C. H. MOORE.

WATER CLOSET OUTLET CONNECTION.

APPLICATION FILED JUNE 17, 1908.

938,777. Patented Nov. 2, 1909.

Fig. 1.

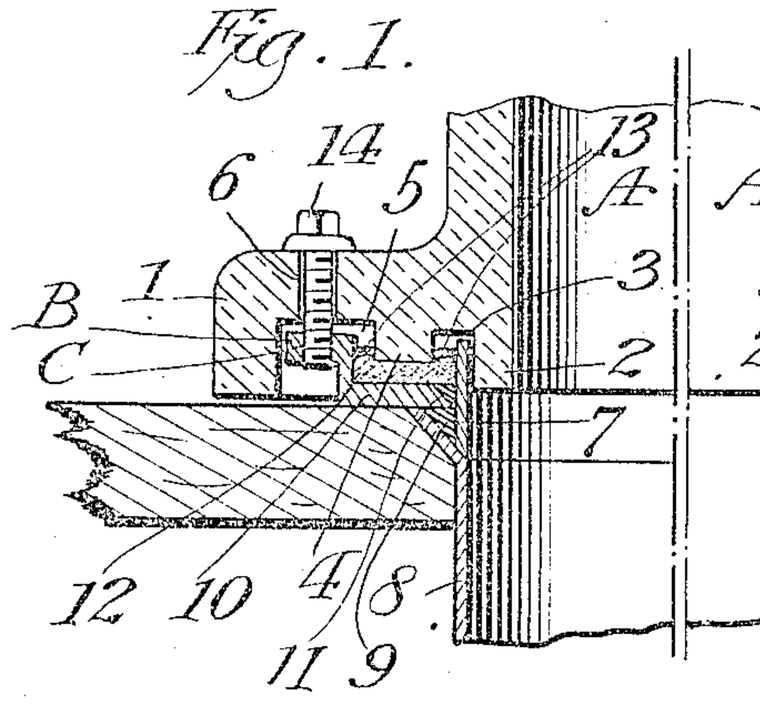


Fig. 2.

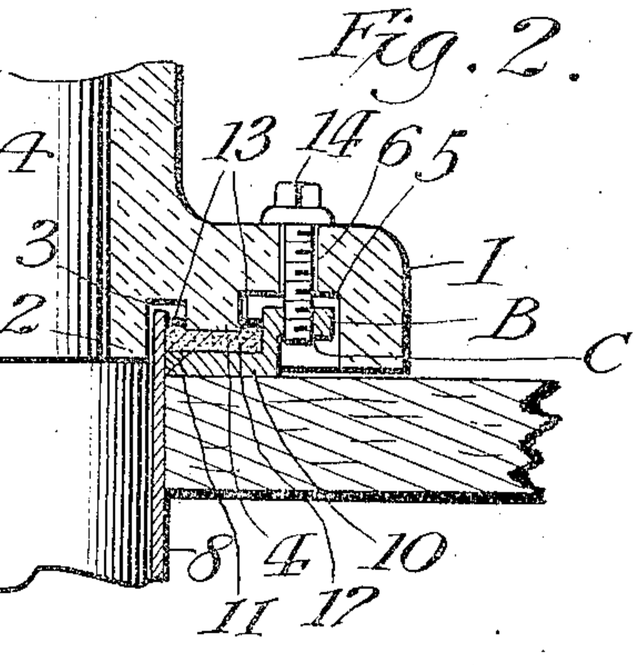


Fig. 3.

