

W. A. WALES.

GAS-FAUCET.

No. 180,397.

Patented July 25, 1876.

Fig. 1.

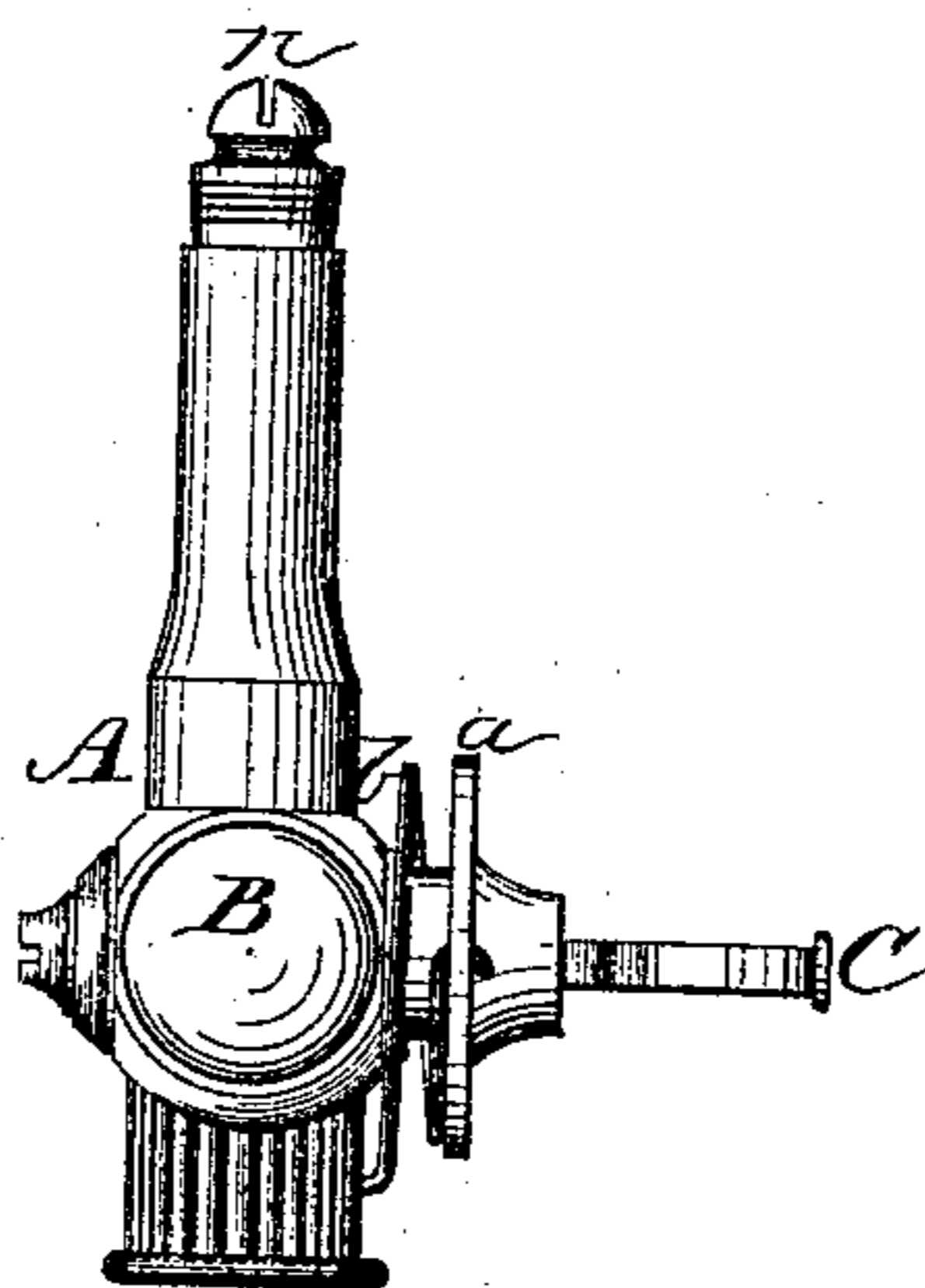


Fig. 2.

