

M. B. WRIGHT.  
Lamp Burner.

No. 38,999.

Patented June 23, 1863.

Fig. 1.

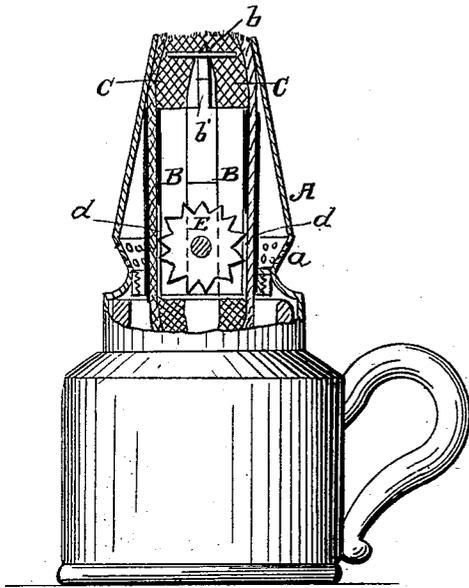


Fig. 3.

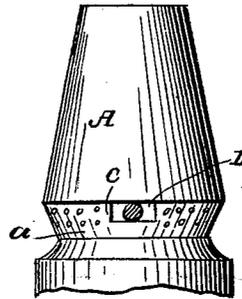


Fig. 4.

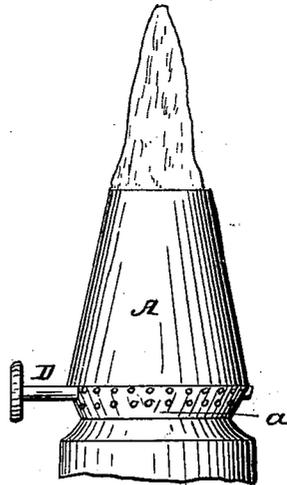
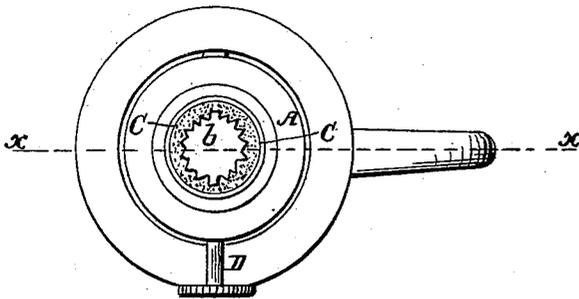


Fig. 2.



Witnesses:  
J. W. Coombs  
G. W. Reed

Inventor:  
Moses B. Wright  
per Munn & Co  
attorneys

# UNITED STATES PATENT OFFICE.

MOSES B. WRIGHT, OF WEST MERIDEN, CONNECTICUT.

## IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 38,999, dated June 23, 1863.

*To all whom it may concern:*

Be it known that I, MOSES B. WRIGHT, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new and Improved Lamp-Burner for Burning Coal-Oil; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of my invention applied to a lamp, *x x*, Fig. 2, indicating the plane of section; Fig. 2, a plan or top view of the same; Figs. 3 and 4, external views of the same.

Similar letters of reference indicate corresponding parts in the several figures.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a conical case or jacket, the lower end of which is attached to a funnel-shaped base, *a*, which is perforated and has two parallel wick-tubes, B B, secured in it, said wick-tubes extending up within the case or jacket about two-thirds or three-quarters of its height. (See Fig. 1.) The upper ends of the wick-tubes are not quite in contact with the inner side of the case or jacket A, a space being left between to admit of a free passage of air all around them and around the wicks for a short distance above the top of the wick-tubes. In the upper part of this case or jacket A there is a circular horizontal plate, *b*, which has its edge serrated or notched, the serrated edge being nearly in contact with the wicks C above the wick-tubes B B. The plate *b* is attached to upright plates *b'*, secured to the inner side of the case or jacket. The wicks C are of the usual flat form, but they are bent or curved nearly in semicircular form, in consequence of the tubes B being of curved form in their horizontal section, and in consequence, also, of the conical form of the case A, with the upper part of which the wicks are brought in contact, as shown clearly in Fig. 1. The lower part of the perforated base *a* of the case or jacket A is screwed into a socket on the top of the lamp, and in said base *a* a shaft, D, is fitted, one bearing of which is an oblong slot, *e*, as shown in Fig. 3, so as to admit of a certain degree of play or vibration of the shaft later-

ally. On this shaft D a serrated wheel, E, is placed, and in line with slots *d d*, made in the inner sides of the wick-tubes. By moving the shaft D laterally the wheel E may be made to engage with either wick, and either of the latter raised or lowered as desired. When the lamp is in use, the wicks C are a trifle above the top of the case or jacket A, and the flame, it will be seen, is supplied with air, which passes up through the case or jacket at both sides of the wicks, the serrated plate *b* causing the air which passes up between the wick-tubes and wicks to impinge against the base of the flame, which is circular in consequence of the wicks being bent each in semicircular form and their edges being in contact.

From the above description it will be seen that the flame is not in contact with the wick-tubes B B, but far above them, with its base in contact with the upper edge of the case or jacket A, and hence the heat from the flame will not be conducted down to the lamp, for, the case or jacket resting on a perforated base, *a*, and the air passing through said base and up through the case or jacket, the heat is absorbed from the latter. Nor can the heat be conducted down to the lamp through the wick-tubes, because the upper end of the tube is surrounded and cooled by the air, and the wicks, just above the wick-tubes, are also surrounded by air. The downward conduction of the heat from the flame is thus prevented. One cause of failure in most burners of this class is the heating of the lamp-body, and the consequent rapid evaporation of the oil and the emission of smoke and a disagreeable odor from the flame.

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

1. Having the wick-wheel shaft D made to vibrate, substantially as and for the purpose herein shown and described.

2. The combination of the wick-tubes B and wicks C C with the plate *b* and the upper part of the jacket A, substantially in the manner and for the purpose herein shown and described.

MOSES B. WRIGHT.

Witnesses:

DANIEL F. SOUTHWICK,  
JOHN. B. STEVENS.