

(No Model.)

A. M. CRAIG.

LAMP BURNER.

No. 344,081.

Patented June 22, 1886.

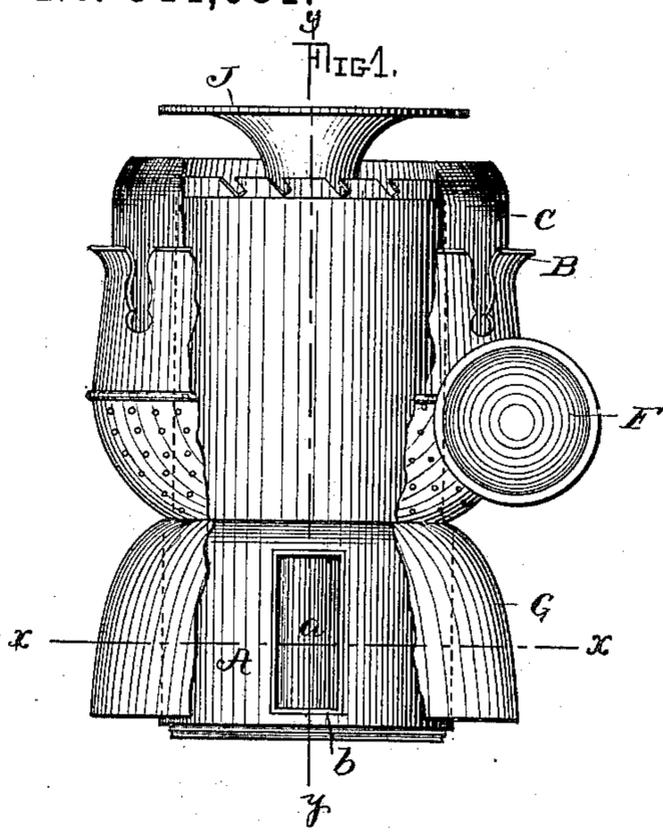


FIG. 2.

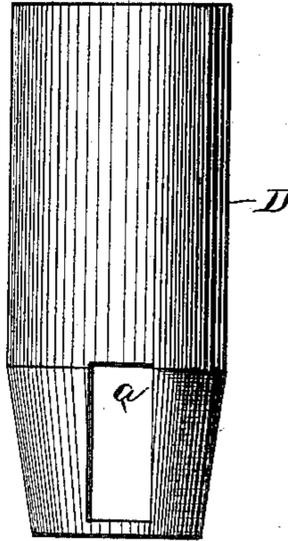


FIG. 3.

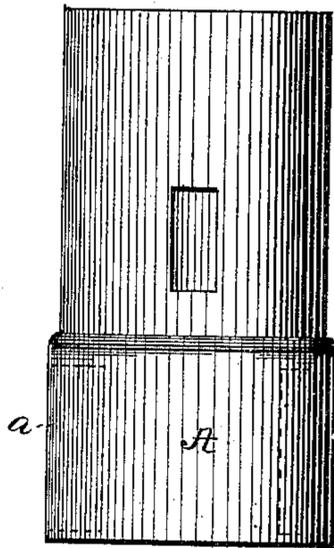
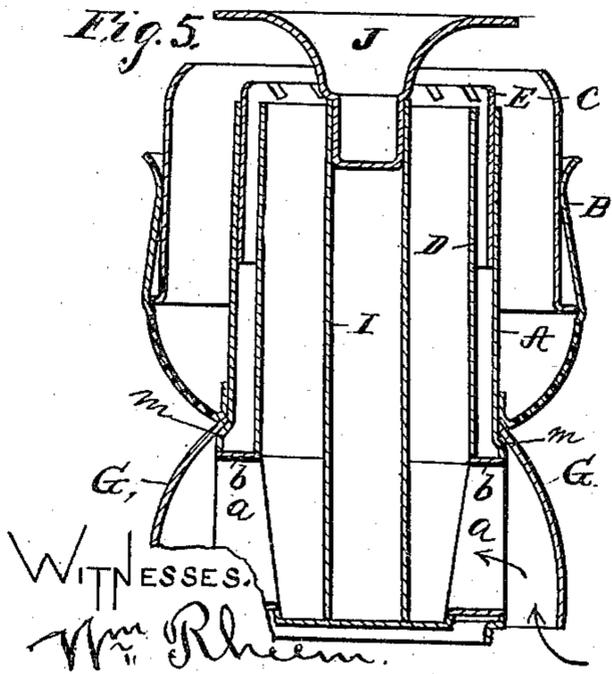
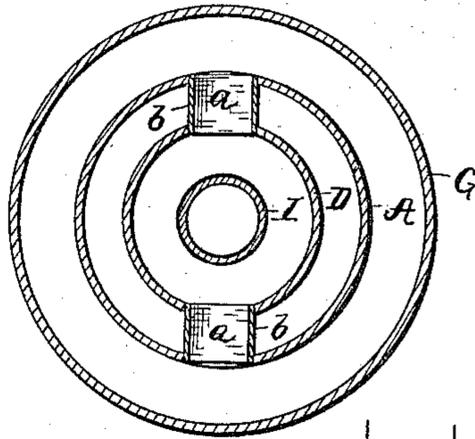


FIG. 4.



