

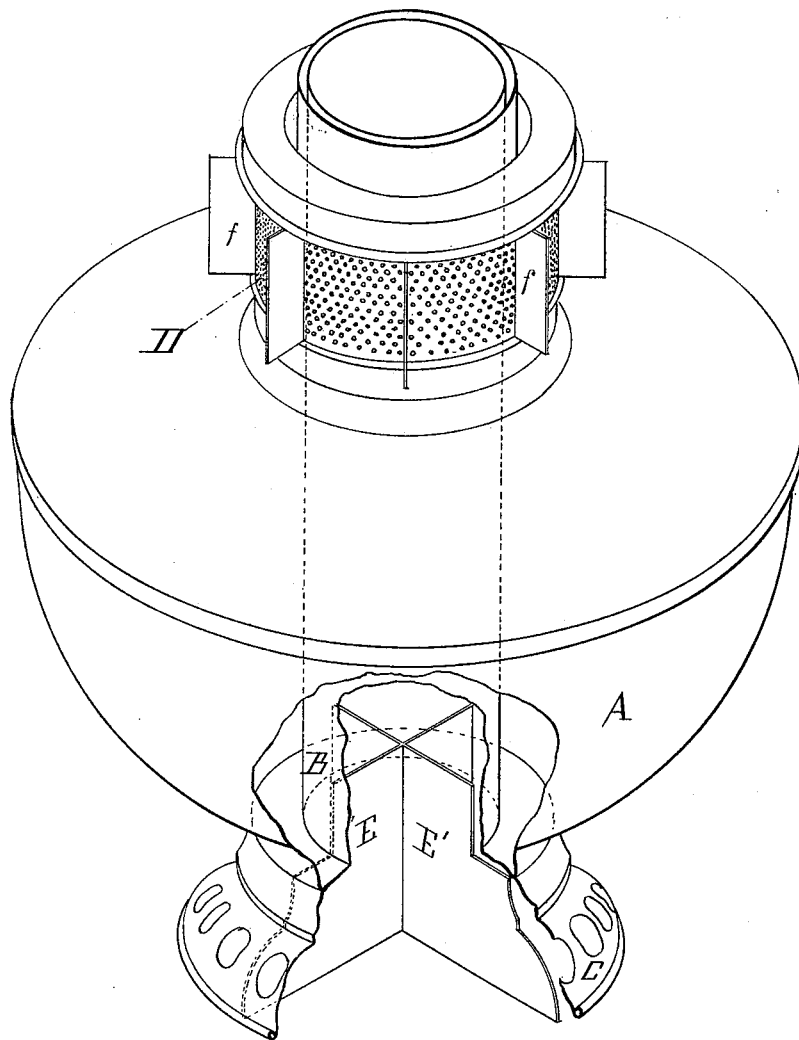
(No Model.)

2 Sheets—Sheet 1.

F. RHIND.  
CENTRAL DRAFT LAMP.

No. 386,658.

Patented July 24, 1888.



*Fig. 1.*

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INVENTOR.  
per Geo. L. Cooper, Atty.

(No Model.)

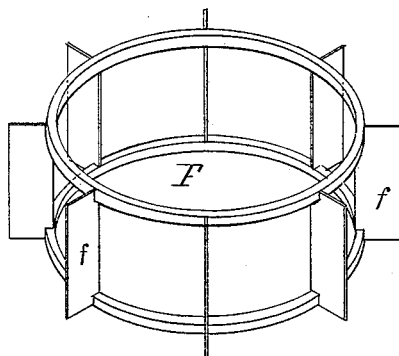
2 Sheets—Sheet 2.

F. RHIND.

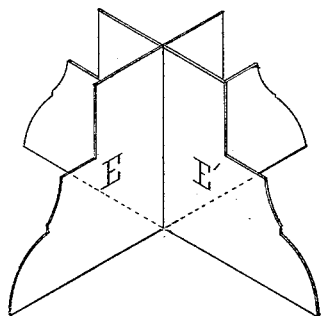
CENTRAL DRAFT LAMP.

