(No Model.)

W. F. DINSE.

GAS EXTINGUISHER.

No. 305,059. Patented Sept. 16, 1884.

Fig 1

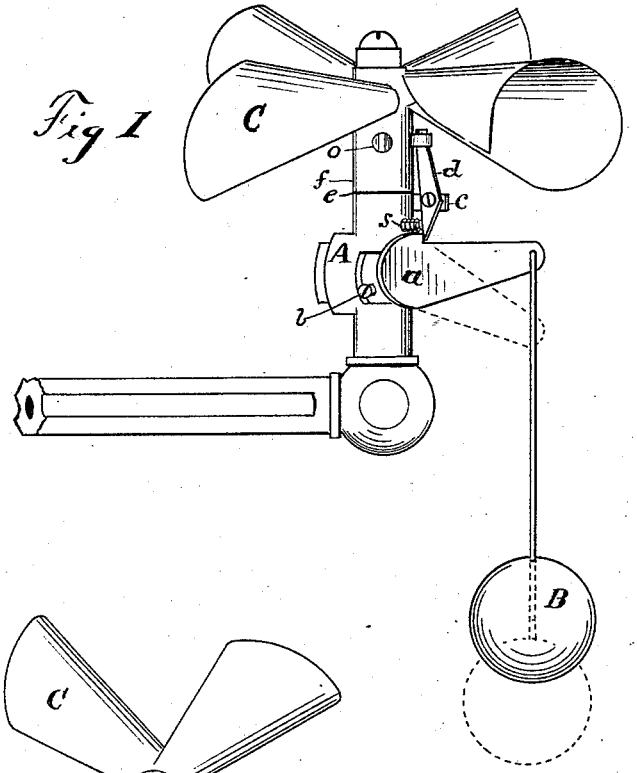
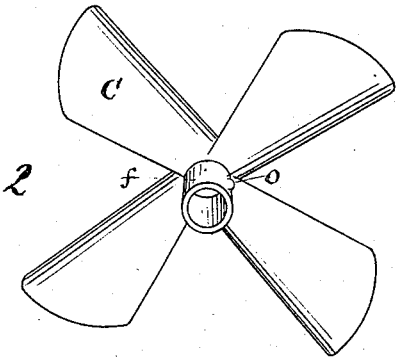


Fig 2



WITNESSES:

E. M. Alling

John H. Barlow

INVENTOR

William F. Dinse

BY

Louis S. Day.

ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM F. DINSE, OF NEW HAVEN, CONNECTICUT.

GAS-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 305,059, dated September 16, 1884.

Application filed December 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. DINSE, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Gas-Extinguishers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in gas-burners; and it consists of a gas-burner provided with a rotary fan, and suitable mechanism for connecting said fan with the valve which controls the flow of gas to the burner.

The object of this invention is to provide a means by which the flow of gas shall be immediately stopped whenever the flame is extinguished by "blowing out," and I attain this object by the novel arrangement of new elements, which are more fully described and claimed hereinafter.

In the annexed drawings, Figure 1 represents a detached portion of a gas fixture to which is attached one of my improved gas-burners complete. Fig. 2 is a perspective view of the under side of the rotary fan.

Letters of like name and kind refer to like parts in each of the figures.

The gas-burner A is adapted to be screwed upon any fixture, the same as ordinary burners used prior to this invention, and is provided with a common "plug-valve," *a*, which controls the flow of gas through the burner A. The valve *a* has an arm extending at a right angle with its axis, and from the outer extremity of this arm is suspended the weight B, which aids in operating the valve *a*, more fully explained hereinafter. A suitable screw or pin is secured in the stem of the valve *a*, as shown at *b* in Fig. 1, which operates in the recess cut in the burner A as a stop, regulating the movement of the valve *a*. The burner A is still further provided with an extension, *c*, upon which is journaled a vertical lever, *d*, having a small roll adapted to revolve upon its upper end. The upright stem of the burner A is reduced in size at *e* sufficiently to enable the central sleeve, *f*, of the rotary fan C being placed upon the burner A, with the lower end of the sleeve *f* resting upon the shoulder formed at *e*, as shown in Fig. 1. The rotary fan C is composed of a series of involute blades radiating from a common center, and provided with the central sleeve, *f*. *o* is a small projection upon the central sleeve, *f*, which operates the vertical lever *d*. The right-angled arm of the valve *a* is provided with a notch upon its upper side, into which the lower end of the vertical lever *d* is forced whenever the arm and appurtenant weight B is lifted into the position indicated by the solid lines in Fig. 1 by the small spiral spring *s*. When the arm of the valve *a* is raised into the position indicated by solid lines in Fig. 1, the valve *a* is open, allowing the gas to flow through the burner, and is retained in that position by the vertical lever *d* being pressed into the notch on the arm of the valve *a* by the spring *s*. Should any one attempt to extinguish the flame by blowing with the breath, or any other strong current of air, the rotary fan C will immediately begin to revolve, carrying the projection *o* on the central sleeve, *f*, under the roll upon the end of the vertical lever *d*, which operation disengages the lower end of the lever *d* from the notch in the arm of the valve *a*. The valve being thus released, the gravity of the weight B immediately brings the valve-arm into the position indicated by dotted lines in Fig. 1, when the valve is closed and the flow of gas stopped.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

A gas-burner provided with a plug-valve, *a*, weight B, lever *d*, spring *s*, and rotary fan C, all being combined and arranged to operate substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM F. DINSE.

Witnesses:

LOUIS S. DAY,

E. N. ALLING.