

Joseph W. Bartlett's Street Lantern.

116399

PATENTED JUN 27 1871

Fig. 1.

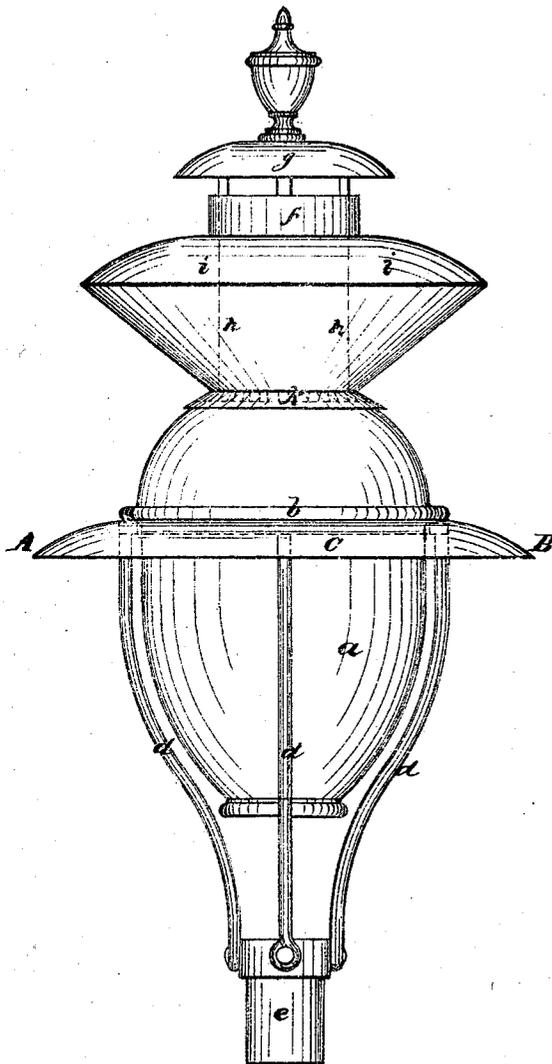


Fig. 3.

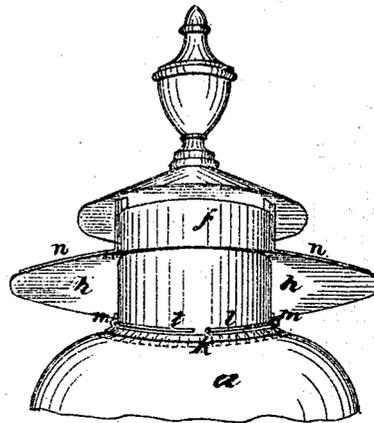
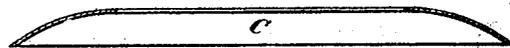


Fig. 2.



Witnesses.

Mr. E. Hardenbergh.
William Hauger.

Inventor.

Joseph W. Bartlett.

UNITED STATES PATENT OFFICE.

JOSEPH W. BARTLETT, OF NEW YORK, N. Y.

IMPROVEMENT IN STREET-LANTERNS.

Specification forming part of Letters Patent No. 116,399, dated June 27, 1871.

To all whom it may concern:

Be it known that I, JOSEPH W. BARTLETT, of the city, county, and State of New York, have invented certain Improvements in Lanterns or Lamps, designed more especially for street use, of which the following is a specification:

The object of my invention is to produce a lantern or lamp constructed in a simple and economical manner, which shall offer the least possible obstruction to the outward passage of the rays of light emanating from the flame within the same, and in the placing of a reflector or of reflectors upon the said lamp in such a manner that, while they shall not obstruct the passage of the full volume of the rays of the light outward toward the street and surrounding territory, will yet check the passage of such of the rays of the said light which would otherwise pass directly upward and above the lamp into space where illumination is not required, and reflect the same back upon the street and to the surrounding territory where illumination is desired.

