H. W. HAYDEN.

Improvement in Lamp Burners.

No. 115,315. Patented May 30, 1871.

Fig. 1.

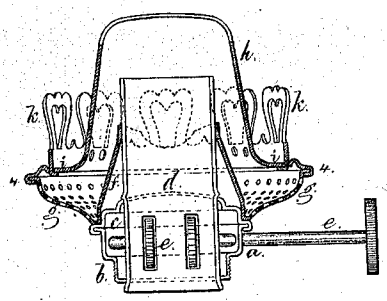


Fig. 2.

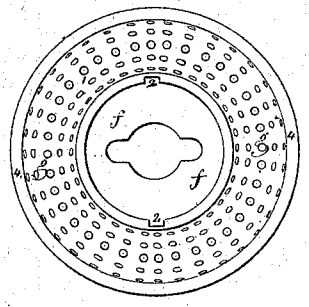
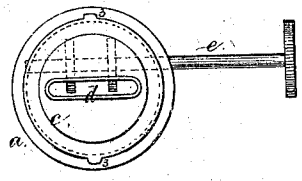


Fig. 3.



Witnesses,

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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

HIRAM W. HAYDEN, OF WATERBURY, CONNECTICUT, ASSIGNOR TO HOLMES, BOOTH & HAYDENS, OF SAME PLACE.

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 115,315, dated May 30, 1871.

To all whom it may concern:

Be it known that I, HIRAM W. HAYDEN, of Waterbury, in the county of New Haven and State of Connecticut, have invented and made an Improvement in Lamp-Burners, and the following is declared to be a correct description thereof.

Lamp-burners have been made with an elevated deflector or draft-plate in combination with a chimney-holder, air-distributer, and a tapering wick-tube guide, as seen in Letters Patent No. 91,590, granted June 22, 1869.

My present invention is made for facilitating the lighting and trimming of lamps in which a conical deflector extending from the base of the chimney up above the wick is employed; and said invention consists in making a perforated air-distributer and wick-tube guide in one piece of metal, and a chimney-rest and conical deflector in another piece of metal, these two parts being removable from the wick-tube and ratchet-cap without extinguishing the flame, thereby giving great facility in the construction of the lamp and its use in lighting and trimming, and I combine with the aforesaid parts a spring chimney-holder that is attached to the base of the conical deflector.

The parts made in this manner are very strong, and the advantageous features of the aforesaid patent are applied to and combined in an ordinary lamp-burner having a flat wick and cone.

In the drawing, Figure 1 is a vertical section of the lamp-burner complete. Fig. 2 is an inverted plan of the air-distributer and wick-tube guide; and Fig. 3 is a plan of the wick-tube and ratchet-cap.

The base *a* of the burner, with the screw *b* for the reservoir, the ratchet-cap *c*, the wick-tube *d*, and wick-raiser *e* are of the well-known construction, and generally similar to those in the said patent. The wick-tube guide *f* is also similar to the wick-tube guide in the said patent; but instead of being made of a separate piece of metal from the air-distributer and united thereto by clasps, it is made out of the same piece of metal as the perforated air-distributer *g*, thereby making the parts much stronger and stiffer and lessening expense. The importance of strength in these parts will be apparent, because the power to screw and unscrew the burner is generally applied to the edge of the air-distributer and acts through the notches 2 and lugs 3 on the base *a* of the burner. The cone or deflector *h* has usually been made separate from the air-distributer and chimney-holder, so as to allow access to the wick; but by combining with the air-distributer and cone the wick-tube guide I am enabled to remove the upper part of the burner, and hence can attach the cone or deflector *h* directly to the air-distributer; this is effected by turning the edges over each other as at 4. The base *i* of the cone forms the chimney-rest, and to this the spring chimney-holder *k* is connected by means of projections passing through mortises in the rest, and bent up.

I claim as my invention—

The removable portion of the burner, made of two pieces of metal united at their edges and forming the deflector, chimney-rest, air-distributer, and wick-tube guide, in combination with a chimney-holder applied at the base of the cone, substantially as set forth.

Signed by me this 9th day of March, A. D. 1871.

H. W. HAYDEN.

Witnesses:

AUGUSTUS M. BLAKESLEY,

E. S. HAYDEN.