C. A. GERDENIER.

GAS COCKS AND VALVES.

No. 178,759. Patented June 13, 1876.

Fig. 1.

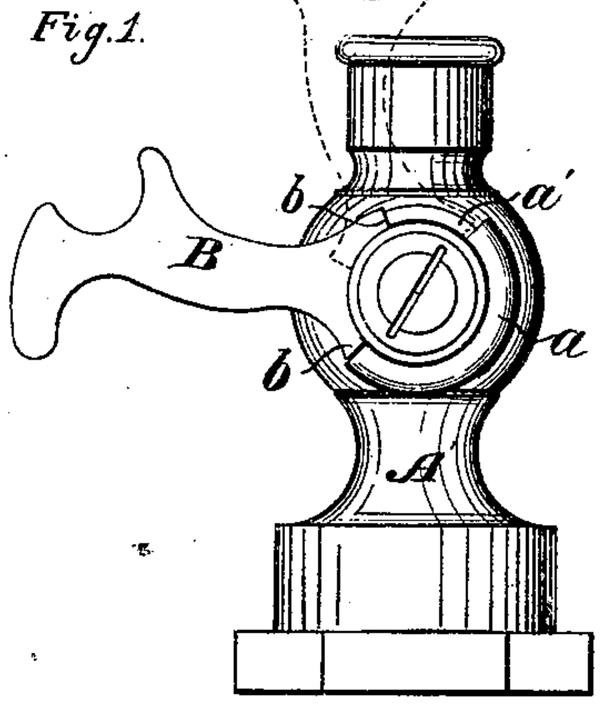


Fig. 2.

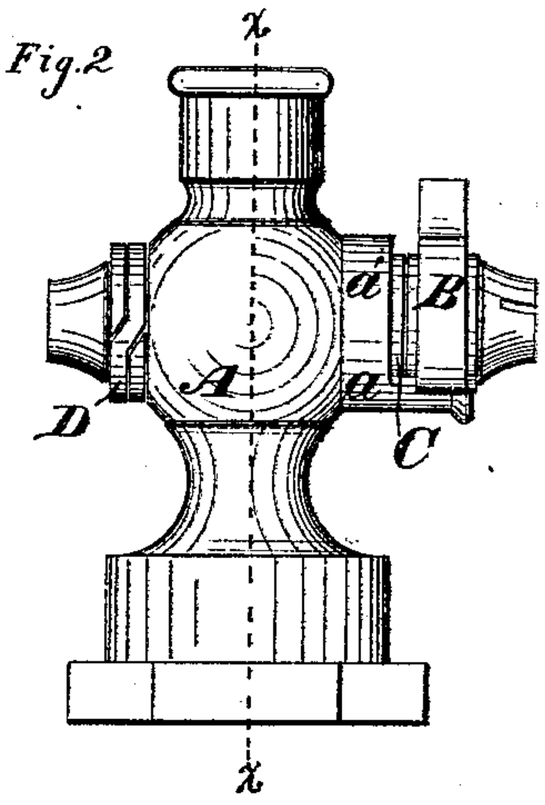
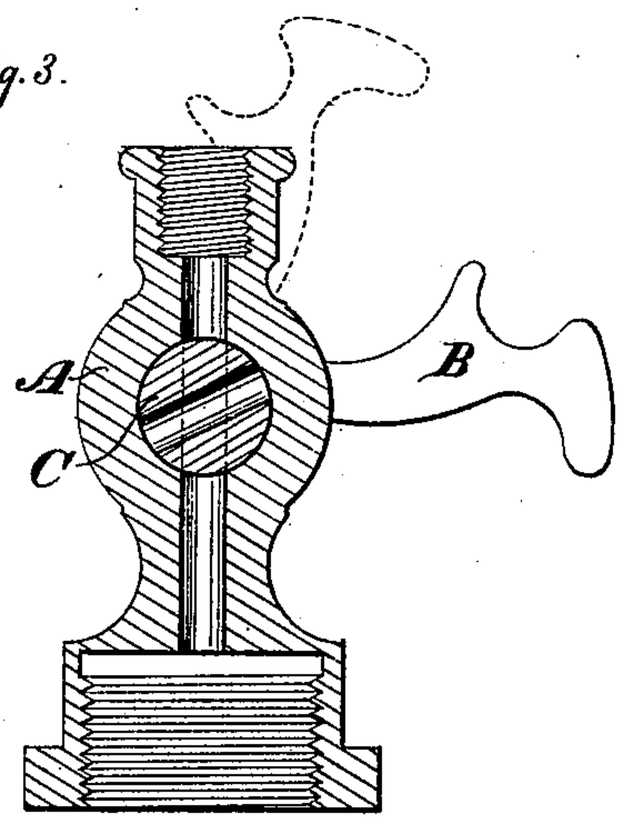


