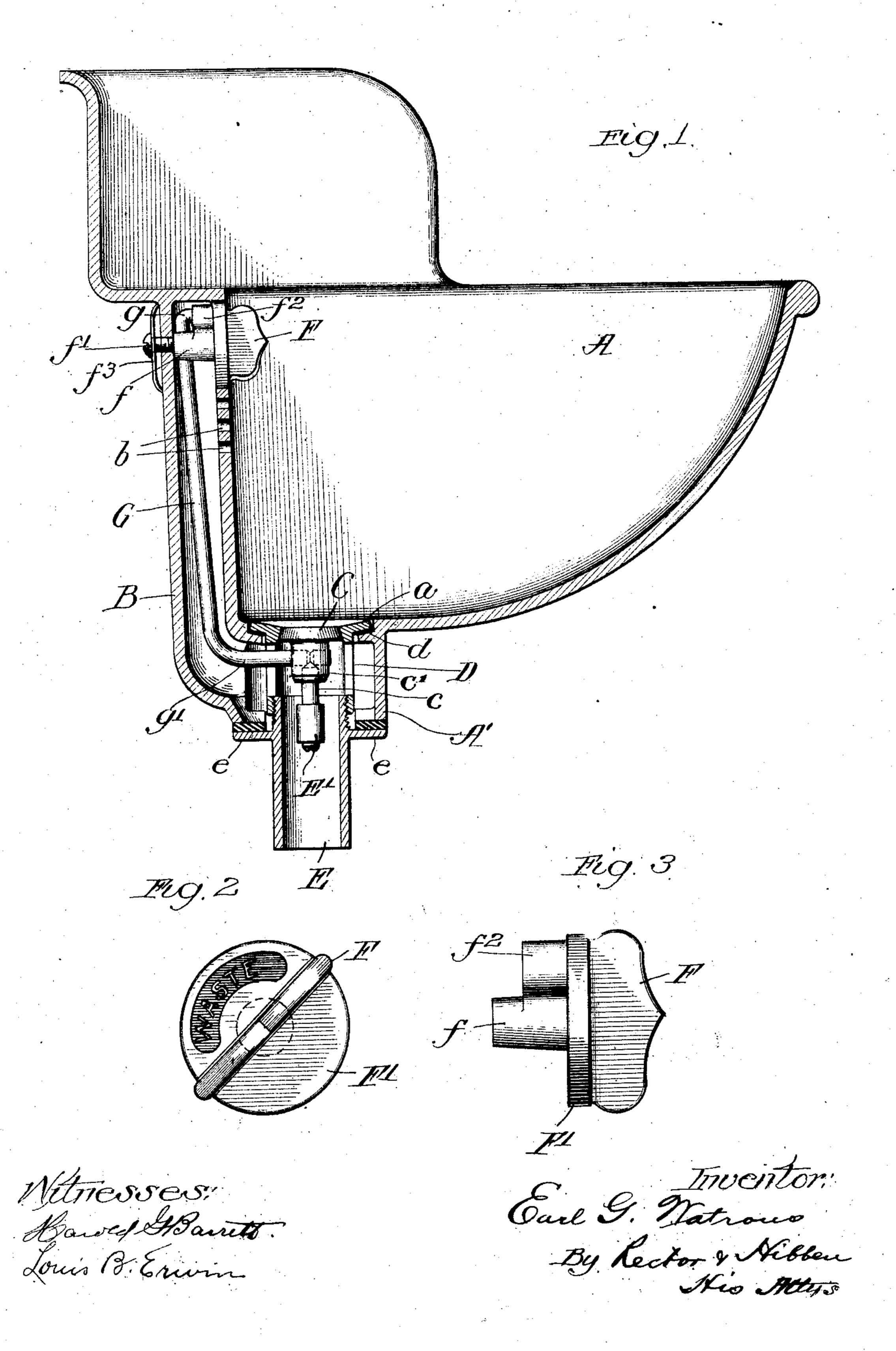
E. G. WATROUS. LAVATORY. APPLICATION FILED JAN. 2, 1903.



UNITED STATES PATENT OFFICE.

EARL G. WATROUS, OF CHICAGO, ILLINOIS.

LAVATORY.

