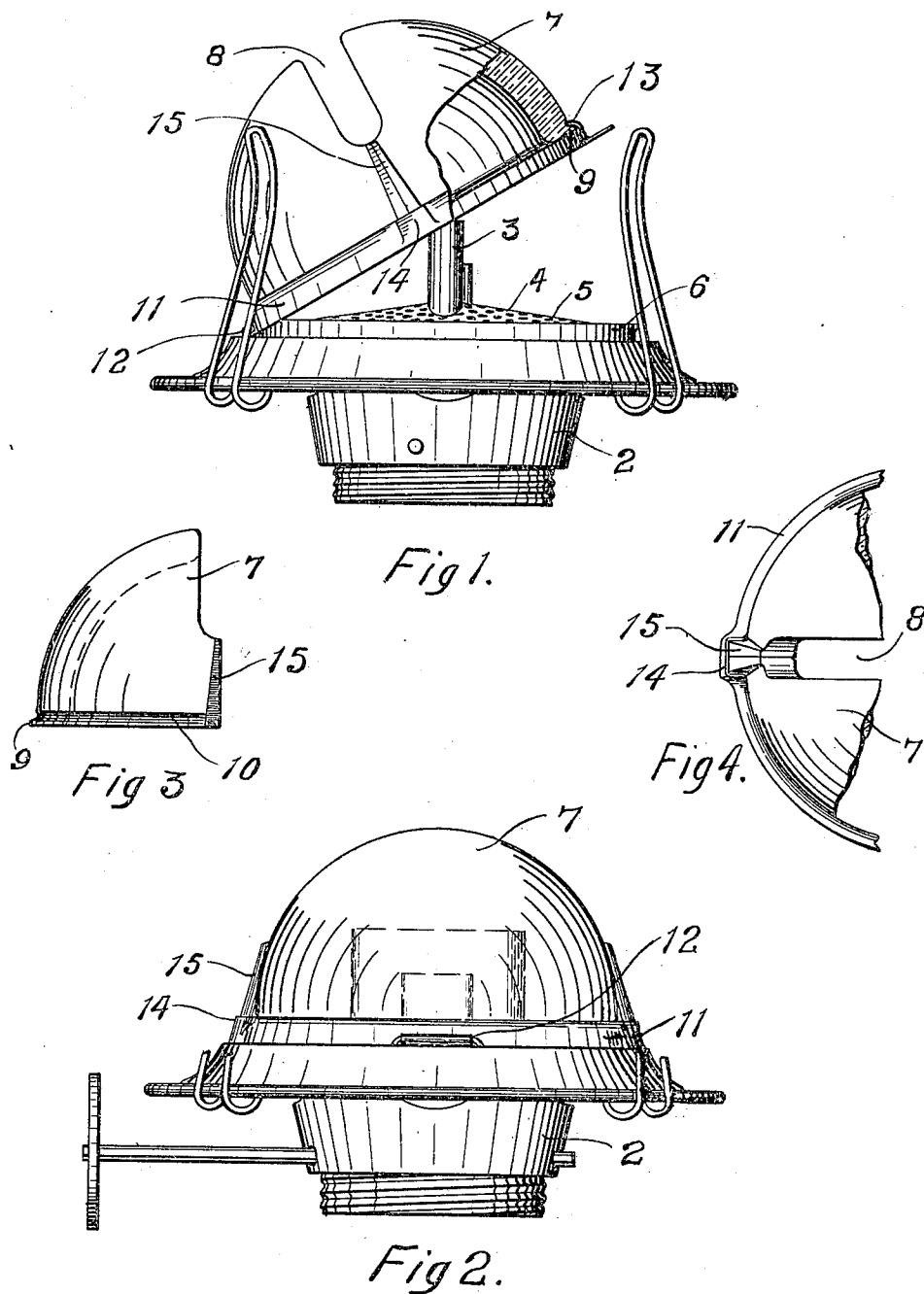


No. 807,838.

PATENTED DEC. 19, 1905.

R. H. MAPLE.
LAMP BURNER.

APPLICATION FILED OCT. 22, 1904.



WITNESSES
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ROY H. MAPLE, OF MINNEAPOLIS, MINNESOTA.

LAMP-BURNER.

No. 807,838.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed October 22, 1904. Serial No. 229,567.

To all whom it may concern:

Be it known that I, ROY H. MAPLE, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful Improvements in Lamp-Burners, of which the following is a specification.

My invention relates to oil-lamp burners, and particularly to those employing a glass cone for the purpose of increasing the radiation of light from the lamp; and the object of the invention is to provide improved means for securing the glass cone on the burner to the end that the parts can be easily and quickly assembled preparatory to packing and shipping and can be readily replaced in case of breakage.

A further object is to provide a securing means for the cone that will prevent it from slipping out of place while the burner is in use.

The invention consists generally in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a lamp-burner with a glass cone having my invention applied thereto and showing the cone and its securing means in a tilted position. Fig. 2 is a similar view of the burner, showing the cone in its horizontal position ready for use. Fig. 3 is a detail view of one section of the cone. Fig. 4 is a plan view of one side of the cone having the means for preventing rotary movement thereof on the burner.

In the drawings, 2 represents an ordinary brass burner having the usual wick-tube 3, a plate 4, provided with air-inlet holes 5, and a flange 6, inclosing the same.

