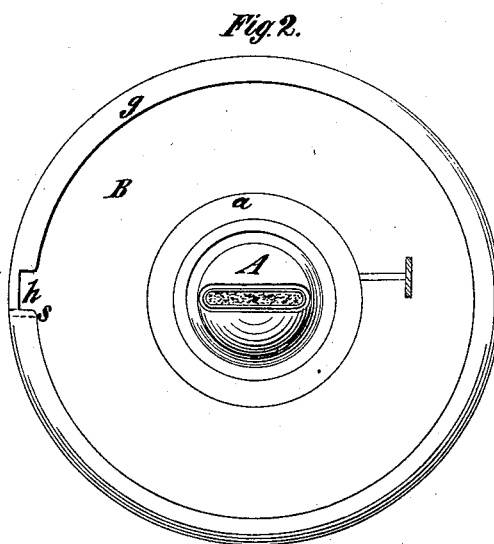
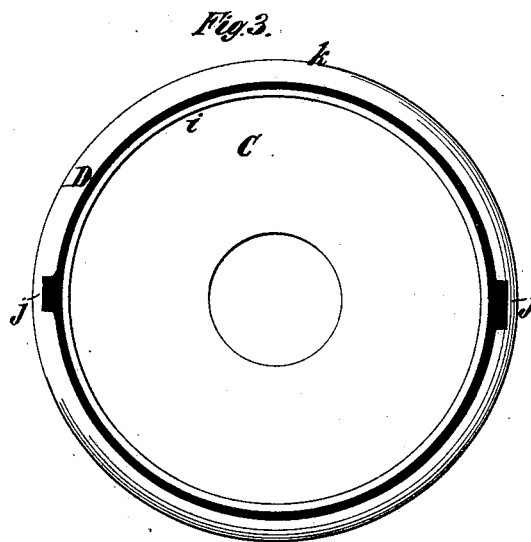
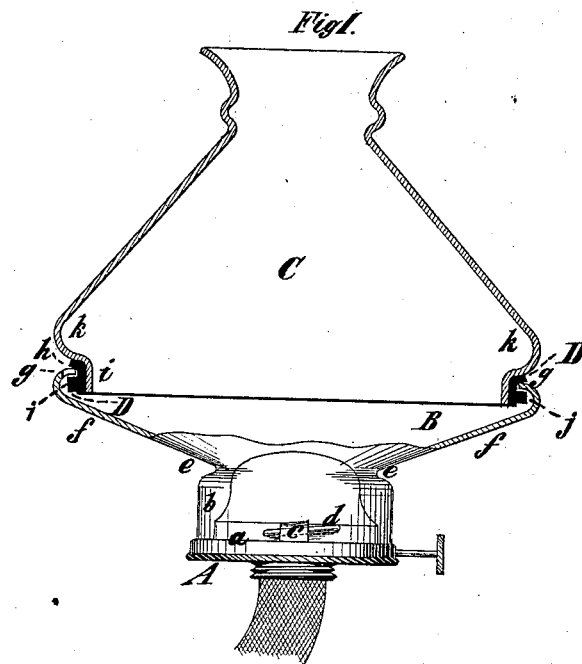


E. BLACKMAN.  
Lamp.

No. 215,867.

Patented May 27, 1879.



*Witnesses:*  
Thomas E. Birch.  
Chandler Hall

*Inventor.*  
Ebenzer Blackman  
by his Attorney  
Edwin H. Brown.

# UNITED STATES PATENT OFFICE.

EBENEZER BLACKMAN, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO A. HOMER BYINGTON, OF NORWALK, CONN.

## IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **215,867**, dated May 27, 1879; application filed December 15, 1877.

*To all whom it may concern:*

Be it known that I, EBENEZER BLACKMAN, of the city of Brooklyn, in Kings county, and State of New York, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

My invention relates principally to lamps embodying the combination, with a burner, of a translucent or transparent holder or base, and a shade so fitted thereto that a chimney may be dispensed with.

The invention consists in the combination, with such translucent or transparent base and shade supported thereon, of a packing between said base and shade, whereby a tight joint between the two is obtained, all noise incident to the rattling of the shade on the base is obviated, and the heating of the base from the shade is in a great measure avoided.

The invention also consists in the combination, with such translucent or transparent base, shade supported thereon, and packing between the two, of fastening devices arranged on and forming part of the packing, whereby the packing is enabled to serve the additional purpose of locking the shade to the base.

The invention also consists in the combination of a lamp-burner, a translucent or transparent holder or base supported thereon, devices for locking the holder or base to said burner, a shade supported on said holder or base, and packing between the said holder or base and shade, and devices on said packing for locking the shade to the holder or base, whereby I produce a lamp wherein the appurtenances for producing a draft and diffusing the light are effectually precluded from rattling, and a lamp admirably adapted for use on boats and in railway-cars and other vehicles.

The invention also consists in a shade provided with devices, preferably consisting of lugs made of elastic material, for securing it to its holder or base.

The invention also consists in details of construction, hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a side view of a lamp-burner, and side view and partial section of a translucent or transparent holder or base supported thereon, and a central section of a shade fitting on said

holder or base, and of a packing between said holder and base and shade, embodying my improvements. Fig. 2 is a plan or top view of such holder or base, and Fig. 3 is an inverted plan or bottom view of the shade and packing.

Similar letters of reference designate corresponding parts in all the figures.

