

(No Model.)

S. A. HOOVER & A. LOUGHEED.
LAMP BURNER.

No. 578,875.

Patented Mar. 16, 1897.

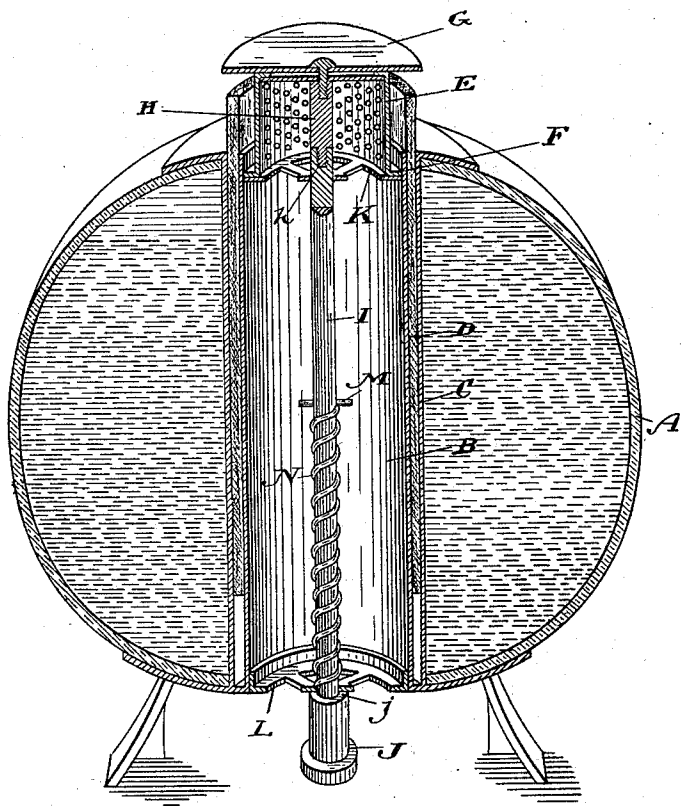


Fig. 1

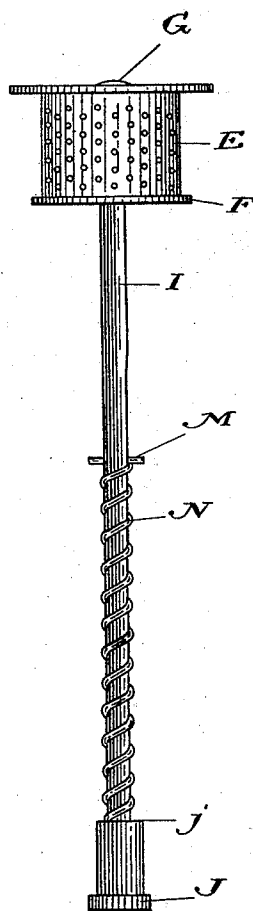


Fig. 2

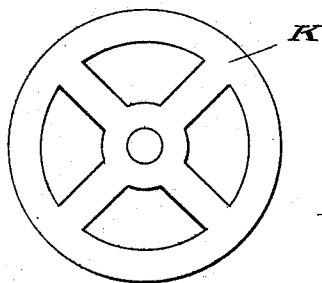


Fig. 3

Witnesses

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UNITED STATES PATENT OFFICE.

SIDNEY A. HOOVER AND AARON LOUGHEED, OF PORT ARTHUR, CANADA.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 578,875, dated March 16, 1897.

Application filed March 20, 1896. Serial No. 584,114. (No model.)

To all whom it may concern:

Be it known that we, SIDNEY A. HOOVER, merchant, and AARON LOUGHEED, surveyor, of Port Arthur, in the district of Thunder Bay, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Lamp-Burners; and we hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to certain new and useful improvements in that class of lamp or lantern burners in which the wick-tube consists of a sleeve extending from the bottom to the top of the oil-receptacle, fitted at the top with a suitably-supported disk to distribute the air to the flame of the wick, which passes upward through the said sleeve; and the invention consists, essentially, of the device hereinafter more fully set forth, and more particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective sectional view showing our improvements. Fig. 2 is a detailed view of the disk and actuating-rod. Fig. 3 is a detail view of the supporting-guides for the actuating-rod.

