W. BUNTING, JR.

LAVATORY.

APPLICATION FILED MAY 7, 1909.

935,621.

Patented Sept. 28, 1909.

Fig. 1.

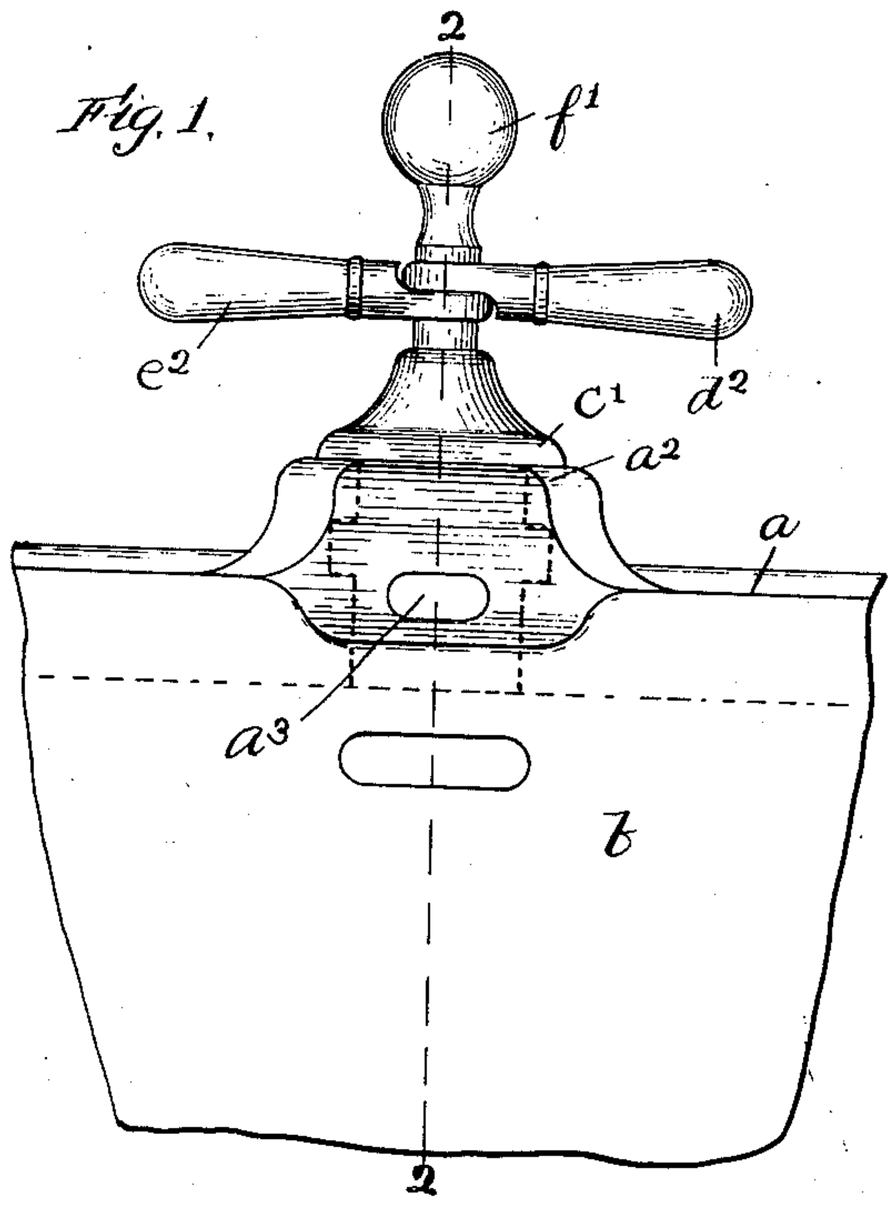
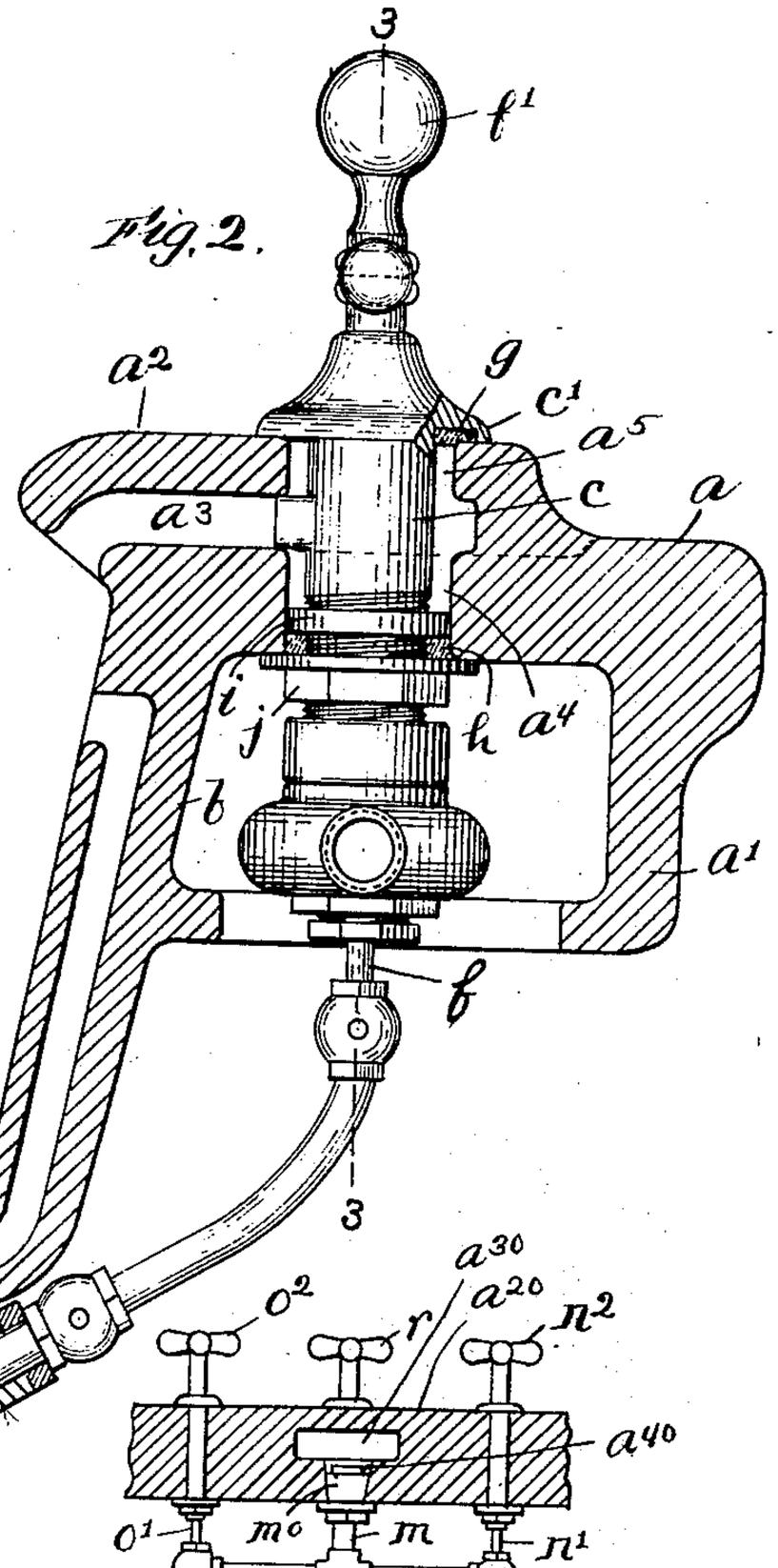