Fig. 3.



WITNESSES
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UNITED STATES PATENT OFFICE.

CHARLES A. GERDENIER, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN GAS COCKS AND VALVES.

Specification forming part of Letters Patent No. **178,759**, dated June 13, 1876; application filed February 9, 1876.

To all whom it may concern:

Be it known that I, CHARLES A. GERDENIER, of Bridgeport, Fairfield county, Connecticut, have invented certain new and useful Improvements in Gas Cocks or Valves, of which the following is a specification:

My invention relates to cocks or valves for regulating the flow of gas to burners of that class adapted to be operated by a torch or implement; and its prime object is so to attach an arm or lever to the key of the valve that it is limited in its movement, when actuated for turning on or shutting off the gas, without the aid of the usual pin-stop, which soon wears out and causes the valve to leak.

The manner of carrying out my invention and the subject-matter claimed will hereinafter specifically be set forth.

In the accompanying drawings, Figure 1 is a view in elevation of my improvements; Fig. 2, a side view; and Fig. 3, a vertical central section on the line *x x* of Fig. 2.

The shell or casing A of the cock or valve may be of any of the usual well-known forms, and is provided with a tubular portion, *a*, forming a prolongation of the key-seat. This tubular portion is recessed or cut away, at *a'*, for about half its circumference, for the reception, and to allow of sufficient play, of an actuating arm or lever, B, secured to it in any suitable way, or forming part of the key C of the valve, and by which the key is actuated in turning on or shutting off the flow of gas to the burners. The actuating-arm B is provided on its free end with suitable bearing-surfaces for the operating torch, and has also formed on its base shoulders *b*, which limit its movement, when actuated for turning on or shutting off the gas, by coming in contact with the shoulders formed by the recess in which it works. This construction has been found to possess great advantages over the well-known pin-stop heretofore employed.

The key C of the valve is shown as conical or tapering in form, its bearings in the casing being correspondingly shaped, and is provided on its end opposite to that carrying the actuating-arm with a spring-washer, D, compressed between a shoulder on the casing and a set-screw, or its equivalent, on the end of the key, the tendency of which is always to draw the key tighter and compensate for any wear of the parts, whereby a tight joint is preserved, and all leakage of gas avoided.

My improvements are shown as applied to the shell or support of an ordinary street-lamp burner, to which they are especially adapted, as by their use all climbing of the post may be dispensed with, the operator lighting the lamp by a suitable torch from the sidewalk.

My improvements will be found of great advantage in all cases where burners are located at such a distance as to require a torch or implement to operate the cock.

I claim as my invention—

The improved gas cock or valve, substantially as hereinbefore set forth, consisting of the combination of the casing, the key turning therein, its actuating-arm working in a recessed portion of the casing, and provided with bearing-surfaces on its free end, and the compensating-spring, whereby the range of movement of the actuating-arm is limited and wear of the key compensated.

In testimony whereof I have hereunto subscribed my name.

CHARLES A. GERDENIER.

Witnesses:

WILLIAM B. HINCKS,

W. E. NORTON.