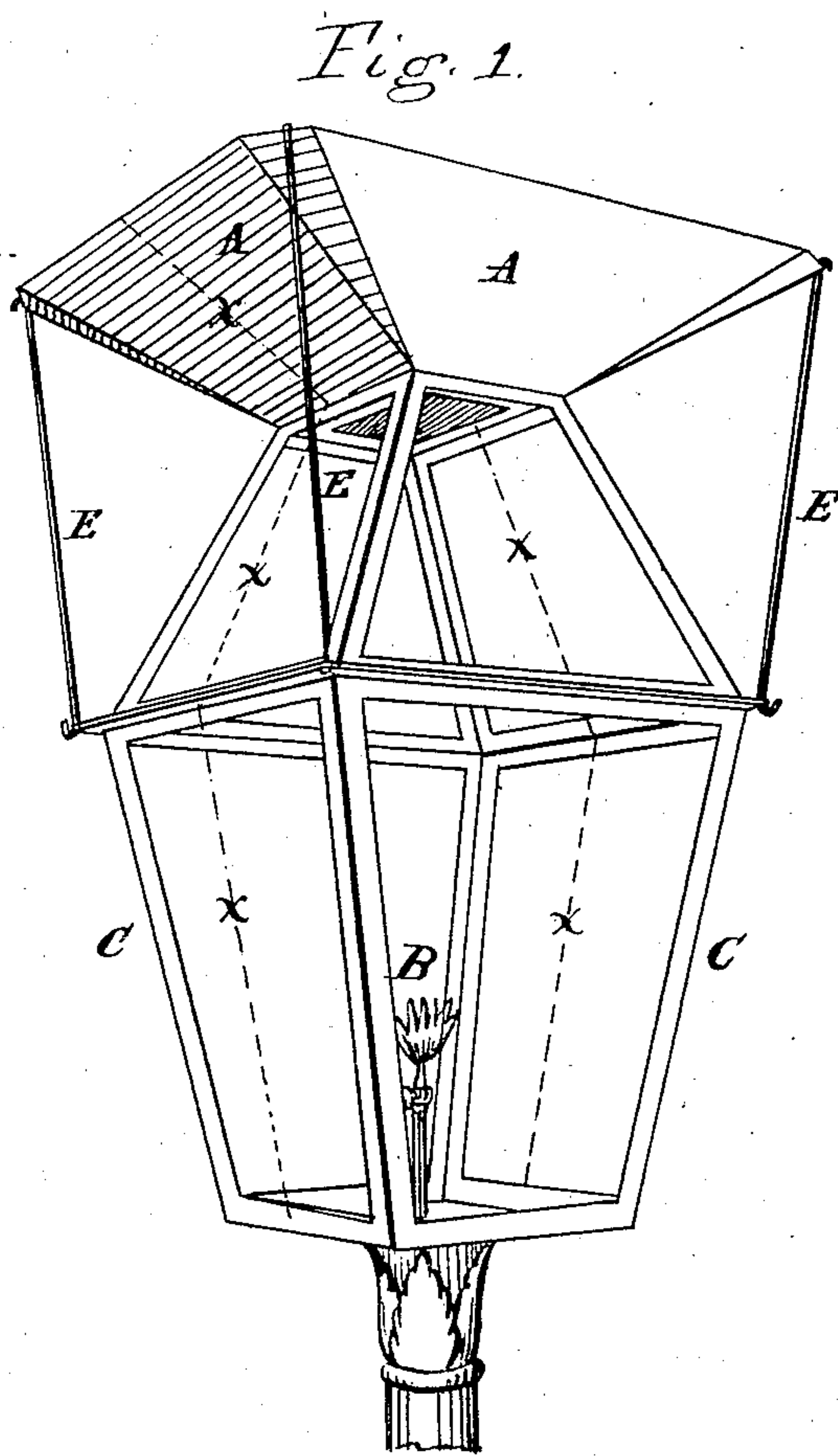
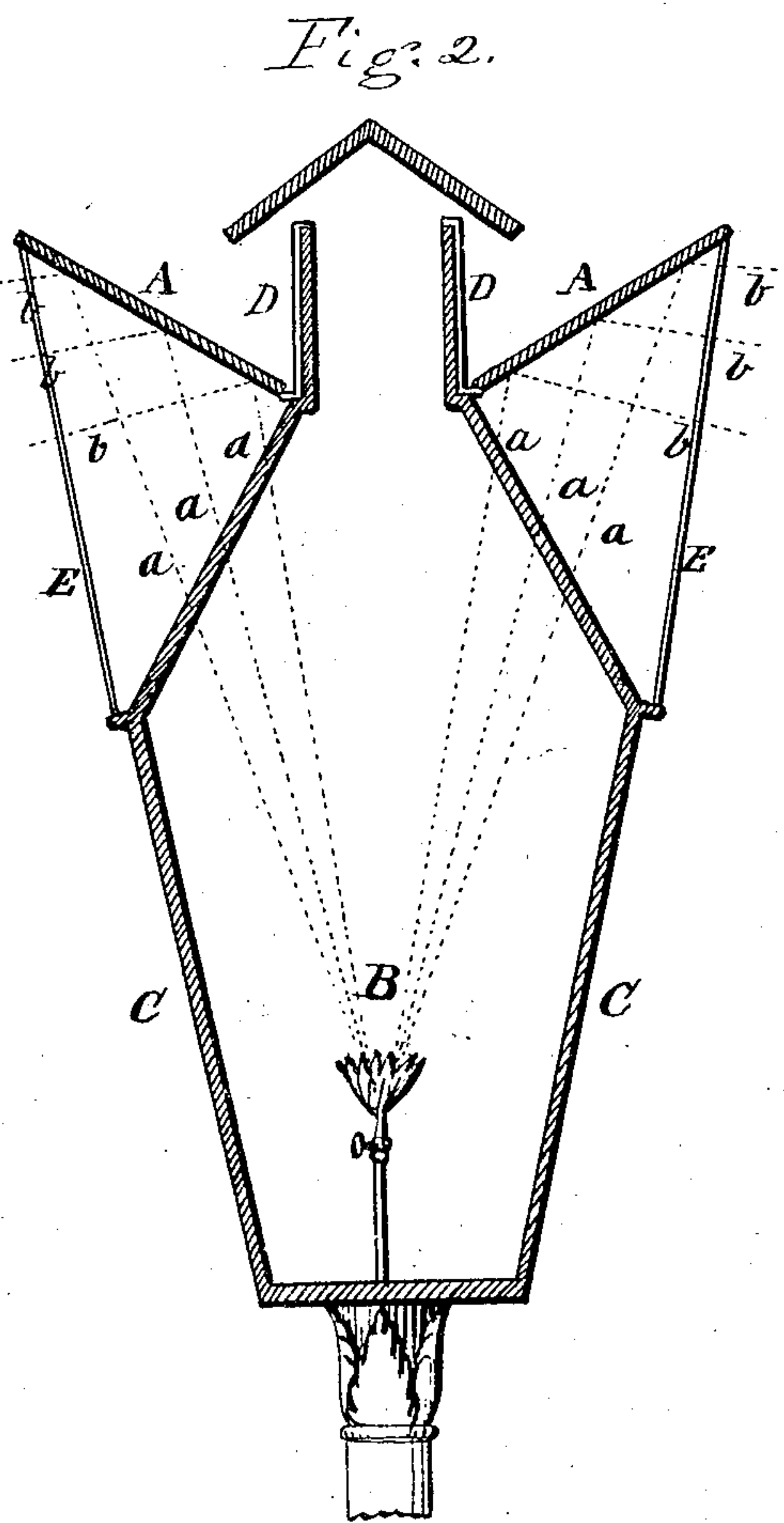


