Nov. 11, 1930. L. W. BROPHY 1,780,968

LAVATORY

Filed Sept. 29, 1928

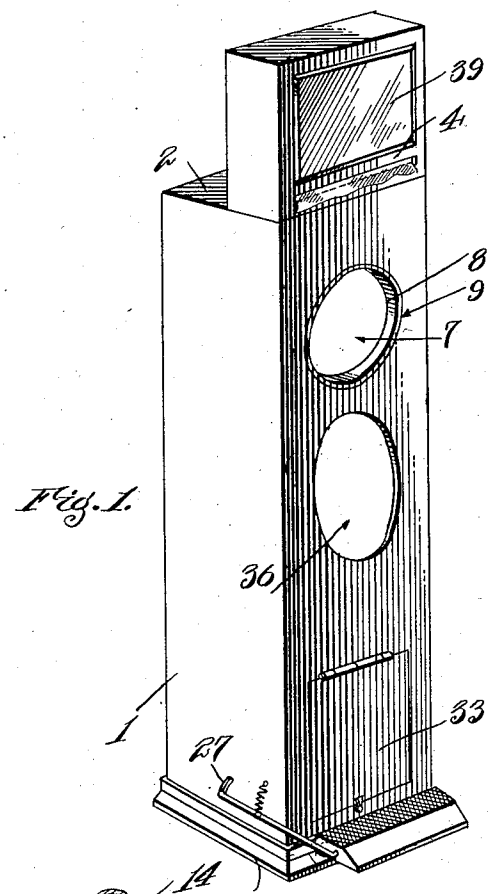


Fig. 1.

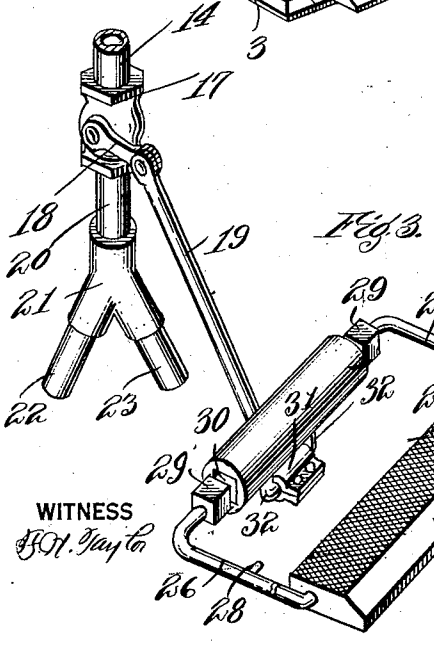


Fig. 3.

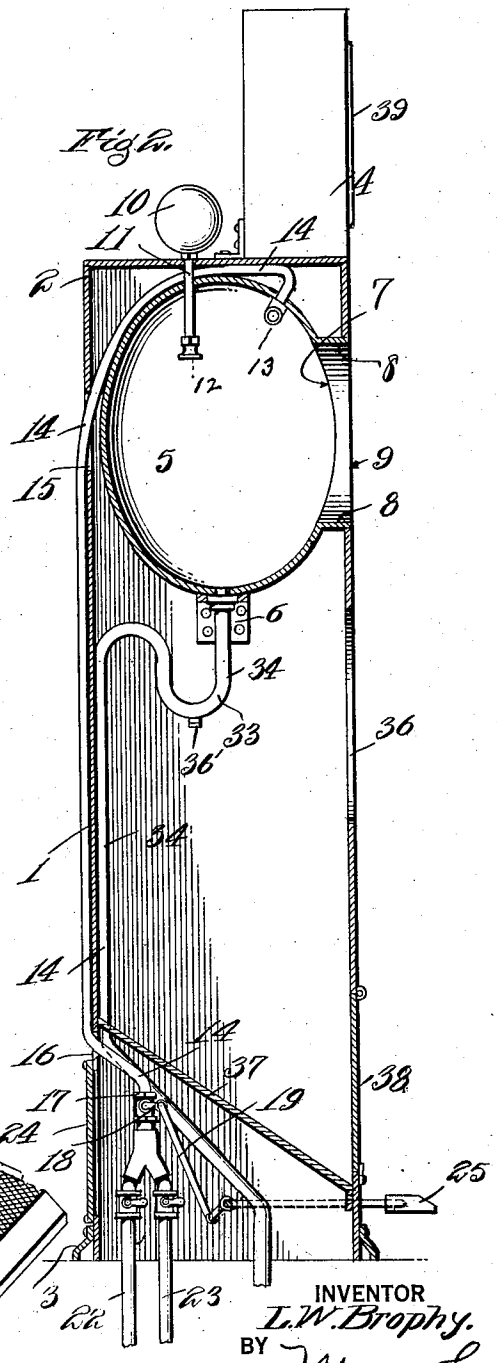


Fig 2.

