

UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN WATER-CLOSETS.

Specification forming part of Letters Patent No. **167,702**, dated September 14, 1875; application filed August 10, 1875.

To all whom it may concern:

Be it known that I, ROBERT D. O. SMITH, of Washington city, in the District of Columbia, have invented an Improvement in Water-Closets, of which the following is a specification:

Heretofore that part of a water-closet which is secured to the floor and couples with the soil-pipe, and commonly called the container or hopper, has been constructed with a flange extending all around its base, and forming a foot, upon which said container rests. This flange covers and completely hides the soil-pipe connection, so that when the container or hopper is secured to the floor it is impossible to know with certainty that said connection or joint has been made tight. For convenience the part referred to will in the following specification be called the container. It is also frequently difficult to set the container in the position necessary to obtain a firm footing for the legs and foot-screws without placing other parts in an inconvenient position. Also, when setting the bowl or receiver upon the container it is customary to seat it upon a layer of putty; but the adhesion of the putty to the iron of the container is slight, and, when applied to the edge of the bowl, but little force is required to disturb its seat and loosen it, so that the joint will leak.

My invention relates to improvements in the container designed to obviate the above-named defects; and it consists, first, in a container provided with legs instead of a foot-flange, as heretofore, whereby the soil-pipe connection or joint is rendered visible and easily accessible after the container has been put into position and secured to the floor; second, in making the top circular, and provided with a neck to receive a ventilating-pipe, whereby said top may be turned about to direct said ventilating-pipe toward some adjacent flue, and thereby permit such an adjustment of the container-feet as will secure them a firm footing; third, in the annular overhanging flange and hooked coupling-bolts; fourth, in the annular funnel-shaped flange, to hold cement or putty against the side of the neck of the bowl or receiver.

That others may fully understand my improvement, I will particularly describe it, hav-

ing reference to the accompanying drawing, wherein—

Figure 1 is a perspective view of my container, with bowl. Fig. 2 is a vertical section of the same. Figs. 3 and 4 represent, in perspective, the ordinary pan-container and the open hopper.

A is the container, constructed of cast-iron, porcelain, or other suitable material. It is provided at its bottom with legs and feet *a a*, upon which it stands. These feet are securely fastened to the floor by means of screws. The legs *a a* are joined to the body of the container A at a sufficient distance above the plane of the feet to permit free access to the joint *p* at the point of connection between the container A and soil-pipe P, so that said joint may be calked after the container has been placed in position and secured to the floor. Access to said joint has never heretofore been possible, because it has been completely hidden and concealed by the flange *g*, heretofore described and shown in Figs. 3 and 4, and said joint *p* may therefore be made tight without trouble and with certainty. When the container is being set the feet *a a* are adjusted so as to find the best and most secure footing, and may then be secured by screws, as set forth above. I prefer to make the upper edge of the container A circular, and provided with a groove, *b*, into which a circular rib, *r*, upon the under side of the cover C fits, to keep said cover from moving laterally out of place. The upper edge of the container is also provided with an overhanging flange, *f*, preferably upon the outside of said container, and under said flange the hooked ends of the screw-bolts *d d* engage and clamp the cover to the container. By loosening the nuts of the bolts *d d* the cover may be rotated, the rib *r*, running in the groove *b* as a guide. When the container is adapted to the purposes of the odorless closet patented to me February 18, 1873, the cover C is provided with a neck, *c*, to receive the ventilating-pipe, which conveys away the effluvia and noxious odors arising from the soil-pipe and inner surface of the container. The cover C and neck *c* may then be adjusted to lead to some adjacent flue, or in any direction desired, without reference to the position of the feet upon the floor. When putting the

cover C in place the groove *b* should be filled with thick putty, or cement of some kind, which the rib *r* will compress and cause to fill the entire joint, and render the same air-tight. The rib *s* is placed around the neck *c* as a stop for the end of the ventilating-pipe, and to serve as a foundation and backing for a ring of putty or cement, to seal the joint of said pipe and neck. The annular conical flange *t* forms a seat for the neck *u* of the receiver or bowl R, so that a bedding of putty or cement may be interposed and held against the said neck in addition to the putty or cement beneath the flange-seat *v* of the receiver. The bowl or receiver will be, therefore, much more firmly united to the container than where, as is now commonly the case, it is merely seated on a layer of putty placed beneath the flange *v*. The annular corrugations of the conical flange *t* serve to receive and hold the putty or cement, and prevent the same from being pushed down into the container.

Having described my invention, what I claim as new is—

1. A water-closet container or hopper, A, provided with supporting legs which permit access to the soil-pipe joint *p*.

2. A water-closet container, A, combined with a circular adjustable cover, C, provided with a ventilating-outlet, *e*, located entirely upon said cover.

3. A water-closet container, A, constructed with a circular groove, *b*, in its upper edge, combined with a cover, C, provided with a circular rib, *r*, adapted to fit in said groove, and compress the putty or other calking matter, to insure a tight joint, as and for the purpose set forth.

4. A water-closet container, A, constructed with a circular top, and provided with an overhung flange, *f*, combined with a cover, C, and hook-bolts *d*, which engage under said flange, and permit an adjustment of and rigid attachment of said cover.

5. A water-closet container and cover, C, provided with an opening for the admission of the neck *u* of the receiver or bowl, combined with a conical flange depending from the edge of said opening, for the purpose set forth.

R. D. O. SMITH.

Witnesses:

C. C. LEE,

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