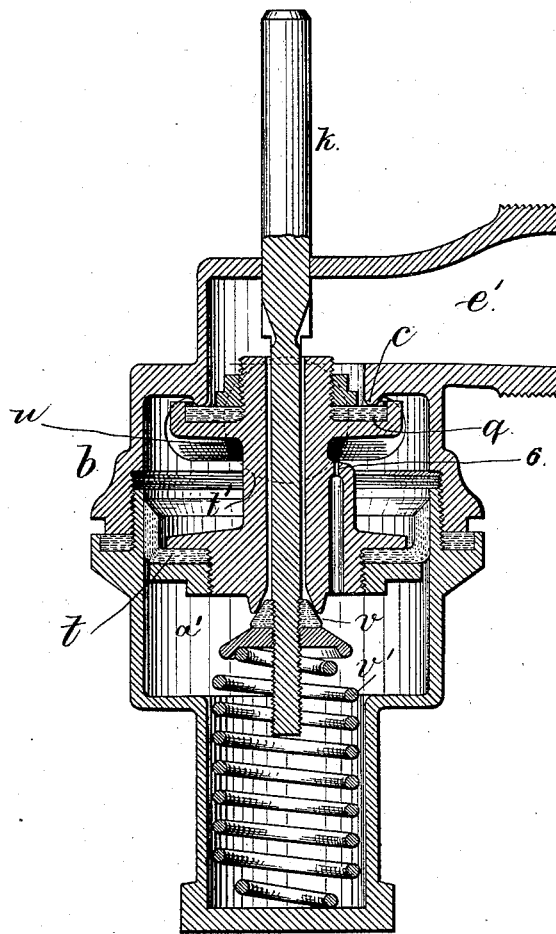


(No Model.)

J. DEMAREST.
VALVE FOR WATER CLOSETS.

No. 303,712.

Patented Aug. 19, 1884.



Witnesses

Chas H. Smith
Harold Ferrell.

Inventor

John Demarest
for Lemuel W. Ferrell
Att'y

UNITED STATES PATENT OFFICE.

JOHN DEMAREST, OF NEW YORK, N. Y., ASSIGNOR TO THE J. L. MOTT
IRON WORKS, OF SAME PLACE.

VALVE FOR WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 303,712, dated August 19, 1884.

Application filed February 7, 1884. (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 Valves for Water-Closets, of which the following is a specification.

This valve is adapted to water-closets, and is made with a chamber for regulating the time occupied by the valve in closing. The special features of improvement relate to the combination of devices hereinafter set forth, whereby the action of the chamber is rendered more reliable.

In the drawing I have represented the improvement by a vertical section.

The water-supply pipe *u* is coupled to one side of the valve-case *b*, and in this valve-case *b* there is a valve, *a*, and valve-seat *c*, and above the seat there is a hollow arm, *e*, with a coupling-screw at the end, by means of which a pipe is connected that passes to the basin of the water-closet, so as to supply the flushing-water to the said closet. The valve-case is made in two parts screwed together, the lower part, *a'*, forming the chamber in which the cup-leather piston *t* slides. The valve-stem *k* is loose in the tubular stem *t'* that connects the valve *a* and cup-leather piston. There are channels in or flattened sides to the valve-stem, so that water will pass freely up around the spindle when the spindle is pressed down in opening the valve; but there is a valve, *v*, at the lower part of the spindle, that closes against the bottom end of the tubular stem by the action of the spring *v'* when pressure on the upper end of the stem *k* is relieved, so that the chamber can only fill with water through the small hole 6 as the cup-leather piston and the valve rise gradually.

In order to prevent the small hole at 6 becoming obstructed with sediment which accumulates around the cup-leather piston, I make a tubular projection at one side of the stem *k*, and this rises above the cup-leather piston *t*, so that the small hole is above and out of the way of any sediment; hence the valve is not liable to get out of order, but it will close with regularity, and the water will run the desired time into the closet-basin according to the extent of movement given to the valve in opening it.

The valve may be taken out for cleaning by simple unscrewing the bottom part of the valve-case without disturbing any of the parts that connect to the water-pipes.

I claim as my invention--

1. In a valve for water-closets, the combination, with the valve and cup-leather, of a piston and stem, with a tubular projection at one side of the stem rising above the piston and terminating at the top in the small hole 6, for the purposes and substantially as set forth.

2. In a valve for water-closets, the combination of the chamber, cup-leather, and valve, with the piston and tubular stem, and a tubular projection and hole 6 at one side of the stem, a valve and valve-seat at the lower end of the tubular stem, and a spring within the chamber, substantially as set forth.

Signed by me this 4th day of February, A. D. 1884.

JOHN DEMAREST.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.