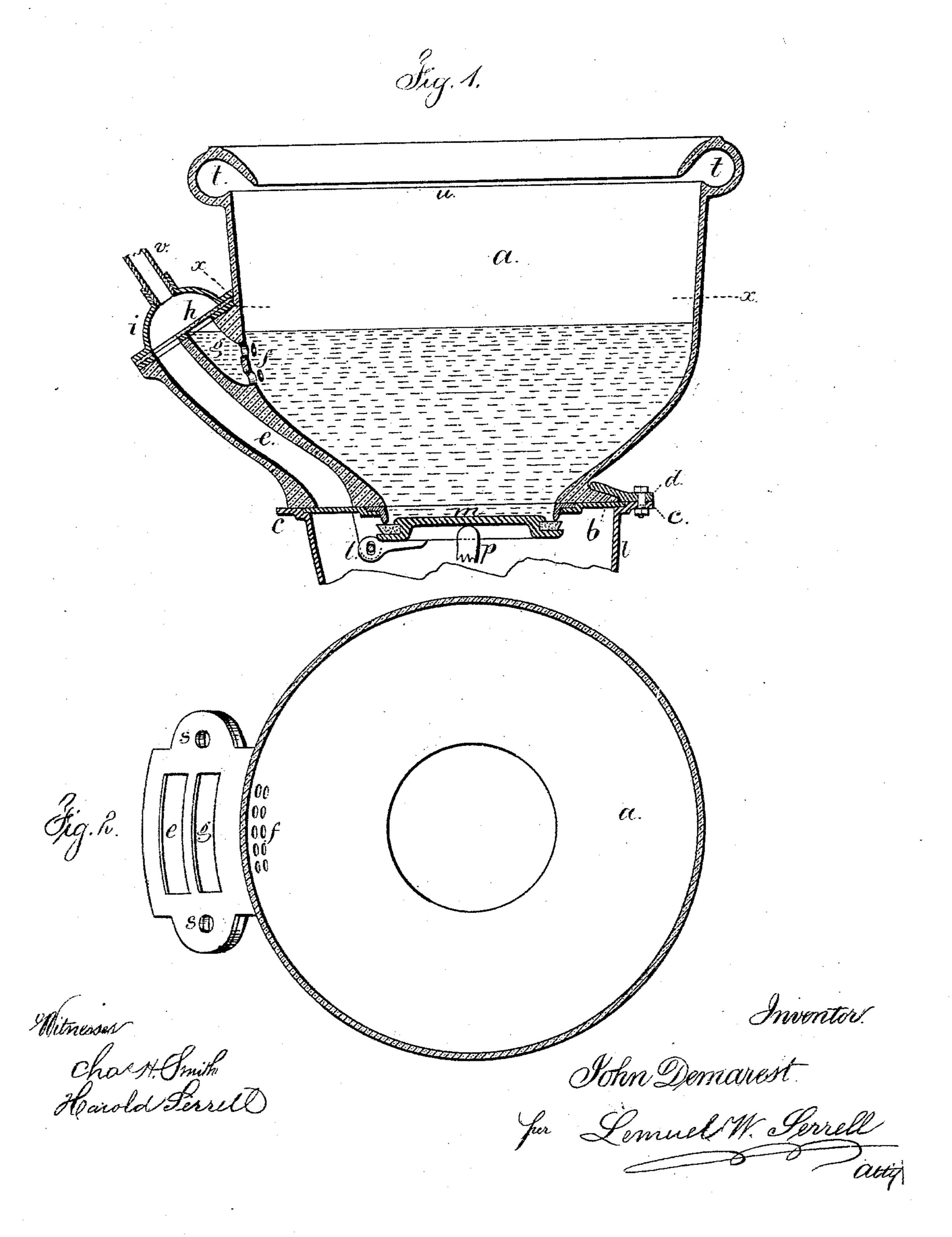
## J. DEMAREST. Water-Closet.

No. 210,677.

Patented Dec. 10, 1878.



## UNITED STATES PATENT OFFICE.

JOHN DEMAREST, OF NEW YORK, N. Y.

## IMPROVEMENT IN WATER-CLOSETS.

Specification forming part of Letters Patent No. 210,677, dated December 10, 1878; application filed September 16, 1878.

To all whom it may concern:

Be it known that I, John Demarest, of the city and State of New York, have invented an Improvement in Water-Closets, of which the following is a specification:

My invention relates to a water-closet basin which is made with nearly straight sides and overflow-passages, to which a valve is applied

to exclude sewer-gas.

There is an ascending overflow that allows the escape of surplus water, which water runs down through a water-way into the receiver behind the upward-closing valve at the bottom of the basin.

The bowl of the closet is provided with an opening at the bottom, closed by a valve that shuts upwardly, and said basin-valve is operated by an arm upon a weighted rock-shaft. These parts are similar to those shown in my application for a patent dated June 19, 1878, and do not require further illustration or description.

In the drawing, Figure 1 is a vertical section of the closet-bowl, and Fig. 2 is a sec-

tional plan of the same at the line x x. The basin a is adapted to rest upon the plate b, and it is fastened to the same and the

flange c of the receiver by metal clips d, or by set-screws or other suitable clamping devices. This basin is made with nearly vertical sides

above the water-line in order that the sides may not become soiled.

Around the upper end of the basin there is a tubular inlet water-way, t, slotted at the inner portion, u, and the water is supplied by a tangential pipe, so as to flow around the pipe t and into the basin and thoroughly wash the same.

The water-way e is either made of porcelain with the basin itself, or else a separate piece cemented thereto.

There are holes f in the side of the basin a opening into the ascending water-way g, and

the upper ends of the water-ways are flat, but at an inclination, and a valve, h, of india-rubber or other suitable material, covers the waterway g, but not the water-way e, and a domeshaped cap, i, secures the edges of the sheet of rubber or other flexible material of which the valve h is composed. Bolts at s are provided for helding this cap in place.

It is to be understood that the surplus water running into the basin a passes through the holes f, rises in the water-way g, lifts the valve h, and escapes freely; but such valve closes and prevents any smell from the sewer passing up through e and escaping into the basin, thereby obviating a difficulty heretofore experienced of deleterious sewer-gases escaping into houses.

It is important that the air in the container or hopper have a free vent when the water in the pan is allowed to descend; otherwise the air escapes through the closet in bubbles that disturb the water. To obviate this there is an escape-tube, v, from the top of the cap i to a ventilating-pipe rising above the building or passing to any suitable point for the outlet.

In the top of the receiver l is a recess, that receives the plate b, forming the seat for the valve m, that is closed upwardly by the leverarm p.

I claim as my invention—

1. The combination of the passages e and g and valve h with the water-closet basin a, substantially as described.

2. The combination, with the water-passages e g and valve, of a cover, i, having an opening connected with a ventilating-pipe, substantially as set forth.

Signed by me this 9th day of September, A. D. 1878.

JOHN DEMAREST.

Witnesses:

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