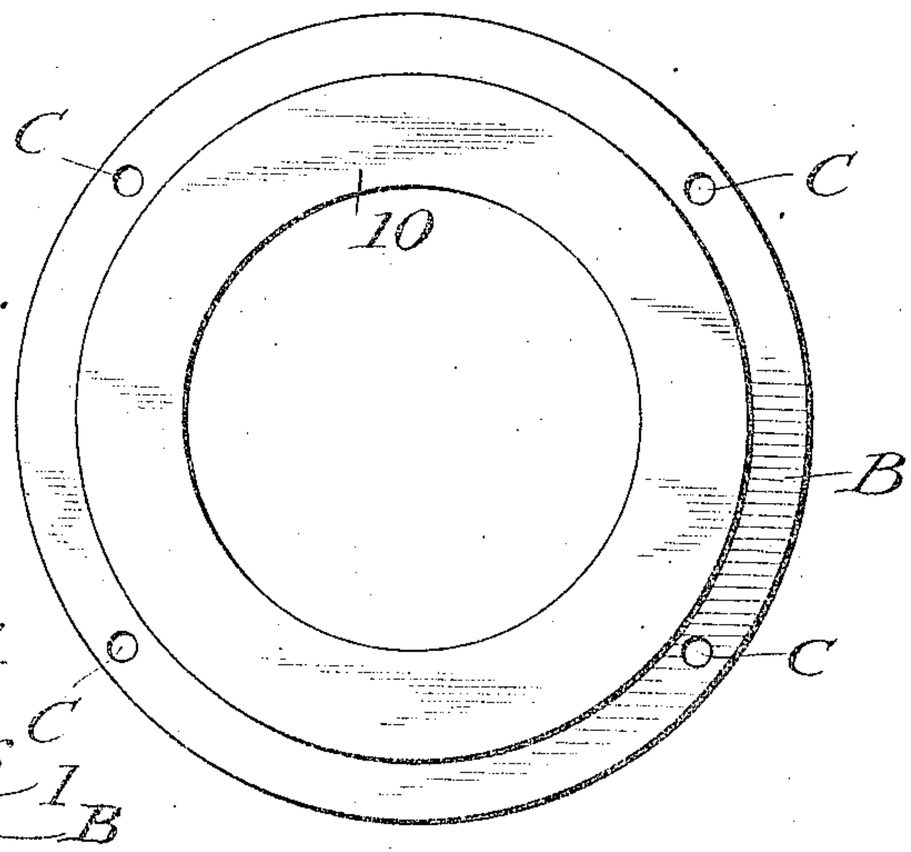


Fig. 5.

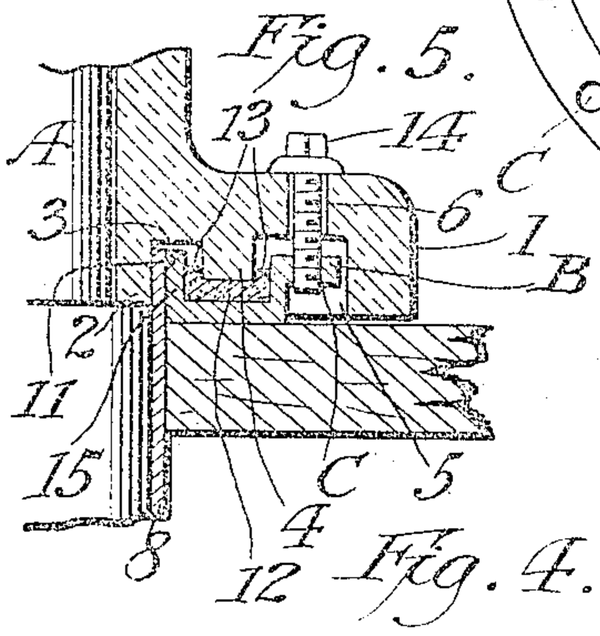
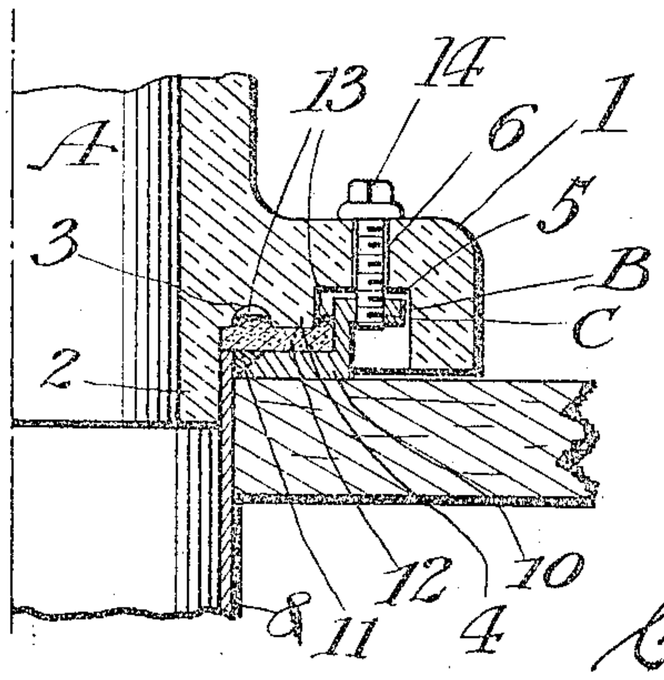


Fig. 4.



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WATER-CLOSET-OUTLET CONNECTION.

938,777. Specification of Letters Patent. Patented Nov. 2, 1909.

Application filed June 17, 1908. Serial No. 438,980.

To all whom it may concern:

Be it known that I, CHARLES H. MOORE, a citizen of the United States, residing in New York city, in the county of New York and State of New York, have invented a new and useful Improvement in Water-Closet-Outlet Connections, of which the following is a specification.

The object of this invention is to provide a connection between a water closet and the soil pipe that will be perfectly tight, and without any liability of the joint becoming broken and leaking if the closet should get jarred or moved a trifle after it has been set in position. To accomplish this, I use a soft gasket, soaked with liquid grease that will not evaporate, in conjunction with a flange shaped to retain liquid, and a closet base shaped on the under surface so that a portion of it will come in contact with the gasket when the closet is being set and force enough of the grease therefrom to partially fill the spaces between the depending ring on the closet base and the side of the metal floor plate.

