

(No Model.)

J. DEMAREST.
Flushing Cistern.

No. 232,009.

Patented Sept. 7, 1880.

Fig. 1.

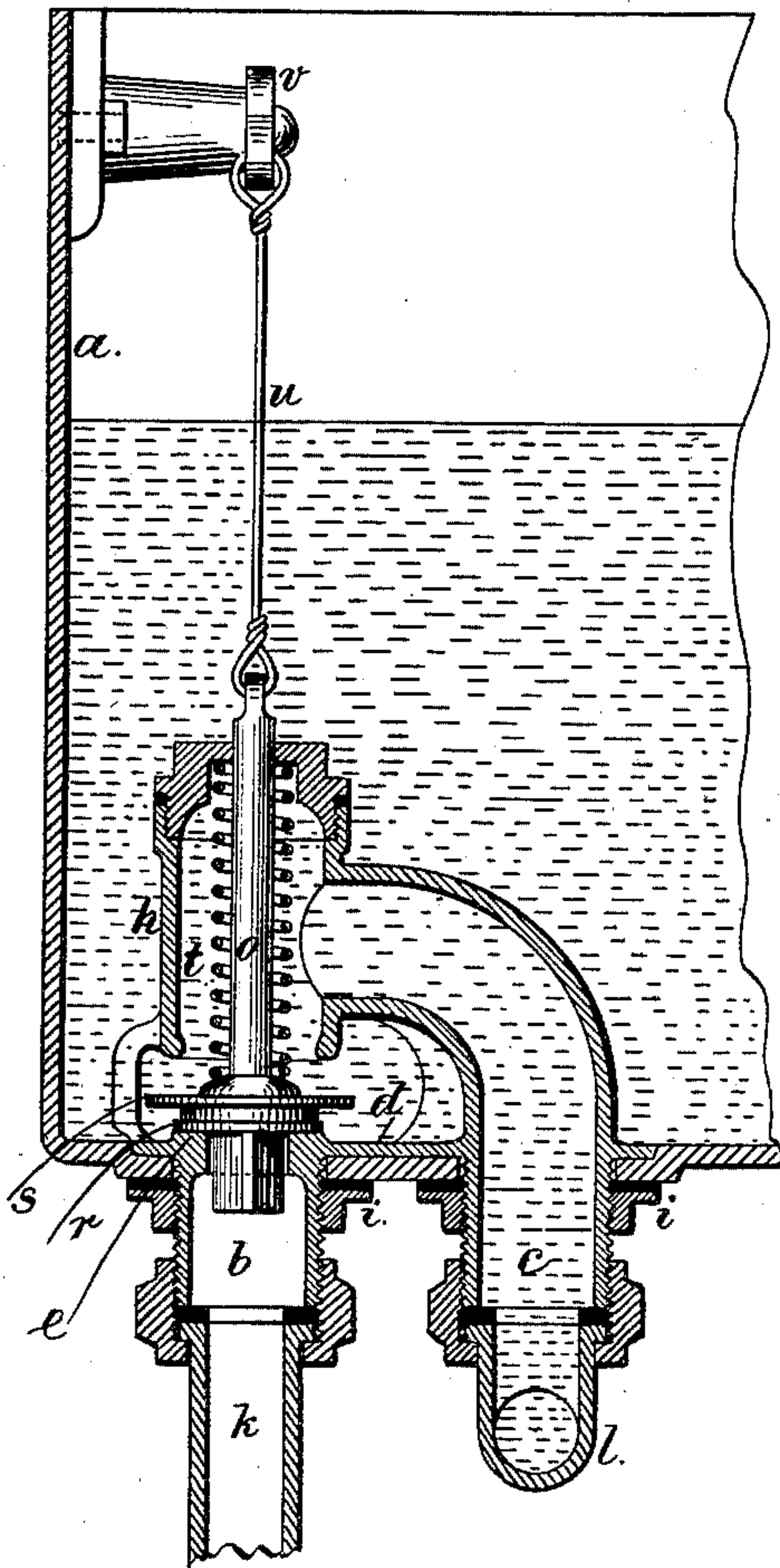
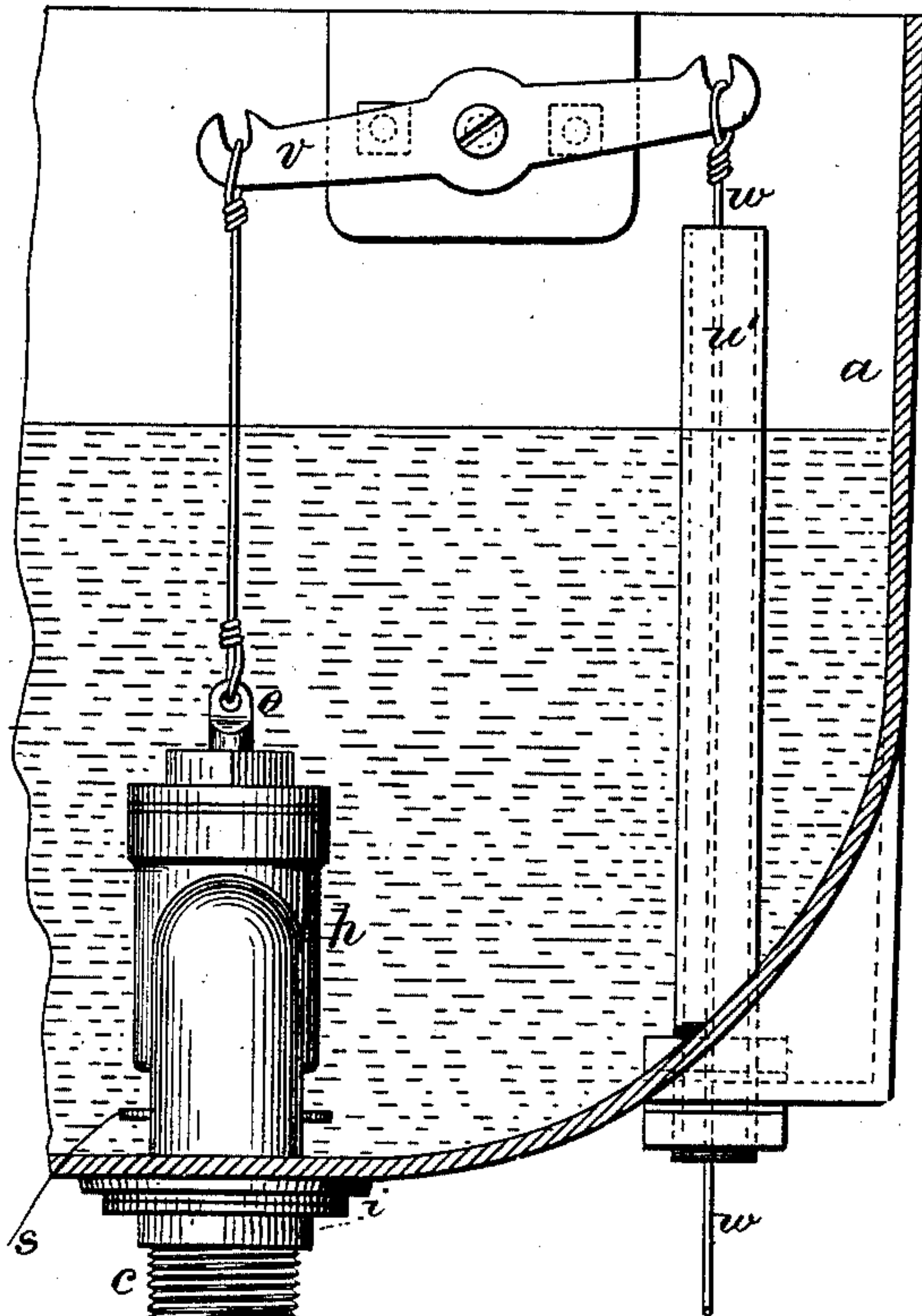


