G. BBANDON.

STREET LAMP.

No. 112,774. Patented Mar. 21, 1871.

Fig. 1,

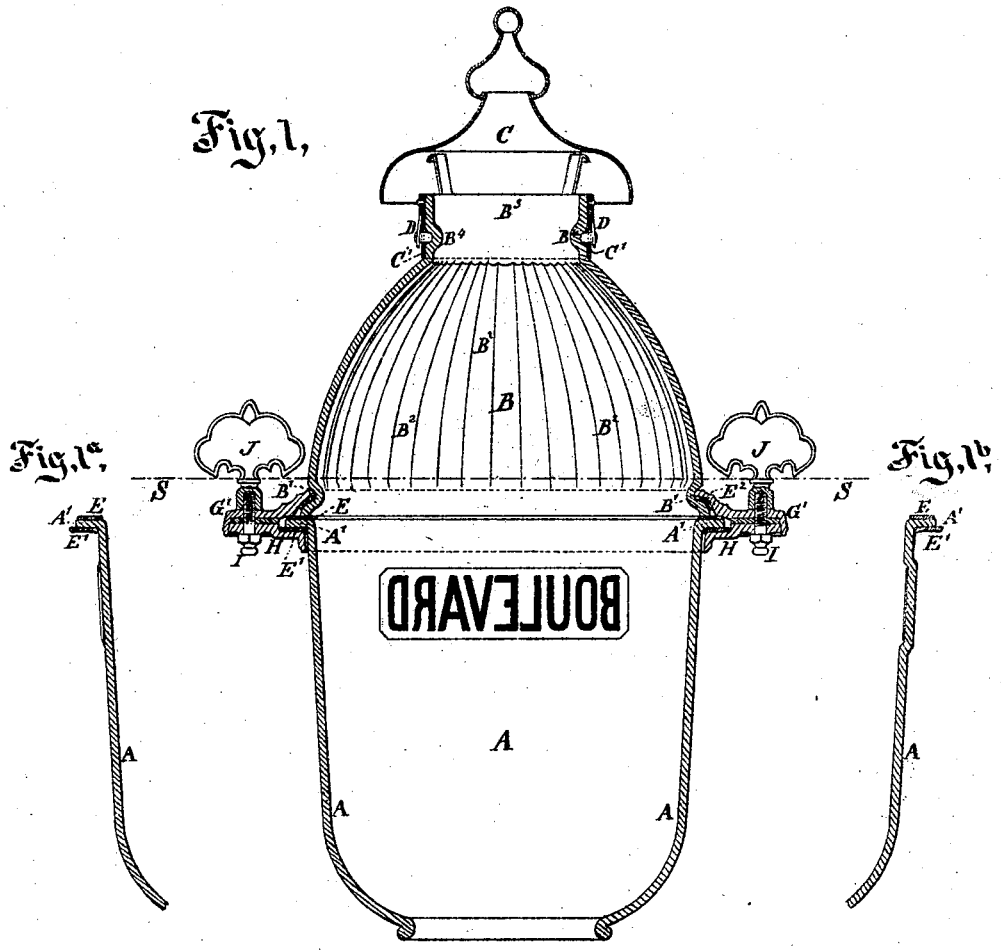
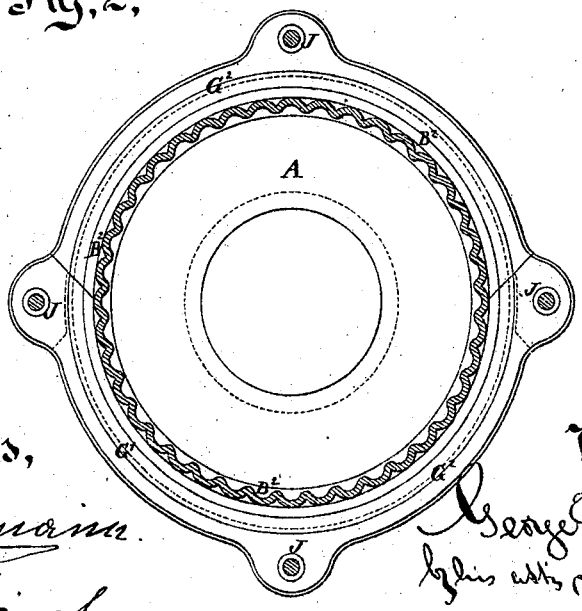


Fig. 1ª,

Fig. 1ᵇ,

Fig. 2,



Witnesses,

A. Hoermann.

C. C. Livingston

Inventor,

George Brandon

by his attys

F. L. Stetson.

United States Patent Office.

GEORGE BRANDON, OF NEW YORK, N. Y.

Letters Patent No. 112,774, dated March 21, 1871.

IMPROVEMENT IN STREET-LAMPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE BRANDON, of the city and county of New York, State of New York, have invented certain new and useful Improvements in Street-Lamps, or lamps for use out of doors, on posts, brackets, or the like.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawing forms a part of this specification.

Figure 1 is a central vertical section, and

Figure 2 is a horizontal section on the line S S in fig. 1.

