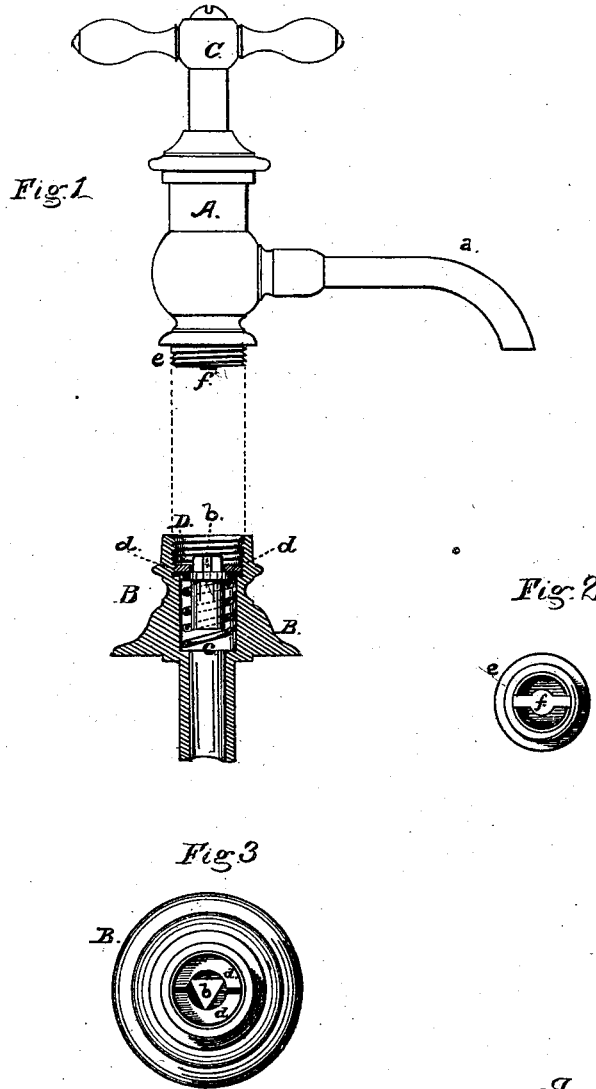


O. COLLIER.
AUTOMATIC CHECK-VALVE.

No. 189,194.

Patented April 3, 1877.



Witnesses:

L. A. Seely.

R. T. Dyer.

Inventor.

Orrin Collier

By G. M. Smith.

His Attorney.

UNITED STATES PATENT OFFICE.

ORRIN COLLIER, OF SACRAMENTO, CALIFORNIA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO GEORGE W. GILBERT, OF SAME PLACE.

IMPROVEMENT IN AUTOMATIC CHECK-VALVES.

Specification forming part of Letters Patent No. 189,191, dated April 3, 1877; application filed December 15, 1876.

To all whom it may concern:

Be it known that I, ORRIN COLLIER, of the city and county of Sacramento, in the State of California, have invented a new and useful Automatic Check-Valve, of which the following is a specification:

My invention relates to that class of cocks or faucets wherein an automatic check-valve is so arranged and situated between the valve of the faucet and the service-pipe, or other source of supply, that when it is desired to remove the faucet from its place the valve will rise as the faucet is unscrewed from its seat and shut off the flow of liquid.

To this end my invention consists in the construction and arrangement of parts, as fully set forth and shown in the following description and drawing, to which reference is made for a better understanding of my invention.

In the accompanying drawing, Figure 1 is an elevation of a faucet of the kind used with stationary wash-basins, and with the lower part of the body detached from it, and in vertical section, to show the arrangement of the check-valve. Fig. 2 is an end view of the lower part of the faucet that enters the portion containing the check-valve. It shows the bridge across the opening for pressing upon the head of the valve. Fig. 3 is a top view of the check-valve and valve-seat.

A represents the body proper of the faucet, having the discharge-pipe *a* and a valve, of the usual construction, operated by the stem and handle C. B is the lower portion, that is permanently secured to the service-pipe, or other source of supply. It constitutes a valve-chamber to hold the check-valve *b*, and the spring *c*, that holds it up against its seat *d*. This check-valve controls the opening D in the upper part of the chamber, and this chamber is provided with an internal screw-thread, to receive the end of the faucet-body.

The head of the valve *b* projects above the opening in the valve-seat a sufficient distance

to allow the end *e* of the faucet-body to come in contact with and press the valve down as the faucet is being screwed into the chamber, the end *e* being provided for this purpose with a bridge, *f*, extending across the orifice in the faucet.

The valve *b* is operated by a coil-spring, *c*, around the stem within the chamber, which holds the valve up against its seat when the faucet is unscrewed from its place, and prevents the flow of liquid from the pipe, but is compressed, and the valve kept open, when the end of the faucet is screwed into the chamber.

By this peculiar construction and arrangement of the parts no care or skill is required to remove or replace the faucet, and a device is produced which is simple in construction, and not liable to get out of order.

I do not pretend to have been the first to provide a faucet with an automatic check-valve, located between the faucet-valve and the orifice of the supply-pipe, for the purpose of shutting off the flow of liquid from the pipe when the faucet is removed; but,

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

An improved faucet, constructed substantially as herein described and shown, consisting of the part A, with its end *e* provided with a screw-thread to fit into the part B, and a bridge, *f*, and the part B having a valve, *b*, valve-seat *d*, and spring *c*, for the purpose of controlling the flow of water from the service-pipe when the faucet is removed, as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of November, 1876.

ORRIN COLLIER.

Witnesses:

EDWARD E. OSBORN,
WILLIAM HARNEY.