Fig. 2.



Witnesses:

Chas H. Smith
William G. Mott.

Inventor:

John Demarest.
per Lemuel W. Serrell,
att'y.

UNITED STATES PATENT OFFICE.

JOHN DEMAREST, OF NEW YORK, N. Y.

FLUSHING CISTERNS.

SPECIFICATION forming part of Letters Patent No. 232,009, dated September 7, 1880.

Application filed July 22, 1880. (No model.)

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 Cisterns for Water-Closets and Urinals, of which the following is a specification.

Heretofore, where a number of water-closets or urinals are in one place, it is usual to have a long cistern for water above such closets or urinals and a service-box to each closet placed below the cistern. This arrangement is expensive and difficult of access when repairs are needed.

I make use of a separate cistern to each water-closet or urinal. One service-pipe runs along the row of cisterns and supplies water to them all, there being a ball-cock and supply-pipe to one of the cisterns or to a separate cistern, so that the water will be furnished alike to all the closet-cisterns.

In each cistern there is a valve and valve-seats, constructed as hereinafter set forth, and a pipe from the cistern to the closet or urinal. When the valve is raised water is allowed to flow from the cistern to the closet, and the pipe admitting water to the cistern is simultaneously closed.

In the drawings, Figure 1 is a vertical section of the cistern and pipes, and Fig. 2 is a sectional elevation at right angles to Fig. 1.

The cistern *a* is preferably of cast-iron and of a size to hold the required quantity of water. In the bottom of the cistern are two openings for the screw-tubes *b* and *c* that project downwardly from the plate *d*, and these screw-tubes receive the clamping-rings *i* that secure the parts to the cistern, and they also receive the couplings of the pipe *k*, leading to the water-closet, and the pipe *l*, by which water is supplied. There is a curved pipe extending from the screw-tube *c* up to the cylinder *h*, which is in line with the screw-tube *b*, and through this

cylinder *h* the valve-stem *o* passes, having upon it the double valve *r s*.

The valve-stem is pressed down by the spring *t* and raised by the connecting-wire *u*, lever *v*, and wire *w* to the closet-pull. It is preferable to have the lever within the cistern and to have the wire *w* pass through the tube *u'*, that rises from the bottom of the cistern to a height greater than that of the water as it stands in the tank or cistern. Usually the valve will be kept upon the seat *e* on the plate *d* by the pressure of the spring, and in that position the water-way through *e* and *h* is open, and the water finds its way from the pipe *l* and rises to the same level in the cistern that it does in the cistern to which the water is supplied with a ball-cock.

When the pull of the water-closet is operated the valve *r* is lifted off its seat *e* and the water is free to flow to the closet. At the same time the valve *s* closes upwardly against the lower end of the cylinder *h* and prevents water running into the cistern until the water-closet pull is released and the valve *r* closes the passage to the water-closet.

For hopper water-closets the seat may be connected with the wire *w*, so that the valve will be raised sufficiently to allow water to run while the seat is depressed.

I claim as my invention—

The combination, with the cistern *a*, of the tubes *b c*, cylinder *h*, double valve *r s*, stem *o*, and spring *t*, the parts being arranged and operating substantially as set forth, to open the water-way to the closet when the inlet water-way is closed, as set forth.

Signed by me this 15th day of July, A. D. 1880.

JOHN DEMAREST.

Witnesses:

LOUIS P. BECK,
AUGUSTUS W. MOTT.