(No Model.)

# T. McHUGH.

## SELF CLOSING FAUCET.

No. 308,186. Patented Nov. 18, 1884.

Fig. 2.

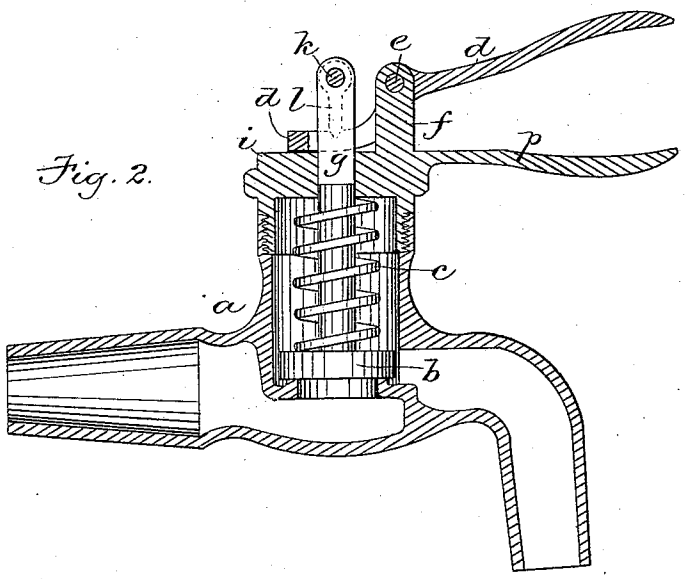



Fig. 1.

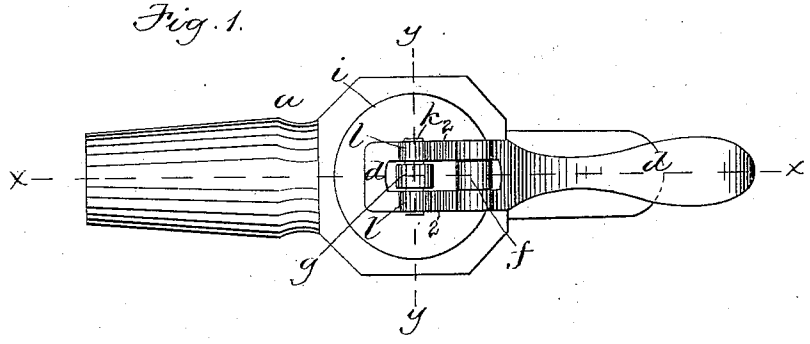



Fig. 4.

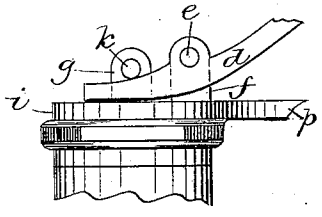



Fig. 3.

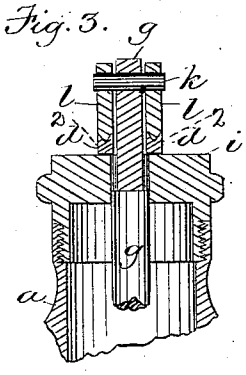
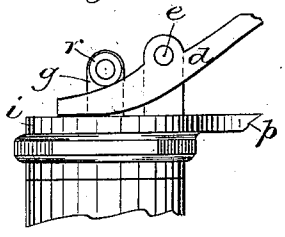



Fig. 5.




Witnesses.
H. Brown
A. L. White

Inventor
T. McHugh
by Wright Brown
Attys

N. PETERS. Photo-Lithographer. Washington, D. C.

# UNITED STATES PATENT OFFICE.

TIMOTHY McHUGH, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO WARD & CURLEY, OF SAME PLACE.

## SELF-CLOSING FAUCET.

SPECIFICATION forming part of Letters Patent No. 308,186, dated November 18, 1884.

Application filed March 27, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, TIMOTHY McHUGH, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Self-Closing Faucets, of which the following is a specification.

