G. H. CHINNOCK.

TRANSLUCENT SHADE-HOLDER.

No. 188,339. Patented March 13, 1877.

Fig. 1.

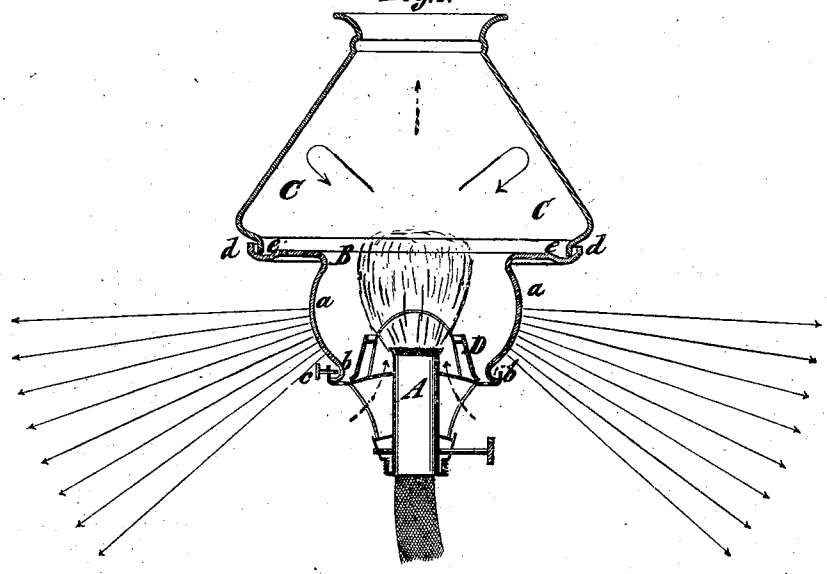
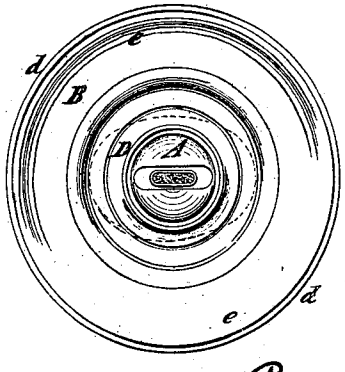


Fig. 2.



Witnesses,
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UNITED STATES PATENT OFFICE.

GEORGE H. CHINNOCK, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN TRANSLUCENT SHADE-HOLDERS.

Specification forming part of Letters Patent No. **188,339**, dated March 13, 1877; application filed November 29, 1876.

To all whom it may concern:

Be it known that I, GEORGE H. CHINNOCK, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Means for Illumination, of which the following is a specification:

This invention consists in a translucent or transparent shade-holder or base, provided with a lenticular portion for projecting up outside of a flame, an outwardly-projecting lip or portion at the base, facilitating its attachment to its support, and a flange and an incline for securing the shade in place, whereby a very superior article is produced.

It also consists in certain details in the construction of the translucent or transparent device for holding a shade, whereby provision is afforded for fastening it securely to the means for illumination with which it is used, and for securely retaining the shade in place upon it.

In the accompanying drawing I have, for the sake of simplicity, illustrated my invention in connection with a lamp-burner.

Figure 1 is a central vertical section of such lamp-burner, a translucent or transparent device embodying my invention, and a shade supported thereby, and serving as the means for inducing a draft of air to a flame issuing from the burner; and Fig. 2 is a plan or top view of the same with the shade removed.

Similar letters of reference designate corresponding parts in both figures.

A designates the burner. Though represented as of ordinary construction, it may be of any other suitable form. B designates the translucent or transparent device, serving to support the shade C, which, as represented, (and preferably,) constitutes the means for inducing a draft of air for a flame issuing from the burner. The important feature of this device B is a lenticular portion, *a*, providing, not simply for the free transmission of light outward, but for its proper radiation, as through a lens, where it is most desirable.

As I have illustrated by dotted lines in Fig. 2, the upper part of this lenticular portion *a* may, for flat-wick burners or any fish-tail flame, be made elliptical or ellipsoidal, to direct the draft of air thereto in the most advantageous manner.

The base of the device B is preferably provided with a projecting lip, *b*, with which may engage a screw, *c*, or other fastening or fastenings for retaining it securely in place. The top of the said device is provided with means, shown as consisting of an upturned flange, *d*, and an inwardly-ascending incline, *e*, for retaining the shade C properly in place. The flange serves to support it on the outer side, and the incline serves to center it, if it is materially smaller in diameter than the flange, by causing it to slide to the lowest portion.

D designates a translucent or transparent shell, forming part of a deflector for directing air upon a flame within the device B and the shade C. It provides for the free transmission of light into the lenticular portion *a* of the former.

Though the shade C, in connection with this device B, serves to induce the necessary draft of air to a flame within them, a chimney may, if desirable, be used for this purpose.

The translucent or transparent deflector-shell D may be made in one piece with the translucent or transparent device for holding the means for inducing a draft of air to a flame, as shown in Letters Patent No. 77,254, granted to me April 28, 1868. This would be advantageous in many ways.

As I have before intimated, this invention is applicable to various means for illumination other than a lamp-burner. The advantages resulting from it in the radiation of light where most needed are clearly indicated by the arrow-lines in Fig. 1.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A translucent or transparent shade-holder or base, provided with a lenticular portion for projecting up outside of a flame, an outwardly-projecting lip or portion at the base, facilitating its attachment to its support, and a flange and an incline at the top or outer part for securing the shade in place, substantially as set forth.

2. The combination, with the device B, having a lenticular portion, *a*, of a lip, *b*, adapted to engage with a screw or its equivalent, substantially as and for the purpose set forth.

3. The combination, with the device B, of the flange *d* and incline *e*, substantially as and for the purpose set forth.

GEO. H. CHINNOCK.

Witnesses:

CHANDLER HALL,

THOMAS E. BIRCH.