C. L. LOCHMAN.
Street-Lamps.

No. 153,581.

Patented July 28, 1874.



Witnesses:
Oliver Edwards
Thomas J. Osler

Inventor.
C. L. Lochman

UNITED STATES PATENT OFFICE.

CHARLES L. LOCHMAN, OF CARLISLE, ASSIGNOR OF ONE-HALF HIS RIGHT
TO THEOPHILUS L. NEFF, OF HARRISBURG, PENNSYLVANIA.

IMPROVEMENT IN STREET-LAMPS.

Specification forming part of Letters Patent No. **153,581**, dated July 28, 1874; application filed
March 29, 1873.

To all whom it may concern:

Be it known that I, CHARLES L. LOCHMAN, of Carlisle, in the county of Cumberland and State of Pennsylvania, have invented certain Improvements in Street-Lamps, of which the following is a specification:

The nature of my invention consists of an attached reflector to a street-lamp, so that the rays of light that usually pass through the top of a lamp are utilized and distributed more or less horizontally along the street and sidewalk.

Figure 1 is a perspective view of a street-lamp of the ordinary construction with my reflector attached. Fig. 2 is a vertical transverse section of the same cut by the lines *x x*, &c., into two equal parts.

C C is a street-lamp, of an ordinary shape, with a pyramidal top of transparent glass. B is the gas-jet. A A is the reflector, which is made of any suitable reflecting medium, preferably polished metal, silvered mica, or ordinary looking-glass, supported by a rigid medium if the latter two materials are used.

The reflector is in the form of an inverted cone or pyramid, and may be either circular or polygonal, having plane or fluted surfaces. The sides are pitched at such an angle that the reflected rays are projected nearly horizontally.

It will be observed that when the sides of the reflector are straight the outer rays *a a* are reflected at a greater angle than the inner rays, which gives a proper diffusion of light, desirable in a street-lamp.

The reflector is fastened to the lamp by the metallic strips D D and wire stays E E, &c., one end of each of said wires being fastened

to the outer edge of the reflector, and the other end to the middle frame of the lamp.

In Fig. 2 are shown, by dotted lines, the incident rays of light *a a*, &c., proceeding from the jet and striking the reflector A A, and thence being reflected as shown by the dotted lines *b b*, &c., at different angles.

The top of the reflector may be closed to prevent the accumulation of snow, or, when kept uncovered, a sufficient space must be left at the bottom for the escape of rain.

It is apparent that a reflector constructed and attached to a street-lamp in this manner will utilize most of the light that usually escapes at the top, which proceeds directly from the burner, and also some of the rays that are reflected upward from the inside of the glass of the lamp.

Reflectors heretofore constructed were designed mainly to reflect the light downward around the lamp-post, where the light is always sufficient without such reflectors.

My reflector has further the advantage that it may be attached to ordinary street-lamps in present use.

I claim as my invention—

The combination, with a street-lamp, C, of the reflector A, made in the form of an inverted frustum of a pyramid and attached to the top of the lamp by strips D and wires E, in order to throw the rays of light out in a horizontal, or nearly horizontal, direction, substantially as set forth.

C. L. LOCHMAN.

Witnesses:

OLIVER EDWARDS,
THOMAS I. OSLER.