A designates a lamp-burner, which may be of any suitable form. It is provided with a gallery, *a*, for the reception of the lower portion, *b*, of a translucent or transparent holder or base, B, and with claws *c*, for grasping inclined ribs *d*, projecting from the said lower tubular portion, *b*, of the translucent or transparent holder or base B. By fitting the holder or base B in the gallery *a* of the burner, and turning said holder or base so that its inclined ribs *d* are brought under the claws *c*, the holder or base may be securely locked to the lamp-burner, so that it cannot rattle or become accidentally displaced. Any number of the claws *c* and ribs *d* may be used; but two of each will, I think, prove sufficient.

The holder or base is provided above its tubular portion *a* with an inwardly-extending neck or contraction, *e*, and above the holder with an outwardly-extending flange, *f*, surmounted by an inwardly-extending rim, *g*; but so far as the present invention is concerned the shape of this holder or base is immaterial, save as regards the inclined ribs *d* and surmounting inwardly-extending rim *g*. This rim, it will be seen, is provided with a notch, *h*, through which a lug or locking device carried by the shade C may enter in order to be adjusted under the rim *g* for securing the shade in place. Although I have shown but a single notch, *h*, I may, if desirable, provide the holder or base with others of the same kind.

The shade C is of ordinary conical shape, and is provided with the usual downwardly-extending rim *i* under an offset, *k*, and it may be made of the ordinary semi-opaque material.

D designates a packing, consisting of any suitable flexible or elastic material, such as india-rubber, leather, a soft woven fabric, or felt, attached to the exterior of the rim *i* of the shade by any suitable cement or adhesive substance, or by any other means. It is designed

to be of sufficient thickness to fit snugly within the inner edge of the inwardly-extending rim *g* of the holder or base B.

*j* designates lugs or locking devices, of elastic material, serving to secure the shade to its holder or base, and, in this instance, affixed to the shade. They are shown as made of the same material as and connected to the packing-ring D, and as extending outwardly from it and adapted to fit underneath the said inwardly-extending rim *g* of the holder or base. I have shown it as provided with but two of these lugs or devices, and these as arranged at opposite portions of the exterior of the packing.

To fasten the shade to the base, one of these lugs is slipped under the rim *g*, and the other is slipped downwardly through the notch *h* therein, whereupon the shade is turned laterally until the lug or device *j* last named has been adjusted under the said rim *g* of the holder or base.

As the packing, by fitting snugly against the inner edge of the rim *g*, produces a friction thereon, there is little or no tendency for the shade to move or turn around so as to bring either of the lugs or devices *j* opposite the notch *h* and admit of the detachment of the shade.

For facilitating the removal of the shade, I may provide the rim *g* of the holder or base at one side of the notch *h* with a stop, *s*, for precluding the movement of either of the lugs or devices *j* on the shade past the said notch, save in one direction.

The holder or base B being locked securely to the burner A, and the shade being locked firmly to the said base or holder, there can be little or no rattling of these parts. This, however, is by no means the only advantage attained by my invention.

As the packing D forms a tight joint between the holder or base and shade, air is precluded from entering, so as to interfere with the proper deflection of the draft upon the flame and cause the light to flicker.

As the packing is formed of a material which is a poor conductor of heat, the shade will not readily transmit the heat imparted to it from the flame to the holder or base, and hence the holder is in a great measure precluded from becoming unduly contracted and expanded through excessive heat at the upper portion, as is commonly the case where such a holder or base and shade are combined in the ordinary manner.

It is obvious that the packing D, if made of elastic material, might be provided with a bead capable of being sprung or pressed within and under the rim C of the holder or base, and of expanding afterward so as to secure the shade.

It is also obvious that the packing may be

attached to the holder or base instead of to the shade, or may be independent of both these parts.

My invention is not confined to a combined holder or base and shade like those I have described, but may be applied with great advantage to chimneys or globes used upon lamps and lighting apparatus.

I am aware that Letters Patent of the United States numbered 112,774, granted March 21, 1871, to George Brandon, for an improvement in street-lamps, comprise a packing of felt between two sections or parts of a lamp. Therefore I do not claim such a packing, broadly, as my invention.

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

1. The combination of a translucent or transparent holder or base and shade or section of a chimney supported thereon, the two parts being so combined that one fits circumferentially around the other, of a packing-ring of felt or other suitable material fitting directly between the adjacent circumferences of the said two parts, substantially as specified, whereby inequalities in the circumferences of the two parts are compensated for, and the rattling of said parts is precluded.

2. The combination of a holder or base, a shade or other appurtenance of a lamp supported thereon, and a packing-ring fitting between the two said parts, provided with lugs or locking devices extending from it to secure the said two parts together, substantially as specified.

3. A packing-ring adapted for use in the joint between a holder or base and a shade or other appurtenance of a lamp supported thereon, said packing-ring having upon it lugs or locking devices, substantially as specified.

4. The combination of a lamp-burner, translucent holder or base supported thereon, claws on said lamp-burner embracing inclined ribs on said holder or base, a shade supported on said holder or base, and a packing fitting between said holder or base and shade, and provided with lugs or locking devices, substantially as and for the purpose specified.

5. A shade provided with devices made of elastic material for securing it to its holder or base.

6. A shade provided with lugs of elastic material for securing it to its holder or base, substantially as specified.

7. The combination, with a shade and a holder or base, of devices made of elastic material for securing them together.

EBENEZER BLACKMAN.

Witnesses:

CHANDLER HALL,  
THOMAS E. BIRCH.