WITNESS

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UNITED STATES PATENT OFFICE

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LAVATORY

Application filed September 29, 1928. Serial No. 309,333.

This invention relates to lavatories, and is more particularly concerned with a lavatory adapted for installation in public rooms, such as dining rooms, cafeterias, etc., to provide an attractive, convenient and expeditious means of cleansing the hands prior to eating, for example.

Science and sanitation demand the cleansing of the hands, particularly prior to the handling of food. Many public places of eating lack adequate facilities, or make them so inconveniently located that patrons often fail, through embarrassment or distaste, to utilize such facilities as are available.

An object of my invention is the provision of a lavatory of attractive yet inconspicuous appearance, which may be installed in public halls, restaurants, etc., in public view, and provide a conveniently located, thoroughly sanitary lavatory, available publicly without embarrassment.

Such an installation will not only increase general sanitation on the part of the public in eating, but will encourage and educate by the example of others, that portion of the public who have not formed the habit of cleansing the hands before eating in a public restaurant.

With the above noted and other objects in view, the invention consists in certain novel features of construction, combination and arrangement of parts as hereinafter described and claimed. The invention will be more clearly and fully understood from the following detailed specification, which is to be read in conjunction with the accompanying drawings forming part thereof, and in which:

Figure 1 is a perspective view of a public lavatory constructed in accordance with the present invention.

Figure 2 is a vertical section therethrough, certain parts including valves, piping, the soap dispenser and towel rack being left in elevation.

Figure 3 is a fragmentary perspective view showing the water supply valve for the hand spray and its actuating treadle and connections.

Support for the lavatory is afforded by a tubular standard or hollow column 1 which, as shown, is rectangular in cross section, and has a closed top end 2. Its base may be encircled by an ornamental molding strip 3. Upon its top 2 at its front edge is supported a towel dispensing cabinet 4 of any suitable form.

Within the tubular standard at a height above its base appropriate for the insertion of the hands is a globular bowl supported at its base by a suitable bracket 6 attached to the inner wall of the standard. Between its top and bottom at its outer face, the bowl 5 is provided with a hand hole or insertion opening 7 edged by a flange 8, which fits and rests against the edge of the standard outlining an alined hand hole or insertion opening 9 therein.

Hand soaping means are provided at the upper rear portion of the bowl. As shown, a liquid soap holder 10 of conventional form is mounted on the top 2 convenient for refilling, and is provided with a discharge tube 11 extending downwardly through the top 2 and through the top of the bowl 5, and has the usual plunger 12 at its lower end for actuation to discharge the liquid soap downwardly through the tube.

Outwardly from the plunger 12 and adjacent and above the hand hole 5 is a spray nozzle tube 13, which may be of T-shape, and with the head of the T perforated and its shank extending upwardly through the bowl. The spray nozzle is supported to direct a spray diagonally downwardly toward the bottom of the bowl at its rear, so that the sleeve or cuff will not be wet by the spray, the depth of the bowl, inwardly from its opening 7, being figured to correspond substantially with the length of the average hand. A water supply pipe 14 extends from the shank of the nozzle rearwardly over the top of the bowl and downwardly, as shown, passing to the outside of the rear of the standard through a slot 15, and re-entering the hollow standard through a slot 16 above its base.

The lower end of the pipe is inserted in one end of a valve case 17 mounting a rotary valve of well-known type normally spring closed. Its valve stem is provided with a cranked

arm 18 to which is pivotally connected the upper end of a valve opening link 19, treadle actuated as later described. A short length 20 of supply pipe extending from the lower end of the valve casing 17 is coupled through a forked connection 21 to branch hot and cold water feed pipes 22 and 23 respectively, provided with individual valves for proportioning the mixture of hot and cold water, which will feed upwardly past valve 17 to the feed pipe 14 and spray nozzle 13. Access to these valves for regulation is afforded by means of a hinged door 24 in the back of the standard at its base.