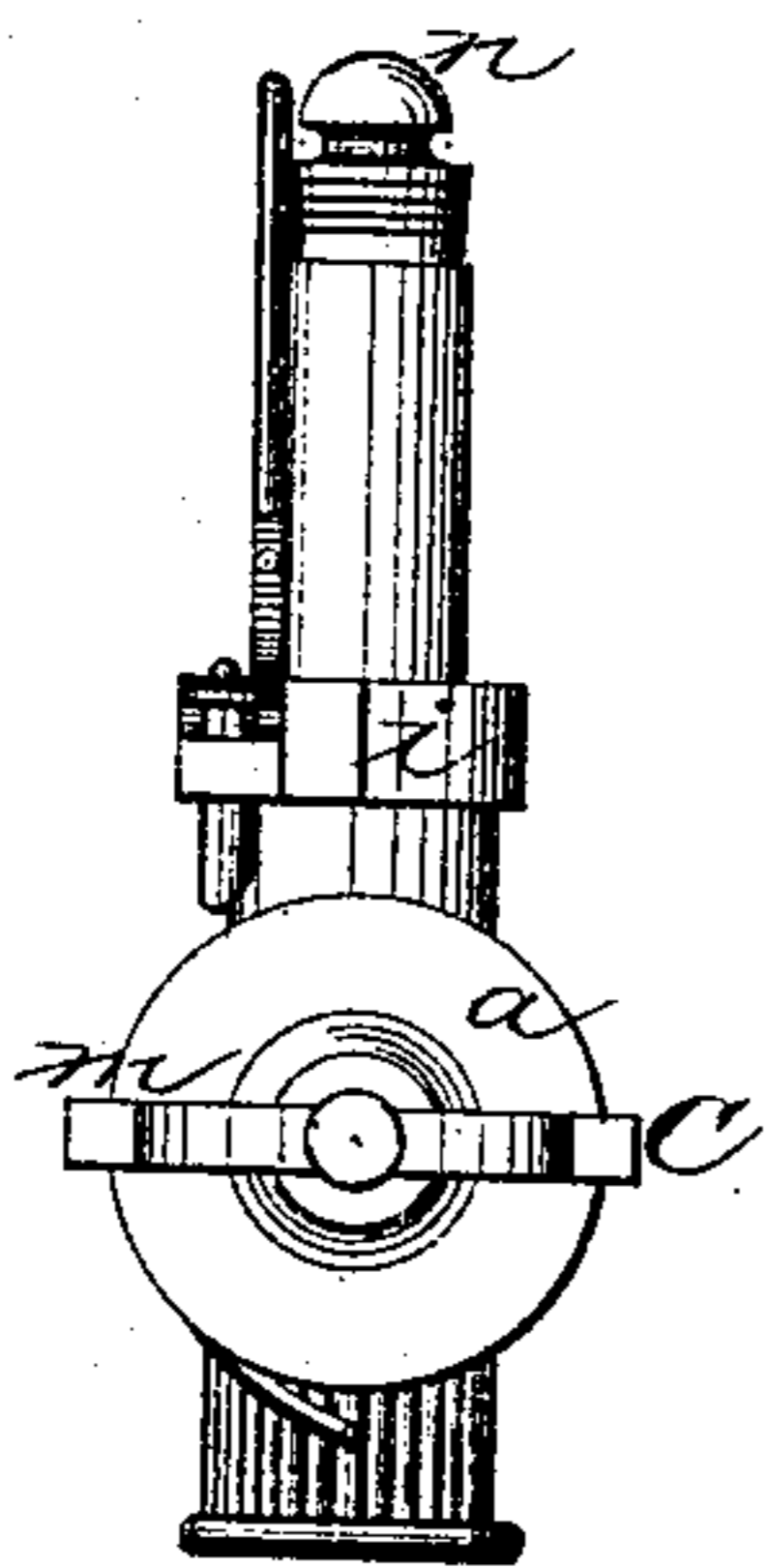
