G. C. ELLIOTT.

FLOAT VALVE.

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980,225. Patented Jan. 3, 1911.

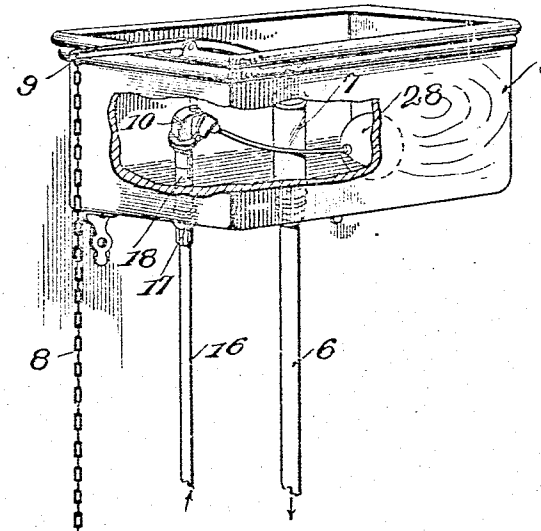

Fig. 1.

Fig. 2.

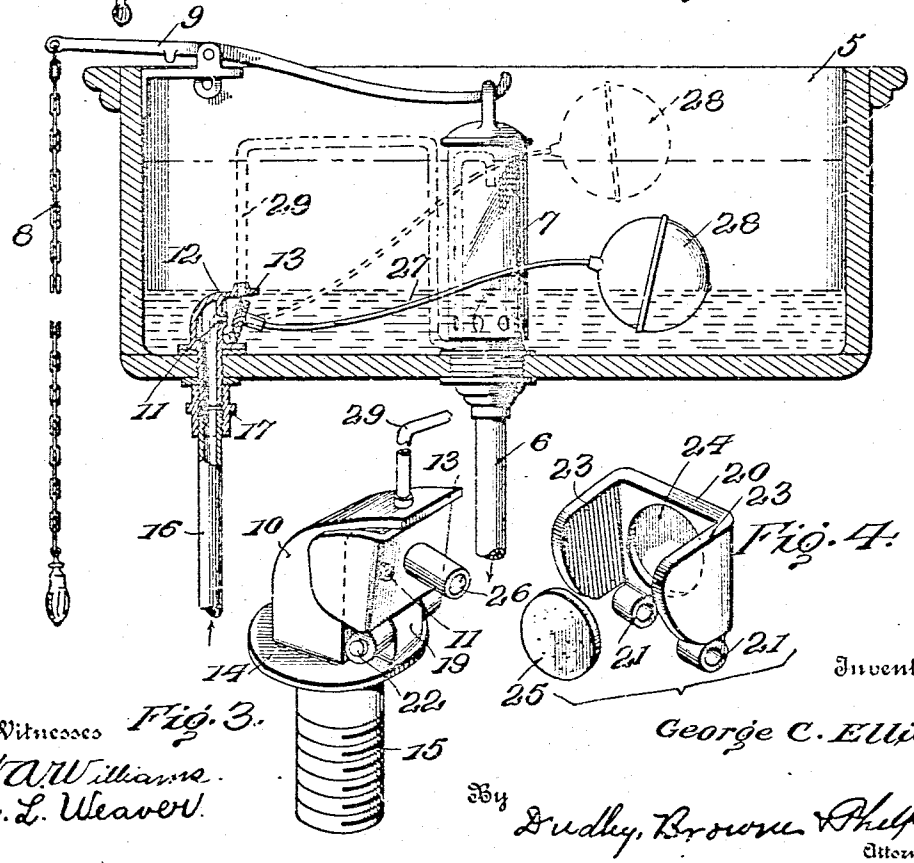

Fig. 3.

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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FLOAT-VALVE.

980,225. Specification of Letters Patent. Patented Jan. 3, 1911.

Application filed April 7, 1910. Serial No. 553,908.

To all whom it may concern:

Be it known that I, GEORGE C. ELLIOTT, a citizen of the United States, residing at South Bellingham, in the county of Whatcom and State of Washington, have invented certain new and useful Improvements in Float-Valves, of which the following is a specification.

