J. H. ROSS.

AUTOMATIC VALVE.

APPLICATION FILED OCT. 18, 1915.

1,195,155. Patented Aug. 15, 1916.

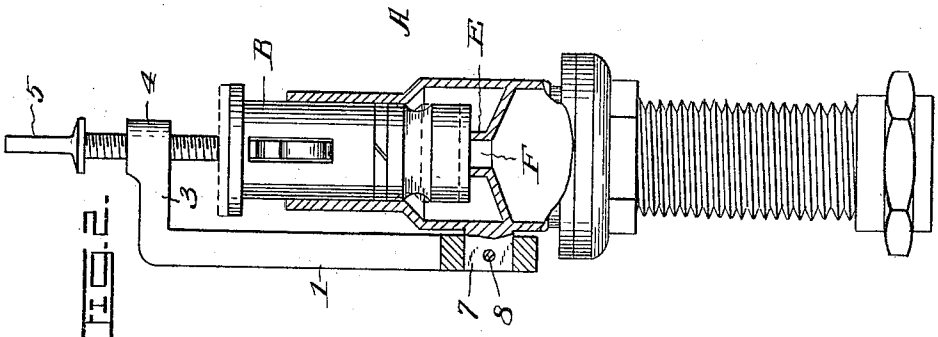


FIG. 2.

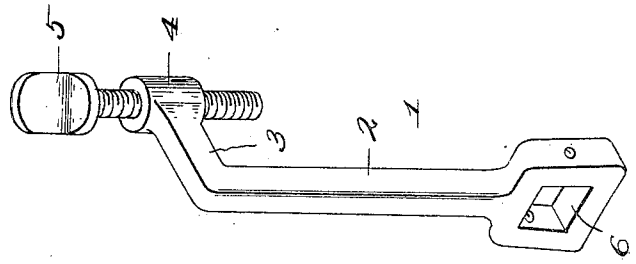


FIG. 3.

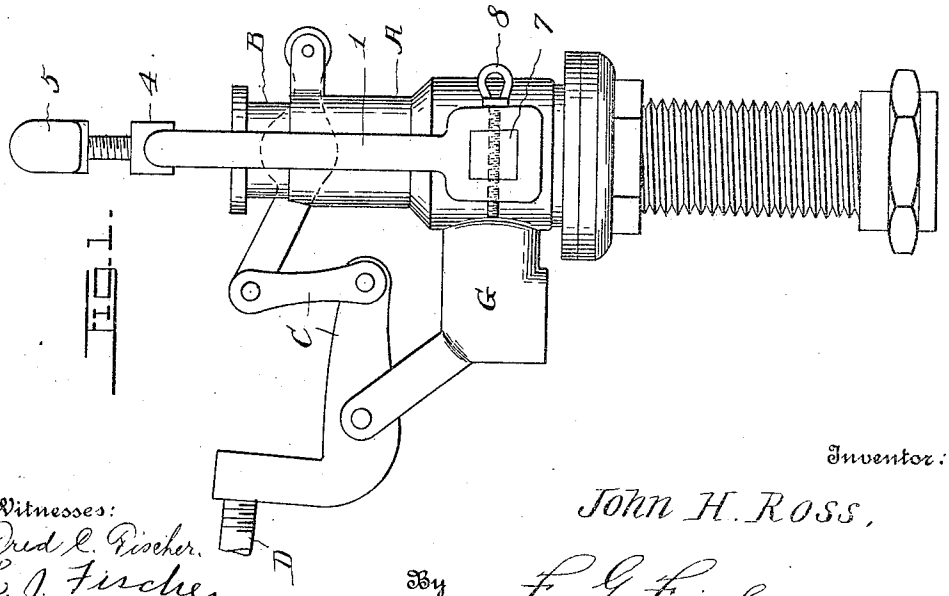


FIG. 1.

Witnesses:
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UNITED STATES PATENT OFFICE.

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AUTOMATIC VALVE.

1,195,155. Specification of Letters Patent. Patented Aug. 15, 1916.

Application filed October 18, 1915. Serial No. 56,523.

To all whom it may concern:

Be it known that I, JOHN H. ROSS, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Automatic Valves, of which the following is a specification.

My invention relates to improvements in automatic valves and while susceptible to general use is more particularly adapted to float valves used in controlling the flow of water into the flush tanks of water closets.

The object of my invention is to overcome the noise occasioned by the opening of valves of this character, which is due to vibration and can usually be heard throughout dwellings in which the valves are installed, I overcome the foregoing objection by providing an attachment to limit the opening movement of the valve-plug, so that the latter will be positively stopped at a certain point in said movement.

In order that the invention may be fully understood, reference will now be made to the accompanying drawing, in which:

Figure 1 is a side elevation of a valve provided with my invention. Fig. 2 shows the valve partly in section and turned at right-angles to the position disclosed by Fig. 1. Fig. 3 is a detail perspective of the attachment constituting the important feature of the invention.

Referring now in detail to the different parts, A designates the valve which has a reciprocatory valve plug B controlled by a compound lever C, which in turn is controlled by the usual float (not shown) attached to the outer end of the stem D secured to one end of the compound lever C. The valve plug B normally rests upon the seat E, surrounding a port F through which water flows to the discharge nozzle G when the valve plug D is raised from its seat as disclosed by dotted lines, Fig. 2.

My attachment of a supporting member 1 embodying a vertical arm 2 bent at right-angles at its upper portion 3, which terminates in an internally threaded boss 4, through which a thumb screw 5 is threaded. The terminal of the vertical arm 2 is enlarged and has a rectangular opening 6 extending therethrough to receive a lug 7, cast on one side of the valve casing H. The arm 2 is reliably held in position upon the lug 7 by a thumb screw 8 extending through said lug and the lower portion of the arm 2.

In practice, when the arm 2 is in position on the lug 7, the thumb screw 5 is adjusted vertically until its lower terminal is spaced the desired distance from the top of the valve plug B. Hence when said valve plug B is opened it impinges against the thumb screw 5 and is thereby positively checked, so that it can not vibrate and produce the noise incident thereto.

From the foregoing description, it is apparent that I have produced a simple device well adapted for the purpose intended, and while I have shown and described the preferred form of my invention, I reserve the right to make such changes in the construction, combination and arrangement of parts as properly fall within the spirit and scope of the claim.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

In combination with an automatic valve, an arm bent at right-angles at its upper end and terminating in an enlarged lower end with an opening therethrough, a lug on the valve case to fit into said opening and support the arm, and an adjustable member threaded through the upper portion of the arm and arranged in the path of the valve plug to limit the opening movement thereof.

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

JOHN H. ROSS.

Witnesses:
F. G. FISCHER,
L. J. FISCHER.

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