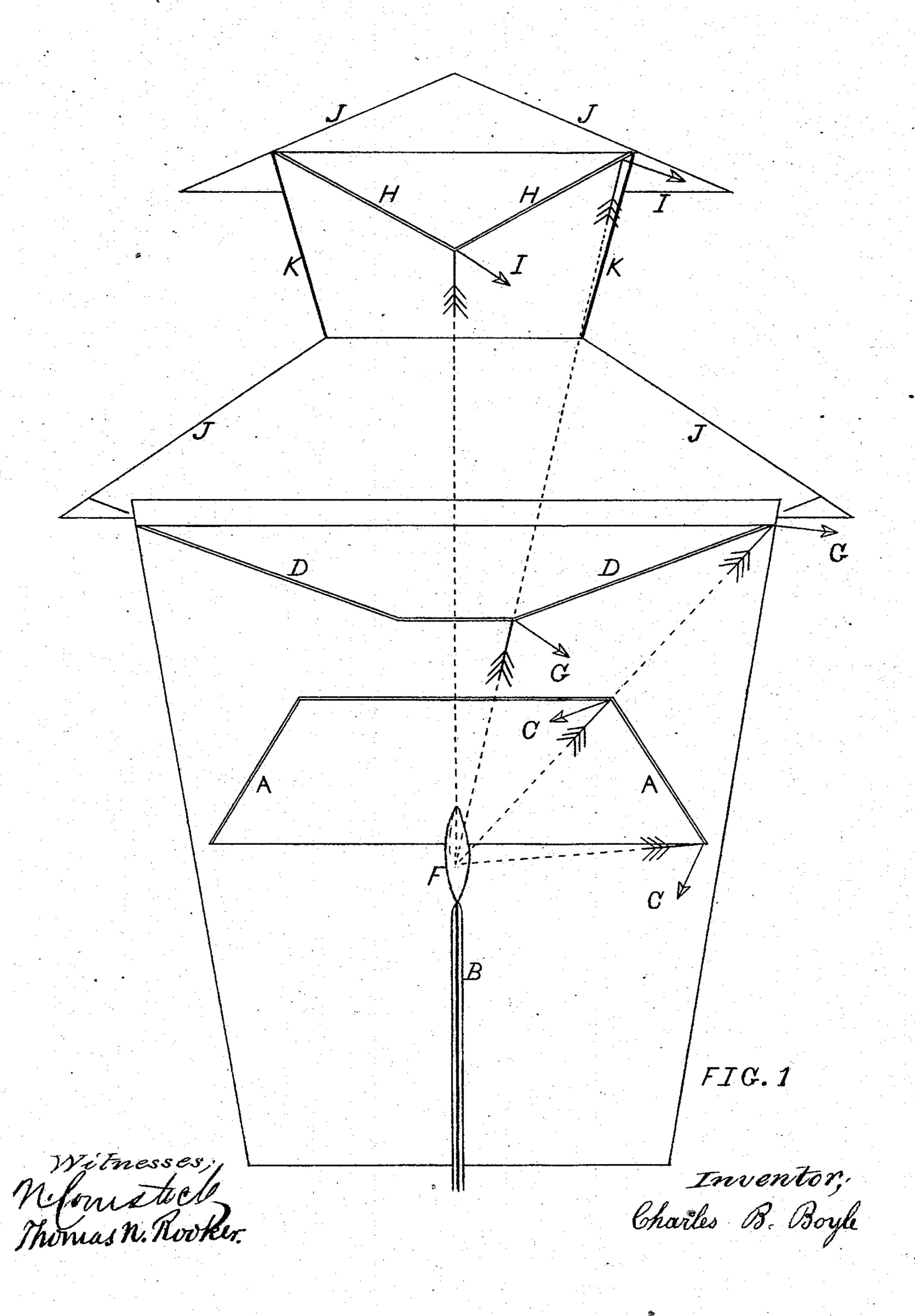
2 Sheets -- Sheet 1.

C. B. BOYLE.
Street Lamps.

No. 158,396.

Patented Jan. 5, 1875.