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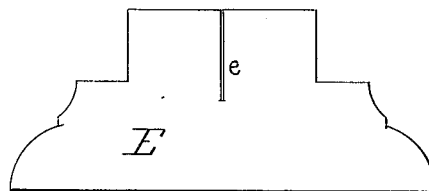
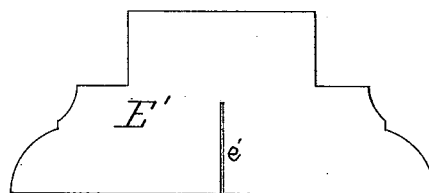
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*Fig. 3.*



*Fig. 2.*



*Fig. 4.*

WITNESSES.

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*INVENTOR.*

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# UNITED STATES PATENT OFFICE.

FRANK RHIND, OF MERIDEN, CONNECTICUT, ASSIGNOR TO EDWARD MILLER  
& COMPANY, OF SAME PLACE.

## CENTRAL-DRAFT LAMP.

SPECIFICATION forming part of Letters Patent No. 386,658, dated July 24, 1888.

Application filed September 19, 1887. Serial No. 250,047. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK RHIND, a citizen of the United States, residing at Meriden, county of New Haven, and State of Connecticut, have invented an Improvement in Central-Draft Lamps, of which the following is a specification.

My invention relates, chiefly, to that class of lamps which have a wick of annular section, and is intended to prevent interference with the flame by currents of air from without.

In the accompanying drawings, Figure 1 represents a lamp embodying my invention, part of the lamp being broken away to show the interior mechanism. Figs. 2 and 3 represent portions of my device; Fig. 4, the two pieces of metal of which the portion of my device shown in Fig. 2 is formed.

Similar letters refer to corresponding parts in the several views.

A designates a lamp; B, a central-draft or inner wick-tube; C, a perforated foot or base; D, a perforated portion through which air is supplied to the exterior of the flame; E E', walls or wind-guards placed within the foot or base C; *e e'*, slots in the pieces E E', respectively; F, a radial wind-guard applied to the exterior of the perforated portion D; *f*, a wing or radial wall forming part of the wind-guard F.

The example of my invention shown in the drawings is constructed and operated as follows:

A blank, E, preferably of metal, is formed with its upper portion of a width equal to the interior diameter of the tube B, its lower portion substantially a templet fitting the interior of the foot or base C. This blank E is slotted, as shown at *e*. A similar blank, E', except that it is slotted, as shown at *e'*, is also formed. These two blanks E and E' are then placed substantially at right angles with each other, as shown in Fig. 2, the solid portion of each entering the slotted portion of the other. They are preferably fastened together in this position by soldering or otherwise. The cruciform wall E E' thus formed is then inserted in the foot or base C. The upper portion of this wall E E' preferably extends some dis-

tance into the central-draft tube, B. This forms in effect two walls at right angles to each other, extending entirely across the interior of the base or foot C and the lower part of the central-draft tube, B. It is obvious that this device entirely prevents any current of air which has passed in through the openings or perforations at one side of the foot or base C from passing out at the opposite openings. Heretofore it has been frequently found that currents of air were forced through opposite openings in the lamp foot or base C, not only interrupting the steady upward current of air in the central-draft tube, but often causing a reversed or downward current. In addition to this, the perforated portion D, through which air is supplied to the exterior of the flame, is provided with exterior radial wings or wind-guards, *f*. These radial walls or wings *f* may be secured directly to the perforated portion D, as shown in Fig. 1, or they may be attached to wire rings or otherwise, and combined into the detachable wind-guard F. (Shown in Fig. 3.) It will be seen that the effect of this device is somewhat similar to that above described, that it is intended to prevent any interruption to or reversal of the current of air which is supplied to the exterior of the flame, that it does this by preventing the passage of a current of air so near to the perforated portion D as to educe air through said perforated portion. If the walls E E' are held in place by friction only, and the wings *f* attached to wire or other hoops, so as to form a detachable wind-guard, F, it is clear that either portion of the device may be applied to or detached from a lamp to adapt it to different positions or degrees of exposure.

It is obvious that the walls E E', instead of being slotted, as shown, may be bent at right angles and attached together along the median line of each, thus producing a wall cruciform in horizontal section, as above described, and that three or more walls may be used, if desired.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is as follows:

1. In a lamp, the combination of a perforated portion, through which air is supplied to the exterior surface of the flame, and one or more wings or wind-guards extending outward from said perforated portion, substantially as described.

2. In combination with a lamp having a perforated portion through which air is sup-

plied to the exterior surface of the flame, a detachable ring or hoop and one or more wings or wind-guards attached to said ring, substantially as described.

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Witnesses:

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