In the accompanying drawings forming a part of this specification the device is shown in different forms, Figure 1 representing a central vertical section of the device having a thimble 7 forming the inner projection on the flange. Fig. 2 represents a central vertical section of the device in which the metal pipe extending through the floor forms the inner projection on the flange. Fig. 3 shows a central vertical section of the floor plate. Fig. 4 represents a central vertical section of the device in which the floor plate has the outer flange. Fig. 5 represents a central vertical section of the device in which the inner and outer flanges are cast in one piece on the floor plate.

A represents a water closet showing the discharge end.

1 is the base of the closet; 2 is the spud end of the closet that enters the soil pipe; 3 is a groove formed in the under side of the base around the spud end 2; 4 is a depending ring formed on the under side of the base; 5 is a groove formed in the under side of the base and is separated from the groove 3 by the depending ring 4.

6 shows holes through the base 1 for bolts to extend through; 7 represents a thimble that extends up from the soil pipe 8 into the groove 3 and is soldered to the soil pipe at 9; 10 represents a metal floor plate having an outer flange projecting up into the groove 5 and in the form shown in Fig. 5 having a flange at the inner edge so that a receptacle D is formed in the floor plate between the two flanges, and this receptacle D contains the gasket and retains the liquid that is pressed from the said gasket when the closet is set.

11 represents the joint that connects the metal floor plate to the soil pipe.

12 represents a soft gasket preferably made of felt that will absorb plenty of liquid grease so that when the closet is set there will be a sufficient quantity of the grease (that is represented by the numeral 13) pressed from it to partially fill the spaces at each side of the depending ring 4 and submerge the lower end of the said depending ring 4, thereby forming a grease seal above the gasket and assuring a gas tight joint independent of the joint that is formed by the gasket, and if there is any unevenness on the under side of the depending ring 4 it will be filled with the grease.

B represents a flat rim projecting out from the floor plate and C shows the bolt holes.

It is immaterial whether the gasket is saturated with liquid grease and then placed in the receptacle D or whether it is put in the receptacle dry and liquid grease filled in the receptacle upon it.

Any suitable liquid substance may be used in place of grease.

The advantages are: 1st. A perfect sewer gas tight joint is formed that will not become defective and leak. 2nd. The gasket is protected by the grease seal surrounding it and will not become hard and crack.

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

1. In a connection between water-closet bowls and soil-pipes, the combination with the bowl having two downwardly opening grooves in its base formed by an annular flange on its outer edge, an annular flange or spud on the edge of its discharge orifice extending into the soil-pipe and a ring intermediate said flanges, an imperforate annular floor-plate adapted to be secured on the upper end of the soil-pipe and having an upwardly opening groove into which the ring of the base extends, said groove being formed by imperforate annular flanges on its inner and outer edges, means securing said base and floor plate together and a liquid filled compressible washer located in

the groove in the floor-plate and compressed between the bottom of its groove and the end of the ring, thereby forming within the groove in the floor-plate, on each side of said ring, a combined solid and liquid seal and a tight connection between said base and the floor-plate, substantially as described.

2. In a connection between water-closet bowls and soil-pipes, the combination with the bowl having two downwardly opening grooves in its base formed by an annular flange on its outer edge, an annular flange or spud on the edge of its discharge orifice extending into the soil-pipe and a ring intermediate said flanges, an annular flanged floor-plate adapted to be secured on the upper end of the soil-pipe and having an upwardly facing recess the wall of which is imperforate, and into which the ring of the base extends, means securing said base and floor-plate together, and a liquid-filled compressible washer located in the recess in the floor-plate and compressed between the bottom of its recess and the end of the ring, thereby forming within the recess in the floor-plate, on each side of said ring, a combined solid and liquid seal and a tight connection between said base and the floor-plate, substantially as described.

3. In a connection between water-closet bowls and soil pipes, the combination with the bowl having an annular spud projecting downwardly from its base on the edge of its discharge orifice and extending into the soil pipe and a ring also projecting downwardly from said base, an imperforate annular floor plate adapted to be secured on the upper end of the soil pipe and having an upwardly opening groove into which the downwardly projecting ring of the base extends, said groove being formed by imperforate annular flanges on its inner and outer edges, means securing said base and floor plate together and a liquid filled compressible washer located in the groove in the floor-plate and compressed between the bottom of its groove and the end of the downwardly projecting ring, thereby forming within the groove in the floor-plate, on each side of said ring, a combined solid and liquid seal and a tight connection between said base and the floor-plate, substantially as described.

4. In a connection between water-closet bowls and soil pipes, the combination with the bowl having an annular spud projecting downwardly from its base on the edge of its discharge orifice and extending into the soil pipe and a ring also projecting downwardly from said base, an annular flanged floor-plate adapted to be secured on the upper end of the soil-pipe and forming an upwardly opening groove, the walls of which are imperforate, and into which the downwardly projecting ring of the base extends, means securing said base and floor-plate together, and a liquid filled compressible washer located in the groove in the floor-plate and compressed between the bottom of its groove and the end of the downwardly projecting ring, thereby forming within the groove in the floor-plate, on each side of said ring, a combined solid and liquid seal and a tight connection between said base and the floor-plate, substantially as described.

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