The normally closed valve in the water feed pipe line is opened when desired to spray water on the hands by means of a treadle mechanism mounted on the standard. As shown, a foot treadle plate 25 has a pair of arms 26 rigidly connected therewith, and extending inwardly therefrom to embrace opposite sides of the standard at its base. Their ends are inwardly bent and extend through into the interior of the standard base through curved slots 27 in the side walls of the standard. Intermediate of their ends these arms are pivotally mounted on the sides of the standard by pivot studs 28. The inturned ends of the arms 26 carry squared blocks 29 (Figure 3), which seat in squared sockets 30 formed in the ends of a bar 31. A U-shaped link 32, inserted through a clamp on the lower end of link 19, is rigidly attached to the bar 31, so that depression of the treadle 25 will swing bar 31 upwardly, and in turn move the link 19 upwardly turning valve 17 to open position, and holding it in such position so long as the treadle is depressed. Coiled springs 33, anchored to the standard and to the arms 26, function to return the treadle to raised position when the foot is removed, and assist the spring of valve 27 to return its valve plug to closed position.

The water sprayed upon the hands, together with soap and the matter cleansed from the hands is conveyed by a drain pipe 34 downwardly from the bottom of bowl 5 through the interior of the standard to a suitable drain or soil pipe of the building. Preferably a bend 35, forming a trap, is formed in the drain pipe 34 immediately below the bowl, and a clean-out plug 36 provided.

The interior of the tubular standard below the bowl is conveniently utilized to receive the soiled towels. Accordingly a towel insertion opening 36 is provided in the front face of the standard below the hand hole 9, and a downwardly and forwardly inclined partition plate 37 is supported on suitable lugs within and adjacent to the base of the standard to act as a bottom for the soiled towel compartment, and to facilitate removal of the towels. A door 38 hinged at its upper end, and having its lower end alined substantially with the forward edge of the plate 37 is provided to permit the removal of the soiled towels.

In the use of the lavatory, the hands are first inserted and soaped by operating the plunger 12 of the liquid soap container. The treadle 25 is then depressed, and water is sprayed on the hands while they are being rubbed and cleansed in the usual manner. When the operation is completed, the treadle is released, valve 27 closes and the spray ceases. The user now pulls a towel from rack 4, and after using it deposits it in the opening 36 in the standard. Since the bowl is housed within the standard and the spray directed rearwardly, no water splashes on the floor and cleanliness is assured. For convenience a mirror 39 may be mounted on the front face of the towel cabinet 4.

While I have herein shown and described a specific structural embodiment of the invention, it is intended as illustrative rather than restrictive, and structural changes adapting it to different conditions of manufacture and use are contemplated in consonance with the spirit of the invention and the scope of the appended claim.

Having thus fully described the invention, what is claimed is:

A lavatory comprising a tubular standard having a hand hole in its front side at a height appropriate for the insertion of the hands therein, a globular bowl supported within said standard having a hand hole therein between its top and bottom alined with the hand hole in the standard and provided with a flange edging said hole seating on and supported by the edge of the standard enclosing the hand hole, a spray nozzle supported within the upper front portion of the bowl above the hand hole therein, said nozzle being supported to direct a spray diagonally downward toward the rear face of the bowl and away from said hand opening, a water supply pipe extending from said nozzle having a normally closed valve therein, a treadle mounted on said standard operatively connected with said valve to open the same to supply water to the spray nozzle, and a drain pipe extending downwardly from the bottom of the bowl.

LAWRENCE W. BROPHY.

CERTIFICATE OF CORRECTION.

Patent No. 1,780,968. November 11, 1930.

LAWRENCE W. BROPHY.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 2, line 95, in the claim, for the word "lavatory" read hand washing appliance; line 111, after "closed" insert the comma, words and comma , manually operable,; lines 112 to 115 inclusive, strike out "a treadle mounted on said standard operatively connected with said valve to open the same to supply water to the spray nozzle," and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 14th day of February, A.D. 1939.

Henry Van Arsdale.

(Seal) Acting Commissioner of Patents.