

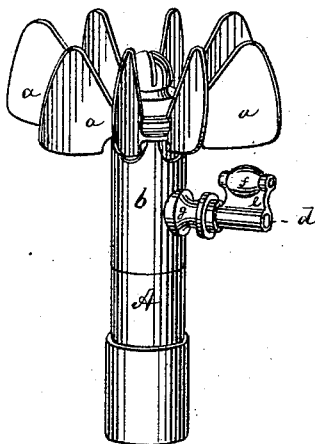
(No Model.)

C. PIETZ.  
GAS BURNER.

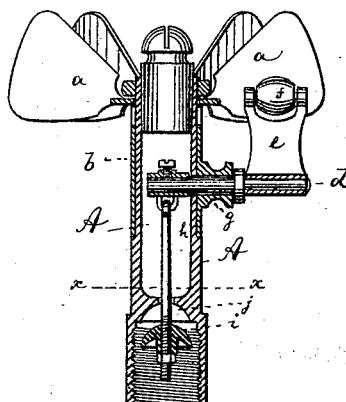
No. 303,319.

Patented Aug. 12, 1884.

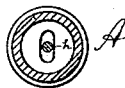
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES PIETZ, OF NEW YORK, N. Y.

## GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 303,319, dated August 12, 1884.

Application filed March 24, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES PIETZ, of the city of New York, in the county and State of New York, have invented a new and Improved Gas-Burner, of which the following specification is a full, clear, and exact description.

This invention relates to a gas-burner which is provided with an attachment by means of which the flow of gas will be cut off if the flame is blown out.

It has frequently happened that gas has been blown out by inexperienced persons who have been suffocated by the subsequent continued flow of gas. To avoid such accidents is the object of my invention, which consists, principally, in the combination of a gas-burner with a surrounding fan-blower, which is revolved if the flame is blown out, and which thereby shuts off the supply of gas.

The invention also consists in the details of construction hereinafter more fully pointed out.

In the accompanying drawings, Figure 1 is a perspective view of a gas-burner provided with my improvement, showing it when the gas is partially turned off. Fig. 2 is a longitudinal central section of the same with the gas turned on. Fig. 3 is a cross-section on the line *x x*, Fig. 2.

The letter A represents a gas-burner of the customary or suitable construction. Around the upper portion thereof I place a fan-blower, *a*, seated upon a sleeve, *b*, that surrounds the upper part of the burner. The upper edge of the sleeve *b* is scalloped, as shown, to decrease the contact-surface. The fan-blower has upright or inclined blades, and is revolved by the air-current if the gas is blown out.

Through the side of burner A extends a rod, *d*, to the inner end of which is attached a valve, in manner hereinafter specified, while the outer end carries a key or arm, *e*. This key is weighted at its upper edge by a weight, *f*, and is of such a length that when in an upright position, as shown in Fig. 2, it extends with its top between two of the blades of the fan-blower *a*. The rod *d* passes through a sleeve, *g*, and is connected to a valve-rod, *h*,

that carries the ball-valve *i*. The connection between rods *d* *h* is made by means of a staple and eye, as shown, so that when the rod *d* is partially revolved the valve-rod *h*, and with it the ball-valve *i*, will move up or down vertically. *j* is a valve-seat formed within burner A. This valve-seat is provided with a slit, (seen in Fig. 3,) which is closed when the ball-valve is raised.

The operation of the device is as follows: In its normal condition the weighted key *e* projects between and is held in an upright position by the blades of the fan-blower, and the valve is open, permitting the free passage of gas, Fig. 2. As soon as the gas is blown out the fan-blower *a* is revolved, and the blades striking the key *e*, will throw it down, Fig. 1. As soon as the top of the key is free of the fan-blower its weight *f* will cause the key, and with it the rod *d*, to revolve further until the valve *i* is raised up to its seat *j*. The valve will now be closed, and the further admission of gas cut off. In this way an automatic extinguisher is provided.

It is evident that in addition to my attachment the ordinary gas-cock is used.

I claim as my invention—

1. The combination of burner A with fan-blower *a* and with key *e*, extending between the blades of the fan-blower and connected with a valve within the burner, substantially as herein shown and described.

2. The combination of burner A with fan-blower *a*, rod *d*, operating a valve within the burner, and with key *e*, having weight *f*, substantially as specified.

3. The combination of burner A with fan-blower *a*, sleeve *b*, rod *d*, and with the key *e*, connected by rod *d* with a valve within the burner, substantially as and for the purpose specified.

4. The combination of burner A with fan-blower *a*, rod *d*, weighted key *e*, sleeve *g*, and with the valve-rod *h*, valve *i*, and seat *j*, substantially as specified.

CHARLES PIETZ.

Witnesses:

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