H. L. IVES.
Lamp-Burner.

No. 211,021. Patented Dec. 17, 1878.

Fig. 1.

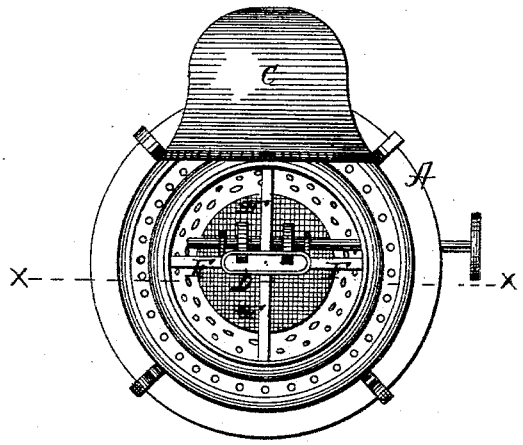
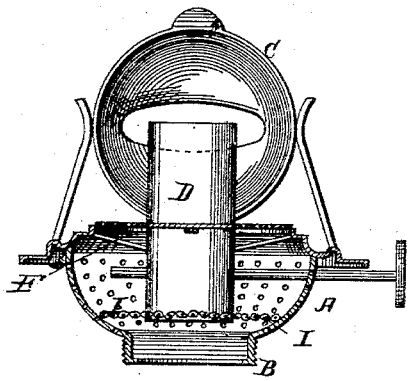


Fig. 2.



WITNESSES
Aubrey Toulmin
F. J. McCarthy.

INVENTOR
Hiram L. Ives
By his Attorneys
Alexander Mason

UNITED STATES PATENT OFFICE.

HIRAM L. IVES, OF TROY, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN S. SAUNDERS, OF SAME PLACE.

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. **211,021**, dated December 17, 1878; application filed September 12, 1878.

To all whom it may concern:

Be it known that I, HIRAM L. IVES, of Troy, in the county of Rensselaer, and in the State of New York, have invented certain new and useful Improvements in Lamp-Burners; and do hereby declare that the following is a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The object of my invention is to so construct a burner for burning kerosene or coal oil, whether a round or flat wick is used, that there can no heat descend into its base from the flame, and consequently keeping the base of the burner-collar of the lamp and the oil perfectly cool, thereby preventing explosions; and to this end the nature of my invention consists in entirely disconnecting the wick-tube from the base of the burner, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of a burner embodying my invention. Fig. 2 is a central vertical section of the same.

A represents the shell of the burner, with its screw-base B and dome C, constructed in any of the known and usual ways. D represents the wick-tube, which is rigidly connected to the shell A by means of cross-bars F F, but does not extend to or come in contact with the base B of the burner.

It is a well-established fact that the heat is conducted to the base of the burner and collar of the lamp through or by means of the wick-tube; and heretofore the wick-tube has always extended through the base of the burner and connected with it, conducting heat from the flame into the top of the lamp, heating it and the oil, thereby causing gas to form in the lamp from the heated oil, and, by its becoming sufficiently hot by this conducted heat from or through the wick-tube, causing an explosion.

In my construction I disconnect the wick-tube from the base of the burner by not letting it extend down to the same; or it may run through the base by making the slot in the base so broad that the tube will not touch it at any place. By this means I prevent any heat from passing down the wick-tube into the base of burner or the lamp, making it impossible to explode a lamp from the heat from the flame.

To the bottom of the wick-tube is attached a piece of wire-gauze, I, to prevent the ignition of the gas from the lamp if there should be any. This invention is applicable to all burners where a wick is used to burn kerosene or coal oil, whether a flat or a round wick, whether one tube or more, and whether used for lamps or coal-oil stoves.

I do not broadly claim in a lamp-burner devices for preventing the descent of the heat from the flame to the oil-reservoir; nor do I claim a divided wick-tube, as I am aware that such have been heretofore known.

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

1. The wick-tube suspended free from contact with the base of the burner by the braces F F, and connected to the wire-gauze diaphragm I, all substantially as and for the purposes set forth.

2. The combination of the perforated shell A, the suspended wick-tube D, braces F F, and the wire-gauze diaphragm I, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of August, 1878.

HIRAM L. IVES.

Witnesses:
COLE H. DENIO,
ALVAH TRAVER.