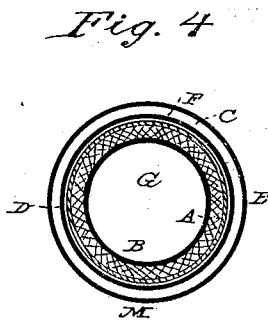
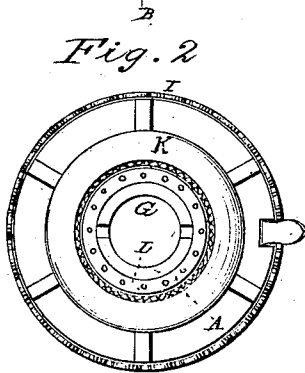
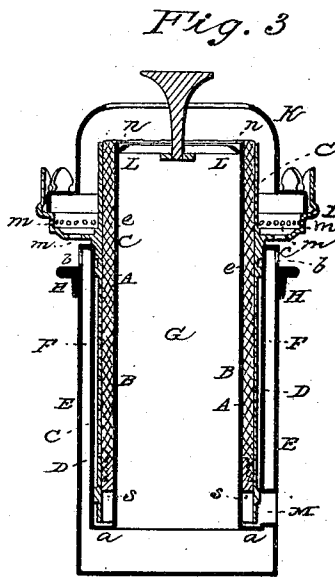
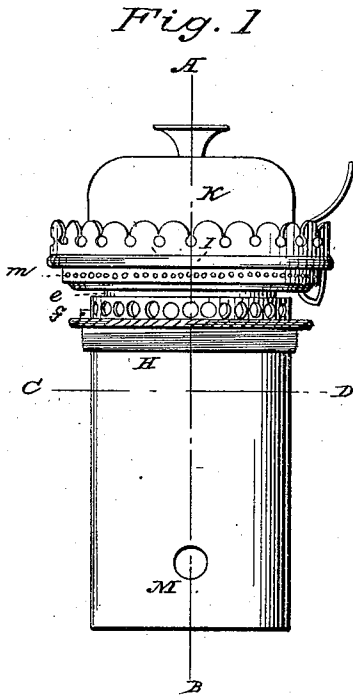


C. E. LYON.
Lamp Burner.

No. 101,748.

Patented April 12, 1870.



Witnesses
Thos. B. Dodge
Albert C. Lind

Inventor.
C. E. Lyon

United States Patent Office.

C. E. LYON, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 101,748, dated April 12, 1870.

LAMP.

The Schedule referred to in these Letters Patent and making part of the same

Know all men by these presents:

That I, C. E. LYON, of the city and county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Lamps; and I do hereby declare that the following is a full, clear, and exact description, reference being had to the accompanying drawings forming a part of this specification, in which—

Figure 1 represents a side view of a lamp-burner, illustrating my improvements.

Figure 2 represents a plan view of the same.

Figure 3 represents a vertical central section at line A B, fig. 1; and

Figure 4 represents a horizontal section of same at line C D, fig. 1.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

The nature of my invention consists—

First, in the peculiar construction and arrangement of the air tube or chamber, as hereinafter explained.

Second, in the combination with the top of the wick tube of an oil-guard and guide, as herein described.

Third, in the combination of the wick-carrier and chimney-support with the air-chamber and oil receptacle, substantially in the manner hereafter explained.

Fourth, in the combination of a guiding and holding-screw with the tops of the air-chamber and wick-carrier, as hereafter explained.

In the drawings the part marked A is the wick, supported around a cylindrical wick-tube, B, by the wick-carrier C, while a second or outer cylindrical tube D is arranged around the wick-carrier, and joined at its lower end to the lower end of the wick-tube B, by an annular flange a, thereby forming a receptacle for the oil around the wick.

A casing, E, is arranged outside the tube D, and joined thereto at the top by an annular flange, c, by means of which the tubes B and D are supported, and also the wick-carrier, the latter being provided with a shoulder, e, that rests upon the top of the flange c, as indicated in fig. 3.

An air-passage, F, is formed between the casing E and the tube D that communicates with the central air-chamber G, and into which the air is admitted through the holes b, formed through the casing E, near its top. A screw-thread is formed on the projection H, around the casing, whereby the burner may be screwed into the body of the lamp upon which it is used.

The wick-carrier is perforated in its lower part, to enable the oil to pass freely into the wick, and it is also provided with flanges or rings on its outer side, near the top and bottom, that rest against the inside of the tube D to keep the carrier steady, while the space between said rings allows free passage for the oil around all portions of the wick.

Secured to the wick-carrier D is a chimney-support, I, upon which rests the cone K and chimney.

Perforations or holes, m, are formed through the flange of the chimney-support, below the cone, through which the air passes to the outside of the flame, the air for supplying the inside of the flame passing through the holes b, down the air passage F, and up through the chamber G, in the center of the wick-tube B, as indicated by arrows in fig. 3.

Upon the interior of the wick-tube B, at its upper end, is secured an oil-guard, L, which is perforated with holes a short distance from its junction with the tube B, for the passage of the air, while holes, n, are formed through the tube B, through which any oil that may run over the edge of the tube is guided back into the wick, thereby guarding against any accident or inconvenience that might be caused by the oil running down and filling up the bottom of the air-chamber G.

A screw, F, is arranged in the upper part of the casing E, the end of which fits into a groove formed around the wick-carrier, whereby the latter is held from being drawn out, but is, at the same time, allowed to turn around, for the purpose of raising the wick, the operation of which is accomplished in the usual manner by means of a spiral groove around the tube B and a traveling ring, S.

The oil is admitted to the receptacle through the opening M in the side of the casing E.

The cone K may be made high, as shown in the drawings, or it may be cut down so that the top will be on line with the top of the tube B.

By supporting the tubes B and D with the flange c on the outside casing E, and securing the chimney-support to the wick-carrier, a very compact and elegant burner is produced, while, at the same time, it is more durable, and can be constructed with less trouble and expense than the ordinary Argand burner.

If preferred the chimney-support may be so constructed that it can be slipped off from the wick-carrier when desired, and different forms or sizes substituted in its place.

Having described my improvement in lamps,

What I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. The air-chamber or tube formed by the union of parts E and D just above the holes b, and below the base of the chimney-support, substantially as shown in fig. 3 of the drawings.

2. The oil-guard L, combined with and arranged upon the wick-tube B, substantially as and for the purposes set forth.

3. The combination of the wick-carrier and chimney-support, the oil-receptacle, and air-chamber, substantially as and for the purposes set forth.

4. The combination of the guiding and holding-screw f with the air-chamber and wick-carrier, substantially as and for the purposes set forth.

Witnesses:

C. E. LYON.

THOS. H. DODGE,
A. E. PETRICE.