No. 873,915.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Earl G. Watrous, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Lavatories, of which the following is a specification.

My invention relates to lavatories and the like, and the object thereof is to provide a simple and efficient mechanism for operating the valve or plug for controlling the discharge opening of the bowl or basin. The features of advantage of my invention will be apparent from the description hereinafter given.

In the drawing Figure 1 is a sectional elevation of a lavatory or wash basin embodying my invention, and Figs. 2 and 3 detail views of the operating device or knob.

Like reference letters indicate identical

parts in the different figures.

The bowl or basin A, which may be of the ordinary or desired construction and proportions, is provided with the discharge opening or outlet a, and with an overflow pipe and passage B, having communication with the basin through the overflow-holes b.

The discharge valve C which governs the outlet a is here shown as seating upwardly and, in the present instance, the margin of such valve is beveled inwardly and upwardly. 30 As shown, the valve seats near the upper end of a cage or casing D, whose upper flange d bears on the bottom of the bowl around the opening and which is screw threaded at its lower end to engage the threaded end of the 35 discharge pipe E. A flange e on this pipe bears against the bottom of a depending substantially tubular extension A' of the bowl with the result that said parts are held securely together and tight joints effected. 40 Suitable means may be adopted to guide the stem c of the valve, as for instance the lug \mathbf{E}' arranged on the pipe E and through which the stem passes.

The discharge valve is governed by means
of a button or knob F, and in order that the
parts operated thereby and connected with
the valve for the purpose of opening and closing it, may be entirely concealed and tampering prevented, such parts are arranged in
the overflow pipe or passage. To this end,
the button or knob has a preferably integral
disk F' fitting rotatably in an opening near
the upper edge of the bowl within convenient
reach. This disk has a central stem f extending across the overflow pipe and held in place

This screw is located in a place which is practically inaccessible when the basin and its fixtures are installed, and consequently it is impossible to remove or tamper with the 60

valve operating devices.

Eccentrically arranged on the inner face of the disk F' is a hollow projection or lug f² which forms a socket for the upper bent or cranked end g of an operating rod G extending substantially longitudinally of the overflow pipe. The lower end g' of the rod is also cranked or bent substantially at right angles and passes through the hub or enlarged stem portion c' of the discharge valve C. In order 70 to secure the rod and valve together, the stem c is formed separate from the hub c' and its conical end screws longitudinally therein so as to engage a groove in the end g' of the operating rod.

The operation of the device will be obvious from the above description. The valve is shown in closed position and if it is desired to open the valve, the knob F is turned to the right, with the result that the operating rod 80 G will be forced downwards carrying the valve C with it. A turn of the knob in the opposite direction will close the valve.

It is evident that all the operating parts except the knob or button are completely 85 inclosed by and concealed within the overflow pipe or passage and that such knob cannot be removed when the bowl is installed. All tampering and theft of parts is absolutely prevented and at the same time an 90 efficient and compact arrangement of bowl and operating parts is provided.

In order that the parts may be maintained in the position set by the knob, suitable means may be employed, and to accomplish 95 this result I have shown in the present instance a flat spring f^3 of suitable material and arranged to bear against the head of the screw f' with sufficient tension to hold the movable parts in any set position.

While I have shown my invention in connection with an upwardly seating outlet valve which is preferred in places where tampering and theft is more prevalent, it will be understood that the same is applicable with equal facility and advantage to

downwardly seating valves.

I claim:

the upper edge of the bowl within convenient reach. This disk has a central stem f extending across the overflow pipe and held in place by a screw f' but permitted to rotate freely.

pipe or passage and operatively connected to the valve, and means for actuating the rod comprising a rotatable knob or button having a stem extending across the discharge 5 pipe, a screw located at the rear side of the discharge pipe and engaging the said stem to hold it in operative position, and a connection between the knob and the said rod, substantially as described.

2. The combination with a wash basin or the like having a communicating overflow pipe or passage and having a valve governed outlet, of an operating rod arranged in such pipe or passage and operatively connected to 15 the valve, and means for actuating the rod comprising a rotatable knob having a disk provided with an eccentrically arranged bearing lug on its inner face adjacent the overflow passage, in which lug an end of the 20 operating rod bears, substantially as described.

