

(No Model.)

F. FERGUSON.
LAMPLIGHTER.

No. 522,462.

Patented July 3, 1894.

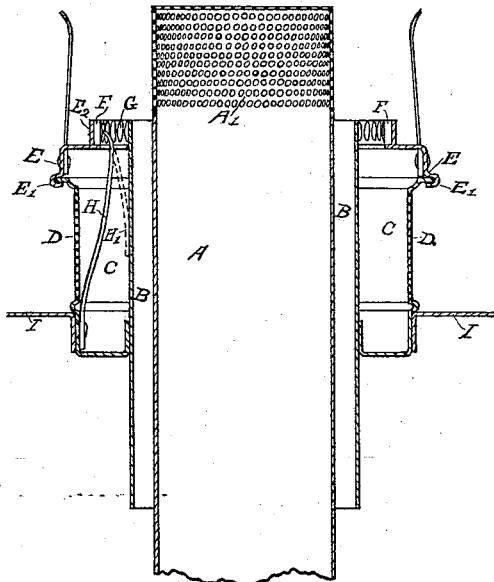


Fig. 1.

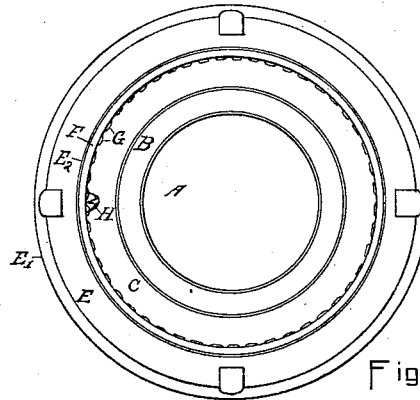


Fig. 2.

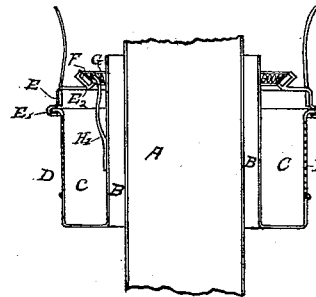


Fig. 5.

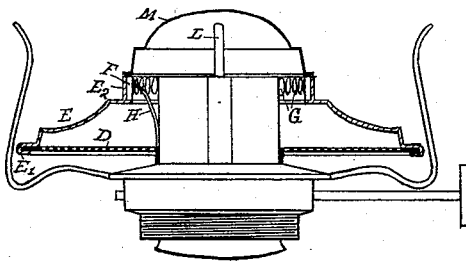


Fig. 3.

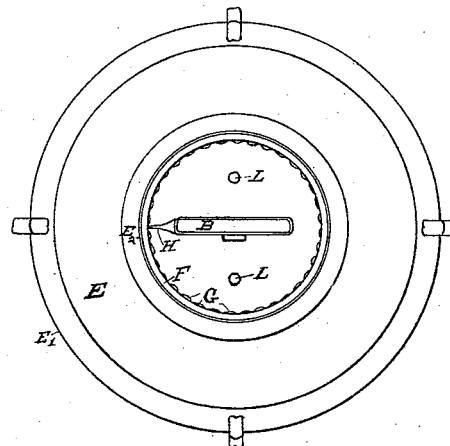


Fig. 4

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UNITED STATES PATENT OFFICE.

FLORIAN FERGUSON, OF SEATTLE, WASHINGTON.

LAMPLIGHTER.

SPECIFICATION forming part of Letters Patent No. 522,462, dated July 3, 1894.

Application filed March 3, 1893. Serial No. 464,557. (No model.)

To all whom it may concern:

Be it known that I, FLORIAN FERGUSON, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Lamplighters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to lighting mechanisms for lamps and consists essentially of a rotatable circular ring placed in juxtaposition to the lamp wick, and carrying a ring of friction caps, and a fixed scratcher or igniting point which bears upon the ring of caps and ignites them as they are rotated by it.