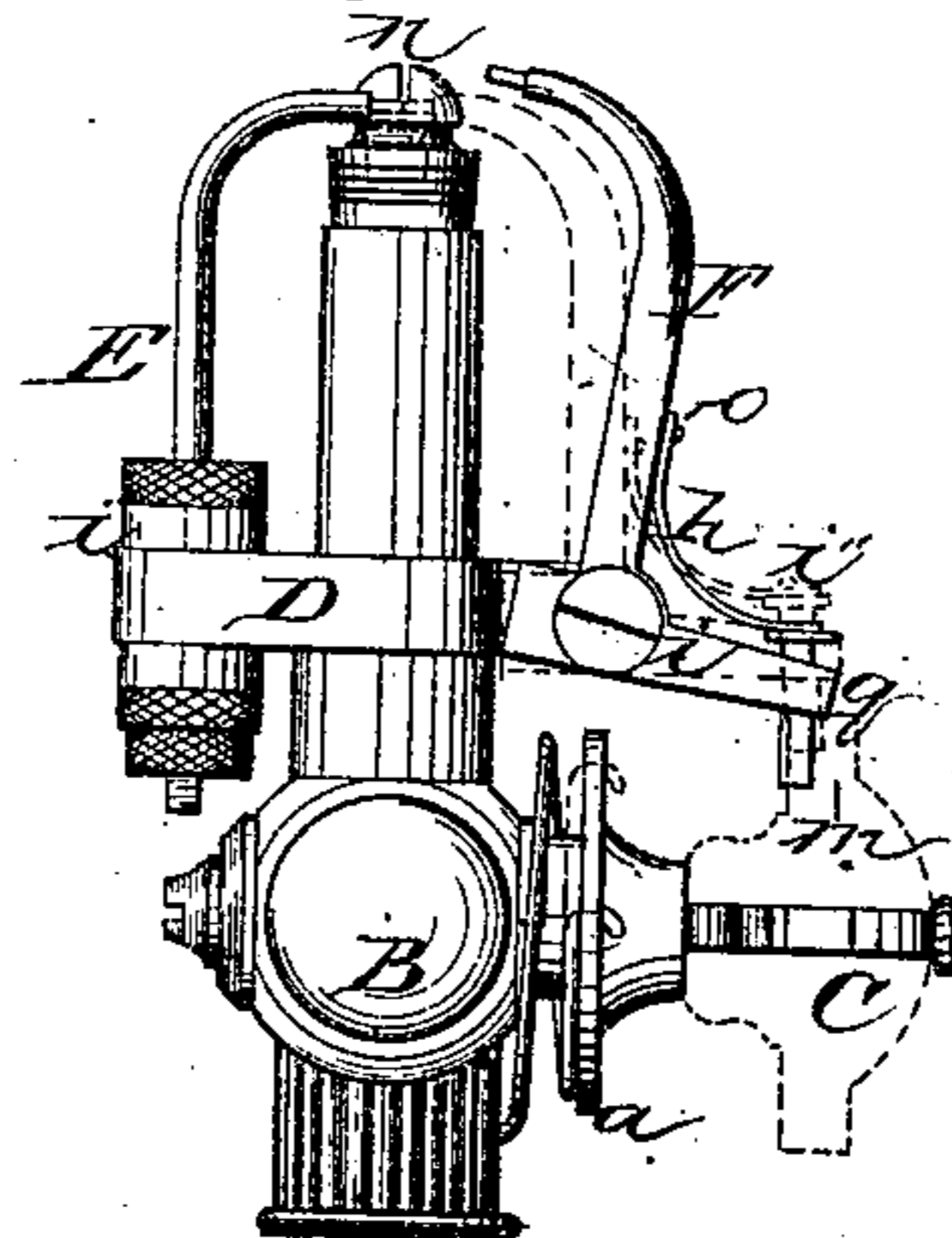