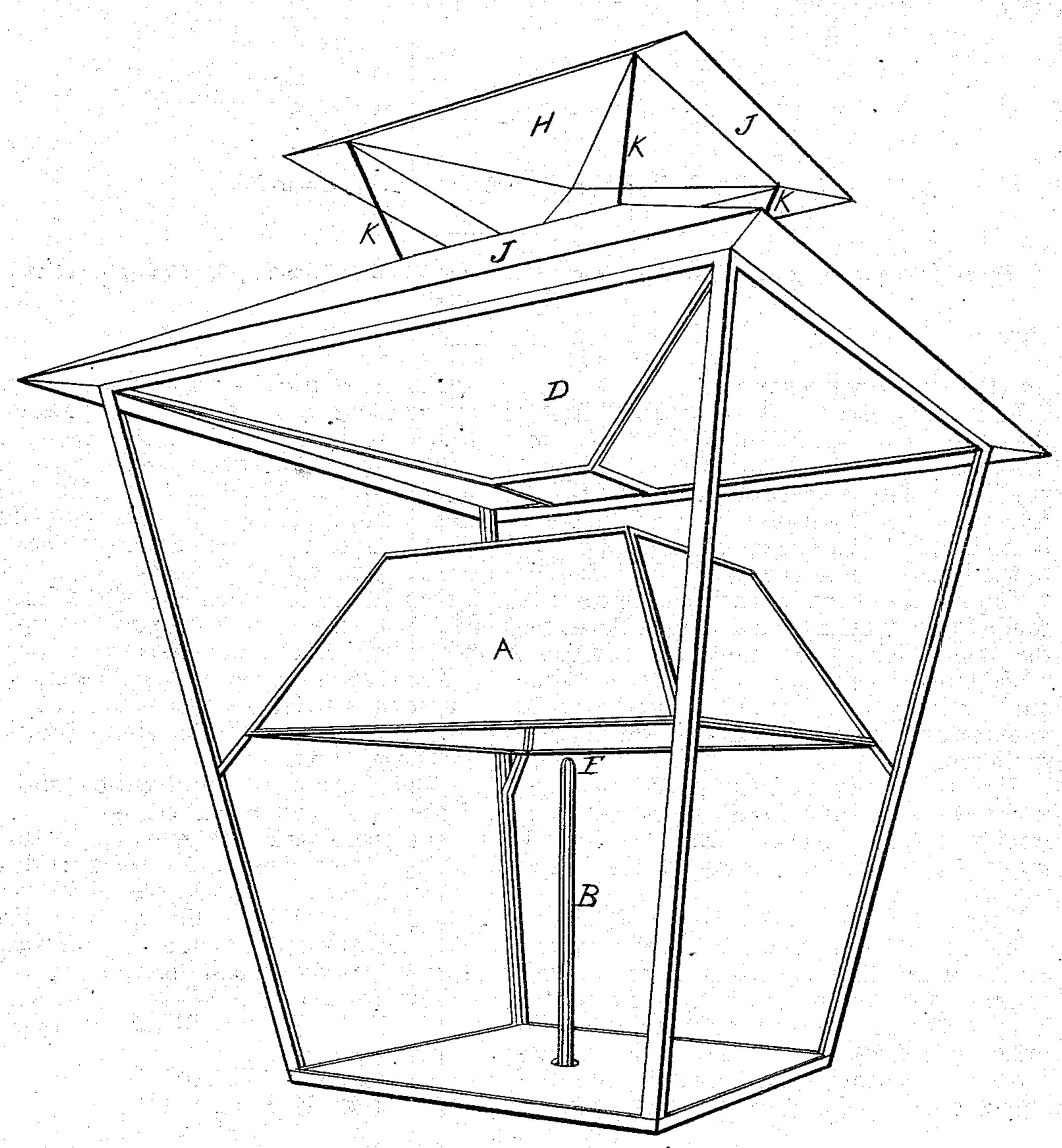


2 Sheets -- Sheet 2.

C. B. BOYLE.
Street-Lamps.

No. 158,396.

Patented Jan. 5, 1875.



Witnesses, Mismesses, Thomas n. Rowker,

FIG. 2

Inventor. Charles B. Boyle

## UNITED STATES PATENT OFFICE.

CHARLES B. BOYLE, OF NEW YORK, N. Y.

## IMPROVEMENT IN STREET-LAMPS.

Specification forming part of Letters Patent No. 158,396, dated January 5, 1875; application filed June 5, 1874.

To all whom it may concern:

Be it known that I, Charles B. Boyle, of the city, county, and State of New York, have invented a new and Improved Street-Lamp; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in so combining a system of reflecting-surfaces that the light which is now radiated upward into space from the street-lamps in use, and other outdoor lamps, may be intercepted and distributed over the spaces which it was intended to illuminate.

Figure 1 shows an outline side view upon a reduced scale of an ordinary street-lamp, from its bottom to its cornice, above which the upper portion of the improved street-lamp is represented.

B is the burner; F, the flame and point of radiation. The shafts of the broken arrows represent the direction taken by the radiated or emitted rays, while the barbs indicate their course after the interposed reflectors have altered their direction. A A are the surfaces of the first reflector. (Shown in section.) The angles of emitted light which they intercept

are directed back to the street, as indicated by the barbs C C. D D are the surfaces of the second reflector, which direct the light they reflect back to the street, as shown by the arrows G G, and H H are the third reflector, which intercepts the light escaping through the flue or chimney and directs it back to the street, as shown by the barbs I I. J J J show sectional views of the roofs of the lamp, and K K are wires, which support the upper reflector and its roof above the main roof.

The drawing shows the application of such a system of reflectors to the form of the lamps now in use; but it can be adapted to those of any form or size.

What I claim as my invention, and desire

to secure by Letters Patent, is—
The combination of reflectors

The combination of reflectors, A throwing the light downward and inward, D throwing outward and downward the light received through A, and H, in like manner, throwing the light received through D downward and outward, as shown and described.

New York, June 2, 1874.

CHAS. B. BOYLE.

Witnesses:

FRANK P. CRASTO, LOUIS R. FRANK.