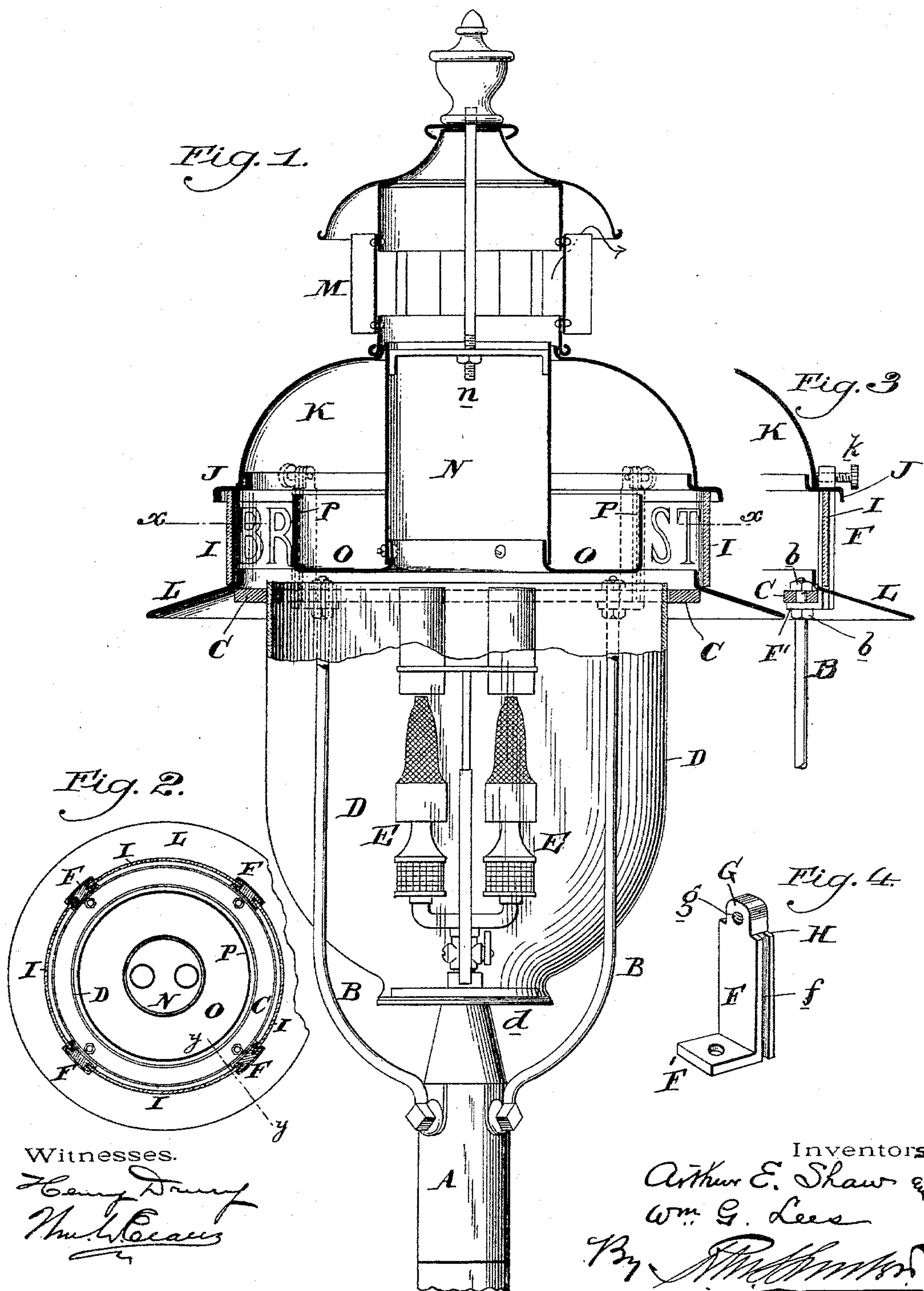


(No Model.)

A. E. SHAW & W. G. LEES.  
STREET LAMP.

No. 597,439.

Patented Jan. 18, 1898.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.



# UNITED STATES PATENT OFFICE.

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## STREET-LAMP.

SPECIFICATION forming part of Letters Patent No. 597,439, dated January 18, 1898.

Application filed June 9, 1897. Serial No. 639,937. (No model.)