Figure 1 is an elevation of the said lamp, showing two of the before-mentioned reflectors in their relative positions upon said lamp. Fig. 2 is a section from A to B of the lower one of the two above-named reflectors. Fig. 3 is an elevation, showing the upper portion of the said lamp with a reflector placed upon the same, and made slightly concave in form.

I make the upper reflectors, or those which are placed upon the chimney, of both the convex and concave forms, as shown in Figs. 1 and 3.

a represents the glass, made in an elongated globular form; *b*, a rib or rim of glass, made upon the outer side of the glass *a* for the purpose of holding and sustaining the lamp within the metal ring or frame. *c* is a reflector, made of metal, slightly concave in form, which is placed upon the glass *a*, and held in position by the rib *b* and metal ring or frame supporting the lamp. I make this reflector, for ordinary street use, of about four inches in width from the inner to the outer edges. *d* is the metal frame supporting the lamp when used upon the ordinary post. *f* is the ventilating-chimney, made of metal, the lower part of which I secure to the opening in the glass *a* by means of clasps made from the same. The chimney may also be secured to the glass *a* by means of a spring and a flange, or with indentures made upon the glass. *g* is a metal

cap or cover placed at a proper distance for ventilation above the chimney, and held in place by straps of metal. *h*, Fig. 1, is a reflector, made of a convex form, and is fitted upon the chimney *f*. I make this reflector, for ordinary street use, about six inches in height from the lower edge, when it is fitted to the chimney to the upper edge, and about fourteen inches in diameter across the top. *i* is a metal cover fitted upon the top of the reflector *h*, Fig. 1, for the purpose of conducting away the water, &c.

There are various articles which may be used upon the surfaces of these reflectors in order to increase the reflecting power of the same, nearly all of which I have tried in order to arrive at what was the best for all purposes and in the place where it is required in use. I find that to cover the surface of metal with a good body of the best white paint, and enamel the same thoroughly with varnish, answers for all the purposes the best and gives the best satisfaction.

k is a rim of metal secured to the lower part and outside of the chimney *f*, placed there for the purpose of holding the outer edge of the glass *a* in place, and, by extending the said rim over a slight distance upon the surface of the glass, it covers any variation or inequality which may occur in the size of the opening of the glass *a*. The clasps made upon the lower edge of the chimney *f* are made of a length corresponding to the width of the rim *k*. *l* is a bead made upon the lower edge of the upper part of the chimney, where it is found desirable to make the same in two parts for the purposes of packing, cleaning the glass on the inside from above, &c. *m m* are catches, of metal, secured to the rim *k*, which are secured upon the bead *l* by passing through the openings made thereon, sliding the chimney around the distance for the catches to hold upon the bead *l*. The two parts of the chimney may also be secured by means of a slot made in the outer part and a rivet secured upon the inner part, upon a plan somewhat similar to that used for securing the lamp in old-style hand-lanterns to the upper part. There are various simple ways by which this may be done. I make the chimneys both ways—that is, all in one, or in two parts for disconnecting the same. *n n*, Fig. 3, show the metal bands which support the chimney-cap brought down upon the outside of the chimney to the upper surface of the reflector *h*, Fig. 3, when they

are carried across to the edge of the said reflector and help to support the same in place.

Having thus described my improvements in lamps, I will merely here state that I do not now claim of themselves the glass *a* with its rib *b* and chimney *f*, Fig. 1, that having been granted to me in Letters Patent No. 103,828, dated June 7, 1870; but

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

1. A glass, *a*, having a rib, *b*, thereon, combined with its supporting-frame or bracket and with a reflector held to place between such rib and frame, substantially as shown and described.

2. In combination with a glass shade, a metallic chimney secured to the top of the glass and provided with a reflector, *h*, substantially as described and shown in Figs. 1 and 3.

3. In combination with a glass shade, a reflector directly surrounding and fitting the glass at a point beneath its top, and an auxiliary reflector surmounting the glass at its top, substantially as shown and described.

JOSEPH W. BARTLETT.

Witnesses:

M. E. HARDENBERGH,

WM. H. POST,

WM. HANGER.