Similar letters of reference indicate like parts in both the figures.

The figures represent the lamp proper, without the light frame-work in which it is mounted when in use.

It will be understood that the frame-work, (not represented,) consists of a ring, supported by four or other suitable number of slender rods, which extend down therefrom, and are fixed to a similar ring on the top of the lamp-post.

The drawing also omits the gas-pipe, which, it will be understood, extends up through the open bottom to a proper height within the body of the lamp.

A is the lower portion or main body of the lamp. It is blown or otherwise formed in one piece of glass. The upper half is also of glass, peculiarly formed.

I will designate the single glass piece, which forms the upper portion when necessary, by the single letter B, the several parts thereof being marked B^1, &c.

I attach much importance to the form of this part B, and its adaptation to the other parts.

B^1 is a groove, or indented circular mark, extending quite around, just above the base of the part B.

B^2 B^2, &c., are creases or corrugations, extending up and down the dome-shaped top, and serving to give strength and elasticity to the glass, as also to materially modify the effect produced on the eye, either when the lamp is lighted or when it is standing unlighted in the day-light.

It will be understood that the glass is of about even thickness throughout, that is to say, that there is an internal projection corresponding to each of the indentations or creases on the external surface of the glass.

B^3 is a portion extending upward in a nearly cylindrical form, and serving as means for uniting the sheet-metal top or cap C, which is formed as represented, to admit of ample ventilation, and to add to the ornamental and tasty appearance of the lamp, while protecting the interior of the lamp from rain, snow, &c.

A cylindrical portion, C′, of the cap C, extends down closely around the cylindrical portion B^3 of the glass.

There are spring catches D on the part C′ of the cap, which, being riveted firmly on the part C′, reach inward, through holes therein, and take in recesses or indentations in the glass B^3. These indentations are marked B^4.

There may be two or any other number of the springs D, and there may be a corresponding number of the indentations B^4; or, if preferred, what I have termed the indentations B^4, may be extended continuously around, forming a horizontal groove, so that the cap C, may be locked thereon by the catches D, in any position desired.

The top B and body A are held firmly and elastically together, so as to serve very nearly equivalently to a single piece of glass, but with the advantage that in case one portion is broken, it may be replaced without requiring the replacing of the other part. Between the parts A and B is a ring of felt, E, which may be cemented by silicate of soda or other suitable cementing material, to the upper surface of the flange A′, which forms the top of the body A.

There are iron castings, G^1, G^2, and H, which encircle the lamp around and adjacent to the joint between the parts A and B.

The lower casting, H, is a single piece of iron, carrying pieces of felt E^1, extending around the lamp in two or more pieces, and which may be cemented upon the iron by any suitable cementing material, to aid in keeping them in place.

Upon this single ring H rest two semi-rings G^1 G^2, which are lapped upon each other at the joints, as represented.

Each half incloses the base of the upper portion B, and carries half of the felt-ring E^2.

I I are screw-bolts, put up from below, through suitable holes in the single ring H, and in the overlapping parts of the half-rings G^1 G^2.

J J are large thumb-nuts, cast or otherwise formed in an ornamental style, and adapted by applying upon the bolts I, to perform the double function of holding the parts G^1 G^2 H, and consequently the parts A B of the lamp, firmly together, and also of decorating the finished structure and giving it a highly-attractive appearance. They may carry any suitable symbolic or other device, or may be simply lettered to indicate the name of the city, park, or other place in which the lamp is to be used.

The felt E, between the parts A and B, adapts itself to any slight inequalities in the fit of the glass, and allows the parts to be held firmly in position.

The felts E^1 E^2 perform a similar function between the glass parts A and B and the iron parts G^1, G^2, and H.

What I have termed felt may be Canton flannel, or woolen flannel, or various analogous soft and elastic material. It may be India rubber, or it may be felt saturated, in various degrees, with India rubber.

Although I have described the felts E^1 E^2 as cemented upon the cast rings G^1 G^2 and H, I can, with equal success, cement them with fish-glue, or other suitable cementing material directly upon the adjacent surfaces of the glass which they are to protect. I can, in fact, use them with some success without cementing at all. I propose, in ordinary cases, to furnish each glass part A or B with the felt or analogous soft material, firmly cemented in its proper position on the glass before it leaves the hands of the manufacturer.

I believe that the corrugations in my top part B serve an important function in modifying the reflective action of the top in addition to their other effects, above noted. The corrugations tend still better than a simply concave surface to concentrate the light at and near the foot of the lamp-post. This is a point which usually is but feebly lighted.

I claim as my improvements in street-lamps—

1. The glass top B, corrugated as and for the purposes herein set forth.

2. The ring G^1 G^2, made in separate pieces, matching upon the ring H, and holding the parts A B of the lamp together, as specified.

3. The felt E, or its equivalent, arranged as represented, relatively to the parts A B of the lamp and to the confining means, as specified.

In testimony whereof I have hereunto set my name in presence of two subscribing witnesses.

GEO. BRANDON.

Witnesses:

THOMAS D. STETSON,

C. C. LIVINGS.