Fig. 2.



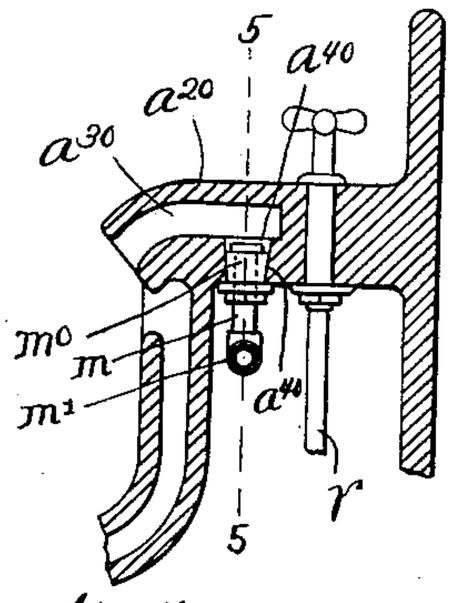


Fig. 4.

Fig. 5.

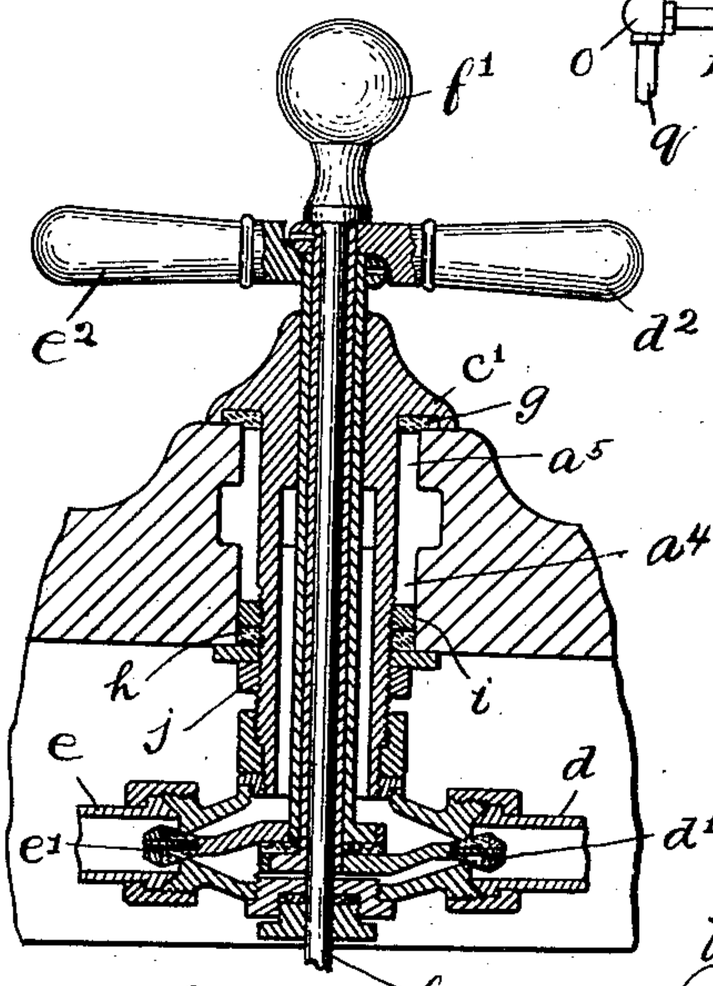


Fig. 3.

Witnesses:
H. B. Davis.
Cynthia Doyle.

Inventor:
Wm. Bunting Jr.
by Boyce & Kamman
Atty's

UNITED STATES PATENT OFFICE.

WILLIAM BUNTING, JR., OF BROOKLINE, MASSACHUSETTS.

LAVATORY.

935,621. Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed May 7, 1909. Serial No. 494,573.

To all whom it may concern:

Be it known that I, WILLIAM BUNTING, Jr., of Brookline, county of Norfolk, State of Massachusetts, have invented an Improvement in Lavatories, of which the following is a specification.

