July 6, 1926. 1,591,332

P. MUELLER

CHINA SPOUT AND WASTE CONTROL

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Fig. 2.

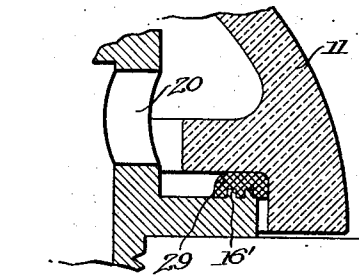

Fig. 1.

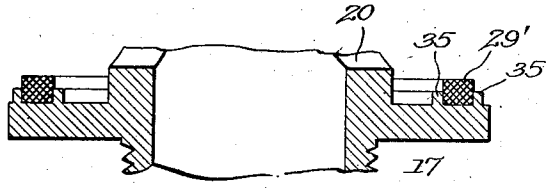

Fig. 3.

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CHINA SPOUT AND WASTE CONTROL.

Application filed October 19, 1925. Serial No. 63,523.

The present invention relates to lavatory fittings, and has as its object to provide a spout, preferably made from vitreous material, such as glass, china or porcelain, and of the mixing type adapted to receive a supply of water admitted thereto from both hot and cold water cocks, although the invention is not restricted to this particular type of spout.

An object of the invention is to provide a spout and waste valve control mechanism, which, when formed from vitreous material, will present substantially no metal to the eye, and will, therefore, be very sightly and of attractive design.

A further object of the invention is to afford a simple arrangement of parts, and an improved construction for connecting a spout of vitreous material to the water supply fitting, and for associating with such a spout, a suitable operating mechanism such as a waste valve control.

Other objects of the invention will become apparent as the description proceeds in connection with the showing of a preferred form of the same in the accompanying drawings wherein:

Figure 1 is a sectional view,

Figure 2 is a fragmentary enlarged section showing the sealing joint between the spout and the water supply connections, and

Figure 3 is a fragmentary section showing a slightly modified type of joint.

Referring to the drawings for a more detailed description, B indicates a portion of a basin or other lavatory fixture. The spout 10, which, as shown, is made from suitable vitreous material, such as china, glass or porcelain, comprises a rear portion 11, within which is a chamber 12. This chamber, when the spout is of the mixing type, serves to receive either hot or cold water, or both, the admission of the water being controlled by suitable hot and cold water cocks, as in the construction of my Patent 1,447,808, granted Mar. 6, 1923. In the bottom of the spout beneath the chamber 12 is formed an opening 13, surrounding which is an annular recess 14. The recess has a seat 15 against which bears a flange or rim 16 upon a water supply fitting 17, having a threaded shank portion 18 and a delivery portion 19 extending through the opening 13. Side ports 20, formed in the fitting, lead into the chamber.

The fitting 17 is preferably clamped to the spout, and since the latter will ordinarily be of somewhat frangible material, it is desirable to provide a connection which will permit the positioning of the spout without fracturing of the same. For this purpose, a tube 21 extends upwardly through the fitting, and has a threaded portion 22, which is connected to the fitting within the chamber 12, as is clearly indicated, the interior of the fitting being formed with threads 23 for this purpose. The tube extends upwardly through a top opening 24 in the spout 10 and a substantially elongated clamping nut 25 fits upon the upper end of the same, serving to draw the flange 16 of the fitting against the seat 15 of the spout. The nut 25 bears against a seat 26, surrounding the opening 24, and is enclosed within an upwardly extending neck portion 27 of the spout which thereby forms a housing for the nut 25 and conceals the metallic connections. For the purpose of insuring a water tight joint between the nut 25 and the rim 17, respectively, with the spout, compressible washers or gaskets 29, 30, are positioned between the rim and nut and the spout. Obviously, these washers will be suitably compressed when the nut 25 is tightened and by spacing the metallic connecting devices from the vitreous spout, they protect the spout when it is being installed.

Particular attention is called to the formation of the top surface of the rim 16 which is provided with annular ribs 16′ serving to interlock with the washer or gasket 29, thereby forming a water tight joint and preventing accidental displacement of the washer when the parts are being positioned. At this point, it should be observed that a slightly modified arrangement which may be employed is shown in Figure 3, wherein ribs 35 are suitably spaced to receive therebetween a gasket 29′. This construction is substantially the equivalent of that shown in Figures 1 and 2, but, it will be understood, does not tend to mutilate the gasket.

After the clamping nut is positioned, which is accomplished, of course, by engaging a suitable wrench with sockets 25′ formed in its upper end, a sleeve 38 is threaded into the upper end of the nut and being provided with an end flange 38′, the

same serves to close the interior of the neck 27 around the nut, the flange constituting a cap for the spout neck.

