

G. L. WELLER.
 FLUSH TANK REGULATOR.
 APPLICATION FILED DEC. 2, 1911.

1,039,620.

Patented Sept. 24, 1912.

Fig. 1.

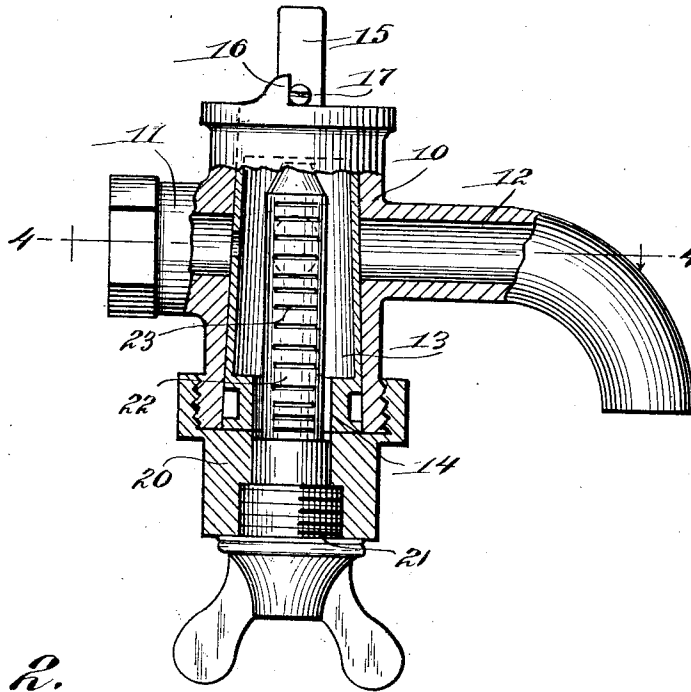


Fig. 2.

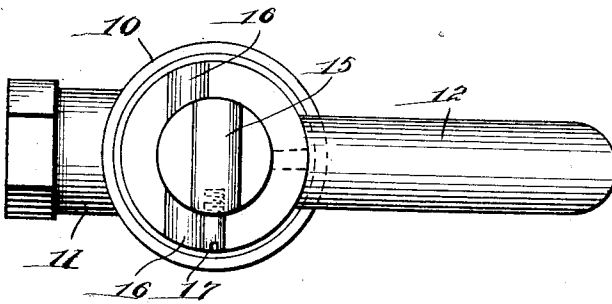


Fig. 3.

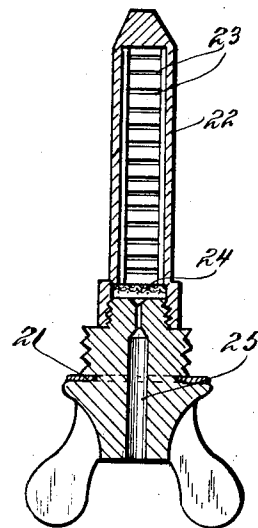
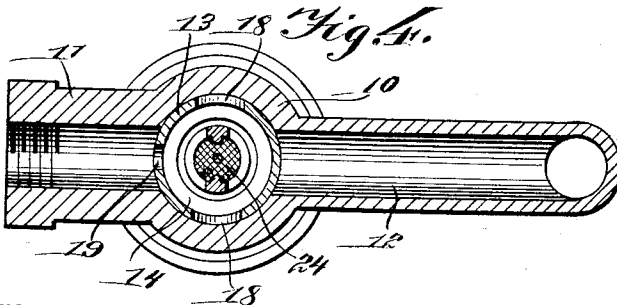


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE L. WELLER, OF ELYRIA, OHIO.

FLUSH-TANK REGULATOR.

1,039,620.

Specification of Letters Patent.

Patented Sept. 24, 1912.

Application filed December 2, 1911. Serial No. 663,627.

To all whom it may concern:

Be it known that I, GEORGE L. WELLER, a citizen of the United States, residing at Elyria, in the county of Lorain and State of Ohio, have invented certain new and useful Improvements in Flush-Tank Regulators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to flush tank regulators and has for its object to construct a device of this nature which will give a constant supply of water for automatic flush tanks in sewerage systems.

It further provides a means whereby a desired number of flushings may be had per day by the regulation or change of the strainer, as will hereinafter be more fully described.

With the above and other objects in view, this invention consists in the construction, combination and arrangement of parts, all as hereinafter more particularly described, claimed and illustrated in the accompanying drawings, wherein:

Figure 1 is a central, vertical section, parts thereof being in elevation, of a device constructed in accordance with the present invention; Fig. 2 is a top plan view thereof; Fig. 3 is a vertical section of a strainer contained within the valve constituting the present invention; and Fig. 4 is a horizontal section taken along line 4-4 of Fig. 1.