My invention relates to an improved float valve designed for regulating the flow of water from a suitable source of supply to a tank or receiver of water and particularly to a flushing tank, and in the accompanying drawings I have illustrated my invention as applied to a flushing tank for water closets.

The object of my invention is to produce a float valve which is simple in construction, composed of few parts and one which is not likely to get out of order.

With these and other objects in view, my invention consists in certain constructions, combinations and arrangement of parts, the preferred form of which will be first described in connection with the accompanying drawings and then the invention particularly pointed out in the appended claim.

Referring to the drawings wherein the same part is designated by the same reference numeral wherever it occurs: Figure 1 is a perspective view of the flushing tank, partly broken away and showing my valve applied thereto, the tank being of what is known as a high or elevated tank; Fig. 2 is a sectional view of what is known as a low tank showing the same provided with my invention; Fig. 3 is a perspective view of my improved valve; and Fig. 4 is a detail view of the swinging plate with the packing separated therefrom.

5 designates an ordinary flushing tank. 6 is the outlet pipe controlled by a valve 7, operated by a pull chain 8, through the intervention of the lever 9. These parts are of any ordinary or desired construction and will not be further described.

10 designates the head of the valve which preferably and as shown, is rectangular in cross-section and upon one face is provided with the opening 11, through which the water passes to the tank. Preferably and as shown, the opening 11 is surrounded by an outwardly projecting flange or bead 12. The top of the valve body 10 is provided with the overhanging portion 13, which portion overhangs the face of the valve body that is provided with the opening 11. Below the head 10, the valve body is preferably provided with a projecting collar 14, from which depends a screw-threaded portion 15.

When the valve is mounted in the bottom of the flush tank, as illustrated in Fig. 2, the threaded portion 15 is passed through the bottom of the tank and the inlet pipe 16 is secured to the portion 15 by means of a union 17.

In the form of construction shown in Fig. 1, the portion 15 is connected to a section of pipe 18, which passes through the bottom of the tank and to which the inlet pipe 16 is connected by the union 17. It is to be understood, however, that the particular means for mounting the valve illustrated forms no part of my invention and may be modified as desired.

19 designates a perforated lug extending out from the face of the valve body which is provided with the opening 11, and 20 is a plate provided with perforated lugs 21, through which and the lug 19 a pivot pin 22 can be passed, to hinge the plate to the valve body in position to be swung up against the opening 11. This plate is provided with the side wings 23, 23, which embrace the sides of the valve body 10 when the valve is closed, as is best shown in Fig. 3. The plate is also preferably provided with a depression 24 in its inner face into which the packing disk 25 may be placed. The outer face of the plate 20 is provided with a threaded nipple 26, into which the rod 27 of the float 28 may be screwed to enable the float to operate the plate and open and close the valve. The overhanging portion 13 of the valve body may be provided with the afterflow pipe 29, threaded into the overhanging portion 13 and extends upwardly therefrom, the upper portion of said pipe curving downwardly and extending into the valve 7. After the valve has been opened and while water is flowing through the valve into the tank a certain portion is deflected by the portion 20 and its side wings 23, thus flowing into the outlet pipe 6.

As readily understood from the foregoing description and inspection of the drawings, when water is drawn out of the tank, the float 28 causes the plate 20 to swing down and back into the position shown in

Fig. 2, and when the tank is again filled up, the plate 20 is moved to the position shown in Fig. 3, and stops the flow of water.

I realize that considerable variation is possible in the details of construction and arrangement of parts without departing from the spirit of my invention, and I therefore do not intend to limit myself to the specific form shown and described.

What I claim as new and desire to secure by Letters Patent is:

In a float valve, the combination with a valve body adapted to be secured to a supply pipe, said valve body being provided with an opening in one face thereof, an overhanging portion projecting over said face, a plate hingedly mounted on the valve body below said overhanging portion, said plate being provided with side wings adapted to embrace the valve body when the valve is closed.

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

GEORGE C. ELLIOTT.

Witnesses:
GEO. S. LIVINGSTON,
A. L. WEAVER.