WITNESSES.

Wm. Rheem.

David Stued.

INVENTOR.

A. M. Craig

By

Amesbury ATTY.

# UNITED STATES PATENT OFFICE.

ALVIN M. CRAIG, OF SOUTHTON, CONNECTICUT, ASSIGNOR OF ONE-HALF  
TO CHARLES P. HOBART, OF SAME PLACE.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 344,081, dated June 22, 1886.

Application filed September 18, 1885. Serial No. 177,480. (No model.)

*To all whom it may concern:*

Be it known that I, ALVIN M. CRAIG, a citizen of the United States, residing at Southington, Connecticut, have invented new and useful Improvements in Lamp-Burners, of which the following is a specification.

This invention relates to what are known as "central-draft lamp-burners."

The object of the invention is to provide a lamp-burner which shall be cheap in cost, and of such peculiarities of construction as will enable the parts contributing thereto to be readily united and again taken apart to be replaced by others when they have become worn, the construction also perfectly adapting the parts to each other, by which they are securely held together when in use.

The invention consists in various novel details of construction, fully set forth hereinafter.

In order that those skilled in the art to which my invention relates may know how to make and use the same, I will now proceed to describe it in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of the burner, partly in section. Fig. 2 is a detail view of the wick-tube. Fig. 3 is a view of details of the burner. Fig. 4 is a section taken at line *x x* of Fig. 1. Fig. 5 represents a central vertical section of the burner, taken on the line *y y* of Fig. 1.

In the drawings, A represents a tube, of any suitable material, preferably of brass, upon which is fitted the ring B, which, in connection with the ring C, forms the means for holding the chimney in place. The lower part of the ring B is perforated for the admission of air, which passes up inside the chimney and aids in creating a draft.

D represents the wick-tube, which is situated within the tube A, and is of such size as to leave a space between it and the tube A for the reception of the wick. It is of course necessary to confine the wick somewhat snugly near the top of the wick-tube, where it is grasped by the wick-raiser; but in order that it may not be confined closely below this point, and thus rendered partially incapable of absorbing the oil, I make the wick-tube in

the form shown in the drawings—that is, tapering gradually below the point at which the wick is engaged by the wick-raiser, thus leaving the wick free to absorb the oil. The tube A is provided near its lower end with openings *a*, preferably two in number, which are situated opposite each other and are of the same size. The wick-tube is provided with holes which correspond in size, number, and position with those in the tube A, and these openings are connected by means of tubes *b*, fastened at one end to the tube A and the other to the wick-tube, and air is conducted to the interior of the wick-tube and passes upward through the same, causing a draft which promotes the combustion of the oil.

In order that the burning of the lamp may not be affected by drafts and gusts of wind, I provide the bell-shaped ring G, whose upper end tightly incloses the tubes, and whose lower end is of a size to leave a space for the entrance of air. This ring G, it will be observed, surrounds the lower end of the tube A and forms a perfect screen or guard against lateral or radial drafts or gusts of air into the air-passages *a*, and compelling the air to travel in the line indicated by arrows at Fig. 7, which insures a very even and steady combustion. The lower end of the wick-tube is closed by a metal disk, to the upper side of which is soldered a tube, I, in which fits the reduced lower end of the spreader J, which latter is of ordinary form.

I am aware that lamp-burners have been constructed with air-passages entering laterally through the tubes A and D, to supply air to the interior, and I am also aware that various means have been provided for partially governing the induction of air at the base of the burner—such, for instance, as shown in Letters Patent Nos. 187,810 and 316,422; but in all such there is always a more or less probability of direct ingress of air in such manner as to cause the jumping of the flame, and I do not wish to be understood as laying claim, broadly, to any such devices. It will be observed that the outer tube, A, is formed with an annular flange, *m*, and that the ring B is fitted thereto slightly above the flange, while

the guard G embraces the tubes between the ring B and flange *m*, by which means both the ring and guard are properly held in place relative to the tubes.

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

10 In a central-draft lamp burner, the combination, with the tubes A and D, the former having annular flange *m*, and the two being connected by side air-passages, *a*, of the ring B, surrounding said tubes, and fitting slightly

above the flange, and the guard G, embracing the tubes between the ring B and flange *m*, and extending downward over the passages *a*, substantially as shown and described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALVIN M. CRAIG.

Witnesses:

DENNIS P. WEBSTER,  
F. H. CEYGIERD.