Like letters of reference refer to like parts throughout the specification and drawings.

Within the bowl or oil-receptacle A is a sleeve B, which extends from the bottom to the top of the bowl. Surrounding the sleeve B is a perforated tube C, and interposed between the tube C and the sleeve B is a wick D. It might here be stated that the sleeve B is so arranged that a free passage of air is provided from the bottom of the bowl to the top of the burner. At the top of the sleeve B is a perforated tube E, of a lesser diameter than the inner diameter of the sleeve, in order that the tube E can freely move within the sleeve. To enable the tube E to maintain its proper relative position to the sleeve B, we provide its lower end with a flange F, which snugly fits against the inner face of the sleeve. The top of the tube E is fitted with a disk G, of a greater diameter than the outer diameter of the perforated tube C, in order that it will overlap the wick and said tube C. Depending from the under side of the middle of the disk G is a pin H, the lower end H of which is screw-threaded to receive the upper end of the actuating-rod I. The actuating-rod I extends from the lower end

of the pin H to a point below the lower end of the sleeve B, and fitted to the lower end of the rod I is a thumb-nut J, adapted to be grasped by the operator. The upper end of the rod I is maintained in its proper position by a guide K, suitably connected to the rod I, while the lower end of the rod I is held by a guide L, connected to the lower end of the sleeve B. The thumb-nut J is fitted with a shoulder *j*, which abuts against the under side of the guide L and limits the upward movement of the actuating-rod. Passing diametrically through the middle of the actuating-rod is a pin M, and coiled on the actuating-rod, between the under side of the pin M and the top of the guide L, is a spring N. It has heretofore been customary to immovably fix the tube E to the sleeve B and to make the disk G of substantially the same diameter as the inner diameter of the sleeve.

The purpose of the tube E and disk G is to distribute the air to the flame.

By rendering the tube E and disk G movable and increasing the diameter of the disk to overlap the top of the wick-tubes the disk can be utilized for the purpose of instantaneously extinguishing the flame when drawn downward by the actuating-rod, thus preventing the escape of noxious carbonic gases, in addition to rendering the lamp less liable to explosion and facilitating the extinguishing of the light.

The operation of the device is as follows: When it is required to extinguish the light, the actuating-rod is drawn downward by an operator, drawing downward at the same time the tube E and disk G until the disk comes into contact with the wick and its tubes. The contact of the disk G at once extinguishes the flame, and immediately upon the release of the actuating-rod the spring N lifts the rod until the shoulder *j* of the thumb-nut abuts against the under side of the guide L and arrests the upward movement of the actuating-rod. The thumb-nut J is so adjusted that when the upward movement of the actuating-rod is arrested the disk and the tube E will be returned to their normal position.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A flame-extinguisher for lamps or lanterns,

consisting of a bowl or oil-receptable, a sleeve within the bowl extending from the top to the bottom, a perforated tube surrounding the sleeve to form a wick-chamber, a perforated tube within the top of the sleeve, the
5 lower end of which is provided with a flange bearing against the inner face of the sleeve, a disk fitted to the top of the perforated tube overlapping the said sleeve, a screw-threaded
10 pin depending from the under side of the disk, an actuating-rod located within the said sleeve extending below the bottom of the bowl, the upper end of which is fitted to the said pin, a thumb-nut fitted to the lower end

of the actuating-rod, a guide connected to the 15 bottom of the sleeve to maintain the actuating-rod in its proper position, a cross-pin fitted to the actuating-rod between the guide and the top disk, a spring coiled on the actuating-rod between the cross-pin and the said 20 guide, substantially as specified.

Port Arthur, February 28, A. D. 1896.

SIDNEY A. HOOVER.
AARON LOUGHEED.

In presence of—

T. J. C. RODDEN,
W. F. GILLEY.