

M. SULZBACHER & C. E. YVELIN.
Water-Closets.

No. 198,433.

Patented Dec. 18, 1877.

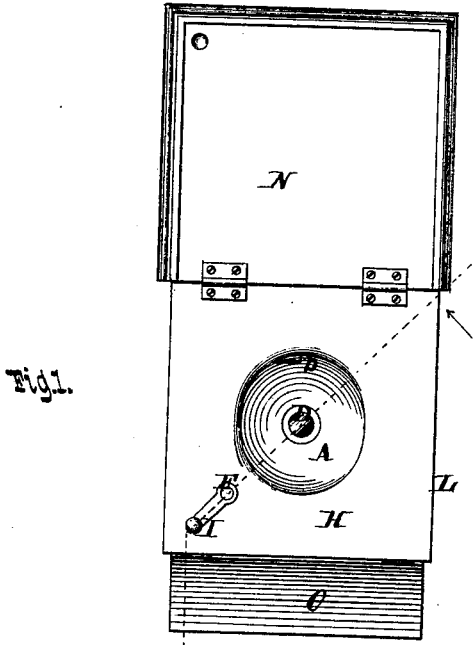


Fig. 1.

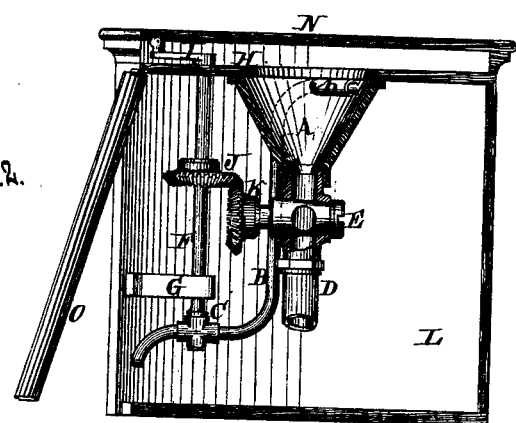


Fig. 2.

Witnesses.

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MIRUM SULZBACHER AND CORDELIA E. YVELIN, OF NEW YORK, N. Y.

IMPROVEMENT IN WATER-CLOSETS.

Specification forming part of Letters Patent No. **198,433**, dated December 18, 1877; application filed July 6, 1877.

To all whom it may concern:

Be it known that we, MIRUM SULZBACHER and CORDELIA E. YVELIN, both of the city, county, and State of New York, have invented a new and useful Improvement in Water-Closets, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a plan or top view when the seat is open. Fig. 2 is a vertical section of the same when the seat is closed and the front of the case partly open.

Similar letters indicate corresponding parts.

Our invention consists in the combination, in a water-closet, of a hopper having a water-inlet near its top edge, a water-supply pipe connecting with said inlet, a waste-pipe connected to the open bottom end of the hopper, a faucet in the waste-pipe, a faucet in the supply-pipe, a vertical shaft rising from the plug of the supply-faucet up through the seat of the closet, and having a handle secured to its upper end, and two bevel-wheels, one of which is mounted on said vertical shaft, while the other is mounted on the plug of the faucet in the waste-pipe, in such a manner that by turning the vertical shaft, by means of its handle, in the proper direction, the faucets in the supply-pipe and in the waste-pipe can be opened at one and the same time, and thereby water is simultaneously supplied to and discharged from the hopper, while, when the faucets are closed, sewer-gases are effectually prevented from passing up through the waste-pipe into the room in which the closet is located; and by arranging the water-inlet near the top edge of the hopper, the latter is cleansed in the best possible manner.

In the drawing, the letter A designates the hopper of our closet, having an inlet-opening, *b*, in the top part thereof, this opening being so arranged as to discharge in a horizontal direction, or nearly so.

To the exterior surface of the hopper A, and at a point opposite to the inlet-opening *b*, is connected a water-supply pipe, B, in which is arranged a faucet, C.

The hopper A has the usual open bottom

end, to which is connected a waste-pipe, D, containing a faucet, E. From the plug of the supply-faucet C rises a shaft, F, which has its bearings in a bracket, G, and in the seat H of the closet, being made to extend up through this seat, and being provided with a handle or crank, I, above the seat, whereby it is turned.

On the vertical shaft F is mounted a bevel-wheel, J, which gears with a bevel-wheel, K, mounted on the plug of the faucet E in the waste-pipe D. The bevel-wheels J K are so arranged, relatively to the plugs of the faucets C E, that by turning the vertical shaft F in one or the other direction both such faucets are either opened or closed, as the case may be. Thus, when said shaft F is turned so as to open the faucets C E, and the pipe B is connected to a water-supply source, water is simultaneously supplied to and allowed to discharge from the hopper A.

In order to insure the discharge of all the water from the hopper A, the faucet E in the waste-pipe D may be made larger than the faucet C in the supply-pipe.

When the faucets C E are closed no sewer-gases are permitted to pass up through the waste-pipe D into the room in which our water-closet is situated, and hence we are enabled to dispense with the trap usually employed for this purpose.

The hopper A and its supply-pipe and waste-pipe are inclosed in a case, L, of which the seat H forms the top, and which is provided with a hinged cover, N, of ordinary form, for the purpose of concealing the seat. One of the sides of this case L is hinged at its top edge to the seat H, so as to form a door, O, swinging upward.

By means of this door O access is had to the hopper A and its paraphernalia beneath the seat H; and by arranging the door to swing upward it can be opened to its full extent without obstruction.

What we claim as new, and desire to secure by Letters Patent, is—

The combination, in a water-closet, of a hopper, having a water-inlet near its top edge, a water-supply pipe connecting with said

inlet, a waste-pipe connected to the open bottom end of the hopper, a faucet in the waste-pipe, a faucet in the supply-pipe, a vertical spindle rising from the plug of the supply-faucet up through the seat of the closet, and having a handle secured to its upper end, and two bevel-wheels, one of which is mounted on said vertical shaft, while the other is mounted on the plug of the faucet in the waste-pipe, the whole being constructed and operating substantially as shown and described.

In testimony that we claim the foregoing we have hereunto set our hands and seals this 2d day of July, 1877.

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C. E. YVELIN. [L. S.]

Witnesses:

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