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T. E. FLYNN.

WASTE PIPE CONNECTION FOR WATER CLOSETS.

APPLICATION FILED OCT. 25, 1906.

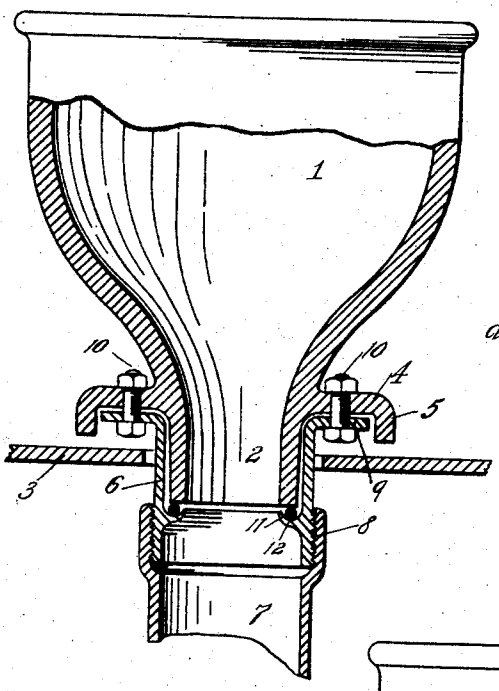


Fig. 1

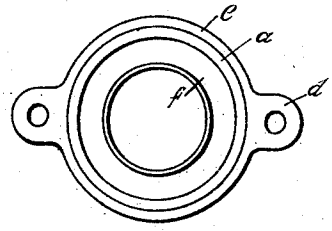


Fig. 3.

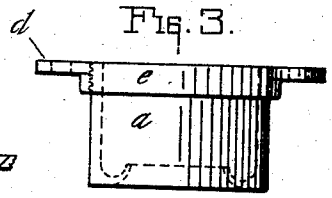


Fig. 4

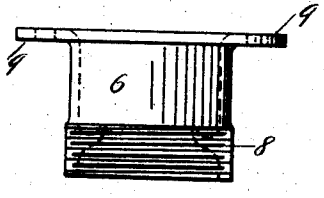


Fig. 5.

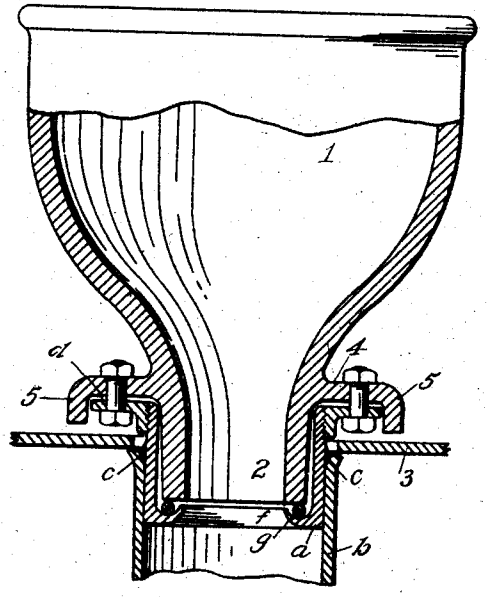


Fig. 2.

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WASTE-PIPE CONNECTION FOR WATER-CLOSETS.

No. 864,239. Specification of Letters Patent. Patented Aug. 27, 1907.

Application filed October 25, 1906. Serial No. 340,438.

To all whom it may concern:

Be it known that I, THOMAS E. FLYNN, a citizen of the United States, and a resident of Tiffin, in the county of Seneca and State of Ohio, have invented a certain new and useful Waste-Pipe Connection for Water-Closets; 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, reference being had to the accompanying drawings, and to the figures and letters of reference marked thereon, which form a part of this specification.

My invention has particular reference to coupling devices of the class employed to form a water-tight connection between the bowls or hoppers of water-closets, cess-pools, or the like, and the waste or take-off pipe leading off to the main soil-pipe.

The object of my invention is to provide a simple, durable and efficient coupling means of this class, which permits of an easy, speedy and water-tight connection between the bowl or hopper and the waste-pipe with which it connects, whether such pipe be of lead or iron construction.

