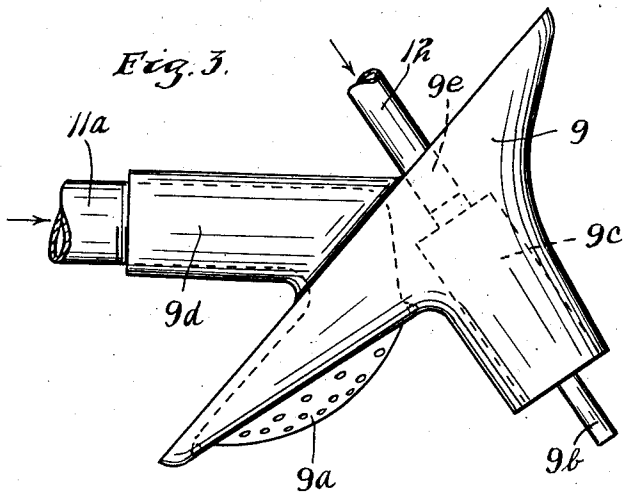


Fig. 3.



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LAVATORY

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Refiled for abandoned application Serial No. 85,231, June 15, 1936. This application December 12, 1938, Serial No. 245,257

5 Claims. (Cl. 4—167)

My invention relates to plumbing equipment and particularly to lavatories. This application is a refile of abandoned application Serial Number 35,231, filed June 15, 1936.

In rural schools and other locations where pressure fed water distribution systems are not available, it is usually necessary to pump and carry water by hand and hence it is highly desirable to use water with the utmost economy and, accordingly, to provide lavatory facilities forcing, or at least encouraging, such economy. It is also desirable that such facilities be of such nature as to be convenient of use and to tend to remain clean and sanitary.

An object of my invention is to provide a combination lavatory inherently tending toward economical and sanitary use of water and adapted for convenient and rapid use by adults and children of various heights.

Another object is to provide such a lavatory having a bowl of improved shape.

Still another object is to provide such a lavatory having storage and dispensing means for liquid soap and storage, dispensing and heating means for water.

A still further object is to provide such a lavatory of sturdy, compact, inexpensive and readily portable construction.

These and other objects and advantages of the invention will be more fully set forth in the following description made in connection with the accompanying drawing, in which like reference characters refer to similar parts throughout the several views, and in which:

Fig. 1 is a front view of an embodiment of my invention;

Fig. 2 is a partially broken away, partially sectional side view, and

Fig. 3 is a side view of the water and liquid soap dispensing device of my lavatory.

Referring to the drawing, my lavatory includes a cabinet or casing 4 which serves as a supporting frame, and which is provided with legs 5 to maintain the same in upwardly spaced relation with a floor F.

A water containing tank or reservoir 6 and a liquid soap containing tank or reservoir 7 are built into the upper portion of the cabinet 4. The tanks 6 and 7 are respectively provided with filler necks 6a and 7a, filler neck caps 6b and 7b, and outlets 6c and 7c.

A bowl 8 is provided consisting of a substantially spherical shell open in the forward portion of the upper hemisphere thereof and the upper part of the forward portion of the lower hemisphere thereof as shown. The bowl 8 is provided with a flange 8a and is set into and secured in a suitable opening in the front side of the cabinet 4 as shown.

A water and liquid soap dispensing device 9 is mounted in an aperture 8b in the upper portion of the bowl 8 with the water spray element 9a and the operating push rod 9b of the soap pump 9c projecting forwardly and downwardly into the interior of the bowl 8. The liquid soap outlet means of the soap pump 9b, are closely adjacent the push-rod 9b and will deliver a predetermined quantity of soap in response to each upward and downward operating cycle of the push rod 9b. The water inlet 9d and soap inlet 9e of the device 9 are situated within the cabinet 4 above and rearwardly of the top portion of the bowl 8. The water inlet 9d is connected through a valve 10 and conduits 11 and 11a to the water outlet 6c of the water tank 6. The soap inlet 9e is connected through a conduit 12 to the soap outlet 7c of the liquid soap tank 7. The operating arm 10a of the valve 10 is connected by suitable means such as the rod 13 to a suitable foot operated control element such as the treadle 14 so that the valve 10 may be opened and closed by suitable movements of the control element 14. The treadle is pivotally connected at the end opposite the point of connection of the rod 13 to an element 14a which is mounted on a suitable stationary element such as the floor F. Yieldable resilient means is provided for normally holding the valve 10 in closed position. For this purpose a curved or arched flat spring 14b may be interposed between the treadle 14 and floor F and secured to the treadle 14 near the element 14a by suitable means such as the rivet 14c as shown.