This invention relates to certain improvements in lavatories of the character shown in my pending application Serial No. 470,942, filed January 6, 1909, in which a raised or thickened portion is formed in the slab in the rear of the bowl, within which a discharge waterway is formed, which leads rearwardly and opens at the under side of the slab at two points to receive the hot and cold water supply pipes.

The object of the present invention is to provide a form of bowl of the general character above referred to, in which the hot and cold water supply pipes are united in a single pipe on or before entering the slab and, also, to adapt a valve, such as is shown in my prior patent #682,453, dated February 10, 1901, to the purpose.

A further object of my invention is to provide a simple and effective form of connection between the valve casing and the bowl.

I accomplish these objects by the means shown in the accompanying drawing, in which,

Figure 1 is a front elevation of the rear portion of a bowl provided with my invention. Fig. 2 is a cross section on the line 2—2 of Fig. 1. Fig. 3 is a cross section on the line 3—3 of Fig. 2. Fig. 4 is a cross section, on the line corresponding to the line 2—2 of Fig. 1, of a modified form of my invention. Fig. 5 is a cross section on the line 5—5 of Fig. 4.

According to my invention the slab a is formed integral with the rear wall b of the bowl, and projects rearwardly from said wall, so that a clear space is provided in the rear thereof, and beneath the slab. Said slab may be provided with a depending strengthening flange a', as indicated, which, however, bears no relation to my invention.

According to my invention I provide a raised portion a^2 on the upper side of the slab, directly in the rear of the middle of the bowl, said raised portion being provided with a passage a^3, which extends rearwardly or longitudinally of said raised portion in the central vertical plane of the bowl, said passage extending obliquely downward at its front end and opening into the bowl approximately at the level of its rim. Said passage a^3 extends rearwardly in the slab for some distance beyond the outer side of the rear wall of the bowl, and an aperture a^4 is provided in the slab, which leads from the rear end of said passage a^3, to the under side thereof, while an aperture a^5 is provided which leads through said raised portion to its upper side, from the rear end of said passage a^3, said apertures a^4 and a^5 being arranged in alinement.

A valve is provided, of the character shown in my prior patent, above referred to, the casing c of said valve extending through said apertures a^4 and a^5, and being connected at its lower end to hot and cold water supply pipes d and e, in which valves d', e' are provided, which are controlled by stems extending up through the casing and connected to handles d^2, e^2 at their upper ends. The waste operating rod f, which is connected to the handle f', also extends downwardly through the casing, as shown in my said prior patent.

A packing washer g is provided between the upper flange c' of the valve casing and the upper side of said raised portion a^2, and an expansion ring h, of rubber, is provided on the casing between an abutment ring i, and a clamping nut j, both threaded on the lower end of the casing the external diameter of said ring i being less than the internal diameter of said aperture a^4, and said nut j being adapted to engage the under side of the slab about said aperture a^4. In applying said valve to the lavatory, the casing c is passed down through the apertures a^5, a^4 and the ring i is so adjusted that, when the nut j is screwed onto the casing the ring h will be compressed axially and expanded until the periphery thereof is forced firmly against the walls of the aperture a^4, before the nut j engages the under side of the slab and draws the gasket g, at the upper end of the casing, firmly against the seat therefor, on the raised portion about the upper end of the aperture a^5. A tight joint will thus be formed at both the upper end of the aperture a^5 and the lower end of the aperture a^4, thereby preventing the escape of water from said chamber when water is admitted thereto. The supply pipes are then connected to the casing in a manner which will be obvious, the whole arrangement being such that said connections may be conveniently made.

In the modification of Figs. 4 and 5, the raised portion a^{20} is provided with a rearwardly extending passage a^{30}, and an aperture a^{40} is provided which extends from the rear end of said passage a^{30} to the under side of the slab, as above described, except that no opening is provided to the upper side of the raised portion. With this arrangement a branch pipe m is connected to the aperture a^{40} by a suitable expansion joint m^0, and the lower end of said pipe m is connected by a suitable means, as the T-coupling shown, to two branch pipes m' and m^2, said branch pipes being respectively connected to valves n and o, the stems n' and o' of which extend vertically through the slab at points equidistant from the middle of the bowl, said stems being provided with operating handles n^2, o^2, above the level of the slab. The hot and cold water supply pipes p and q are respectively connected to the valves n and o, and a waste operating rod r' is provided in the slab directly in the rear of the passage a^{20} and in the central plane of the bowl. This form of my invention is less expensive of manufacture, than the form previously described, and the connections may be made without difficulty.

