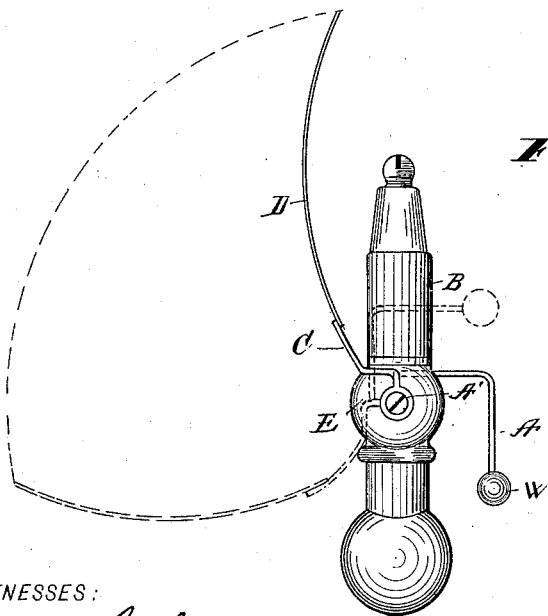
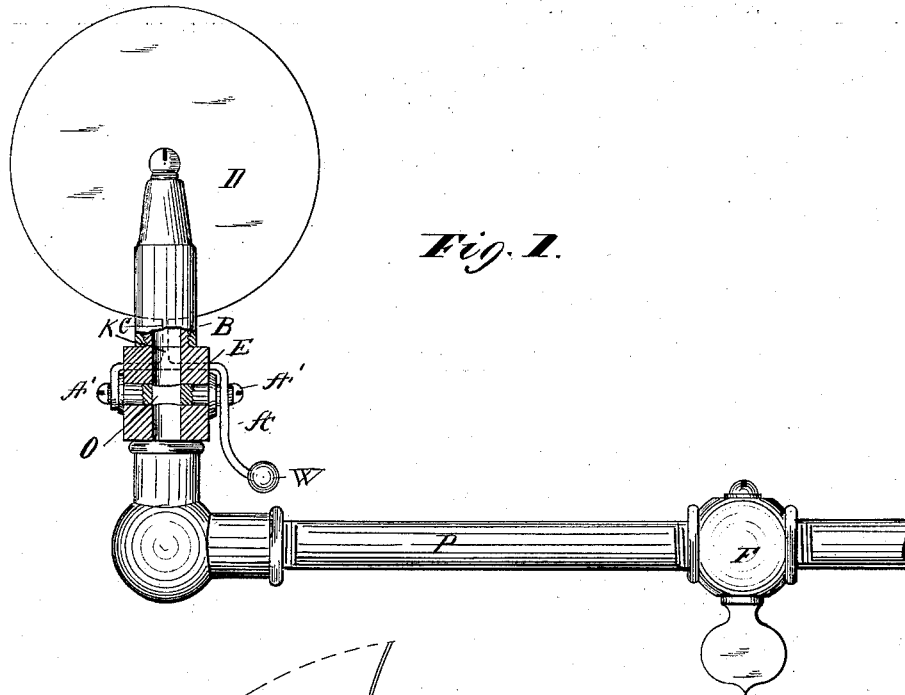


(No Model.)

M. SIERSDORFER.
AUTOMATIC GAS EXTINGUISHER.

No. 383,497.

Patented May 29, 1888.



WITNESSES:

Emma Arthur.
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UNITED STATES PATENT OFFICE.

MICHAEL SIERSDORFER, OF LOUISVILLE, KENTUCKY.

AUTOMATIC GAS-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 383,497, dated May 29, 1888.

Application filed April 8, 1887. Serial No. 234,177. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL SIERSDORFER, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Automatic Gas-Extinguishers, of which the following is a specification.

This invention relates to a device which can be applied to any ordinary or special form of gas-burner, and it is so constructed that it will automatically operate to turn off the gas and stop the supply when the flame of the gas is blown upon by a person or persons ignorant of the use of gas and not understanding the use of it and the ordinary method of extinguishing.