A drain outlet 8c in the lower portion of the bowl 8 has a waste pipe 15 connected thereto, this pipe being adapted for discharging waste water into a suitable receptacle or any other desired type of water receiving and disposal means.

A heat producing means 16, such as an ordinary portable kerosene burning room heater is placed within the cabinet 4 behind the bowl 8 and below the water tank 6 for the purpose of heating the water W contained in the tank 6. A support 16a is provided for the heater 16 and, to provide access to the heater 16, the side of the cabinet 4 may be provided with a hinged door 4a.

As should be apparent from the drawing and the foregoing description, my lavatory comprises a complete compact unit adapted for use in places wherein a supply of water under pressure is not available. Obviously the tanks 6 and 7 are to

be respectively filled with water and liquid soap for delivery to the hands of a user through the water and soap dispensing device 9. The user may obtain soap by moving the push rod 9b upwardly with the palm of his hand and releasing the same, whereupon soap will be delivered into the palm. Then, responsive to pressure of his foot upon the treadle 14, water will be sprayed upon his hands from the spray element 9a of the dispensing device.

The shape of the bowl 8 is such that when the bowl is situated at a height enabling easy access to the dispensing device 9 by small children, large children and adults may easily reach the device 9 and conveniently use the same.

For sanitary reasons it is preferable to omit a plug or any other closure means for the bowl drain outlet 8c so that there will be no tendency toward use of a pool of water in the bowl 8.

My lavatory unit is readily portable since all of the parts thereof are assembled in a single compact structure.

It is apparent that I have invented a novel, efficient, compact and sanitary lavatory unit which is economical in consumption of water and soap and which may be used with great convenience by persons of various heights.

It will, of course, be understood that various changes may be made in the form, details, proportions and arrangement of the parts without departing from the scope of my invention, which, generally stated, consists in a device capable of carrying out the objects above set forth and in the novel parts and combinations of parts disclosed and defined in the appended claims.

What is claimed is:

1. A lavatory having in combination, a large bowl inclined substantially from horizontal position and having a sump portion with drainage means connected therewith, a shower head mounted in the upper portion of said bowl with the axis of its discharge directed substantially parallel with a plane defined by the side edges of the bowl, and means for controlling discharge from said shower head.

2. In lavatory structure, a bowl, a member mounted adjacent the upper portion of said bowl, said member having a water passage therein and having a water spray element constructed to direct water downwardly and outwardly within the confines of said bowl, said member also defining therein a soap passage and piston actuated soap dispensing means disposed in said member, the discharge of said soap dispensing means being disposed in juxtaposition to said spray element.

3. The structure set forth in claim 2, said soap dispensing means including a plunger connected with said piston, the outer end of said plunger extending beyond said member in juxtaposition to said spray element for manipulation by the user.

4. A lavatory having in combination, an upstanding casing, said casing having a forwardly protruding lower portion for supporting a bowl, a bowl mounted in said casing and inclined substantially from the horizontal, said bowl having a lower or sump portion provided with a drain, liquid discharging means at the upper portion of said bowl directed downwardly and outwardly substantially parallel with the inclined side edges of said bowl, soap discharging means adjacent said liquid discharging means, and means for controlling said liquid discharging means.

5. A lavatory having in combination an upstanding casing provided with a lower forwardly protruding portion adapted to support a bowl, a bowl mounted in said casing and having its rim disposed at an oblique angle to the horizontal, said bowl having a lower sump portion provided with a drain, a member mounted in the upper portion of said bowl and defining a water passage, said member having a spray element constructed to direct water downwardly and outwardly within the confines of said bowl, said member also defining a soap passage and soap dispensing means mounted in said passage and having an actuating element extending beyond said member and in juxtaposition to said spray element.

WALTER W. KROLOP.