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

1. A lavatory comprising a bowl having an integral slab projecting rearwardly beyond the middle portion of the rear wall thereof, said slab having a chamber therein, opening into the bowl at its rim and extending rearwardly therefrom in the middle plane thereof, and having an aperture leading downwardly to its under side from the rear end of said chamber, hot and cold water supply pipes connected to said chamber through said aperture and valves for separately controlling said pipes having operating stems extending through the slab to the upper side thereof, substantially as described.

2. A lavatory comprising a bowl having an integral slab projecting rearwardly beyond the middle portion of the rear wall thereof, said slab having an integral raised portion on its upper side in the middle portion thereof, and said slab and its said raised portion having a chamber formed therein, opening at its front end into the bowl and extending rearwardly therefrom in the middle plane thereof, and having an aperture extending downwardly from the rear end of said chamber to the under side of the slab, hot and cold water supply pipes connected to said chamber through said aperture, and valves for separately controlling said pipes having operating stems extending through the slab to the upper side thereof, substantially as described.

3. A lavatory comprising a bowl having an integral slab projecting rearwardly beyond the middle portion of the rear wall thereof, said slab having a chamber therein, opening into the bowl at its rim and extending rearwardly therefrom in the middle plane thereof, and having apertures leading vertically from the inner end of said chamber to the upper and under sides thereof, one directly over the other, a valve casing extending through said apertures and having a water tight connection with said slab above and below said chamber, hot and cold water pipes connected to the lower end of said casing beneath the slab, and means for operating said valves extending through the upper end of said casing, substantially as described.

4. A lavatory comprising a bowl having an integral slab projecting rearwardly beyond the middle portion of the rear wall thereof, said slab having an integral raised portion on its upper side in the middle portion thereof, and said slab and its said raised portion having a chamber formed therein, opening at its front end into the bowl and extending rearwardly therefrom in the middle plane thereof, and having an aperture extending downwardly from the rear portion of said chamber to the under side of the slab, a water supply pipe connected to said chamber through said aperture, and means for controlling the water supply through said pipe comprising a valve stem extending through the slab to the upper side thereof, substantially as described.

5. A lavatory comprising a bowl having an integral slab projecting rearwardly beyond the middle portion of the rear wall thereof, said slab having a chamber therein, opening into the bowl at its rim and extending rearwardly therefrom in the middle plane thereof, and having an aperture leading downwardly to its under side from the rear end of said chamber, hot and cold water supply pipes connected to said chamber through said aperture, valves for controlling said pipes having operating stems extending through the slab to the upper side thereof, waste apparatus for the bowl and an operating rod extending through said slab in said middle plane of the bowl, substantially as described.

6. A lavatory comprising a bowl having an integral slab projecting rearwardly beyond the middle portion of the rear wall thereof, said slab having a chamber therein opening into the bowl at its rim, and having apertures leading vertically from said chamber to the upper and under sides thereof, one directly over the other, a valve casing extending through said apertures and having a flange for engaging the upper side of the slab, a clamping nut for engaging the lower side thereof, an expansion ring disposed on said casing within the lower of said apertures, an annular stop mounted on said

casing above said expansion ring, to provide an abutment against which said expansion ring may be pressed by said clamping nut, to compress the same in advance of the clamping action of said nut, a water supply connection with the lower end of said casing, and means for controlling the water supply therethrough, substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

WILLIAM BUNTING, Jr.

Witnesses:
L. H. Harriman,
H. B. Davis.