*To all whom it may concern:*

Be it known that we, ARTHUR E. SHAW and WILLIAM G. LEES, of the city and county of Philadelphia, State of Pennsylvania, have invented an Improvement in Street-Lamps, of which the following is a specification.

Our invention has reference to street-lamps; and it consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

The object of our invention is to provide a construction of street-lamp which shall enable the dome to be composed of glass and metal and constructed so as to be easily, simply, and inexpensively manufactured, considering the advantages secured.

In carrying out our invention we provide the annular ring or frame which is supported upon the top of the post with upright guides, between which sections, curved or otherwise, are inserted, with the street indicated thereon by perforations or by a different color to the glass when the latter is used in preference to metal. A reflecting-hood is also carried upon the annular ring or frame immediately below the said name-plate sections or portions. Supported by the uprights and arranged immediately above the said curved portions having the street-names thereon is arranged an annular metal rim which receives a dome-section, preferably of white porcelain or opalescent or translucent vitreous material, which is held thereto by suitable clamps carried by said uprights. Supported upon the upper part of the dome is the ventilator-cap, from which is hung within the dome a deflector for deflecting the light radiated upward in a downward direction.

The details of our improvements will be better understood by reference to the accompanying drawings, in which—

Figure 1 is an elevation of our improved street-lamp with the upper portion in section. Fig. 2 is a sectional plan view of same on line *x x*. Fig. 3 is a view similar to a portion of Fig. 1, but taken close to the line of one of the uprights—as, for instance, on line *y y* of Fig. 2; and Fig. 4 is a perspective view of one of the uprights.

A is the socket adapted to fit upon the top of the post and has secured to it any suitable construction of upright supports B, which sustain an annular ring C.

E represents the burners, which may be of any suitable construction and are inclosed within the glass globe D, which loosely fits within the annular ring C and is supported at the bottom upon the base-cap *d*.

F are a series of uprights which are provided at the bottom with lateral extensions F', bolted to the annular ring C by the upper ends of the supports B and the nuts *b b*, as clearly shown in Fig. 3. These uprights F are provided with grooves *f* upon each side to receive the curved plates I, upon which may be formed letters or numbers corresponding to the street. These plates are preferably formed of colored glass, with the letters clearly defined thereon in white, but may, if desired, be formed of perforated sheet metal. Supported upon the uprights F and immediately below the bottom of the curved plates I is arranged the reflecting-hood L, which is loosely placed over the uprights before the plates I are inserted in position. Arranged immediately above the plates I is an annular rim J, which has its outer edge turned down and its inner edge turned upward. This rim is provided with holes, through which the upper ends G of the uprights F pass and through which clamping-screws *k* extend.

H represents shoulders, which correspond to the upper edge of the plates I and act to sustain the rim J.

K is a glass dome, the bottom edge of which rests upon the rim J and upon which it is clamped by the clamping-screws *k* in the upper part of the uprights.

M is the ventilator-cap and may be made of metal and of any suitable construction. This ventilator is adapted to be supported upon the top of the dome K and sustains within said dome the deflector. The dome K is preferably formed of white porcelain or opalescent glass, but it may be formed of metal or any other material.

O is the deflector and is arranged above the burner at the upper part of the globe D. It is of less diameter within the curved plates



I, and so as to leave an annular space between the said plates and the flange P to receive the upper edge of the globe when the latter is raised when adjusting or securing access to the burners. A central portion of the deflector O is open and is secured to the chimney N, which is hung with provision for vertical adjustment from a bolt *n*, depending from the ventilator-cap. The deflector is of metal and coated with white porcelain.

It is evident from this construction that the dome structure as a whole being made in parts and properly assembled greater economy and beauty result than if made in one piece. Furthermore, as it is necessary to manufacture such structures in quantities they may be formed complete without the name being etched or ground upon the glass plates I until filling the order. It is also evident that if the name of a street is changed the name may be changed on the lamp by simply changing the plates I. Furthermore, in case of breakage the lamp may be repaired at small expense.

By forming the dome K of glass or porcelain the effect of the lamp at night is exceedingly brilliant, as the light shining through the dome also illuminates the ventilating-cap. This effect is, furthermore, heightened by red or blue glass plates I with the white names formed thereon.

It is evident that while our improved lamp is shown as made circular in sectional plan, this shape may be modified to suit the ideas of the designer, since it is not essential that it shall be circular, although that is the preferable form.

