

J. DEMAREST.  
Water-Closet Valve.

No. 199,418.

Patented Jan. 22, 1878.

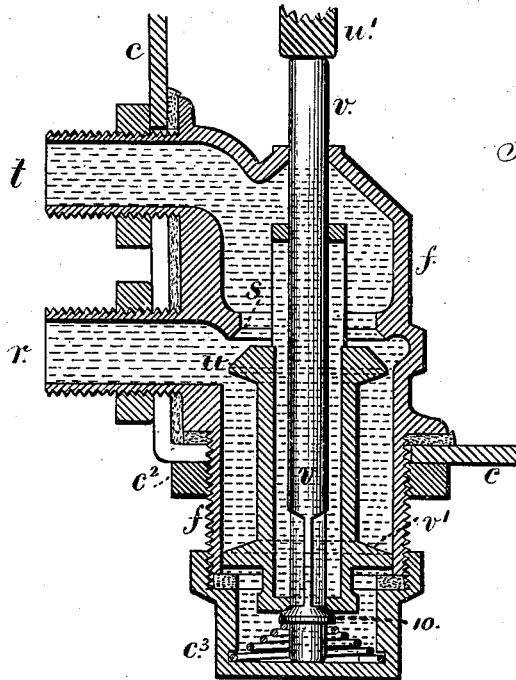
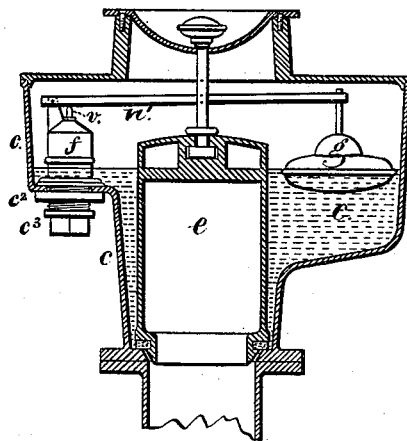


Fig. 1.

Fig. 2.



Witnesses

Chas. H. Smith  
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John Demarest.  
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# UNITED STATES PATENT OFFICE.

JOHN DEMAREST, OF NEW YORK, N. Y.

## IMPROVEMENT IN WATER-CLOSET VALVES.

Specification forming part of Letters Patent No. **199,418**, dated January 22, 1878; application filed November 15, 1877.

*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 Valves for Water-Closets, of which the following is a specification:

In fitting the pipes, water-closets, basins, &c., into a building, metal-filings, pieces of solder, and other foreign substances are liable to get into the supply water-pipes, and to lodge in the self-acting valves of the water-closets, and derange their action; hence such work, especially when new, has often to be taken apart for cleaning.

In Letters Patent No. 195,705, granted to me, a valve is represented as within a valve-chamber, and if it becomes clogged with sediment or foreign matter great difficulty is experienced in cleaning the same.

My present invention relates to an improvement in the closet and valve by means of which the internal portions of the valve can be removed for cleaning or repair without disturbing the couplings or removing the valve from the chamber.

In the drawings, Figure 1 is a section of the valve itself and its case; and Fig. 2 is an elevation of the valve-case, and a section of the parts of the closet with which it is connected.

The cylinder *e*, chamber *c*, float *g*, and lever *n'* are similar to those shown in Letters Patent No. 195,705, granted to me October 2, 1877, and do not require further description. These parts are introduced to illustrate the manner in which my improved closet-valve is made use of.

The cylinder or case *f* of the closet-valve is provided with the couplings *r t* for the inlet and outlet pipes, as usual, and within the cylinder *f* is the valve *u*, closing against the seat *s*, and the stem *v* passes through the upper end of the cylinder *f* and rests against the lever *n'*, or is acted upon by any other device, to

open the valve when the water-supply is to pass to the basin.

There is a piston, *v'*, within the cylinder *f*, to regulate the closing of the valve *u*, and the valve 10 at the lower end of the stem *v* acts, in the manner described in the said patent, to allow water to escape from below the piston as the valve is opened; but I employ a spring to raise the valve 10 and its stem *v*.

The especial feature of my present improvement relates to the construction of the chamber *c* with an opening, through which the lower part of the valve-case *f* passes, and to which it is clamped by the nut *c<sup>2</sup>* around the outside of said cylinder, so that the removable cap *c<sup>3</sup>*, screwed upon the lower end of said cylinder *f*, can be removed without disturbing the case or cylinder *f*, or the connections thereof within the chamber.

When the cap *c<sup>3</sup>* is taken off, the valves *u* 10, spindle *v*, and piston can be taken out of the cylinder *f* and cleaned, or any obstruction removed from the valve-seat or the inlet or outlet pipes at their junction with the cylinder, without disturbing the pipes leading to the valve, or from the valve to the water-closet, thereby effecting a saving in time and expense, and avoiding risk of injury to the couplings.

I claim as my invention—

The chamber *c* of the water-closet, having an opening through the bottom thereof, in combination with the valve-cylinder *f* that passes through said opening, the nut *c<sup>2</sup>* for holding the cylinder *f*, and the removable cap *c<sup>3</sup>*, valve, and controlling-piston, substantially as set forth.

Signed by me this 12th day of November, 1877.

JOHN DEMAREST.

Witnesses:

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