The regulator forming the subject matter of the present invention constitutes a valve casing having oppositely disposed inlet and outlet ports. A cylinder is rotatably mounted within the casing and is provided with a rectangular projection at its upper terminal, which projects out of said casing. This projection carries a projecting screw, which co-operates with a pair of diametrically disposed stops formed on the casing for regulating rotation of said casing. A plurality of openings are formed in said casing whereby the passage of water therethrough may readily be regulated. Oppositely disposed to the projection carried by said cylinder, and operable within said cylinder, is a tubular projection retained therein by a wing nut, said tubular member having the wall thereof pierced by a plurality of slits, through which the water, as will hereinafter be more fully described, is adapted to pass. A

screen or a plurality thereof, as desired, is mounted within the tubular member, and is adapted to strain and cleanse the water passing therethrough, as will be described more clearly hereinafter.

Reference being had more particularly to the drawings, 10 indicates a valve casing of any suitable construction, preferably, however, cylindrical, having located adjacent to its upper terminal the inlet and outlet port 11 and 12 respectively. A cylinder 13 is mounted within the casing 10, said cylinder being closed at its outer terminal and provided with an inwardly extending circumferential flange at its lower terminal. The upper terminal of the cylinder 10 is provided with a transversely arranged rectangular extension 15, which projects from the casing 10. A pair of diametrically disposed stops 16 are formed upon the casing 10 and coöperate with the screw 17 carried by the extension 15 for limiting the rotary movement of the cylinder 13. The cylinder 13 is pierced adjacent to the inlet and outlet ports 11 and 12 respectively by the oppositely disposed openings 18, which are adapted to coincide with the inlet and outlet ports 11 and 12 when the screw 17 is positioned as illustrated in dotted lines in Fig. 2. The cylinder is likewise provided with a similar opening 19 which is adapted to coincide with the inlet port 11 when the screw 17 bears against one of the stops 16, and registers with the outlet port 12 when the screw operates against the opposite stop 16.

A collar 20 is threaded upon the lower terminal of the casing 10 and has detachably mounted therein a wing nut 21, said wing nut removably carrying a tubular member 22. This tubular member 22 is provided with the opposite disposed transversely arranged slits or openings 23, and is provided at its base with a screen 24.

The wing nut 21 is provided with a passage 25 therethrough, the upper terminal of which is greatly reduced. This passage is for the regulation of the number of flushings in a given time, by reason of the fact that the reduced portion of the passage is of such size that only a known amount of water can pass therethrough in 24 hours. When the port 19 of the cylinder 13 registers with the inlet port 11, the outlet port 12 is closed, thus permitting the water to flow through the slotted cylinder 22, the screen 24 and out through the passage 25

into the flushing tank. A tubular slotted cylindrical member 22 in combination with the screen 24 prevents any sediment or foreign matter from entering the reduced portion of the passage 25, thereby clogging the same. The minute sides of the reduced portion of the passage 25 is of such construction that a very small amount of sediment would clog the same, thereby rendering the valve useless. If so desired, the cylinder 13 may be turned to register the port 19 with the escape 12, thus closing the supply and permitting the wing nut to be removed for the cleansing of the interior of the valve. If so desired, the ports 18 may coincide respectively with the ports 11 and 12, thus permitting the water to pass directly through the valve and out of the escape 12.

Having thus fully described my invention, what I claim as new, and desire to secure by U. S. Letters Patent, is:

1. In a device of the character described, the combination with a casing, of inlet and outlet extensions formed on said casing, a cylinder mounted in said casing adapted to regulate the flow of liquid therethrough, a closure carried by said casing having a restricted opening therethrough, and a tubular member carried by said closure and communicating with said opening in the closure.

2. In a device of the character described,

the combination with a casing, of inlet and outlet extensions formed on said casing, a cylinder mounted in said casing adapted to regulate the flow of liquid therethrough, a closure carried by said casing having a restricted opening therethrough, and a tubular member carried by said closure communicating with the restricted opening therein and said tubular member also provided with openings communicating with the interior of the cylinder.

3. In a device of the character described, the combination with a casing, of inlet and outlet extensions formed on said casing, a cylinder mounted in said casing adapted to regulate the flow of liquid therethrough, a closure carried by said casing having a restricted opening therein, and a tubular member carried by said closure communicating with the restricted opening therein, said tubular member being provided with a plurality of oppositely disposed transverse slots providing communication between the interior of said tubular member and the cylinder aforesaid.

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

GEORGE L. WELLER.

Witnesses:

R. H. RICE,
L. Z. FAUVER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."