While we prefer the construction shown, it is evident that the minor details may be modified without departing from the spirit of the invention.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a street-lamp, the combination of an annular frame permanently supported above and connected to the top of the lamp-post, a translucent dome supported at a distance above the annular frame upon uprights, detachably-arranged curved name-plates interposed between the bottom of the dome and the annular frame, a burner secured to the top of the lamp-post, and an inclosing globe open at the top for free passage of air and of less diameter than the annular frame and also vertically adjustable within the annular frame and curved name-plates.

2. In a street-lamp, the combination of an annular frame permanently supported above and connected to the top of the lamp-post, a translucent dome supported at a distance above the annular frame upon uprights, detachably-arranged curved name-plates interposed between the bottom of the dome and the annular frame, a burner secured to the top of the lamp-post, an inclosing globe open at the top for free passage of air and of less

diameter than the annular frame and also vertically adjustable within the annular frame and curved name-plates, a metallic ventilator-cap supported above the dome, and a deflector arranged within the dome sustained from the ventilator-cap and independent of the globe.

3. In a street-lamp the combination of a burner, a vertically-adjustable globe surrounding said burner and open at the top, an annular frame surrounding the globe, a porcelain dome supported at a distance above the annular frame and of greater diameter than the globe, and detachable name-plates arranged between the lower part of the dome and the annular frame.

4. In a street-lamp, the combination of a burner, a vertically-adjustable globe surrounding said burner and open at the top, an annular frame surrounding the globe, a porcelain dome supported at a distance above the annular frame and of greater diameter than the globe, detachable name-plates arranged between the lower part of the dome and the annular frame, and a deflector supported within the space bounded by the dome and the name-plates.

5. In a street-lamp, the combination of the lamp-post, a supporting-frame having two or more uprights permanently and wholly carried thereby, curved detachable name-plate sections secured in position upon and between said uprights, a dome supported by the lamp-post by said uprights above the curved name-plates, means to hold the dome to the uprights, and a ventilator detachably supported upon the upper part of the dome.

6. In a street-lamp, a supporting-frame having two or more uprights carried thereby, curved name-plate sections secured in position upon said uprights, a dome supported by said uprights above the curved name-plates, means to hold the dome to the uprights, a reflecting-hood projecting laterally from below the curved name-plate, and an annular metallic rim interposed between the base of the dome and the upper part of the curved name-plates.

7. In a street-lamp the combination of the annular ring C, uprights F carried by the ring and having grooved edges as at *f*, plates I interposed between the adjacent grooves of the uprights, an annular rim fitting over the tops of the uprights and arranged above the plates I, and a dome K resting upon the upper part of the rim J.

8. In a street-lamp, the combination of the annular ring C, uprights F carried by the ring and having grooved edges as at *f*, plates I interposed between the adjacent grooves of the uprights, an annular rim J fitting over the tops of the uprights and arranged above the plates I, a dome K resting upon the upper part of the rim J, and a reflecting-hood L fitted over the uprights F and interposed between the plates I and the annular ring C.



9. In a street-lamp, the combination of the annular ring C, uprights F carried by the ring and having grooved edges as at *f*, plates I interposed between the adjacent grooves of the uprights, an annular rim J fitting over the tops of the uprights and arranged above the plates I, a dome K resting upon the upper part of the rim J, and clamping-screws *k* carried in the upper parts of the uprights and adapted to hold the globe K in position.

10. In a street-lamp, the combination of a framework rigidly and permanently carried upon the upper end of the post and having metal uprights provided with vertical guides, name-plates arranged in sections between the uprights and held by the guides thereof, and a dome structure also supported by the uprights and having its lower part fitted down close to and outwardly over the name-plate sections.

11. In a street-lamp, the combination of a

framework rigidly and permanently carried upon the upper end of the post and having metal uprights provided with vertical guides, name-plates arranged in sections between the uprights and held by the guides thereof, a dome structure also supported by the uprights and having its lower part fitted down close to the name-plate sections, and an interposed metal rim carried by the uprights arranged between the bottom of the dome and the top of the name-plates and so constructed that its inner edge fits within the dome and its outer edge extends outward and over the name-plates to shed the water.

In testimony of which invention we hereunto set our hands.

ARTHUR E. SHAW.  
WM. G. LEES.

Witnesses:

F. H. MACMORRIS,  
THOS. A. JAMES.