

Morrison & Smith,

Water Closet.

No. 108378.

Patented Oct. 18. 1870.

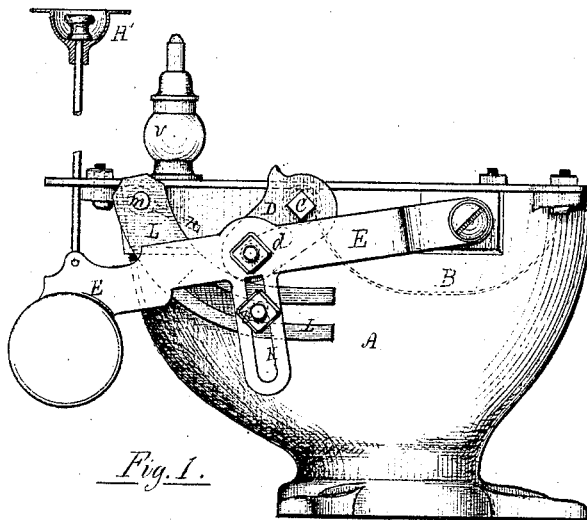


Fig. 1.

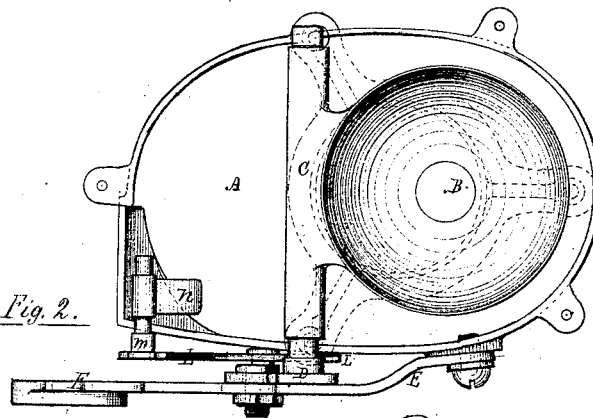


Fig. 2.

Samuel Thomson,

David Morrison

Witness.

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DAVID MORRISON AND JOHN D. SMITH, OF NEW YORK, N. Y.

Letters Patent No. 108,378, dated October 18, 1870.

## IMPROVEMENTS IN WATER-CLOSETS.

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

We, DAVID MORRISON and JOHN D. SMITH, both of the city, county, and State of New York, have invented certain Improvements in Water-Closets, of which the following is a specification.

### *Nature and Object.*

This invention relates to that class of closets which is provided with such a system of valves and levers that the act of emptying the soil-pan will so operate a valve as to give an after supply of water to said pan after it has been emptied and returned to its proper receiving position; and

The object of this invention is to provide a new combination of levers between the handle that operates the soil-pan and the valve that supplies the water in such a manner that space around the closet is thereby economized, and a more convenient and substantial adjustability of the valve obtained, as will be hereafter explained in connection with the accompanying

### *Drawing.*

Figure 1 represents a front elevation of our apparatus complete.

Figure 2 is a top view of the same, with the cover and valve removed to show more distinctly the axis and lever that lifts the valve.

A is the trunk or receiver upon which all the other parts are mounted.

B is the soil-pan underneath the seat, and is attached to, and is controlled by, the shaft C, mounted in and near the top of the trunk or receiver, A.

Upon the front end of said shaft C is a lever, D, fastened firmly thereon in any convenient manner, for partially rotating the shaft in order to empty the pan, B.

Said lever, D, is connected by a pin similar to a crank pin, with the weighted lever E, in a slot at d, in such a manner that when the lever E is lifted by the handle H, the soil-pan, B, will be dropped to empty it.

Upon the under side of the controlling lever, and at a right angle to it, is an arm, K, in which is a slot for receiving a pin, similar to a crank pin, which en-

gages with the curved lever L L, firmly attached to a small rock-shaft, M, near the water valve V, and just below the cover of the trunk.

Upon said shaft or axis, M, is a bracket or arm, N, which works immediately under the stem of the valve at V, and which, on being raised, opens the portion of the valve that sluices the closet.

It is evident, from such a construction, that if the handle H be raised from the position shown at fig. 1, the weighted end of lever E will be raised, the pan B tilted downward, and the lever L L lifted so as to partially rotate the axis at M, and thereby lift the arm N against the valve-stem in V, so as to open said valve and sluice the closet.

The construction of the valve is old and well known, and similar operations have been performed by a lever made adjustable in its center and operated at one end by a cam on the shaft, O, but the adjusting screws of such a device are arranged so far back from the front of the closet that after they have been in use a short time it is very difficult to move them, especially after they become coated with rust, as they invariably do when inclosed within the trunk.

Our adjustments can all be made at the front, as shown in the drawing, the nut at Z, holding the pin in lever L L, being the only one required to be changed.

Instead of the lifting handle H, a connection may be made with a flexible seat in such a manner that the valve may be operated upon by a person sitting or rising from the seat.

### *Claim.*

What we claim, however, is—

The combination of the lever E with its bracket K, for carrying the pin Z, the lever L L, axis M, and arm N, for operating the valves of a water-closet, as described.

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Witnesses:

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JAMES F. THOMSON.