W. S. CARR.

WATER CLOSET.

No. 79,728. Patented July 7, 1868.

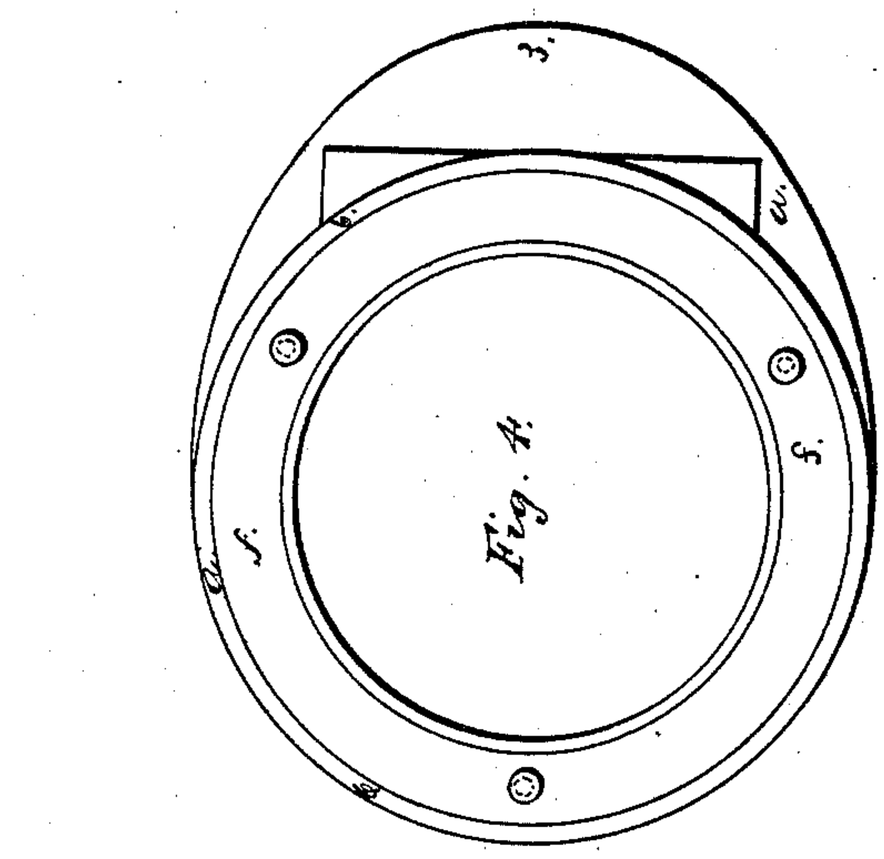

Fig. 4.

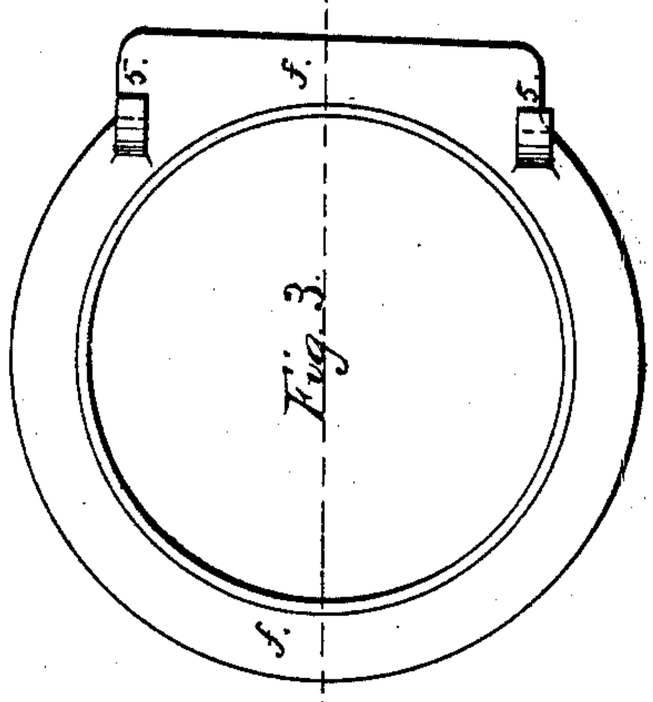

Fig. 3.

