

G. G. PASSARO.
TANK FLUSHING MECHANISM.
APPLICATION FILED MAY 28, 1910.

1,000,437.

Patented Aug. 15, 1911.

Fig. 1

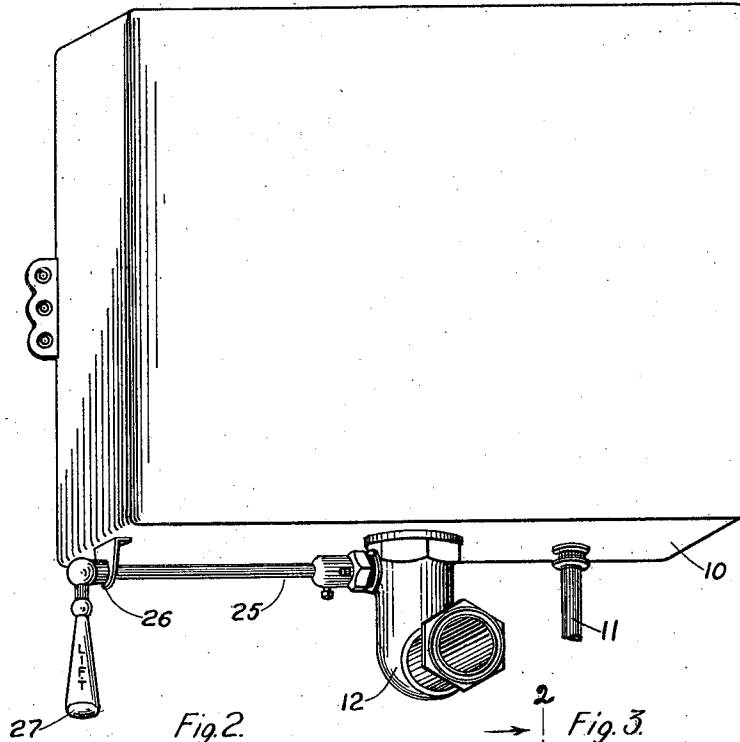


Fig. 2

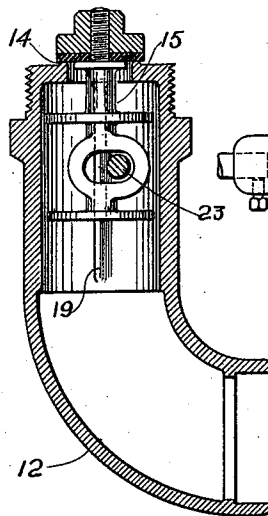


Fig. 3

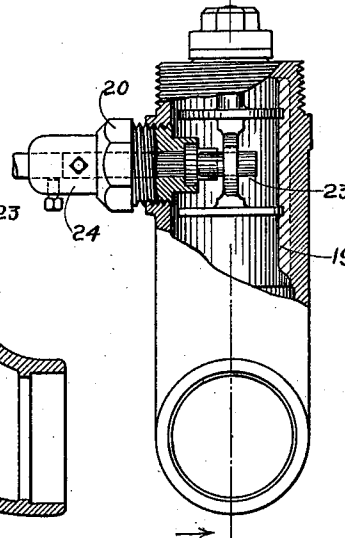


Fig. 5

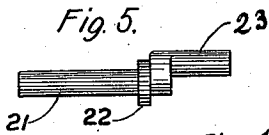
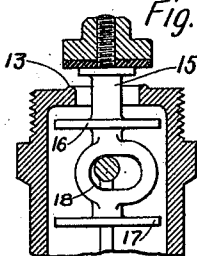


Fig. 4



Witnesses
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UNITED STATES PATENT OFFICE.

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TANK-FLUSHING MECHANISM.

1,000,437.

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Application filed May 28, 1910. Serial No. 563,921.

To all whom it may concern:

Be it known that I, GENNARO G. PASSARO, a citizen of the United States, residing at Stamford, county of Fairfield, State of Connecticut, have invented an Improvement in Tank-Flushing Mechanism, of which the following is a specification.

This invention has for its object to provide simple and inexpensive tank flushing mechanism, especially adapted for use in connection with water closets, which shall be wholly outside of the tank thus doing away with the various complicated mechanisms now in use and which shall be positive and certain in operation as there are no parts that can get out of order.

With these and other objects in view I have devised the novel flushing mechanism which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts:

Figure 1 is a perspective view illustrating the application of my novel flushing mechanism to a tank; Fig. 2 is a section on the line 2—2 in Fig. 3, looking in the direction of the arrows; Fig. 3 an elevation partly in longitudinal section of the flushing pipe detached; Fig. 4 a view corresponding with Fig. 2, showing the parts in the operative position; and Fig. 5 is a view of the crank rod detached.

