

W. W. ELLERBECK.
 DEVICE FOR FLUSHING TANKS.
 APPLICATION FILED APR. 6, 1909.

943,145.

Patented Dec. 14, 1909.

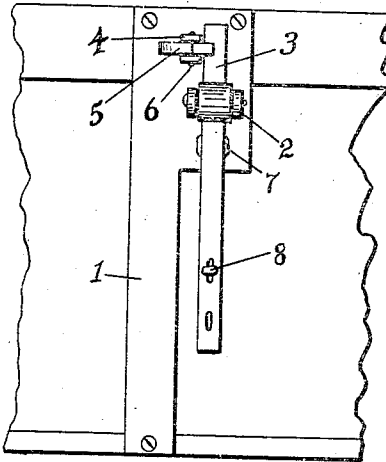


Fig. 2.

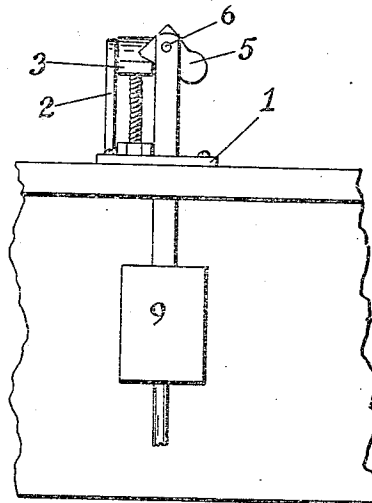


Fig. 3.

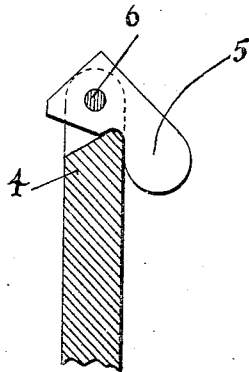


Fig. 4.

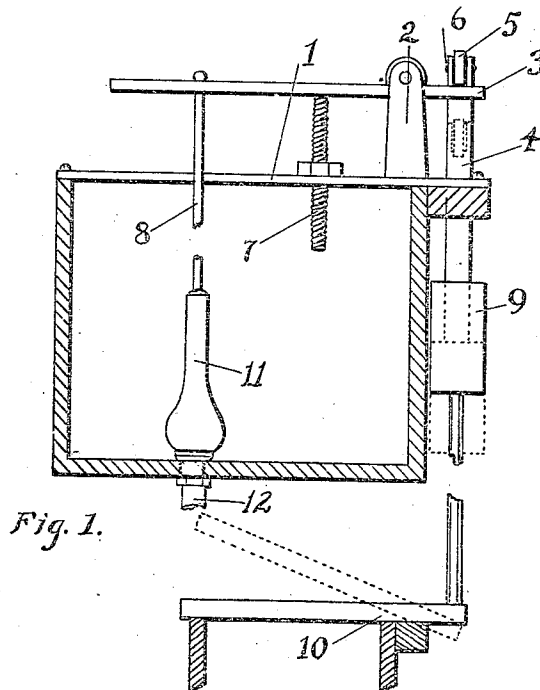


Fig. 1.

Witnesses
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DEVICE FOR FLUSHING TANKS.

943,145.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed April 6, 1909. Serial No. 488,319.

To all whom it may concern:

Be it known that I, WITTON W. ELLERBECK, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented certain new and useful Improvements in Devices for Flushing Tanks, of which the following is a specification.

The object of my invention is to provide a device for raising the valve, in flushing tanks, that is self adjusting, and that will be slow enough in its action to allow the flow of the water through the valve seat to become strong enough to hold the valve up, before it is released. I am aware of the fact, that other devices have been used to raise the valve for flushing the tank, but so far as known to me, none have allowed sufficient time to elapse before releasing the valve.

This object I attain by my device illustrated in the accompanying drawings, in which similar figures of reference indicate like parts and described in the specification following.

Figure 1 is a vertical side elevation, with the tank in section. Fig. 2 is a plan view. Fig. 3 is a vertical rear elevation. Fig. 4 is a detail of the detent.

A base 1 is attached to the top of the tank, and has an upwardly extending bracket 2, consisting of two parts. Pivottally secured therebetween is a lever 3, to one end of which lever is connected the valve rod 8. An adjusting screw 7 is provided with threads thereon, that engage with the threads of a nut, that is fastened to said base 1. Or if desired the last mentioned threads may be cut in said base 1. Near the other end of the lever 3, is provided a vertically movable rod 4, the upper portion of said rod being formed square or rectangular in shape, and adapted to move vertically within guides provided on the side of the tank, one guide aperture being cut in the base 1. Near the top of said rod 4, within a slot cut therein, is pivoted by a pin 6, the detent 5, and the lower end of the rod 4 is connected to the seat of the toilet 10. A weight 9 on said rod 4, keeps the seat raised except when it

is held down. The vertically movable rod 4 is so placed with reference to the lever 3, that the detent 5, carried by said rod when moved downward engages said lever and raises the valve rod in the other end of said lever. Said engagement continues until the downward motion of the detent moves the lever out of the line of descent when it is released. This insures sufficient time to elapse between the raising of the valve 11, and the releasing of the lever 3 that controls it, to allow the flow of the water through the valve seat 12, to become strong enough to hold the valve 11 up until the tank is empty before the valve will seat again.

The beveled end of the detent 5 and as pivoted by pin 6, allows it to pass the lever 3 in the upward motion, when it is again ready to engage the lever with the downward motion.

The seat 10 is held in the position shown by dotted lines, in Fig. 1, by the weight 9 or may be so held by a spring.

Having thus described my invention I desire to secure by Letters Patent and claim—

1. In combination with a tank having a flush valve in the bottom thereof, a lever one end of which is connected with the valve rod, a base supporting said lever, means for adjusting the throw thereof, with a vertically movable rod and guides therefor, a detent pivoted in the upper portion of said rod that engages said lever and positioned at right angles to said lever, and adapted to engage said lever only in descending, a short distance from its end.

2. In combination with a tank, a self adjusting detent positioned at right angles to and a short distance from the end of a lever, a vertically movable rod within which said detent is pivoted and whose lower end is connected to the seat, with a lever one arm of which is connected to the valve that closes the discharge opening in said tank, and the other arm adapted to be engaged by said detent a short distance from the end of said lever, and means for adjusting the movement of said lever, as and for the purposes described.

3. In combination with a tank, a base

plate secured thereon having a guide opening near one end and an upwardly extending bifurcated bracket on said base, a lever pivoted therebetween, a valve rod detachably
5 secured thereto and an adjusting screw therein; a vertical rod whose lower end is attached to the closet seat and movable in said guide opening, a weight on said rod, a detent pivoted in the upper end of said rod and posi-

tioned near one end and at right angles to said lever, as and for the purposes described. 10

In testimony whereof I have affixed my signature in presence of two witnesses.

WITTON W. ELLERBECK.

Witnesses:

W. W. BARTON,
PERCY HALLEN.