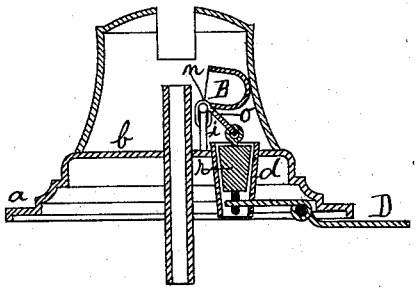
E. MERCIER.
Lamp-Extinguisher.

No. 198,139. Patented Dec. 11, 1877.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD MERCIER, OF SPRINGFIELD, ASSIGNOR OF ONE-HALF HIS RIGHT TO ISAÏS PARÉ, OR ISAAC PERRY, OF HOLYOKE, MASSACHUSETTS.

IMPROVEMENT IN LAMP-EXTINGUISHERS.

Specification forming part of Letters Patent No. **198,139**, dated December 11, 1877; application filed April 23, 1877.

To all whom it may concern:

Be it known that I, EDWARD MERCIER, of Springfield, county of Hampden, and State of Massachusetts, have invented a new and useful Extinguisher Attachment for Kerosene-Lamp Burners, which improvement is fully set forth in the annexed specification and in the accompanying drawing.

The object of my invention is to provide for kerosene-lamps an extinguisher permanently attached to the burner, by the use of which the light can be extinguished by pressing upon the end of a lever outside of the exterior rim of the burner, without drawing the wick down in the wick-tube or changing its proper burning position therein, so that after being extinguished by my improved device the wick is at proper height to be relighted. Also, still another and more important object I have in view by my invention is, to provide a self-acting extinguisher that shall operate to extinguish the flame of the lamp in case the lamp be turned over on its side or upset, thereby preventing the contents of the lamp from taking fire should the lamp be broken, or should the oil otherwise escape by tipping the lamp too much from a perpendicular position.

The drawing shows a vertical section of a burner with my improved extinguisher attached, and in which *a* is the rim of the burner. *b* is the horizontal perforated plate below the top of the wick-tube and surrounding it. *d* is a taper tube, the largest at the top, inserted in plate *b*, by the side of the wick-tube, and in the side of which, next to the outer edge of plate *b*, is a vertical slot. Attached to the burner, between the upper end of tube *d* and the wick-tube, is a wire yoke, *i*, with its two ends bent outwardly at right angles to the wick-tube. B is an extinguisher-cap, hinged and swinging upon yoke *i*. Attached to each end of cap B is a perforated arm, *n*, and also a third center-arm, *o*, likewise perforated. The perforations in the said arms *n* of cap B are of an oblong form, and, as said cap stands open, are nearly vertical. Hinged upon and hanging to arm *o* by a wire hook inside of tube *d* is a metallic weight, *r*, and the wire forming said hook passes down through weight *r*, and terminates in an eye-shaped end, opening toward the slot in tube *d*. D is a lever, swinging on a fulcrum at a convenient point near and under the rim of the burner, beyond which its outer end extends sufficiently far to be conveniently pressed upon with the finger, and its inner end projects through the vertical slot in tube *d* and through the eye-piece at the base of weight *r*.

The operation of the extinguishing device is as follows: By bearing down upon the end of lever D, the weight *r* is lifted up, and, by means of its hook-connection with center-arm *o* on cap B, the cap is swung over, so as to cover the top of the wick and extinguish the flame of the lamp.

The oblong perforations in arms *n* on cap B, through which project the ends of yoke *i*, permit the cap to rise up and swing over the top of the wick, thereby clearing the end of it; and also when the cap swings back off from the wick it has a like movement. This arrangement allows of operating the extinguisher without disturbing the position of the wick, which would not be the case were the perforations in arms *n* not oblong. Of course the extinguisher might be operated if said holes were round, but not with equal advantage. Upon releasing the end of lever D the weight *r* drops down and swings cap B off from the top of the wick.

The tube *d* is made tapering in order to facilitate the outwardly-sliding motion of weight *r*, when the lamp may happen to be upset, or when tipped to a dangerous degree. This movement by gravitation of weight *r*, if the lamp is tipped or upset, causes the cap B to swing over and extinguish the flame of the lamp before any oil that may be accidentally spilled from it can ignite or be exploded.

By the use of my device, as hereinbefore described, the wick of the lamp is left in position to be relighted; and upon removing the finger from lever D, after having extinguished

the flame, the weight *r* falls down and swings cap B off from the top of the wick, leaving it as seen in the drawing.

What I claim as my invention, is—

1. The combination, with a kerosene-lamp burner, of the lever D, the weight *r*, and its wire connections, yoke *i*, and cap B, substantially as set forth, and for the purpose specified.

2. An extinguisher-cap, having a lifting and falling and swinging motion by the side of and over the top of the wick-tube, in combination with a kerosene-lamp burner and yoke *i*, weight *r*, and lever D, substantially as and for the purposes set forth.

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Witnesses:

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