While it will be apparent that obvious modifications of my invention will occur to a person skilled in the art, the preferred embodiments thereof are fully described in the following specification, and shown in the accompanying drawings, in which,—

Figure 1 is a central vertical section of one form of the coupling means embodying my invention with the associated hopper and waste-pipe shown in similar partial section. Fig. 2 is a similar view of another form of the invention. Figs. 3 and 4 are top and side elevations of the coupling-member shown in Fig. 2, and Fig. 5 is a side elevation of the coupling-member in Fig. 1.

Referring to the drawings, 1 designates a water-closet hopper or bowl of any suitable construction, which is shown as having its base portion extended, as at 2, to enable it to project through the associated opening of the floor 3, and is formed above the floor line with the laterally projecting annular flange 4 having the depending lip 5 at its outer edge.

In Fig. 1 the coupling-member 6 comprising my invention is shown as used in connection with what is known as Durhan fittings for fire proof buildings. When used in this connection the coupling-member 6, which is of tubular form, has its lower end threaded as at 8, to the top of the waste-pipe 7 and its upper portion encircling or telescoping with the lower extended base 2 of the hopper and formed at its upper edge with a lateral flange or plurality of perforated radial ears 9, which are intended to be secured to the flange 4 of the hopper by bolts 10, or in any other suitable manner. On the inner wall of this coupling-member is formed an annular trough 11 for receiving and supporting a gasket member 12. This trough is disposed at a proper depth within the coupling-member 6 to enable the gasket supported thereby to receive the thrust of the lower end of the hopper when the coupling-member is approximately abutting the flange 4 thereof, a slight space being preferably allowed between said flange and the upper end of the coupling-member to enable a tightening of the bolts 10 to effect a further compression of the gasket-member. While a gasket of lead or other compressible metal is preferably employed to hermetically seal the joint thus formed, a gasket of rubber or fibrous material may be used if desired.

In Fig. 2 the construction of the coupling-member, which is designated therein as *a*, is shown as being slightly modified over that shown in Fig. 1 in order to adapt it for use in connecting a hopper or bowl with the lead-pipe *b* usually employed in house plumbing, as in this connection it would not be practical to thread the lead-pipe and coupling-member together. In this construction the threaded portion of the coupling-member *a* is eliminated and the joint between it and the lead-pipe *b* sealed by solder or other suitable cementing substance *c*. In order to facilitate the placing of the solder or cement *c* the securing ears *d* at the top of the coupling-member are carried by a ring *e*, which is threaded to the upper end of the coupling, as shown, thus enabling it to be removed so the workman can have easy access to such point. The trough *f* and gasket *g* are the same as in Fig. 1.

It will be apparent with either form of my invention that a simple and efficient coupling means is provided, which enable the hopper and waste-pipe to be speedily and easily connected and forms a perfect and lasting joint-sealing means therebetween.

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

1. In combination a closet-bowl having an extended base and lateral securing means, a waste-pipe, a coupling-member sealed to the upper end of the pipe and having an inner annular gasket-supporting part beneath the base end and its upper end secured to the securing means on the bowl, and a gasket carried by the gasket-supporting part and coacting with the end of the base.

2. In combination a closet-bowl having an extended end, a waste-pipe, a member coupling the bowl and pipe together, said member having its opposite ends telescoping with the pipe and extended end of the bowl, and being provided with an inner annular trough, a gasket supported by the trough and coacting with the extended end of the bowl, and means for tightening the coupling-member relative to the bowl.

3. In combination, a closet-bowl having an extended end, a waste-pipe, a coupling-member connecting the bowl and upper end of the pipe and having an inner annular gasket-supporting part contiguous to the extended end of the bowl and in line therewith, and a gasket interposed between said supporting part and the end of the bowl.

4. In combination, a closet-bowl having a lateral flange and an extended base, a waste-pipe associated therewith, a coupling-member having its upper end telescoping with the bowl base and secured to the flange and its lower end telescoping the upper end of the waste-pipe and formed with an inner annular trough-like gasket-supporting part, and a gasket supported by said part and engaging the extended end of the bowl.

5. In combination a closet-bowl having an extended base, a waste-pipe, a coupling-member encircling and projecting below the base and having an inner annular flange disposed below the end of the base, said member connecting at its lower end with the waste-pipe, and a gasket supported by the flange and abutting the extreme end of the base.

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

THOMAS E. FLYNN.

Witnesses:
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R. L. SIMPSON.