

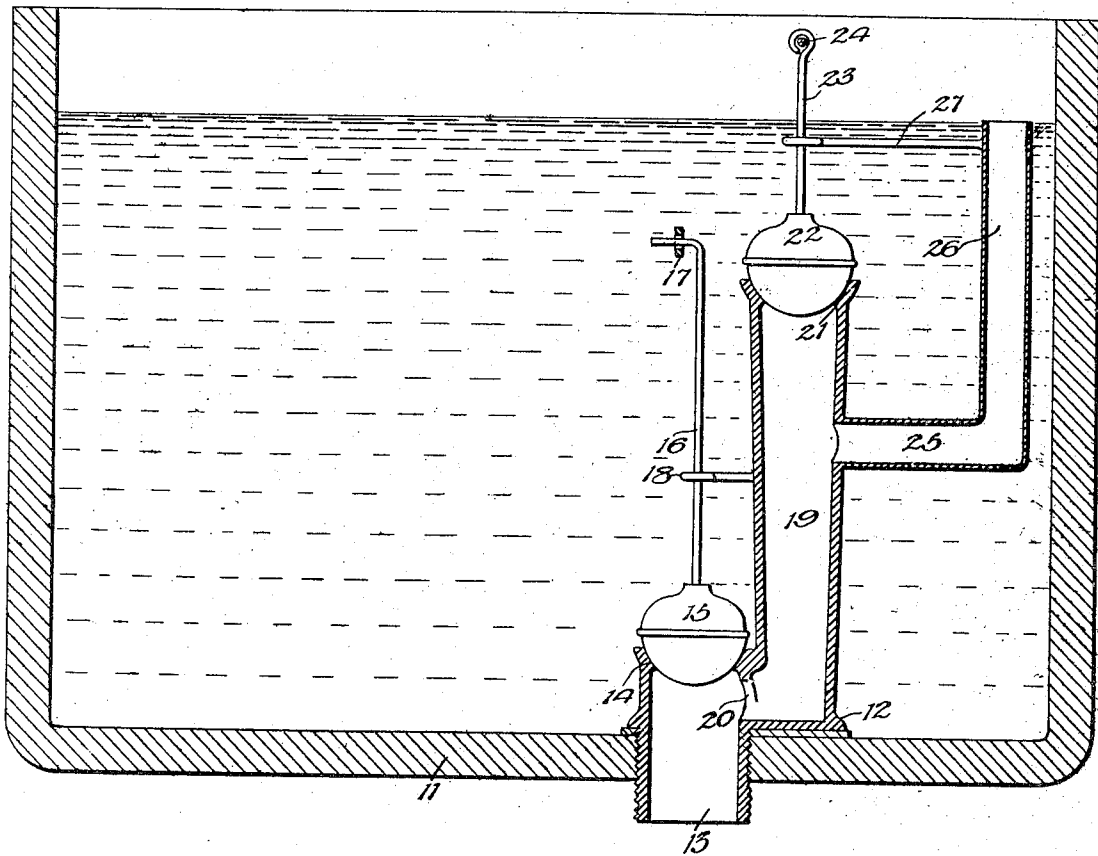
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WATER CLOSET VALVE

Filed June 21, 1922



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY ARTHUR RATH, OF ELIZABETH, NEW JERSEY.

WATER-CLOSET VALVE.

Application filed June 21, 1922. Serial No. 569,866.

To all whom it may concern:

Be it known that I, HENRY A. RATH, a citizen of the United States, and a resident of Elizabeth, in the county of Union and State of New Jersey, have invented a new and Improved Water-Closet Valve, of which the following is a full, clear, and exact description.

The present invention relates to new and useful improvements in valves and it pertains more particularly to valves adapted for use in connection with tanks or flush boxes for water-closets.

It is one of the primary objects of the present invention to provide a valve by which either the entire contents of a tank may be drained or only a portion thereof, at the will of the operator.

It is a further object of the invention to provide a plurality of valves independently operated in order that either a portion of the contents of the tank or the entire contents of the tank may be discharged.

With the above and other objects in view, reference is had to the accompanying drawings, in which the figure is a vertical sectional view of a tank with the valve shown in position therein, the valve being shown in section.

Referring more particularly to the drawings, the reference character 11 designates the tank, and 12 designates the valve. The valve comprises a discharge pipe 13, the upper end of which is formed with a valve seat 14 and adapted to engage the valve seat 14 is a valve member 15 of the ordinary construction. This valve member 15 is mounted upon a rod 16, to the upper end of which is connected a suitable operating mechanism 17 (not forming a particular part of the present invention). This rod 16 passes through a guide member 18 in order to keep the valve properly centered. The discharge pipe 13 has an integral extension 19, and said integral extension 19 has communication with the interior of the discharge pipe 13 by means of a passage 20. The upper end of the integral extension 19 is formed with a valve seat 21, and adapted to engage the valve seat 21, is a valve 22 carried by a rod 23, to the upper end of which is secured a suitable operating mechanism 24 not forming a part of the present invention.

The reference character 25 designates an

integral extension of the integral extension 19, and said extension 25 is substantially right-angular in form and has a vertically extending leg 26. Carried by this vertically extending leg 26 is a guide member 27, through which the rod 23 extends in order to maintain the valve 22 properly centered. This integral extension 25 forms an overflow for the tank, and said integral extension has communication with the integral extension 19, as shown.

While the extensions 19 and 25 have been described as integral, it is obvious that they may be separately attached to their respective members without departing from the spirit of the invention.

The device operates in the following manner:

Assuming that the tank 11 is filled with water to a level on a plane with the upper end of the overflow 25, and it is desired to discharge the contents of the tank, it is only necessary to lift the valve 15 from its seat 14 by the operating mechanism 17, which will permit of a complete discharge of the contents of the tank.

When, however, it is desired to discharge only a portion of the contents of the tank 11, the valve 22 is moved from its seat 21, by its operating mechanism 24. The contents of the tank will then pass through the member 19, passageway 20, and be discharged through the discharge opening 13. As soon as the level of the contents of the tank falls to a point in a plane with the upper end of the member 19, the flow of contents from the tank will cease and only that portion of the contents which is normally above the upper end of the member 19 will be discharged.

From the foregoing it is apparent that the present construction provides a valve for water-closet tanks in which either all of the contents of the tank or only a portion thereof may be discharged at the will of the operator.

What is claimed is:

The combination with a tank, of an outlet pipe connected thereto and having its upper end formed with a valve seat, an upright branch outlet pipe connected to the first named outlet pipe beneath said valve seat and terminating a substantial distance above the valve seat, the upper end of said branch pipe being formed with a valve seat, an L-

shaped overflow pipe connected to said branch outlet pipe intermediate the ends thereof and terminating above said second named valve seat, separate valves mounted on said valve seats and having stems, brackets carried by said overflow pipe and said branch pipe for guiding said stems, and

separate means whereby to manually operate said first and second named valves independently of each other, said branch pipe establishing communication between said outlet and overflow pipes.

HENRY ARTHUR RATH.

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