3. The combination with a wash basin or the like having a communicating overflow pipe or passage and having a valve governed 25 outlet, of an operating rod arranged in such pipe or passage and operatively connected to the valve, and means for actuating the rod comprising a rotatable knob having a disk provided with a stem extending across the 30 overflow pipe or passage and a screw bearing against the rear side of the overflow pipe and engaging said stem, said disk also having a socket on its inner face within said passage into which socket the upper end of the oper-35 ating rod bears, substantially as described.

4. The combination with a wash basin or the like having a communicating overflow pipe or passage and having a valve governed outlet, of an operating rod arranged in 40 such pipe or passage and operatively connected to the valve, and means for actuating the rod comprising a rotatable knob having a disk provided on its inner side within said passage with a stem and also a lug having a 45 socket in which an end of the operating rod bears, substantially as described.

5. The combination with a wash basin or the like having a communicating overflow pipe or passage and having a valve-governed 50 outlet, of an operating rod disposed within said pipe and having its upper end bent or cranked, the lower end thereof engaging said valve to operate it, and means for operating the rod comprising a rotatable disk 55 having bearings in the opposite sides of the wall of said overflow pipe or passage and provided with an eccentrically arranged socket for engaging the upper bent end of the rod; substantially as described.

6. The combination with a wash basin or the like having a communicating overflow pipe or passage and having a valve-governed outlet, of an operating rod disposed within said pipe and having its upper end bent or

valve to operate it, means for operating said rod comprising a rotatable disk having bearings in the opposite sides of the wall of said overflow pipe or passage and provided with an eccentrically arranged socket for engaging 70 the upper bent end of the rod, and means for yieldingly holding the movable parts in their different adjusted positions; substantially as described.

7. The combination with a wash basin or 75 the like having a communicating overflow pipe or passage and having a valve governed outlet, of an operating rod extending substantially longitudinally of said pipe and bent at its upper and lower ends, a valve 80 governing said outlet mounted upon said lower bent end of the operating rod, and a rotatable disk connected to the upper end of said rod for actuating it, substantially as described.

8. The combination with a wash basin or the like having a communicating overflow pipe or passage and having a valve governed outlet, of an operating rod extending substantially longitudinally of said pipe and 90 bent at its ends, the lower end thereof engaging said valve to operate it, a rotatable disk arranged towards the upper end of the bowl adjacent the overflow pipe and having: a socket engaged by the upper end of said 95 rod, substantially as described.

9. The combination with a wash basin or the like having a communicating overflow. pipe or passage and having a valve governed outlet, of an operating rod extending sub- 100 stantially longitudinally of said pipe and bent at substantially right angles, the lower end engaging the valve, a rotatable disk having a stem projecting into the overflow pipe, a screw entering the rear side of the overflow 105 pipe and engaging the stem, and a hollow lug on such inner side of the disk to engage the upper end of the rod, substantially as described.

10. The combination with a wash basin or 110 the like having a communicating overflow pipe or passage forming a part of the rear wall or portion thereof, and also having a valve governed outlet, valve operating mechanism connected to said valve and actuated 115 by a rotatable knob or button provided with bearings in opposite sides of the wall of said overflow pipe or passage, said operating mechanism being arranged within the overflow pipe and thereby concealed and unex- 120 posed except as to the knob or button and a spring for frictionally holding the movable parts in set position, substantially as described.

11. The combination with a wash basin or 125 the like having a communicating overflow pipe B, and also having a discharge outlet, a valve C governing said outlet, a rod G arranged within said pipe B and having 65 cranked, the lower end thereof engaging said | cranked ends g and g', the lower end g' being 130 operatively connected to the valve C, a disk F rotatable in an opening in the bowl and having a hollow lug f^2 engaged by the upper end g of the rod G, substantially as described.

5 12. The combination with a wash basin or the like having an overflow pipe B, outlet a, a valve C governing such outlet and having a hub portion c' provided with a transverse hole, an operating rod G having cranked 10 ends, the lower end entering said hole,

means for removably securing such lower end therein and a rotatable disk arranged near the upper portion of the overflow pipe and engaged by the upper end of the operating rod, substantially as described.

EARL G. WATROUS

Witnesses:
S. E. Hibben,
Louis B. Erwin.