The object of my invention is therefore obvious; and besides the above-named conditions, which it fulfills, it aims to secure an economical and durable construction, which can be easily adjusted to any of the ordinary gas-burners now in use.

To these ends my invention consists of a small casing adapted to be screwed on to the bottom of any burner or to form the lower part of a burner having the usual vertical perforation forming the conduit for the gas, and provided with a circular and cylindrical key which traverses the said casing and conduit horizontally, said key being provided with an opening centrally located to correspond with the conduit in the casing. This key protrudes slightly on both sides of the casing, and from these outer ends extends an inverted Y-shaped arm, the branches being attached to either end of the key and the arm extending upward and terminating in a highly-polished metallic disk. A counterbalancing-weight is provided to retain the disk in an upright position after it has been set there. This disk forms a reflector for the light, and at the same time provides a means for operating the aforementioned key, and is so arranged that when it is blown against it will partially rotate the said key and close the conduit or channel of the flowing gas, thereby extinguishing the light and shutting off the supply of gas to the burner.

I will now refer to the accompanying drawings, which form a part of the specification and serve to illustrate my invention.

Figure 1 is a side elevation of my extinguisher, partly in section, and Fig. 2 is an end view of my invention.

In the drawings, P is a gas-pipe, provided with an ordinary key, F, to be used by persons understanding the nature and construction of gas-burners. At E is shown a casing, which may be made separate from the burner B, and which is adapted to be screwed on the bottom thereof; or it may be made a part of the burner itself, as preferred. The casing and burner are provided with corresponding channels or conduits, K, for the gas, and the casing E is further provided with a centrally-located and horizontally-arranged key, A, which traverses the casing E, as shown. It is circular and cylindrical in shape, and is adapted to rotate in the chamber in which it is seated. It is also provided with a centrally-located opening, O, for the escape of the gas through the channel of the burner. When the opening O is in a line with the channel of the gas-burner, the flow of gas will be unimpeded, as shown in the drawings. When, however, the key is turned a quarter of a revolution, the opening O would be cut off, thereby closing the channel K, and consequently stopping the flow of gas. To accomplish this result automatically, I arrange a yoke or Y-shaped arm, C, composed, preferably, of polished steel wire, and attach it, as shown, to either side of the key A, at which point it is held firm in position by means of small screws A'. The upper end of this arm has a concaved highly-polished disk, D, made of thin metal and mounted upon it, as shown. This disk will serve partly as a reflector, and will also serve, when the gas-jet is blown against, as a receiver for the pressure or current so applied, and will, when this pressure is applied, fall backward, turning on its pivot, the said pivot being the aforementioned key A. When the disk falls, therefore, it will cause the pivot A also to turn, and when the disk and its carrying-arm C have reached the horizontal position the pivot A will have turned a quarter of a revolution, thereby cutting off the flow of gas. At the lower end of the arm C is a counterbalancing-weight, W, which serves to retain the disk in its normal upright position, as shown in the drawings, but which is not heavy enough to prevent the

disk D from dropping after it has once left the vertical line. It will be seen by this arrangement that I have provided a simple mechanical arrangement for dispensing with the great
5 danger usually attendant upon the employment of gas in places where ignorant people are left to extinguish it.

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

1. The combination, in an automatic gas-extinguisher, of a cylindrical key passing horizontally through the gas tube, an arm attached rigidly to said key and extending above and
15 below the same, a disk secured to the upper

end, and a counter-balance secured to the lower end of the arm, substantially as and for the purpose set forth.

2. An automatic gas-extinguisher consisting, essentially, of a casing, E, a key, A, provided with an opening, O, and a Y-shaped arm, C, rigidly attached to the key, a concave polished disk, D, at its upper end, and a counter-balancing-weight, W, at the lower end of said arm, all adapted to operate substantially as
20 and for the purposes set forth. 25

MICHAEL SIERSDORFER.

Witnesses:

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FRANK. SIERSDORFER.