L. J. ATWOOD.

LAMP.

No. 187,800. Patented Feb. 27, 1877.

Fig. 1.

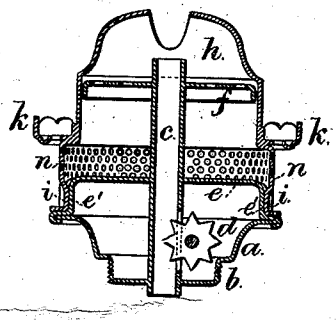


Fig. 2.

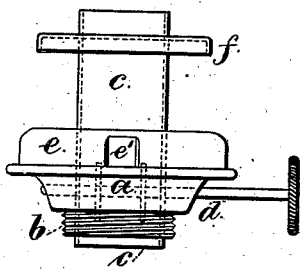


Fig. 4.

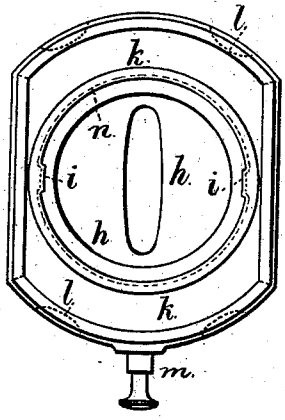
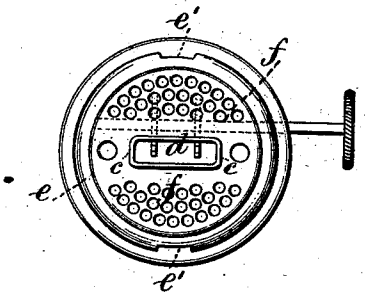


Fig. 3.



Witnesses

Chas. F. Smith

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Inventor

Lewis J. Atwood.

per Lemuel W. Serrell

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UNITED STATES PATENT OFFICE.

LEWIS J. ATWOOD, OF WATERBURY, CONN., ASSIGNOR TO THE PLUME & ATWOOD MANUFACTURING COMPANY OF SAME PLACE.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **187,800**, dated February 27, 1877; application filed February 5, 1877.

To all whom it may concern:

Be it known that I, LEWIS J. ATWOOD, of Waterbury, in the county of New Haven and State of Connecticut, have invented an Improvement in Lamps, of which the following is a specification:

Lamps have been made with an air-distributer near the upper end of the wick-tube, and a removable chimney-holder, as in my Patent No. 162,004, and the chimney-holder has been supported by the base or ratchet cap of the lamp, and it has been steadied by a guide within the movable portion of the burner coming against the wick-tube, as in my Patent No. 80,111; but in this latter instance the guide was attached to the removable portion of the burner, and had to be placed over the wick-tube.

In my present invention I make use of an open-work guide around the upper part of the wick-tube, permanently attached to the same, in combination with a deflector and chimney-holder attached together, and removable from the other portion of the burner, and with the lower part of the removable portion of a size and shape to fit upon the ratchet-cap or base of the lamp.

By this construction the lamp is more easily kept clean than those heretofore constructed, because the removable portion of the burner can be wiped out, and the perforations around the lower part thereof, and which form the air-distributer, are in the vertical, or nearly vertical, portions of the sheet metal; hence, they do not become obstructed by any carbonaceous accumulation, and the open-work guide that is around the wick-tube is accessible at each side, and hence can be kept clean, and the wick-tube and ratchet-cap are also exposed and easily cleaned.

In the drawing, Figure 1 is a vertical section of the lamp-burner complete. Fig. 2 is a side view of the wick-tube and stationary part of the burner, and Fig. 3 is a plan of the same; and Fig. 4 is an inverted plan of the removable portion of the burner.

The shell *a* of the burner is made with the screw *b* for the collar of the reservoir, and within the same are the wick-tube *c* and wick-raiser *d*. The ratchet-cap *e* covers the wick-raiser, and forms the top of the shell *a*, as usual. The edge of the ratchet cap or shell *a* is adapted to receive the lower part of the removable portion of the burner, and it is preferably cylindrical and made with recesses at *e'*, to receive corresponding projections *i* inside the bottom part of the removable portion of the burner, whereby the latter is properly positioned to the wick-tube. Around the wick-tube *c* there is the open-work guide *f*, that is preferably a disk with perforations, to form a secondary air-distributer, and it is permanently attached to the wick-tube.

The slotted dome or deflector *h* is connected with the chimney-holder *k*, and this is represented with straight sides, round ends, chimney-hooks *l*, and clamping-screw *m*, all similar to those before used; but the cylinder *n*, below the chimney-holder, is adapted to fit upon the periphery of the ratchet-cap, and has the projections *i* aforesaid to enter the recesses *e'*, and determine the proper position of the flame-slot in the deflector in relation to the wick-tube.

The cylinder *n* is preferably perforated with numerous small holes, so as to form an air-distributer.

The parts of the burner are easily kept clean, because access is furnished to both sides of the air-distributer and open-work guide, and when the removable portion of the burner is in place it is firmly supported by the base and guide, and is easily removed therefrom.

I claim as my invention—

The open-work guide *f*, attached to the wick-tube near the upper part thereof, and the shell and ratchet-cap *e*, in combination with the removable portion of the burner, composed of the cone *h*, chimney-holder *k*, and cylinder *n*, substantially as set forth.

Signed by me this 30th day of January, A. D. 1877.

L. J. ATWOOD.

Witnesses:
GEO. T. PINCKNEY,
CHAS. H. SMITH.