(No Model.)

# J. G. HALLAS.

## LAMP BURNER.

No. 307,644. Patented Nov. 4, 1884.

Fig. 1

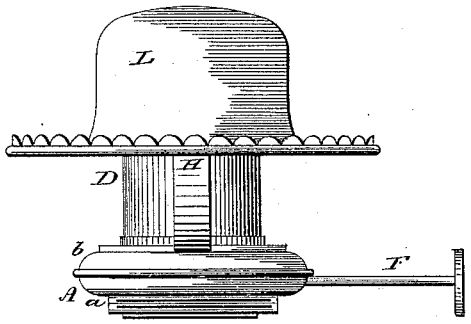



Fig. 4

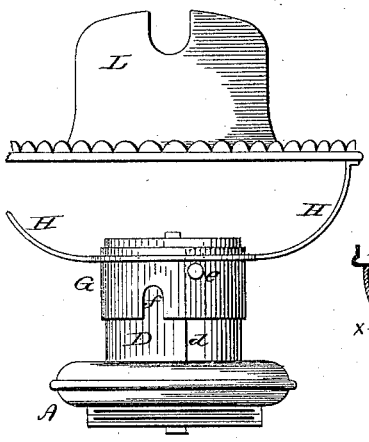



Fig. 2

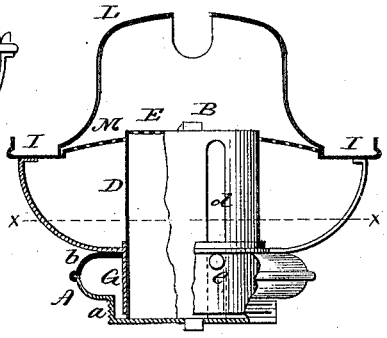



Fig. 5

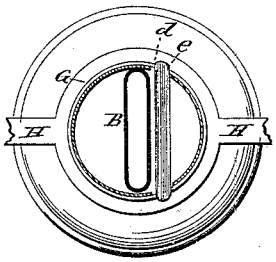



Fig. 3

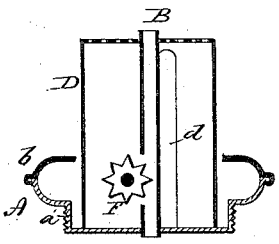
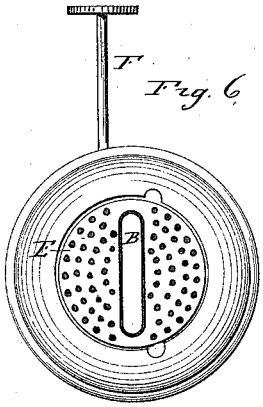



Fig. 6

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# UNITED STATES PATENT OFFICE.

JAMES G. HALLAS, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE BENEDICT & BURNHAM MANUFACTURING COMPANY, OF SAME PLACE.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 307,644, dated November 4, 1884.

Application filed April 10, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES G. HALLAS, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Lamp-Burners; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of the burner, the parts in their normal or operative condition; Fig. 2, a sectional side view at right angles to the plane of the wick-tube; Fig. 3, a vertical section through the base, cylinder, and wick-tube, the adjusting part of the burner removed; Fig. 4, a side view showing the chimney-rest in its raised position; Fig. 5, a horizontal section on line *x x*, looking down; Fig. 6, a top view of the base, cylinder, and wick-tube, the adjustable parts removed.

This invention relates to an improvement in that class of lamp-burners in which the chimney-rest and cone are made movable vertically independent of the base and wick-tube, and whereby the wick may be trimmed or lighted without entirely removing the chimney-rest, cone, or chimney, the object of the invention being to make the construction such that the chimney-rest will be firmly held either in its up or down position; and in such construction, as more fully hereinafter described, and particularly recited in the claims, my invention consists.

A represents the base or burner constructed with the usual screw, *a*, to fit the lamp-collar. Centrally in this disk the wick-tube B is fixed. Around the wick-tube is a fixed hollow cylinder, D, extending from the extreme bottom of the base up to near the upper end of the wick-tube, the upper end of the cylinder closed by a perforated top, E, which serves as a part of the air-distributer. The wick-adjuster F is also arranged in the usual manner transversely through the base. The top plate, *b*, of the base turns inward in a horizontal plane, but stops a little short of the cylinder D, so as to leave a space between the cylinder D and the edge of the plate *b*, as seen in Fig. 6.

On the cylinder D is a sleeve, G, arranged to slide freely up and down, and so as to pass down through the opening between the cylinder D and the edge of the top plate of the base, as seen in Fig. 2. From this sleeve two or more arms, H, extend outward and upward, attached to and so as to support the chimney-rest I. The chimney-rest supports the dome L in the usual manner, and at the bottom of the dome is the perforated air-distributer M, also of usual construction, except that there is a central opening through it corresponding to the cylinder D, and so that when the chimney-rest is in its down position, as seen in Fig. 2, the upper end of the cylinder D closes the opening in the distributer M, the top E of the cylinder forming substantially a part of the air-distributer, but so that when the chimney-rest is raised, as seen in Fig. 4, then the distributer is taken away from the cylinder D, and a free space is left between the distributer or chimney-rest and the top of the wick-tube, so that the wick may be trimmed or lighted, and if lighted the central opening through the distributer permits the flame to pass up through the distributer as the distributer is returned into the position seen in Fig. 2. It is necessary to hold the dome in its proper relation to the wick-tube in order that the slit in the dome may correspond to the tube. To this end a vertical slot, *d*, is cut in opposite sides of the cylinder, and in a plane with the wick-tube, as seen in Fig. 5. Then through the sleeve G and through the slots a pin, *e*, is passed, made fast in the sleeve, but so as to slide up and down in the slots *d* as a guide to prevent rotation of the sleeve and the parts which it carries. As the sleeve descends below the wick-adjuster, a notch, *f*, is cut in opposite sides of the sleeve, so that the sleeve may pass to its extreme down position without interference with the wick-adjuster shaft. By opening into the base around the cylinder, to permit the sleeve G to extend down so near the bottom of the base, I am enabled to make a sleeve of suitable length without adding to the length of the burner—as, for illustration, were the sleeve entirely above the base, then the height of the burner would be increased accordingly; or, if the sleeve were so short as to be adapted

to be worked entirely above the base, then its bearing upon the cylinder would be so short as to make it weak and liable to derangement.

I do not claim, broadly, making the chimney-rest and cone vertically adjustable with relation to the wick-tube, nor do I claim, broadly, making it so adjustable on a cylinder around the wick-tube, the essential feature of my invention being the cutting away of that portion of the upper base-plate which adjusts the central tube, so that the outer or telescoping tube may pass down between the edge of said plate and the said inner tube, thereby making a shorter and more compact burner.

What I do claim as my invention is—

1. The combination of the base, the wick-tube fixed therein, the cylinder D, concentric with the base and surrounding the wick-tube, the top plate of the base constructed with a recess between it and said cylinder, and the sleeve arranged upon the cylinder, so as to extend down upon the same through the space between it and the edge of the top plate of the base, and carrying the chimney-rest and cone, substantially as described.

2. The combination of the base, the wick-tube B, and cylinder D, both fixed to the base, the upper plate of the base extending inward nearly to but so as to leave a space between it and the said cylinder, the sleeve G arranged on said cylinder, so as to pass down between it and the edge of the base, the cylinder being constructed with vertical slots *d*, and the sleeve being provided with a pin, *e*, extending through said slots, the said sleeve carrying the chimney-rest and cone, substantially as described.

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Witnesses:

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