G. DOUGLAS.

WATER CLOSET FLOOR CONNECTION.

APPLICATION FILED JULY 30, 1920.

1,358,714. **Patented Nov. 16, 1920.**

Fig. 1.

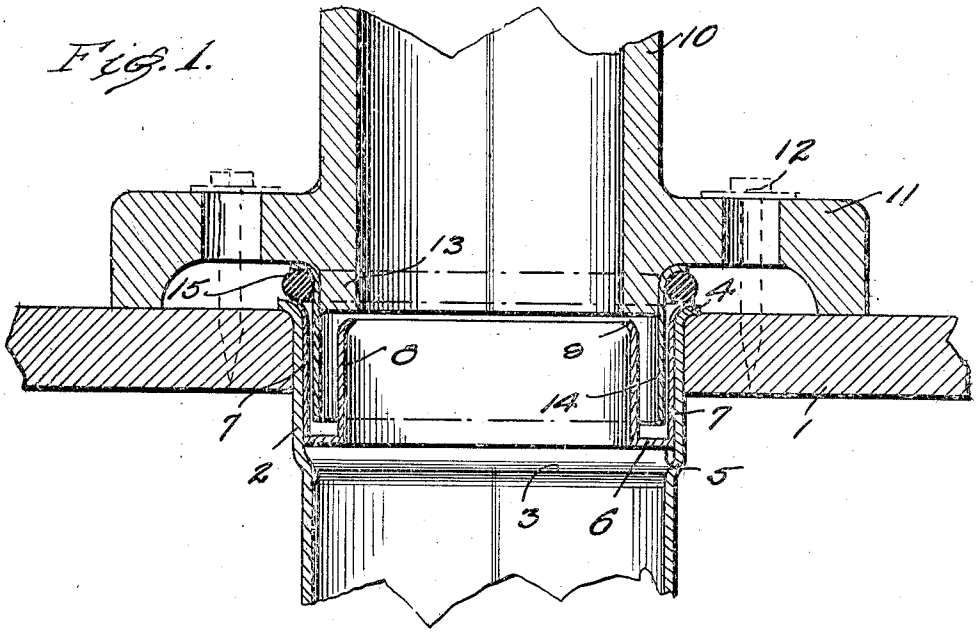
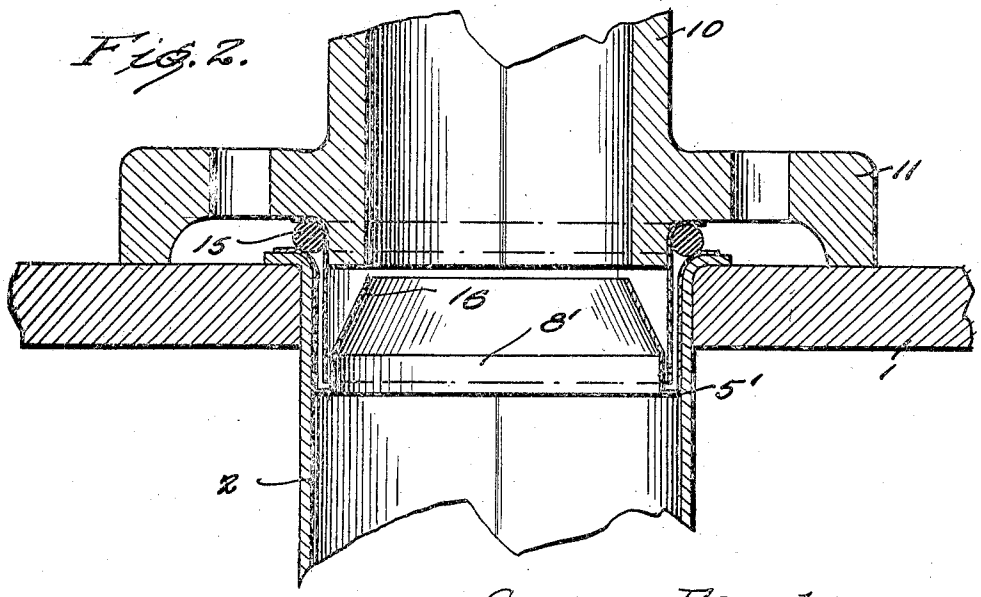


Fig. 2.



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Witness

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WATER-CLOSET FLOOR CONNECTION.

1,358,714. Specification of Letters Patent. Patented Nov. 16, 1920.

Application filed July 30, 1920. Serial No. 399,995.

To all whom it may concern:

Be it known that I, GEORGE DOUGLAS, a citizen of the United States, residing at Sparta, in the county of Randolph and State of Illinois, have invented certain new and useful Improvements in Water-Closet Floor Connections, of which the following is a specification.

