

J. S. WOOD.
STREET-LAMP.

No. 178,396.

Patented June 6, 1876.

Fig. 1.

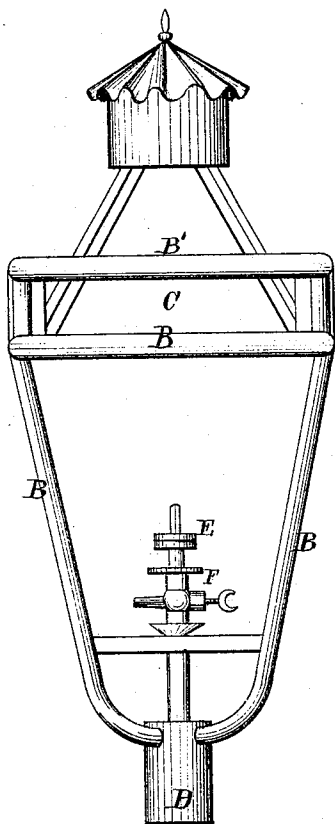


Fig. 2.

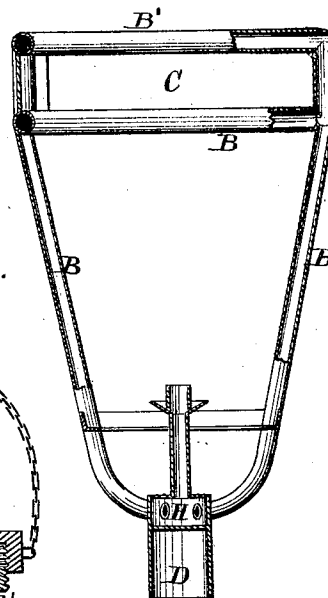
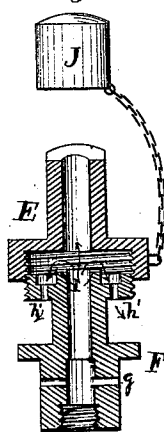


Fig. 3.



Witnesses:

Forman Whitney.
David B. Brown.

Inventor:

Joseph S. Wood

UNITED STATES PATENT OFFICE.

JOSEPH S. WOOD, OF NEW YORK, N. Y.

IMPROVEMENT IN STREET-LAMPS.

Specification forming part of Letters Patent No. **178,396**, dated June 6, 1876; application filed April 4, 1876.

To all whom it may concern :

Be it known that I, JOSEPH S. WOOD, of the city, county, and State of New York, have invented a new and Improved Street-Lamp, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved street-lamp with the glass set into the frame. Fig. 2 is a side view of the frame with the glass detached; Fig. 3, a detail vertical central section of the burner of the lamp.

Similar letters of reference indicate corresponding parts.

The object of my invention is to utilize the glass-supporting frames of street lamps or lanterns for the purpose of holding the oil and feeding it, under suitable pressure, to the point of combustion, so as to generate the gas or vapor required for the flame.

The invention is further intended to arrange the oil-holding tubes in such a manner that open spaces are formed for the transparent signs with the names of the streets placed thereon, which may thereby be clearly and distinctly seen and read.

The invention consists, mainly, of the arrangement of an oil-reservoir below the burner, which is connected with the glass-supporting frame, made of hollow tubing, of any shape, and of two ring-shaped connected tubes, one above the other, at the top part of the frame, between which the transparent signs are placed. The oil is filled through an opening of the uppermost ring-shaped tube, and fed to the burner by the internal pressure of the gas generated by the heating up of the same.

In the drawing, A represents a street-lamp that is constructed of a number of upright tubes, B, that form the glass-supporting frame or basket. The upright tubes B support at the upper ends a horizontal ring-shaped tube, B, which is connected, by short tubes, with a second ring-shaped tube, B', placed at some distance from the lower one. The ring-shaped tubes B B' form a space, C, between them, for inserting the transparent signs that indicate the names of the streets. The ring-shaped tubes may, however, be made of flat, tapering, or triangular shape, to be utilized as reflectors—in that case inserted near the outer end.

The upright tubes B connect at their lower

ends with the oil-reservoir H, from which, by a central connecting-tube, the burner is fed. The tubes B B' and reservoir H are filled with oil through top apertures of the uppermost ring, the oil being fed gradually to the burner by the pressure of the gas generated in the reservoir by the heating up of the lower burner-tube, which pressure sustains the oil in the tubes B, and feeds the same gradually to the burner. A socket, D, below the oil-reservoir, serves to attach the lamp to the post. The burner is composed of two disk-shaped sections, E and F, which are screwed together by means of threaded circumferential flanges. The lower section F of the burner has perforations or jet-holes *g* around the central tubular part, through which the gas passes out for the purpose of heating up the lower part of the burner and generating the gas required for illumination by the burner-tube of the upper section. One or both sections E and F are provided with central seats or bosses I, that will come closer together or form a wider space between them, according as the sections are screwed together or apart. In screwing down the upper half until the seats come in contact the supply of gas to the jet-holes is entirely cut off, and thereby the jet or heating flame extinguished. The jet-holes are drilled large enough so that they are not liable to be clogged by soot or other impurities. The flame at the lower disk-section of the burner is made larger or smaller, according to the amount of heat required at different temperatures, a larger heating-flame being required in winter than in summer for the purpose of generating the gas for illumination at the upper burner. A cap, J, is preferably placed over the burner when the illuminating-flame is to be extinguished, the jet-flame remaining burning to keep the upper burner heated, to be lighted at once, avoiding thereby the trouble of heating up the burner for the generation of the gas or vapor.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A lamp-frame, made of hollow oil-holding tubes, supporting the glass, in connection with an oil-reservoir at the lowermost part of the frame below the burner, substantially as and for the purpose set forth.

2. A glass-supporting frame for street-lamps, made of oil-holding tubes, with horizontal ring-shaped top tubes forming spaces for the transparent signs, substantially as described.

3. The combination of the oil-holding glass-supporting tubes, and of the oil-reservoir at the lower part, with an adjustable heating and illuminating burner to generate gas to sustain the oil in the tubes and feed it gradually to the burner, substantially as described.

4. The combination of a lower stationary

disk-section of the burner, having a central projecting seat, I, and jet-holes, with a regulating top section screwing thereon, to heat up the gas-generating tube and supply the gas to the illuminating-burner, substantially as and for the purpose specified.

JOSEPH S. WOOD.

Witnesses:

FORMAN WHITNEY,
DAVID BROWN.