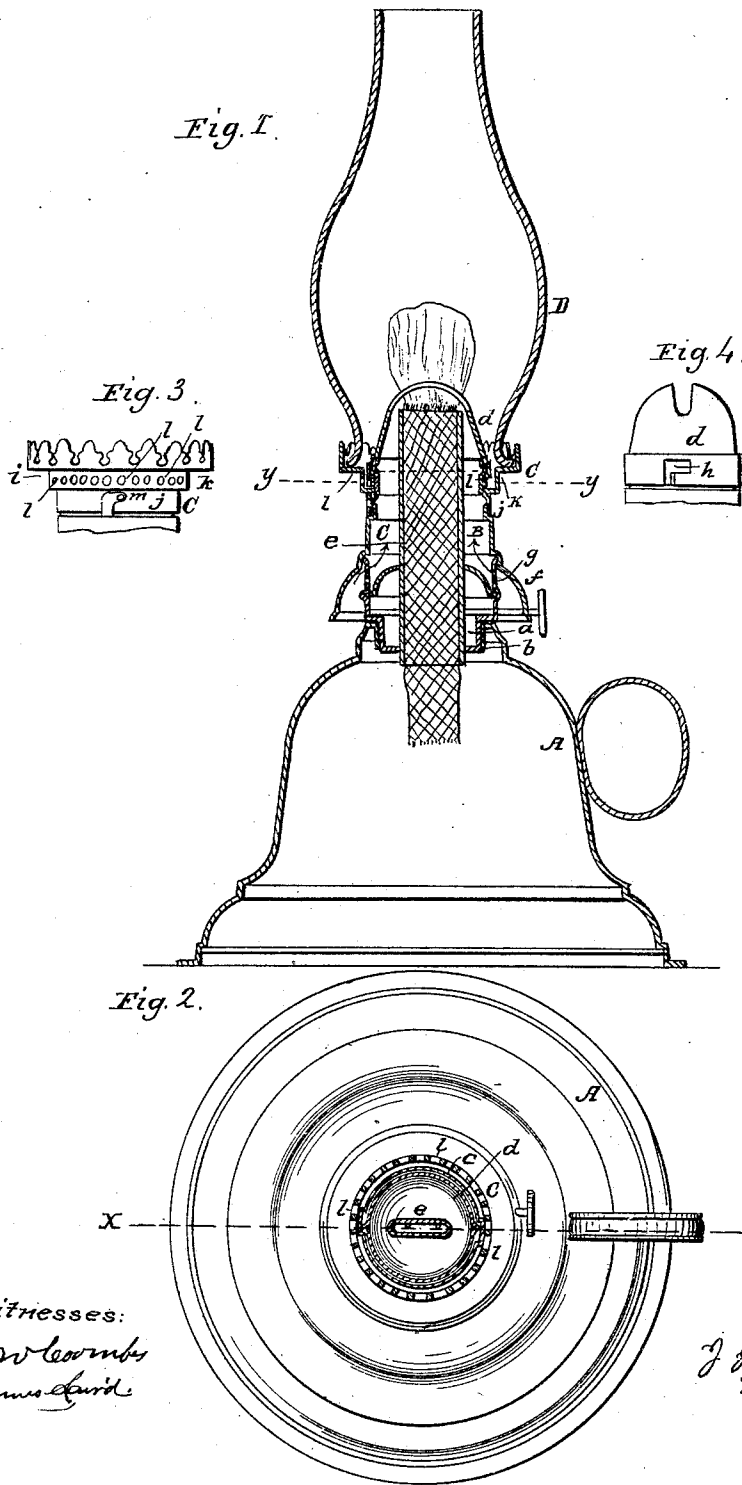


J. J. MARCY.

Lamp Burner.

No. 37,047.

Patented Dec. 2, 1862.



Witnesses:
J. W. Coombs
J. W. Coombs

Inventor:
J. J. Marcy
per Munn & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN J. MARCY, OF MERIDEN, CONNECTICUT.

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 37,047, dated December 2, 1862.

To all whom it may concern:

Be it known that I, JOHN J. MARCY, of Meriden, in the county of New Haven and State of Connecticut, have invented a new and Improved Lamp-Burner; 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 vertical central section of my invention, taken in the line *x x*, Fig. 2. Fig. 2 is a horizontal section of the same, taken in the line *y y*, Fig. 1. Fig. 3 is a detached side view of the chimney flange or support. Fig. 4, a detached side view of the deflector or cone.

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

The object of this invention is to obtain a lamp-burner of simple construction for burning coal-oil and similar hydrocarbons with a short draft-chimney, so that the lamp may be used as a hand or portable one, capable of being carried from place to place without emitting smoke and an unpleasant odor.

To this end the invention consists in the employment or use of a burner provided with a draft-tube, a deflector or cone, and a chimney flange or supporter, all constructed, combined, and arranged in such a manner that a good internal draft is obtained within the burner, as well as an external draft around the deflector or cone, as hereinafter fully shown and described, and a brilliant and persistent illuminating-flame obtained.

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

A represents the body of the lamp, which may be constructed in the ordinary or in any proper way; and B represents the burner, which is provided with a screw, *a*, at its lower end to screw into a cap, *b*, on the top of the lamp, as usual. The burner B is composed of a tube, *c*, deflector or cone *d*, wick-tube *e*, and a flaring or bell-shaped flange, *f*, which encompasses the lower part of the tube *c*, which is perforated, as shown at *g*. The tube *c* is somewhat longer than the main portions of the ordinary chimney-burners in order to obtain a better or more powerful internal draft, and in order to have the draft constant or as uniform as possible. The perforations or air-induction openings *g* are encompassed by the flange *f*, which prevents a direct lateral

draft into the burner, as fully shown in Fig. 1, and admits of the lamp being carried about without having its flame appreciably affected by the movement or motion of the hand. The deflector or cone *d* may be of the ordinary form, and connected to the upper end of the tube *c* by a bayonet catch or fastening, *h*. (Shown in Fig. 4.)

C represents an annular flange or chimney supporter, which is formed with a horizontal shoulder, *i*, on which the draft-chimney D rests, and may be secured in any proper manner. The lower part of the flange or chimney supporter is bent inward, as shown at *j*, so as to fit snugly around the tube *c*, while the part *k* of the flange, immediately above *j*, projects outward from the tube *c* sufficiently to allow a draft-passage into the chimney, the part *k* being perforated to admit the air, as shown at *l*. The flange C is secured to the tube *c* by a catch or fastening, *m*, and at a point just below the base of the cone, as shown clearly in Fig. 1.

From the above description it will be seen that the flame of the lamp will be supplied with an internal and external draft of air, and owing to the strength of the internal draft, caused by the tube *c*, a comparatively short chimney may be used; and in case a very brilliant flame is not required, nor a large one—as, for instance, where a night-lamp is required for a bed-room—the chimney may be dispensed with entirely, the flange C being detached from the burner.

This burner has been practically tested and answers admirably well. It may be carried about from place to place like an ordinary fluid or whale-oil lamp without emitting any smoke or odor. It may be constructed at a small cost, and may be trimmed and kept in proper burning order with equally as great facility as the ordinary burners in use.

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

The burner B, having its tube *c* perforated at its lower end and encompassed by the guard or flange *f*, in combination with the perforated annular flange or chimney supporter C, applied to the tube *c* below the deflector or cone *d*, all arranged as and for the purpose herein set forth.

Witnesses: JOHN J. MARCY.
E. A. WILCOX,
LINUS BIRDSEY.