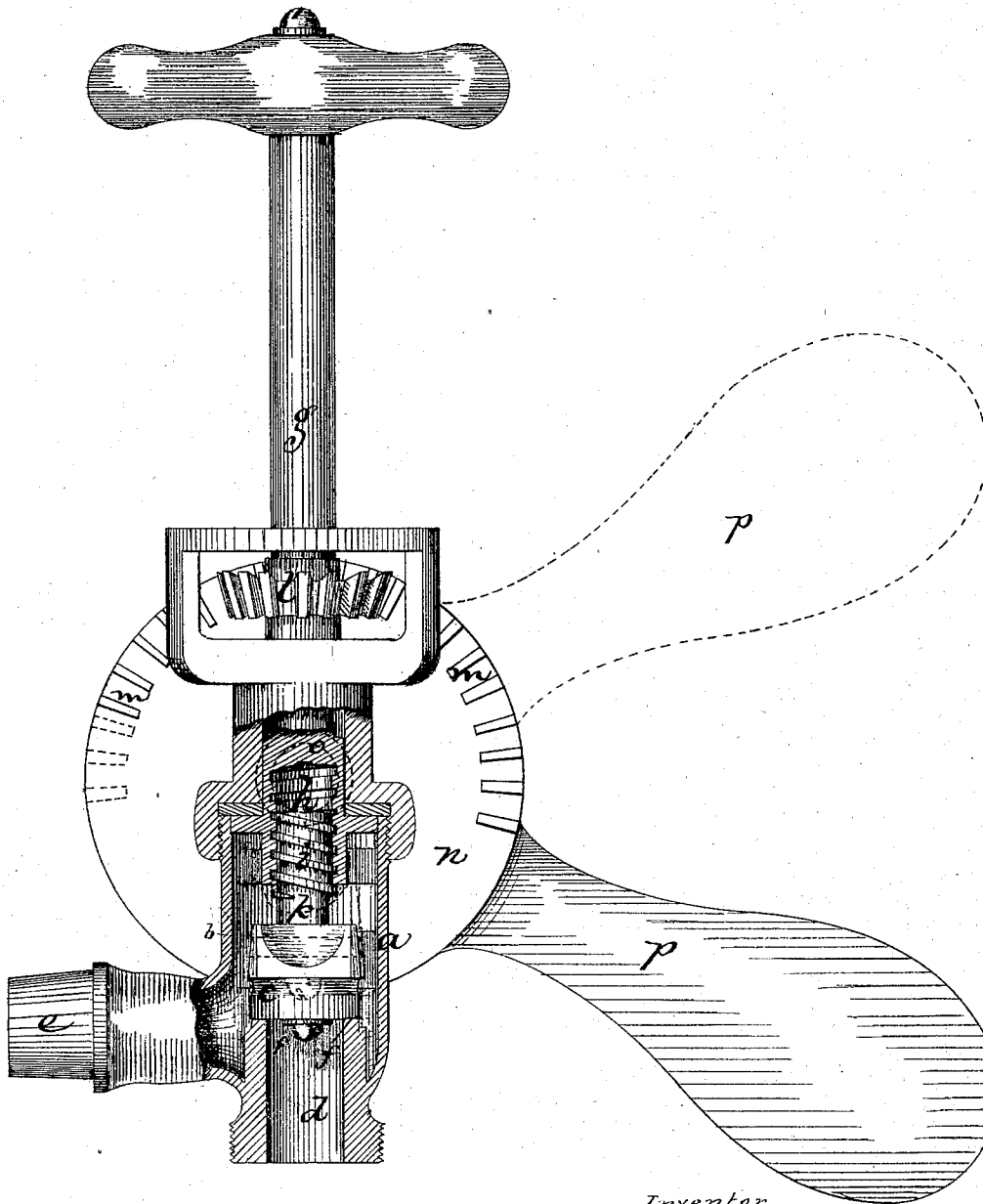


D. WELLINGTON.

Improvement in Self Closing Valves and Faucets.

No. 125,363.

Patented April 2, 1872.



Witnesses:
M. W. Frothingham.
L. H. Latimer,

Inventor.
Darius Wellington
By his Atty.
Crosby & Gould.

UNITED STATES PATENT OFFICE.

DARIUS WELLINGTON, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SELF-CLOSING VALVES AND FAUCETS.

Specification forming part of Letters Patent No. 125,363, dated April 2, 1872; antedated March 30, 1872.

To all whom it may concern:

Be it known that I, DARIUS WELLINGTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Self-Closing Valves and Faucets; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention relates particularly to an improvement in operating water-closet valves, to self-close them when released or after having been opened by hand, the improvement being upon that class of valves which are opened and closed by rotation of a valve-spindle. The invention consists in making the valve-spindle with a pinion-gear, into which mesh gear-teeth made on the pivoted end of a weight or lever hung upon a suitable stud. When the spindle is turned to open the valve the pinion-teeth actuate the lever and lift its weighted end, and when the spindle is released the gear-teeth of the lever operate the pinion, rotating the spindle and closing the valve. It is in a self-closing valve operated by a weight having gear-teeth meshing into a pinion on the valve-spindle that the invention consists.

The drawing represents in sectional elevation a valve embodying my improvement, showing in full lines the valve closed, and in dotted lines the valve open.

a denotes the body of the cock; *b*, the valve-chamber; *c*, the valve; *d*, the induction-tube; *e*, the eduction-tube; *f*, the valve-seat; *g*, the valve-operating stem or spindle, the spindle rotating in suitable bearings, and having a nut-thread, *h*, on its lower end, into which works the screw-thread *i* of a shank, *k*, extending from the valve, rotative movement of the spin-

dle effecting the upward movement of the valve to open the water-passage through it, or the downward movement of the valve to close said passage, in accordance with the direction of such rotative movement. Cast upon or fixed to the spindle is a gear-pinion, *l*, meshing into the teeth of which are gear-teeth, *m*, on a plate, *n*, hung upon a stud-pin, *o*, and having a weight or weighted arm or projection, *p*, as seen in the drawing.

When the spindle is turned to open the valve, the pinion lifts the weight, as seen by the dotted lines, and when the hand is removed from the spindle the weight falls by gravity, and, in falling, turns the spindle and closes the valve, as seen in the drawing.

This construction is valuable for other water-supply cocks or valves than those intended for water-closets, or for such cocks, faucets, or valves as are intended to be self-closing to prevent waste or overflow of water, and which are to be open while, and only while, the party drawing water holds the spindle, the weight being, in many cases, for such purpose an improvement upon a spring for operating the valve.

I claim—

A compression-cock in which the valve is directly raised from its seat by turning the handle of spindle *g*, and is thrown to upon its seat by a pinion, *l*, on the spindle, being rotated by the weighted gear-plate *n*, the spindle having a nut-thread, *h*, into which the screw-thread *i* of valve-stem *k* works, substantially as shown and described.

DARIUS WELLINGTON.

Witnesses:

FRANCIS GOULD,
JOHN F. HASKINS.