10 denotes a tank, 11 the supply pipe and 12 the flushing pipe which is adapted to be connected to a water closet bowl (not shown). The flushing pipe is connected to the tank in any ordinary or preferred manner and is provided at its upper end with a valve seat 13 upon which a valve 14 normally rests. The valve stem 15 extends downward into the flushing pipe and carries disks 16 and 17 and is provided between the disks with a transversely elongated eye 18. The inner side of the flushing pipe is provided with a longitudinal rib 19 which is engaged by corresponding recesses in the edges of the disks to serve as a guide for the disks and to retain the valve stem against rotary movement.

20 denotes a hub in the side of the flushing pipe in which a crank rod 21 oscillates freely. The crank rod is shown as provided with a disk 22 which is seated in a correspondingly shaped recess in the inner end of the hub and with a crank 23 which engages the eye near one end thereof when the

parts are in the normal or inoperative position, as clearly shown in Fig. 2. The crank rod is connected by means of a coupling 24 or in any suitable manner to an operating rod 25 which oscillates in a hanger 26 and is provided with an operating handle 27 which normally drops down to a vertical position, as clearly shown in Fig. 1.

To operate, it is simply required to lift the handle to the horizontal position but not necessary to hold it there. The oscillation of the operating rod and crank rod through the engagement of the crank with the eye raises the valve as in Fig. 4, leaving the crank in vertical position with the eye resting thereon and causes the tank to drain. The effect of the weight of the outflowing water upon the disks on the valve stem is to overcome the weight of the handle and retain the valve in the open position until the tank is drained. As soon as the water has ceased to flow, the valve will drop to the closing position as in Fig. 2, the weight of the handle insuring against the possibility of a failure to close. The device is wholly operative if disk 17 is omitted, as the retention of the valve in the open position will be effected by the weight of the water on disk 16 alone. I preferably, however, use a disk above and below the eye as the action of the water on the lower disk may aid in retaining the valve in the raised position and the lower disk moreover serves as a guide for the valve stem and renders it impossible for it to get out of operative position.

Having thus described my invention I claim:

1. A flushing mechanism comprising a pipe provided with a valve seat, a valve cooperating with said seat and having a stem provided with a transversely elongated eye, a crank rod provided with a crank extending through said eye and normally located in one end of the latter when the valve is seated, a weighted handle for swinging said crank into engagement with one wall of said eye to unseat the valve, and means carried by the valve stem adapted to be engaged by the outflowing fluid to exert a pressure tending to seat said valve, the center of gravity of said handle being outside the axis of said crank rod.

2. A flushing mechanism comprising a pipe provided with a valve seat, a valve cooperating with said seat and having a stem

provided with a transversely elongated eye, a crank rod provided with a crank extending through said eye and normally located in one end of the latter when the valve is seated, and a weighted handle for swinging said crank into engagement with one wall of said eye to unseat the valve, said valve stem being provided with disks above and below said eye adapted to be engaged by the outflowing fluid to exert a pressure tending to seat said valve, the center of gravity of said handle being outside the axis of said crank rod.

3. A flushing mechanism comprising a pipe provided with a valve seat, a valve cooperating with said seat and having a stem provided with a transversely elongated eye, a hub secured to said pipe, a crank rod mounted in said hub and provided with a crank extending through said eye, and normally located in one end of the latter when the valve is seated, a weighted handle for swinging said crank into engagement with one of the side walls of said eye to unseat the valve, and means carried by the valve stem adapted to be engaged by the outflowing fluid to exert a pressure tending to seat

said valve, the center of gravity of said handle being outside the axis of said crank rod.

4. A flushing mechanism comprising a pipe provided with a valve seat, a valve cooperating with said seat and having a stem provided with a transversely elongated eye, a hub secured to said pipe and provided with a recess, a crank rod mounted in said hub and provided with a disk seated in said recess, said rod being also provided with a crank extending through said eye and normally located in one end of the latter when the valve is seated, a weighted handle for swinging said crank into engagement with one of the side walls of said eye to unseat the valve, and means carried by the valve stem adapted to be engaged by the outflowing fluid to exert a pressure tending to seat said valve, the center of gravity of said handle being located outside the axis of said crank rod.

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

GENNARO G. PASSARO.

Witnesses:

ALBERT PHILLIPS,
ANDREW SCHLECHTWEG.