H. J. WARREN & H. F. PACKARD.

LAMP-EXTINGUISHER.

No. 169,604. Patented Nov. 2, 1875.

Fig. 1.

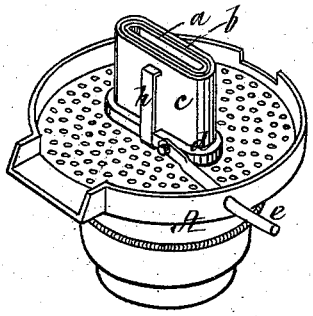


Fig. 2.

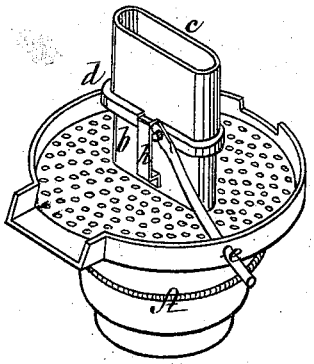


Fig. 3.

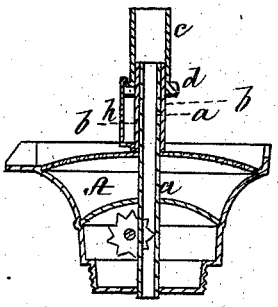


Fig. 4.

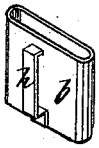
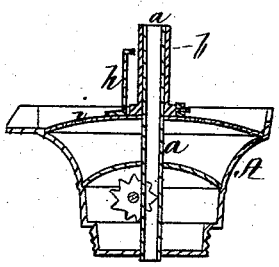


Fig. 5.



Witnesses,
W. J. Cambridge
Chas. E. Griffin

Inventors,
Henry W. Warren & Henry F. Packard,
Per Teschemacher & Stearns,
Attorneys

UNITED STATES PATENT OFFICE.

HENRY J. WARREN, OF LEXINGTON, AND HENRY F. PACKARD, OF BROCKTON, ASSIGNORS, BY MESNE ASSIGNMENTS, TO LORIN A. PRESBY, CHARLES SWIFT, AND JONATHAN SWIFT, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LAMP-EXTINGUISHERS.

Specification forming part of Letters Patent No. **169,604**, dated November 2, 1875; application filed June 8, 1875.

To all whom it may concern:

Be it known that we, HENRY J. WARREN, of Lexington, in the county of Middlesex, and HENRY F. PACKARD, of Brockton, in the county of Plymouth, and State of Massachusetts, have invented an Improvement in Lamp-Extinguishers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a perspective view of a lamp-burner with our improved extinguisher applied thereto. Fig. 2 is a perspective view of the same, the position of the parts being changed. Fig. 3 is a vertical transverse section; Fig. 4, a detail in perspective. Fig. 5 is a vertical section, representing a modification of our invention.

Our present invention consists in surrounding the wick-tube with a sleeve provided with a weight attached directly thereto, by which it is kept down at or below the level of the top of the wick, to admit of its being lighted, the flame being readily extinguished by depressing the outer end of a lever connected with the sleeve, which raises it above the top of the wick, a suitable stop being employed to prevent the sleeve from being raised too high, so as to detach it from the wick-tube.

To enable others skilled in the art to understand and use our invention, we will proceed to describe the manner in which we have carried it out.

In the said drawings, A represents a lamp-burner, and *a* its wick-tube, over which is snugly fitted a short friction tube or sleeve, *b*, around which is fitted another tube or sleeve, *c*, which is free to slide thereon, the lower end of the sleeve *c* being provided with an enlargement, which acts as a weight, *d*, to keep it down in the position seen in Fig. 1, with its top at or below the level of the upper end of the wick-tube, so as to admit of the lighting and burning of the wick. *e* is a lever, which passes through the side of the burner, which serves as its fulcrum, the inner end of the lever being connected with the enlargement or weight at the bottom of the outer sleeve *c*, while the opposite end of the lever projects out into a position to allow of placing the finger thereon for the purpose of raising the sleeve *c* upon the wick-tube *a*, as seen in Figs. 2 and 3, to extinguish the flame.

To prevent the sleeve *c* being raised too high by the lever *e*, so as to pass off the wick-tube, we employ a stop, *h*, consisting of a strip of spring metal, of the form seen, secured at its lower end to the outside of the friction-sleeve *b*, and having its top bent in, so as to project into the path of and over the enlarged or weighted portion *d* of the outer sleeve *c*, which comes into contact therewith, this stop *h* serving to limit its upward movement on the wick-tube.

A very important feature resulting from the use of a lamp-extinguisher constructed in accordance with our invention is that it may be instantly applied to the various descriptions of burners now in use, at a trifling cost, whereby they may all be utilized, instead of being discarded as heretofore.

From the foregoing it will be seen that the entire extinguisher, consisting of the inner sleeve *b*, with its spring-stop *h*, and the outer sleeve *c*, with its weight *d* and lever *e*, may be readily removed from their position on the wick-tube, should it be desirable at any time to do so.

In applying our invention to a new burner, we prefer to dispense with the inner or friction sleeve *b*, and secure the lower end of the spring-stop *h* directly to the perforated cap *i* of the burner, as seen in Fig. 5; and should it be required to remove the weighted sleeve from the wick-tube it is simply necessary to press the spring-stop back a slight distance, so that it will not project into the path of the enlarged weighted portion of the sleeve, which may then be lifted off without obstruction.

What we claim as our invention, and desire to secure by Letters Patent, is—

The spring-stop *h*, secured to a friction-sleeve, *b*, or to the burner A, in combination with the sleeve *c*, with its weight *d* attached directly thereto, or formed in one and the same piece therewith, and to be raised by the lever *e*, all constructed to operate substantially as and for the purpose set forth.

Witness our hands this 25th day of May, 1875.

HENRY J. WARREN.
HENRY F. PACKARD.

In presence of—
N. W. STEARNS,
CHAS. E. GRIFFIN.