Fig. 3.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN GAS-FAUCETS.

Specification forming part of Letters Patent No. **180,397**, dated July 25, 1876; application filed May 26, 1876.

To all whom it may concern:

Be it known that I, WILLIAM A. WALES, of Jersey City, in the State of New Jersey, have invented a new and Improved Automatically-Closing Gas-Faucet; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a side elevation. Fig. 2 is a side elevation in the opposite direction. Fig. 3 is an elevation, showing a modification for use with an electric lighting apparatus.

It is, in factories and elsewhere, a source of great wastage of gas that employes, in using the blow-pipe, sealing packages, entering dark water-closets, &c., leave the gas burning when it is not being actually utilized for purposes in the arts, or for purposes of illumination, because they forget to turn it off, or neglect to do so at the moment its uses cease.

The object of my invention is to avoid this wastage, and overcome this difficulty by providing a burner which is supplied with an automatically-closing faucet, which will shut off the supply of gas at the moment the person's fingers release the handle of the faucet, thus preventing such persons who momentarily use the gas for lighting cigars, using the blow-pipe, or for any other purpose, from allowing the gas to continue to burn after its actual use has ended.

My invention consists in an automatically-closing gas-faucet, the valve being opened by the fingers, or otherwise, and closed by the action of a spring, or other device which will shut off the gas.

In order that those skilled in the art may make and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A is a gas-burner of ordinary general construction, and provided with the rotary globe-valve B, having a handle, C. Upon the shank of the valve B, adjacent to the handle C, and between it and the bulb of the burner A, is rigidly secured a disk, *a*, with a diameter about equal to the breadth of the handle C. A spring, *b*, is coiled around the valve-shank, between the disk *a* and the bulb of the burner, one end being fastened to the disk, and the other end to the bulb, so that the distention of the spring keeps the valve closed, as seen in Fig. 1.

Opening the valve by turning the handle C compresses the spring *b*, and the instant the handle is released the spring, in uncoiling, closes the valve.

Thus it will be seen that it is impossible to continue the flow of gas after the hand has released the handle of the valve.

In Figs. 2 and 3 I show adaptations of my improved valve applied to the Hind's improved electrical lighting apparatus, applied as follows: Around the burner A is a collar, D, with projecting lugs *i i'*. Rising from and insulated within the lug *i* is a platinum-pointed conductor, E, terminating adjacent to the opening *n* in the burner-tip. Pivoted to the lug *i'* is a movable platinum-tipped conductor, F, having at its lower end a weighted pawl, *q*, projecting over the valve-handle C. Through a hole in the end of the pawl *q* is a movable pin, *i''*, having its upper end fixed in one end of a spring, *h*, which has its other end fixed to F at *o*. The pin is beveled at its lower end on the side opposite the direction in which the handle C turns, and the point is slightly rounded off. The end *m* of the handle C is beveled in both directions, as seen in Fig. 2, and the point slightly rounded off.

The operation with this modification is as follows to light the gas: Upon turning the handle C, the end *m* comes in contact with the pin *i''*, which forces it upward and forward, and with it the conductor F, until its tip comes sufficiently near the tip of electrode E, when a spark passes, and the gas is ignited. If the end *m* of handle C passes beyond pin *i''*, the bevel on the end of said pin and the bevel on the end of handle C allows the pin to be forced up to close the valve by the extraction of the spring *b*.

I do not claim any invention of the electrical lighting device shown, having merely adapted it to my improved automatically-closing valve; but,

Having thus described my invention, what I claim as new is—

The burner A and globe-valve handle C, in combination with a spring, *b*, and disk *a*, substantially as described.

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Witnesses:

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