(No Model.)

J. L. MOTT, Jr.

FLUSHING APPARATUS FOR WATER CLOSET CISTERNS.

No. 345,390. Patented July 13, 1886.

Fig. 1.

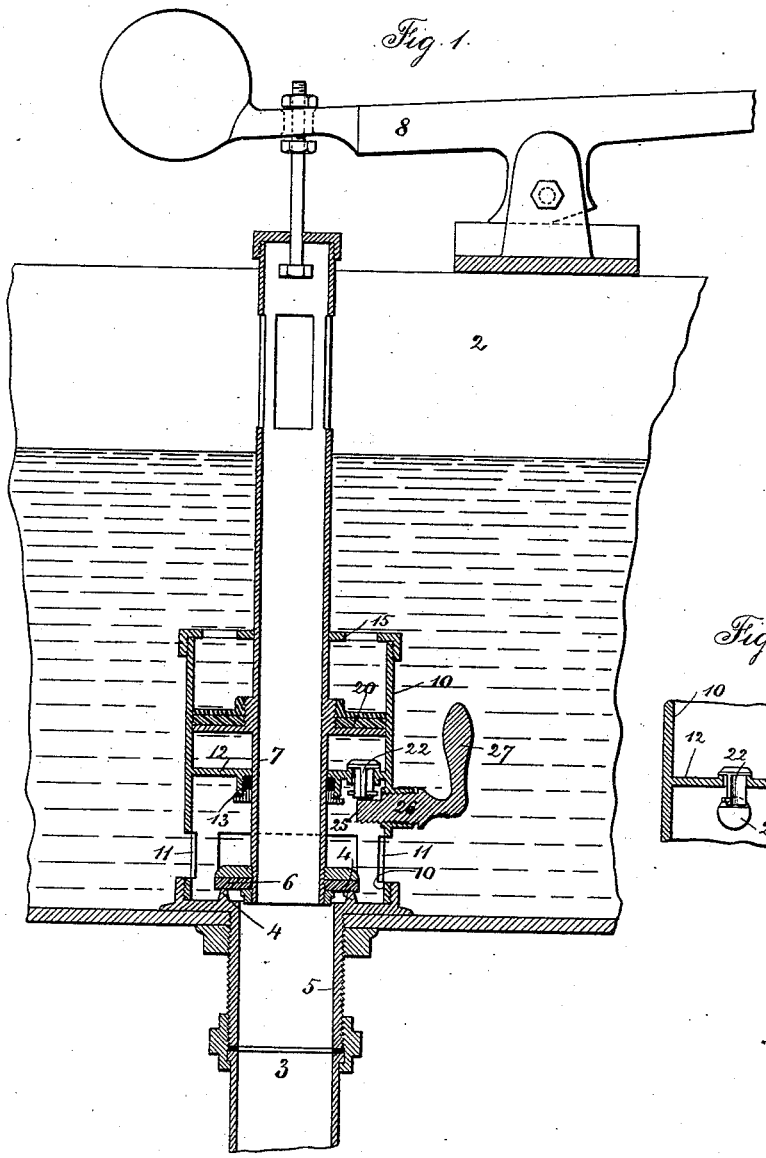
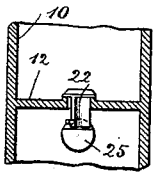


Fig. 2.



Witnesses:
I. Stail
Chas. N. Smith

Inventor:
Jordan L. Mott Jr.
per Lemuel W. Serrell
atty

UNITED STATES PATENT OFFICE.

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

FLUSHING APPARATUS FOR WATER-CLOSET CISTERNS.

SPECIFICATION forming part of Letters Patent No. 345,390, dated July 13, 1886.

Application filed April 26, 1886. Serial No. 200,147. (No model.)

To all whom it may concern:

Be it known that I, JORDAN L. MOTT, Jr., of the city and State of New York, have invented an Improvement in Flushing Apparatus for Water-Closet Cisterns, of which the following is a specification.

Before my invention variable chambers had been made use of, into which water passed for regulating the speed in closing the valve in water-closets and in water-closet cisterns.

My present invention is for facilitating the adjustment and regulating the time occupied in closing the valve, thus preventing the wasting of water, and regulating with accuracy the quantity of water consumed in flushing the closet.

In the drawings, Figure 1 is a vertical section of my improvement, and Fig. 2 is a detached sectional view at the regulating-valve, and at right angles to Fig. 1.

A portion of the cistern is represented at 2, and a portion of the flushing-pipe leading to the water-closet is shown at 3. The valve-seat 4 and its tubular socket 5 are usually connected to the cistern by a screw-nut and to the flushing-pipe by a coupling. The valve 6 is at the lower end of the overflow-pipe 7, and these are raised by a lever, 8, and pull, at the water-closet, as usual. Around the valve-seat is the cylinder 10, slotted at 11, for the water to pass freely to the flushing-pipe, and at 12 there is a septum within the cylinder 10, having a packing-gland, 13, around the tubular overflow-pipe 7, so that said pipe 7 is free to slide endwise through such packing-gland; but the latter renders the joint water-tight, or nearly so, and there is a movable head, 15, at the upper end of the cylinder 10, with a central opening for the overflow-pipe 7 to slide freely therein.

Around the overflow-pipe 7, and within the cylinder 10, is the piston 20, preferably provided with a packing of felt or other material, and this piston 20 is permanently attached to and moves with the overflow-pipe 7, when the latter is raised or lowered.

Through the septum 12 is an opening containing a valve, 22, opening upwardly, and adjacent to the lower end of this valve is the cam-end 25 of the screw 26, and this screw passes through the cylinder 10, and is provided with a handle, 27. When the cistern is to be flushed, the lever 8 is acted upon to raise the overflow-pipe and the valve, and at the same time the piston 20 is drawn upwardly within the cylinder 10, and water is drawn in at the valve 22, said valve lifting by the action of the water. When the lever 8 is dropped, the overflow-pipe 7 and valve 6 descend; but they cannot move rapidly, because the water contained in the cylinder 10 holds up the piston 20, and the speed with which the valve closes is regulated by the escape-opening at the valve 22. If such valve 22 is lifted considerably by the cam 25, the descending movement of the valve 6 will be rapid. If the cam 25 allows the valve 22 almost to close, the descending movement of the valve 6 will be very slow. By moving the lever 27 and adjusting the valve 22 the extent of flushing action can be regulated, and the quantity of water flowing to the water-closet accurately adjusted, and this can easily be done from time to time by simply moving the lever 27.

I claim as my invention—

The combination, with the overflow-pipe 7 and valve 6, of the cylinder 10, surrounding the valve, and slotted for the passage of the water, the septum 12, and packing 13, within the cylinder and around the overflow-pipe 7, the piston 20, attached to such overflow-pipe, the valve 22, applied at an opening in the septum 12, the cam 25, screw 26, and lever 27, for regulating the position of the valve 22 and determining the time consumed in closing the valve 6, substantially as set forth.

Signed by me this 20th day of April, A. D. 1886.

JORDAN L. MOTT, JR.

Witnesses:

JOHN ABEL,

GEO. C. GOELLER.