This invention has for its object to provide improved means for opening or raising the spring-valve of a self-closing faucet; and it consists in the improvements hereinafter described and claimed.

Of the accompanying drawings forming a part of this specification, Figure 1 represents a top view of a faucet provided with my improvement. Fig. 2 represents a section on line *x x*, Fig. 1; and Fig. 3 represents a section on line *y y*, Fig. 1. Figs. 4 and 5 represent modifications.

The same letters of reference indicate the same parts in all the figures.

Referring first to Figs. 1, 2, and 3, *a* represents the body or casing, and *b* the valve of a self-closing faucet of any suitable construction, the valve being pressed against its seat by a spring, *c*.

*d* represents a lever pivoted at *e* to a stud, *f*, on the cap, through which the valve-stem *g* passes. The longer arm of said lever projects laterally from the body of the valve, its shorter arm projecting over the cap *i*, preferably at each side of the valve-stem, as shown, the lever being slotted to form two arms, 2 2, between which the valve-stem projects.

On a pin, *k*, passing transversely through the upper end of the valve-stem, are hung two arms, *l l*, which are adapted to turn on said pin and bear at their lower ends in sockets or steps formed in the shorter arm of the lever *d*. The downward pressure of the spring *c* on the valve presses the arms *l l* firmly against the lever *d*, and prevents them from being disengaged therefrom. It will be seen that when the longer arm of the lever *d* is depressed its shorter arm is caused to raise the arms *l l*, and through said arms the valve-stem and valve, the arms turning on their pivots during the upward movement, and thus harmonizing the swinging movement of the lever-arm with the rectilinear movement of the valve-stem, so that there is no binding or cramping of the valve stem or lever, each moving freely.

*p* represents a handle rigidly attached to the cap *i*, and projecting outwardly under the longer arm of the lever *d*. Said handle enables the lever *d* to be more conveniently depressed, the operator resting his hand or fingers against the under side of the handle and operating the lever by simply closing his hand. This manipulation is more convenient and natural than pressing downwardly on the lever by the otherwise unsupported hand.

I do not limit myself to the employment of the arms *l*. In the modifications shown in Figs. 4 and 5 said arms are omitted, and the pin *k* of the valve-stem rests on the lever and slips or slides on the lever when the latter is moved. In Fig. 4 the rod *k* bears directly on the lever, and in Fig. 5 it is shown as provided with an anti-friction roller, *r*. The sliding connection thus afforded constitutes an equivalent of the swinging connection afforded by the arms *l*.

It will be seen that the pin *k*, projecting from opposite sides of the valve-stem, and the arms 2 2, arranged at opposite sides of the valve-stem and supporting the pin *k*, either indirectly through the arms *l l*, as shown in Figs. 1, 2, and 3, or directly, as shown in Figs. 4 and 5, enable the pressure exerted by the lever *d* in opening the valve to be applied in line with the valve-stem and not laterally; hence the valve-stem is not pressed against either side of the orifice in the casing through which it moves, and friction and wear are reduced to the minimum.

I claim—

1. In a self-closing faucet, the combination of the shell or casing having a stud, *f*, a lever, *d*, pivoted to the stud and provided with arms 2 2, and the spring-valve having a stem projecting through the casing and between the arms 2 2 of the lever, and provided with a transverse pin, *k k*, projecting across the arms 2 2 and supported by said arms, as set forth, whereby the pressure applied by said lever in opening the valve is exerted in line with the valve-

stem, and lateral pressure of the same against the sides of the orifice in the casing through which it slides is prevented, as set forth.

2. In a self-closing faucet, the combination of the shell *a*, the cap *i*, having the stud *f*, the lever *d*, pivoted to said stud, the valve pressed to its seat by a spring and having the valve-stem *g*, passing through the cap, and the arms *l l*, pivoted to the stem *g* and held by the valve-spring in engagement with the lever *d*, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 24th day of March, 1884.

TIMOTHY McHUGH.

Witnesses:
C. F. BROWN,
A. L. WHITE.