A waste control valve rod 39, which, through suitable connections (not shown) operates a waste valve, extends upwardly through the tube 21 and has positioned thereon a manually engageable knob or head 40, the latter being preferably of vitreous material to match the spout, particularly when the latter is made from such material. It will be understood that the waste valve is of the pop-up type, and that vertical movement of the rod 39 operates the same. When the spout is assembled, as described, the only metallic element which is presented to the eye, is the edge of the cap flange 38′, and thus when the spout and waste control knob 40 are of vitreous material, the entire device is very attractive in appearance.

Obviously, the invention is not limited to the precise details of construction shown and described, and all structures come within the scope of the same as are properly within the meaning of the following claims:

1. A fitting of the class described comprising a spout member having an enlarged chamber portion and formed with openings above and below said chamber portion, a supply shank through said lower opening and provided with a fixed external flange bearing upon the wall of the spout around said opening, a tube traversing said shank and chamber and having a threaded connection with said shank within said chamber, said tube extending through the upper opening in said chamber wall, a clamping nut upon said tube and bearing against the top of the spout around said opening, a waste valve control rod traversing said tube, and manually engageable means upon the end of said rod above the spout.

2. A fitting of the class described comprising a spout member having an enlarged chamber portion and formed with openings above and below said chamber portion, a supply shank through said lower opening and provided with an external flange bearing upon the wall of the spout around said opening, the shank terminating within said chamber below said upper opening, a tube traversing said shank and chamber and connected to said shank, said tube extending through the upper opening in said chamber wall, a clamping nut positioned directly upon said tube and bearing against the top of the spout around said opening, a waste valve control rod traversing said tube, the said member having a hollow neck extending upwardly around said upper opening enclosing said nut, and manually engageable means upon the end of said rod above said neck.

3. A fitting of the class described comprising a spout member having an enlarged chamber portion and formed with openings above and below said chamber portion, a supply shank through said lower opening and provided with an external flange bearing upon the wall of the spout around said opening, a tube traversing said shank and chamber and connected to said shank, said tube extending through the upper opening in said chamber wall, a clamping nut upon said tube and bearing against the top of the spout around said upper opening, a waste valve control rod traversing said tube, the spout member having a hollow neck extending upwardly around said top opening enclosing said nut, a sleeve for the waste valve control rod above said nut formed with an end flange resting upon the top of the neck and serving as a cap therefor, and a manually engageable head on said waste valve rod.

4. A fitting of the class described comprising a vitreous spout member having an enlarged chamber portion, the spout having top and bottom openings formed in the said chamber wall, a supply shank leading into said chamber through the said bottom opening and provided with a fixed flange on the exterior of the chamber bearing against the spout wall, a tube traversing said shank and the spout chamber and connected to said shank, a nut threaded directly upon the end of said tube and bearing against the wall of the spout around the top opening, compressible means positioned between both said flange and nut and the body of the spout member, and a waste valve control rod traversing said tube and provided with a manually engageable portion above the spout member.

5. A fitting of the class described comprising a vitreous spout member having an enlarged chamber portion, the spout having top and bottom openings formed in the said chamber wall, a supply shank leading into said chamber through the said bottom opening and provided with a fixed flange on the exterior of the chamber bearing against the spout wall, a tube traversing said shank and the spout chamber and connected to said shank, said tube extending through the top opening in the chamber wall, a nut threaded upon the end of said tube on the exterior of said chamber and bearing against the wall of the spout around the top opening, an apertured cap on said spout over said nut, the spout being extended upwardly around said nut, compressible means positioned between both said flange and nut and the body of the spout member, and a waste valve control rod traversing said tube and provided with a manually engageable portion above the spout member.

6. A fitting of the class described comprising a vitreous spout member having an enlarged chamber portion, the spout having top and bottom openings formed in the said

chamber wall, a supply shank leading into said chamber through the said bottom opening and provided with a flange on the exterior of the chamber bearing against its wall, a tube traversing said shank and the spout chamber and connected to said shank, said tube extending through the top opening in the chamber wall, a nut threaded upon the end of said tube on the exterior of said chamber and bearing against the wall of the spout around the top opening, compressible means positioned between both said flange and nut and the body of the spout member, a waste valve control rod traversing said tube and provided with a manually engageable portion above the spout member, and a hollow neck portion on said spout above said top opening surrounding said nut and a portion of said rod.

In testimony whereof I have hereunto set my hand.

PHILIP MUELLER.