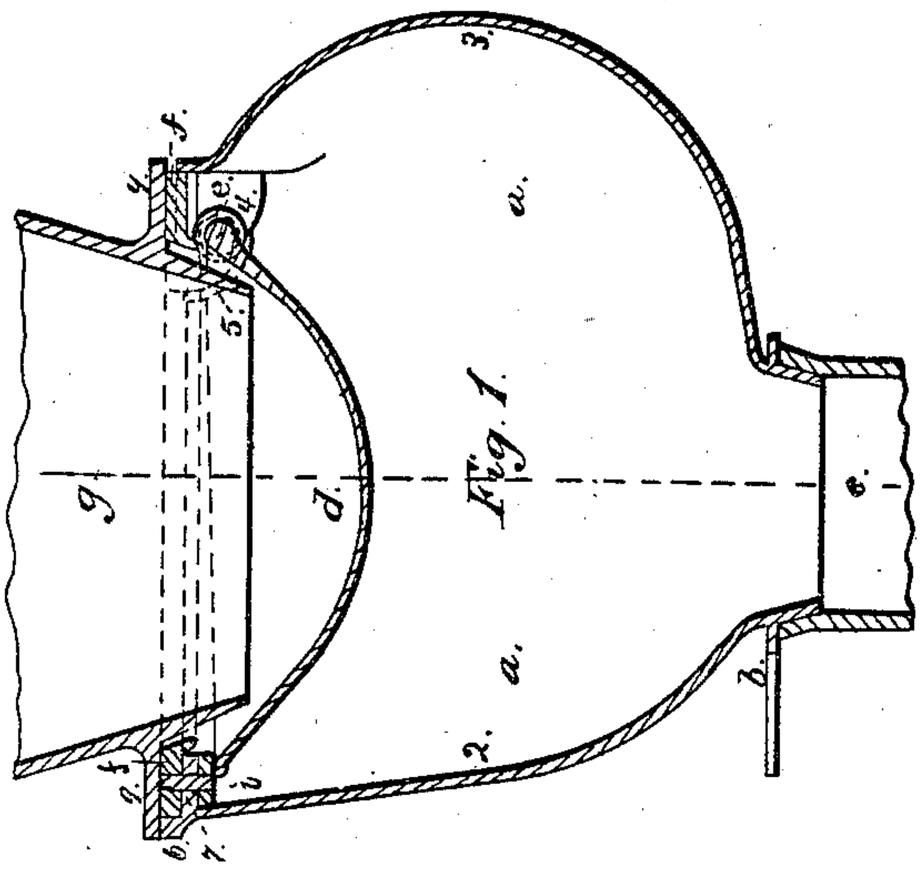

Fig. 1.

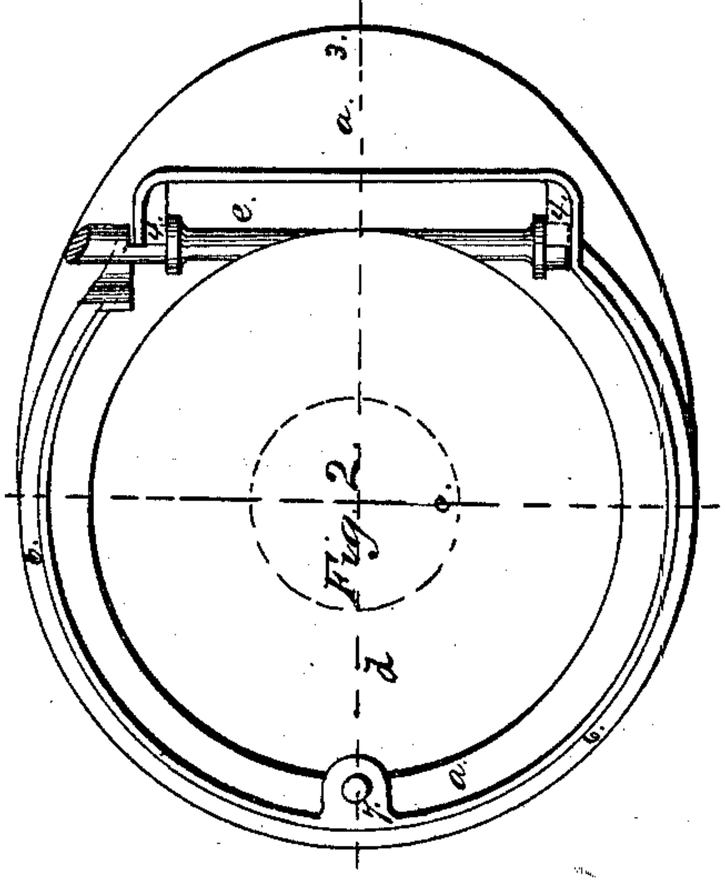

Fig. 2.

