J. DEMAREST.
Water-Closet.

No. 210,677. Patented Dec. 10, 1878.

Fig. 1.

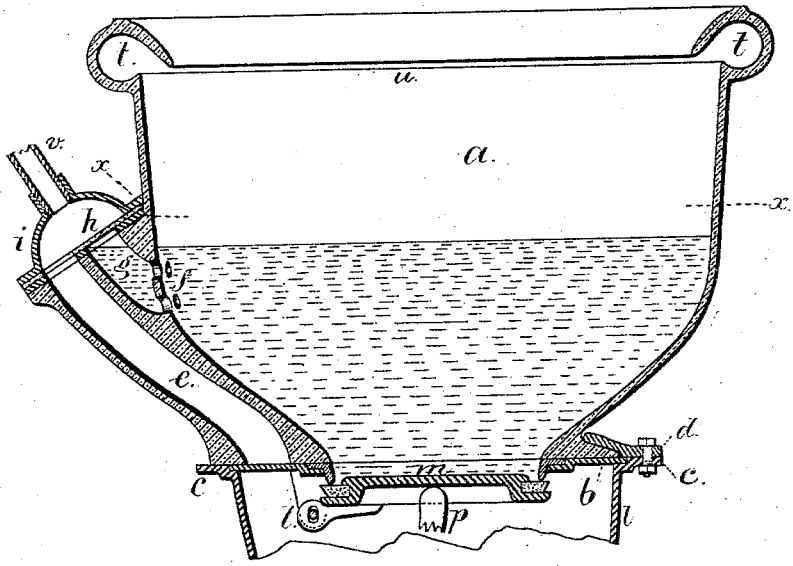
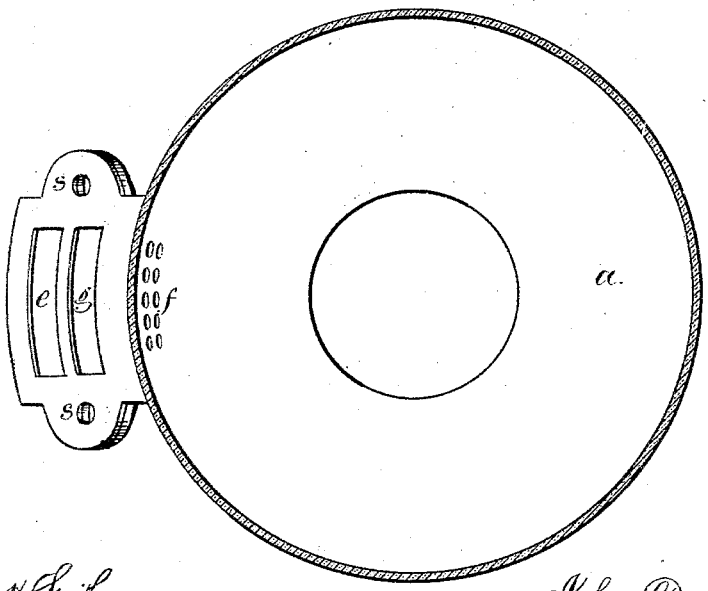



Fig. 2.




Witnesses
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# 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 sectional 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 water-way *g*, but not the water-way *e*, and a dome-shaped 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 holding 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 lever-arm *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.