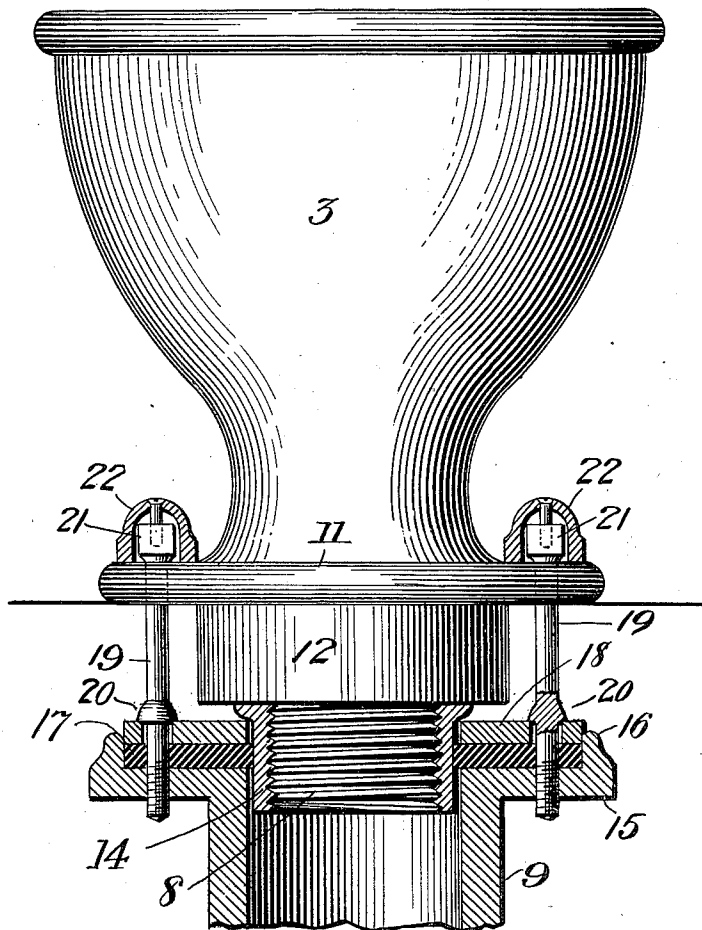


J. F. KELLY.
 SOIL PIPE CONNECTION FOR WATER CLOSET BOWLS.
 APPLICATION FILED APR. 2, 1910.

1,044,056.

Patented Nov. 12, 1912.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN F. KELLY, OF TRENTON, NEW JERSEY.

SOIL-PIPE CONNECTION FOR WATER-CLOSET BOWLS.

1,044,056.

Specification of Letters Patent.

Patented Nov. 12, 1912.

Original application filed November 23, 1909, Serial No. 529,514. Divided and this application filed April 2, 1910. Serial No. 553,139.

To all whom it may concern:

Be it known that I, JOHN F. KELLY, a citizen of the United States, residing at Trenton, county of Mercer, State of New Jersey, have invented certain new and useful Improvements in Soil-Pipe Connections for Water-Closet Bowls; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to water closet bowls, and more especially to the soil pipe connections of the same, the object of the invention being the provision of an improved soil pipe connection by which the bowl and soil pipe are firmly and reliably locked together and supported with relation to each other without liability of leakage.

The novel features of the invention will appear more clearly from the following description and claims.

In the accompanying drawing, the single view is a front elevation, partly in section, of a bowl having a soil pipe connection embodying the invention.

In the drawing, the bowl 3 is shown as having an extension 12 below the floor line and a base flange 11 above said extension, but I wish it to be understood that the improved soil pipe connection forming the subject matter of my invention may be used with bowls of many other types. In the embodiment illustrated, the usual threaded nipple 8 which extends down from the lower surface of the bowl (in this case, from the extension 12) is located at quite some distance below the floor line, but this is likewise a non-essential feature.

A collar or sleeve 14 is screwed on the threaded nipple 8, and said sleeve is surrounded with a certain amount of clearance by the soil pipe 9. The latter is formed at its upper end with a lateral flange 15 having an upstanding rim 16 and on the upper surface of said flange and retained in place by the rim 16 is a gasket or packing 17 of suitable material, such gasket being perforated to pass over the sleeve 14 and make a tight fit therewith. On top of the gasket 17 is placed a disk or plate 18 that is perforated to receive bolts 19, the threaded lower ends of which are screwed into the soil pipe flange 15, as shown, the bolts being headed at their upper ends and passed through the

base flange 11 of the bowl. The bolts 19 are provided with fixed collars or shoulders 20 to abut against the upper surface of the plate 18, and the heads 21 of said bolts are preferably incased in cap nuts 22 that are screwed down on the base flange in a manner well known in the art.

By constructing the connection in the manner described, it is possible, by screwing the bolts 19 as far as possible in the soil pipe flange, to force the shoulders or collars 20 of the bolts into tight contact with the plate 18 and at the same time to move the soil pipe and bowl toward each other, the gasket or packing 17 being compressed by the plate 18 to such an extent that its inner edge will make gas and water tight contact with the smooth outer surface of the sleeve 14. In this way, a hermetic closure is effected between the soil pipe and the discharge end of the bowl and the bowl and soil pipe are firmly connected to each other.

It is evident that the connection described is capable of various modifications and that other features of the structure may also be modified without departing from the spirit of the invention.

What I claim is:—

1. The combination of a water closet bowl having a depending nipple, a soil pipe embracing the nipple, a gasket seated on the upper end of the soil pipe, around the nipple, a plate resting on the gasket, and means which compresses the gasket between the plate and soil pipe and also connects the soil pipe to the bowl.

2. The combination with a water closet bowl having a depending nipple, of a sleeve screwed on the nipple, a soil pipe surrounding the sleeve, a gasket seated on the upper end of the soil pipe, around the sleeve, a plate resting on the gasket, and means which compresses the gasket between the plate and soil pipe and connects the soil pipe and the bowl.

3. The combination with a water closet bowl having a laterally directed base flange, and a nipple below the base flange, of a soil pipe surrounding the nipple, a gasket seated on the upper end of the soil pipe and also surrounding the nipple, a plate resting on the gasket, and bolts passing through the base flange and soil pipe and operative to compress the gasket and connect the soil pipe and the bowl.

4. The combination with a water closet bowl having a laterally directed base flange, and a nipple below the flange, of a sleeve threaded on the nipple, a soil pipe embracing the nipple and having an outstanding flange, a gasket seated on said flange, a plate on top of the gasket, and bolts passing through the base flange and threaded into the flange of the soil pipe to connect the soil pipe and the bowl, said bolts having shoulders to abut against said plate and thereby compress the gasket into tight contact with said sleeve.

5. The combination with a water closet bowl having a laterally directed base flange,

and a nipple below the base flange, of a soil pipe surrounding the nipple, a flat lateral flange on the upper end of the soil pipe, a gasket seated directly on the upper surface of said flange, around the nipple, and bolts connecting the soil pipe flange to the base of the bowl and having means to compress said gasket against the soil pipe flange.

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

JOHN F. KELLY.

Witnesses:

ALBERT EVANS,

R. ROBBINS ANDERSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."