

Lamp Burner.

Patented April 22, 1862.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES P. BROCKETT, OF NEW HAVEN, CONNECTICUT.

IMPROVED LAMP-BURNER.

Specification forming part of Letters Patent No. 35,010, dated April 22, 1862.

To all whom it may concern:

Be it known that I, CHARLES P. BROCKETT, of New Haven, 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. 3; Fig. 2, a horizontal section of the same, taken in the line *y y*, Fig. 1; Fig. 3, a plan or top view of the same.

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

This invention relates to an improved lamp-burner of that class which are designed for burning coal-oil and other hydrocarbons, and in which a glass chimney is employed for producing a requisite draft to support proper combustion for illuminating purposes.

The object of the invention is to obtain a burner which will admit of the lamp being supplied with oil without detaching it from the lamp, and which will also admit of the chimney being so adjusted as to render the wick-tube accessible for the purpose of trimming and lighting the wick and placing the same in the tube without detaching the chimney from the burner.

To this end the invention consists in having the cone or deflector of the burner attached to a plate which is connected to the top of the burner by a pivot, so that the plate may be turned horizontally on and off from the burner, and having a tube fitted in the burner through which the lamp may be supplied with oil, all being arranged as hereinafter fully shown and described.

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

A represents the lower part or body of the burner; B, the wick-tube, which is fitted centrally in the burner, as usual.

C is a tube which is secured in the burner and extends down through its lower part, on which the screw is cut to screw into the socket D on the lamp. The top of the tube C is fitted in a horizontal annular flange or plate E, which

is attached to the upper end of the lower part or body A of the burner, and which is a trifle above the level of the top of the wick-tube B, as shown in Fig. 1.

F is an annular plate, which is of the same diameter as the flange or plate E, and is secured to plate E by a pivot *a*, which passes through said plates near their edges. The plate F is allowed to turn on this pivot, so that it may be fitted snugly down on E, or be turned off from it, as shown in red in Fig. 3. When the plate F is thus turned off from plate E, the top of the wick-tube B is fully exposed and the wick rendered accessible for trimming and lighting, and a wick may also be inserted or adjusted in the tube without detaching or unscrewing the burner from the lamp.

The annular plate F has a cone or deflector G at its center of the usual form, and the chimney is secured to the plate F by means of a screen *b* and hooks *c c*, or other suitable fastenings. It will be seen, therefore, that when the plate F is turned off from the plate E the chimney and cone move with it, and that it is not necessary to detach the chimney from the burner in order to render the wick-tube accessible.

The plate F has a spring-catch H attached to its edge at a point opposite the point *a*. This spring-catch may be formed of a small lever *d*, having a pin *e* at its front end and a spring *f* at its back end, which spring bears against the edge of the plate F and has a tendency to keep the pin *e* in a hole *g* in the side of the body A of the burner, and consequently keep the plate F in proper position on the burner. (See Figs. 1 and 3.)

To the under side of the plate F there is attached a circular plate *h*, which is equal in diameter to the top of the tube C, and which serves as a stopper for the latter when F is secured over E. (See Fig. 1.) In order that this stopper may fit into and be raised out from the upper end of the tube C when the plate F is shoved over on E and off from it, a cross-bar *i* is attached to E and extends across the opening at its center near the pivot *a*. This cross-bar projects a trifle above the level of the plate E, as shown in Fig. 1, and serves to raise up the plate F when the latter is moved off of plate E, so that the stopper *h*

will be lifted out of the tube C, and also serves to keep the plate F, and consequently the stopper *h*, elevated as the plate F is shoved on E, so that the stopper *h* may pass over the edge of E, the plate F being allowed to drop snugly down on E when the cone G arrives in proper position over the wick-tube B, as the cross-bar *i* then fits into the bottom of the cone. Thus it will be seen that when the burner is in use or the lamp lighted no vapor can escape through the tube C, as the latter is effectually stopped or closed at its upper end.

By this invention two important results are obtained in chimney-lamps—to wit, the advantage of filling the lamp without detaching the burner therefrom and the rendering of the wick-tube accessible without removing the chimney from the burner. A lamp, therefore, provided with this burner may be filled and trimmed with even greater facility than an ordinary coal-oil lamp.

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

1. The plate F, with cone G attached, pivoted to the plate E at the top of the burner, provided with a catch H, and arranged relatively with the wick-tube B to admit of the plate F, with chimney attached, being shoved off from and on the burner, for the purpose specified.

2. The tube-stopper *h*, attached to the under side of the plate F, in combination with the cross-bar *i*, secured to plate E, and in such relation with plate F and cone G as to elevate plate F and stopper *h* and admit of said stopper being raised out of and fitted in tube C by the movement of plate F, as set forth.

3. The tube C, fitted in the burner A, in connection with the movable plate F, arranged, substantially as shown, to cover the tube when the burner is in use and the lamp lighted and to expose the tube for filling the lamp when the plate F is shoved off from the burner.

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Witnesses:

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