In the drawings Figure 1 shows a central sectional elevation of a central draft, circular wick burner of the class such as those known under the trade names of "Rochester," "Pittsburgh," "Bradley & Hubbard," &c. Fig. 2 is a top plan view of the same. Fig. 3 is an elevation, partly in section of a common flat wick burner, showing the way of applying my lighter to this class of burners. Fig. 4 is a top plan view of the same with the cap removed. Fig. 5, is a view showing a slightly different manner of placing the ring which carries the caps.

Similar letters of reference refer to similar parts in the various figures.

In the burner shown in Figs. 1 and 2, A, represents the central draft tube, B, the annular space occupied by the wick, and C, the outer draft chamber immediately surrounding the wick and receiving its air through the perforations in its outer wall D. These points are common to all of this class of burners although the details of construction vary in each.

The upper portion or top of the outside air chamber C, has its lower edge at E, beaded over the upper edge of the lower portion D, but loosely so that it may turn thereon. This rotatable ring E, has the flange E², located on or about the level of the wick. This flange is adapted to hold a ring F, of pasteboard or other suitable material which con-

tains on its inner surface a number of friction caps G.

Attached to a non-rotating part of the burner, either as shown in full lines at H, Fig. 1, or as shown in dotted lines at H, is a spring scratcher or igniter having its point pressing upon the inner surface of the ring F, which carries the friction caps.

When the ring E, is rotated the caps will be rotated under this point and the friction produced thereby will ignite them and the flame will leap across the space separating them from the wick and light the lamp. The draft of air passing up between the caps and the wick is sufficient to prevent their being ignited by the heat of the flame.

The ring F, is large enough to accommodate a large number of caps and the lamp may be lighted as many times as there are caps on the ring. When the caps have all been used up the ring may be removed and a fresh one put in its place. The cost of these caps is nominal, being less than that of matches and moreover the bother of getting rid of the burned matches is obviated. Where a lamp has a globe and a fancy shade it is sometimes a great deal of bother to have to remove these to light the lamp with a match and then have to replace them. With my invention it is not necessary to remove anything, a simple slight turn of the rim E, sufficing to light the lamp.

In Fig. 5, I have shown a burner having the holder for the ring of caps F, in a slightly different position. It is dropped below the level of the wick and made of a conical form so that the caps face upward toward the wick. This cuts off the light a little less than does the other form and also makes it easier to examine the ring to see how many caps are left so that it may be renewed before it is completely exhausted. Figs. 3 and 4 show my invention applied to an ordinary flat wick burner. In Fig. 3, D, represents a sheet of perforated metal or gauze which supports the rotating piece E, which carries the caps in a similar manner to that shown in Fig. 1.

The scratcher or igniter H, is attached to the side of the wick tube. The cap M, is

fixed upon the upright pins L, which are supported by the gage D, and prevent the cap from rotating with the ring E and permit its removal to renew the ring of caps. Obvious
5 mechanical changes may be made in the details without departing from the essential features of my invention.

To light the lamp the piece E, is grasped by its outer rim and rotated sufficiently to bring
10 one of the caps under the igniter H. The friction caused by this ignites the cap and the flame leaps across the space between and ignites the wick.

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

1. In a lamp burner, the combination with the wick tube, of an external rotatable ring surrounding said tube and adapted to be
20 grasped by the hand to rotate it and provided with a flange forming a support to hold the friction match material in position with its face toward and at a distance from the wick,

and means for igniting the friction match, substantially as and for the purposes described. 25

2. In a lamp burner, the combination with the wick tube, of a flange forming a support to hold a friction match material in position with its face toward and at a distance from
30 and surrounding the wick tube, an igniter for said friction match material, one of said parts being rotatable and adapted to be grasped by the hand for rotating it to cause the igniter to ignite the friction match material, and an air draft opening between the
35 wick and flange supporting the match material for an upward current of air between the wick and match material support, substantially as and for the purposes described. 40

In testimony whereof I affix my signature in presence of two witnesses.

FLORIAN FERGUSON

Witnesses:

F. R. BULLOCK,

H. L. REYNOLDS.