

189,859. Fig. 5 Fig. 1 Witnesses

United States Patent Office.

HUGH H. CRAIGIE, OF NEW YORK, N. Y.

Letters Patent No. 89,859, dated May 11, 1869.

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, Hugh H. Craigie, of the city and State of New York, have invented, made, and applied to use 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 general vertical section of the watercloset container and pan, transversely of the axis of

said pan;

Figure 2 is a section through the socket for the pull, and its supporting-arm;

Figure 3 is an elevation of the wedge that holds the

supporting-arm to the pull-socket;

Figure 4 is a plan of the valve-projection, from the side of the hopper, with the cover thereof removed; and

Figure 5 is a sectional plan of the lever, weight, and clamp to the pull of the link.

Similar marks of reference denote the same parts.

The object of this invention is to secure the movable parts of the closet and hopper, by means of wedges or keys, that can be driven or drawn into place to firmly attach the respective parts, and allow of the easy separation of those parts for repair.

In the drawing-

a is the container, or hopper, formed with the base-flange b, and with a movable top plate, formed in two sections, c c'.

The section c' is entered at one edge, under the lugs 2, that project up from the hopper a, and then the said plate is pressed down to place, a notch in the other edge allowing said plate to pass the under-cut lug 3, between the under side of which and the plate c', a key, or wedge, 4, is driven, to secure the parts firmly together.

The movable section c is formed with the opening, into which projects the lower end of the usual china basin, and upon the surface of this plate, c, the flange

of said china basin rests, as usual.

This section c is held down by the back end being passed under the edge of the section c, and a bolt, 5, passes through a lug depending from the under part of said plate c, and passes through the side of the hopper a, at which point are projecting lugs, 20, with bevelled under edges, against which the bevelled edge of the washer 6 sets, so that when the nut of the bolt 5 is screwed up, the parts are drawn together, and the plate c firmly held and drawn down upon the top of the hopper a.

I remark that an under-cut lug, like the lug 3, and a key, or wedge, 4, might be employed for holding

down the plate c.

Around the plates cc, on their under sides, and near the edges, are downward flanges 7, that strengthen the plates, and form an angle, into which putty is laid previous to the plates being applied to the hopper, so as to make a tight joint.

At one side of the hopper a, lugs 8 8 are cast, between which are placed the vertical part of the arm

f, that holds the socket e for the pull, and also a wedge, d, the said lugs being under-cut or grooved on their opposite faces, so as to hold the said wedge and arm between them, and by driving the wedge into place, the arm will be securely held at any point to which it is desired to hold the socket e, for accommodating the wood-work of the seat of the closet.

I also provide a screw at the smaller end of the wedge d, passing up through a hole in the plate c', receiving a nut, 9, for drawing or holding the wedge

in place. ~

The socket e is attached to the arm f by a lug, 10, projecting down from the socket e, into a mortise in the arm f, a neck, 11, around the centre part of the said socket, setting against the curved end of the arm f, and a wedge, g, in the slot in f, acting to force the lug 10 one way, and hence draw the neck 11 against the end of f.

This wedge g is provided with a nut on its lower end, to draw it down, and the wedge is widest at its upper end, so that it will not fall out when the parts

are separated.

The pull h passes down to the link-piece k, that is connected to the lever l of the closet, that operates the swinging pan m, by the slotted cam on the axis i

of said pan m, as usual.

The link k passes through the weight n, and this weight n is formed with a loose mortise for said link, and at the back of the weight is a projection, n', that passes into the ring l' of the lever l, the parts being bevelled, as shown in fig. 5, and a wedge-bolt, o, passes through the weight n, and when the nut of said wedge is screwed up, it tends to press the weight n back against the ring l', and hence bind the link k firmly to the face of the ring l', at whatever point the parts may be adjusted, either by moving said link k endwise through the mortise in n, or by rotating the weight n in the ring l'.

At the side of the hopper a is a projecting hollow arm, p, seen in plan in fig. 4, and the cover to this is formed as a pan, upon which the valve or cock of the water-closet is placed, and this cover is fitted to place

and secured by a bolt similar to the bolt 5.

Within the hollow arm p is a rock shaft, r, formed with arms s and t, extending upon opposite sides of the said rock-shaft, and u is a pin connected with the arm s, and projecting up through the cover of the arm p, where it is acted upon by the heel v of the lever l, and hence, when the arm s is pressed down, the arm t will be raised, and will act upon the spindle of the valve, to open the same, to cause a flow of water into the water-closet.

What I claim, and desire to secure by Letters Pat-

ent, is-

1. The plates c c', formed with the downward flanges 7, on their under sides, and secured to the hopper by the action of wedges, substantially in the manner set torth.

2. The arm f, socket e, and hopper a, connected together by wedges, substantially in the manner specified, so as to allow of adjustment, as set forth.

3. The projecting arm p, on the side of the hopper a, with a movable cover, for receiving the valve or cock, in combination with the shaft r and arms s and t, for the purposes and as specified.

4. The weight n, ring l, and wedge-bolt o, in combination with the link k, for the purposes and as speci-

fied.

5. The bolt 5, passing through a hole in the plate c, in combination with the hopper a, having a notch,

into which said bolt passes, so that the parts can be separated without detaching the bolt 5 from the plate c, substantially as set forth.

In witness whereof, I have hereunto set my signature, this 19th day of May, A. D. 1868.

H. H. CRAIGIE.

Witnesses:

CHAS. H. SMITH, GEO. T. PINCKNEY.