Witnesses:

Geo. D. Baker.

Chas. H. Smith.

Inventor:

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United States Patent Office.

WILLIAM S. CARR, OF NEW YORK, N. Y.

Letters Patent No. 79,728, *dated July* 7, 1868.

IMPROVEMENT IN WATER-CLOSETS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM S. CARR, of the city and State of New York, have invented and made a certain new and useful Improvement in Water-Closets; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a vertical section of the closet-hopper or container in place for use.

Figure 2 is a plan of the same, with the ring-flange removed.

Figure 3 is an inverted plan of said ring-flange, and

Figure 4 is a plan of a variation in the shape of the ring-flange.

Similar marks of reference denote corresponding parts.

Heretofore the hoppers or containers of pan-closets have been formed with a top plate bolted upon the hopper itself, and extending over the edges of such hopper, inclusive of the swell or elliptical side of the container, into which the pan turns when swung for emptying it. Upon this top plate the basin is placed. This construction renders it necessary to pack the joints with putty at two places, viz, between the top plate and the hopper, and between the top plate and the basin. The packing at the former place is very liable to break and fall out, in consequence of the concussion from the pan as it closes against the under side of the top plate, or in consequence of the jarring and rough handling to which closets are frequently subjected after manufacture and previous to use.

The nature of my said invention consists in the metallic hopper or container, contracted at its upper end to receive the flange of the basin, in combination with a movable metal ring, that is introduced within said upper end of the container, to form a broader seat for the flange of the basin, and also to allow for the introduction or removal of the swinging pan.

By this construction I am enabled to dispense with one joint, and have only to apply the putty or packing below the flange of the basin, and under circumstances where it is very easy to see that the joint is perfect. There is little or no risk of said putty breaking from concussion, and repairs to the same are very easily made, it being understood that the basin is always put upon the hopper as a permanent fixture after the other parts of the closet are in their places.

In the drawing, *a* is the metallic hopper or container, made with the curved side 2, base-flange or legs *b* to the soil-pipe *c* as usual, and with the bulge 3, into which the pan *d* swings, when dropped to empty its contents.

As seen in fig. 2, the pan *d* is on an axis, *e*, that turns in the bearings that are formed partially on the container and partially upon the ring *f*, fig. 3. It will be understood that the shaft or axis *e* is introduced into the half-bearings, 4, on the hopper, and that then the ring *f*, with its half-bearings, 5, is put into place, and the ring cannot lift at this side in consequence of the axis *e* being in the bearings 5. The pan, however, is free to swing.

Around the upper end of the container or hopper, *a*, is the flange 6, that is outside of and rises about as high as the surface of the ring *f*, and the screw *i* entering the lug 7 on *a*, holds the ring *f* firmly in place at this side.

The pan *d* closes against this lug 7, and hence there is no concussion on the ring *f*, and I prefer that the screw *i* pass into a piece of leather forming a cushion on the under side of this lug 7, for the pan to strike against.

It will now be understood that the packing applied upon the ring *f* and flange 6 makes a perfectly tight joint between the flange 9 of the basin *g* and the hopper *a*, and that this joint is of a character easily made and kept in repair; hence that the escape of smell from the soil-pipe is prevented.

The modification shown in fig. 4 relates to forming the ring *f* entirely circular on its exterior edge, in which case the axis of the pan will be introduced endwise through a hole in the side of the container, into an arm or arms on the pan, formed with a square for moving said pan, instead of employing the divided bearings for said

axle, shown in figs. 1, 2, and 3. The packing of the joint between the container and the flange 9 of the basin is the same as before described, the flange 6 entirely surrounding the ring *f*.

What I claim, and desire to secure by Letters Patent, is—

1. The hopper or container *a*, contracted at its upper end, and adapted to receive the flange of the basin, in combination with the movable ring, that forms a sufficiently wide bearing for the said basin-flange, and allows for the introduction or removal of the swinging pan of the closet, substantially as set forth.

2. The ring *f* and hopper *a*, in combination with the swinging pan *d* and lug 7 upon said hopper *a*, and below the ring *f*, as specified, so that the concussion of the pan *d* in closing will be taken on said lug 7 and the ring *f* relieved, as and for the purposes specified.

In witness whereof, I have hereunto set my signature, this sixteenth day of March, A. D. 1868.

WILLIAM S. CARR.

Witnesses:

CHAS. H. SMITH,

GEO. D. WALKER.