

E. C. LAWRENCE.  
LAMP-BURNER.

No. 190,877.

Patented May 15, 1877.

Fig. 1

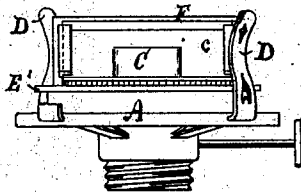


Fig. 2

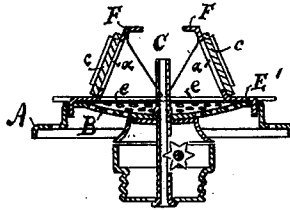
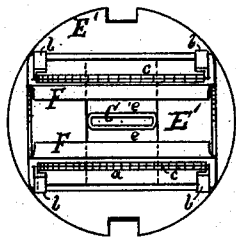


Fig. 3



WITNESSES:

J. E. Wilke

H. Cowles

INVENTOR:

Elijah C. Lawrence

By Girdley & Sherburne

Attys.

# UNITED STATES PATENT OFFICE.

ELIJAH C. LAWRENCE, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. **190,877**, dated May 15, 1877; application filed February 8, 1877.

*To all whom it may concern:*

Be it known that I, ELIJAH C. LAWRENCE, of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Lamp-Burners; and I hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents a front elevation of a lamp-burner embodying my improvements. Fig. 2 represents a vertical central section of the same, and Fig. 3 represents a plan view of the cone detached.

Like letters of reference indicate like parts.

My invention relates to that class of lamp-burners used in connection with coal-oil or kerosene lamps; and consists in the construction and arrangement of the several parts thereof, as hereinafter described and claimed.

In the drawing, A represents the base or chimney-seat of the burner; B, the usual perforated air-distributor; C, the wick-tube; D, the spring chimney-holders, and E the cone. In the example shown, the base E' of the cone consists of a metal plate, provided with one or more openings, *e e*, of any desired shape, adjacent to and on each broad side of the wick-tube. The plate E' is arranged above the air-distributor B, and so as to form an air-chamber between said plate and air-distributor, the object being to prevent the air from passing into the cone against the ends of the flame, and so that the air shall pass into the cone only through said openings in said plate, and against the broad sides of the flame, whereby the entire current of air is concentrated and driven with force against

the sides of the flame, and thereby spreading the flame and increasing the volume of light.

The plate E' may be attached to, and form a part of, the base of the cone, as shown, and be removable therewith; or it may be attached to, and form a part of, the base or chimney-seat of the burner; or it may be placed between, and disconnected from, the cone and chimney-seat; but, in practice, I prefer that said plate should be attached to, and form the base of, the cone, so as to be removed therewith.

The sides F F of the cone may be constructed wholly of metal, in the usual form; but I prefer to construct them with openings *a a* therein, and with the curved guides or flanges *b b*, in which I insert adjustable lights *c c*, of glass or other transparent material, so as to cover and close said openings *a a*. By means of said openings *a a* in the sides of the cone, when covered with glass or other transparent material, an increased amount of light can be obtained from that part of the flame usually hid when the sides of the cone are constructed wholly of metal.

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

In a lamp-burner, the plate E', arranged above the air-distributor C, and provided with the opening through which the wick-tube passes, the side walls thereof adjusted to fit against the edges of the wick-tube, and forming the openings *e e* on the sides of the wick-tube, substantially as and for the purpose described.

ELIJAH C. LAWRENCE.

Witnesses:

N. C. GRIDLEY,  
J. C. WELCKE.