7 represents the cone, composed of glass and made, preferably, in two sections with a flame-opening 8 between them. By making the cone in two pieces there is less danger of breakage on account of unequal expansion and contraction of the glass. The glass cone, as is well known, serves to increase the radiation from the lamp; but as cones of this kind have been used for many years I make no claim, broadly, to the same herein, my invention residing in the improved means for securing the cone to the burner, whereby the radiation obtained through a cone as ordinarily mounted will be considerably increased and the manner of securing the cone to the burner improved and simplified. In carrying out my invention I

provide a narrow peripheral flange 9 at the bottom of the cone, above which is a shallow annular groove 10. A ring 11 is hinged at 12 on the burner and adapted to snap down over the flange 6 in the ordinary way, and said ring is provided on its upper edge with an inwardly-turned lip 13, that is adapted to enter the groove 10 and engage the flange 9 and lock the cone against upward movement, it being understood that the cone is inserted into the ring from the under side.

To prevent rotary movement of the cone in the ring, I provide offsets or recesses 14 in the opposite sides of the ring, and on the cone-sections I provide ribs 15, that taper from the lower edge of the cone to the ends of the flame-opening.

In putting the cone into the ring the narrow ends of the ribs will first enter the recesses and act as guides to direct the cone to its proper position in the ring. The lower ends of the ribs fit snugly in the recesses, and rotary movement of the cone will be impossible, and there will be no danger of the flame-slot getting out of adjustment with respect to the wick-tube. When the cone has been inserted into the ring, it is swung to a horizontal position, with its base bearing up the top of the flange 6, and the ring having been snapped down over the flange the cone will be firmly held, though it can be easily removed at any time by disengaging the ring from the flange and raising it to an inclined position. The ring 11 and its lip are very narrow, and there is practically no obstruction to the radiation of light through the entire surface of the cone, as the lip merely covers a very shallow flange at the bottom. The cone cannot slip out of place while in use, but can be readily removed in case of breakage of either section.

I claim as my invention—

1. The combination, with a burner having a wick-tube, of a ring having means for attachment to said burner, and an inwardly-turned lip at its upper edge, and a glass cone inserted into said ring from the under side and having a flame-opening to coincide with said tube, and an annular groove near its lower edge to receive said lip, substantially as described.

2. The combination, with a lamp-burner having a wick-tube, an air-inlet plate and a vertical flange inclosing the same, of a clamping-ring fitting down around said flange and provided at its upper edge with an inwardly-turned lip projecting above said flange, a glass

cone inserted into said ring from the under side and having a peripheral flange that rests upon said burner and is clamped between it and said lip, substantially as described.

5 3. The combination, with a burner having a wick-tube, of a ring having means for attachment to said burner and provided with offsets or recesses and having a cone-retaining means, a glass cone inserted into said ring
10 from the under side and having a flame-opening to coincide with said tube and prevented from passing through said ring by said retaining means, and ribs provided on said cone to enter said recesses and thereby prevent ac-
15 cidental rotation of said cone.

4. The combination, with a burner having a wick-tube, of a ring having means for attachment to said burner and provided with offsets or recesses, and a cone-retaining
20 means, a glass cone inserted into said ring from the under side and held therein by said retaining means and provided with ribs tapering from the bottom toward the top to enter the recesses in said ring, substantially
25 as described.

5. The combination of a burner having a wick-tube, and a ring having means for attachment to said burner, and a glass cone fitting in said ring and having a flame-opening
30 to coincide with said tube, the lower diameter of the cone being greater than the diameter of the opening in the upper portion of the ring, and the upper portion of the ring grasping the cone and constituting a seat and holder
35 therefor, whereby the cone may be inserted through the ring and brought to position on its seat from beneath the ring and be held by the seat against accidental displacement therefrom, substantially as described.

40 6. The combination, with a burner having a wick-tube, of a ring or collar, a glass cone inserted into said ring from the under side

and having a flame-opening to coincide with said tube, and said ring having means for attachment to said burner, and a retaining
45 means for said cone, and said ring being also provided with means to prevent the accidental rotation of said cone therein, substantially as described.

7. The combination, with a burner having
50 a wick-tube, of a clamping-ring hinged on one side to said burner between said tube and the outer portion of the burner that supports the chimney, said ring being provided with an inwardly-turned upper edge, and a glass cone
55 inserted into said ring from the under side and having a lower edge adapted to rest upon said burner, and a flame-opening to coincide with said tube, and said cone being also provided with a peripheral flange that is clamped
60 between the upper edge of said ring and burner when the device is in use.

8. The combination, with a burner having a wick-tube, of a ring having means for attachment to said burner, and a glass cone composed of two sections fitting in said ring and
65 having a flame-opening to coincide with said tube, the lower diameter of the cone being greater than the diameter of the opening in the upper portion of the ring, and the upper
70 portion of the ring grasping the cone and constituting a seat and holder therefor, whereby the cone may be inserted through the ring and brought to its seat from beneath the ring and be held by the seat against accidental displacement
75 therefrom, substantially as described.

In witness whereof I have hereunto set my hand this 18th day of October, 1904.

ROY H. MAPLE.

Witnesses:

RICHARD PAUL,
C. MACNAMARA.