This invention relates to water closet floor connections, the primary object of which is to utilize a floor connection which will properly accommodate the standardized short horn closet bowl.

Another object of the invention is to provide a connection of the above mentioned type which will be positively sanitary, one which will permit expeditious installation and is readily accessible for repair should occasion demand.

The above and other objects of my invention will be in part described and in part understood from the following description of the present prefered embodiment of the invention taken in connection with the accompanying drawings, wherein:—

Figure 1, is a fragmentary vertical sectional view of a connection constructed in accordance with my invention, illustrating its application and

Fig. 2. is a similar view of a slightly modified form.

In the drawings I have in Fig. 1 shown an all-lead connection which is especially adapted for use with a water seal. In Fig. 2 an all-aluminum and copper connection is used in conjunction with either a mercury or a water seal, although a combination of both is desirable.

A portion of a floor 1 is provided in which an opening is formed having mounted therein a lead waste pipe 2, the latter being constricted at a point remote from said floor to provide an annular flange 3. The upper terminal of the pipe is flanged over the top face of the floor as indicated at 4.

Depending in the waste pipe 2 directly above the annular flange 3 is a tray body 5 which consists of an outer wall snugly engaging the inner periphery of the waste pipe. One terminal of the outer wall is flexed over the flange 4 of the waste pipe while the opposite terminal is bent inwardly at right angles to provide a floor or bottom 6. Said opposite terminal is then bent upwardly at right angles to the bottom 6 and in spaced parallel relation to the outer wall 7, thereby providing an inner wall for the tray body as indicated at 8. The free terminal of the inner wall falls short of the free terminal of the outer wall and is bent inwardly as indicated at 9.

A water closet bowl 10 is arranged directly above the opening in the floor 1 and is equipped with a supporting stand 11, the latter engaging the floor and being secured thereto by any suitable securing means, such for instance, as bolts 12. The closet bowl is extended downwardly below the stand 11 to provide a short horn 13 which terminates in the same plane as the lower face of the stand 11. It will be observed that when in this position the said lower terminal of the horn terminates at approximately the upper surface of the floor appreciably spaced from the upper margin of the inner wall 8 of said tray body.

A tray division 14 is pendently carried by the horn 13 and consists of an annular ring, the upper marginal edge of which is bent outwardly directly beneath the lower face of the stand 11 and is engaged therewith. The lower marginal edge of said ring pends downwardly about midway between the front wall 7 and rear wall 8 of the tray body and is spaced from the bottom 6 of the latter. A gasket 15 is interposed between the flanged upper end of the tray division and the flanged upper end of the outer wall 7.

The form of the invention above described includes a water seal, the water being deposited in the tray body 5. The water line is at the top of the inner wall 8.

The form of the invention shown in Fig. 2 is substantially identical with that shown in Fig. 1 of the drawings except that in Fig. 2 an aluminum and copper connection is used and the construction of the tray body is slightly different. The tray body which is generally designated 5′ in Fig. 2 has the upper end of its inner wall 8′ bent abruptly inwardly at an inclination to provide a truncated cone-shaped upper end 16. In this form of the invention the water line is preferably at the jointure of the cone-shaped upper end 16 and the main portion of the wall 8′. Mercury is deposited on top

of the water and extends upwardly to the upper margin of the cone-shaped portion 16.

It is to be understood that changes may be made by me in the configuration of this connection, the materials used and the arrangements of the parts as is permited by the appended claims.

What I claim is:

1. A floor connection for water-closets including a waste pipe pending from the floor and having its upper end flanged over the latter, a tray body sleeved in said pipe and having a flange superimposed on said pipe flange, a closet bowl horn equipped with a tray division which depends in the tray body and is also provided with a flange, the latter mentioned flange being adjacent the body flange, and a gasket interposed between the tray body and tray division flanges.

2. A water closet floor connection including a waste pipe depending through the floor and equipped with a detachable tray body, and a water closet horn equipped with a tray division, the latter depending in the tray body substantially as described.

3. A water-closet floor connection including a bowl having a supporting base and a short depending horn which terminates at said base, a liquid receiving tray body depending from the floor, and a tray division secured to said horn and depending in said body, and a gasket between said tray division and tray body.

4. A water-closet floor connection including a waste pipe extending through the floor and depending therebeneath, a tray body sleeved in said pipe having an intermediate portion thereof bent at right angles to provide a bottom and then bent upwardly to provide the inner wall of the tray, a water-closet horn arranged above the inner wall of said tray body and spaced therefrom, and a tray division constituting a ring, one margin of which embraces the horn and the opposite margin pending between the walls of the tray body.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE DOUGLAS.

Witnesses:

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