

(No Model.)

H. LEAK.
STREET LAMP.

No. 465,481.

Patented Dec. 22, 1891.

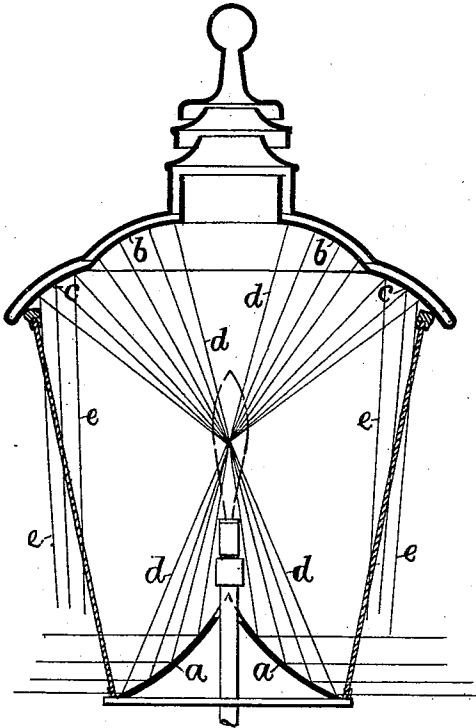


FIG. 1.

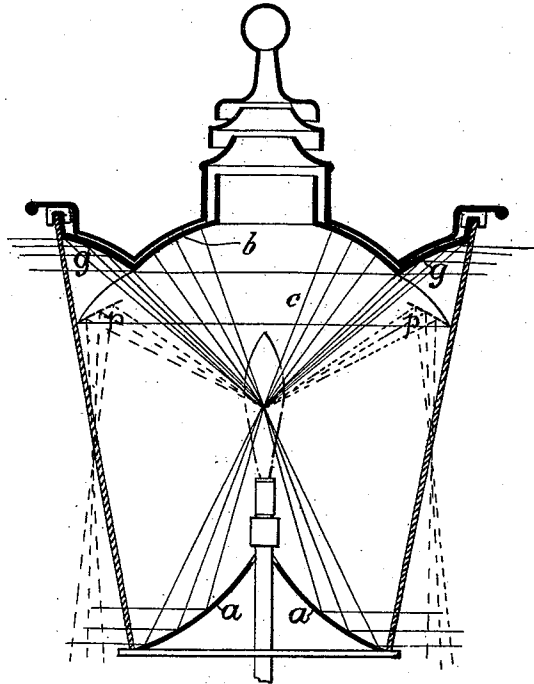


FIG. 3.

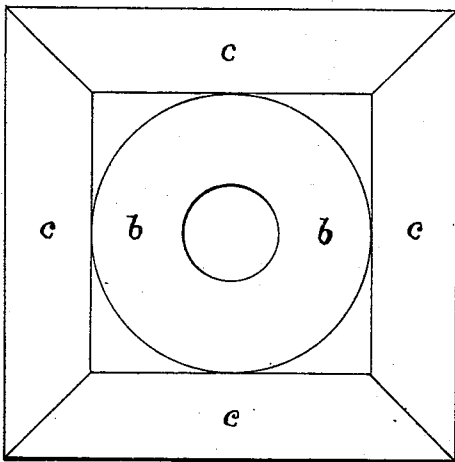


FIG. 2.

Witnesses:

C. J. Bell

C. S. Clarkson

INVENTOR.

Hector Leak

BY HIS ATTORNEY.

Herbert W. Jenner.

UNITED STATES PATENT OFFICE.

HECTOR LEAK, OF WINSFORD, ENGLAND.

STREET-LAMP.

SPECIFICATION forming part of Letters Patent No. 465,481, dated December 15, 1891.

Application filed January 20, 1891. Serial No. 378,458. (No model.) Patented in England June 14, 1890, No. 9,227.

To all whom it may concern:

Be it known that I, HECTOR LEAK, a subject of the Queen of Great Britain and Ireland, and a resident of Winsford, in the county of Chester, England, have invented new and useful Improvements in Street-Lamps, (for which I have obtained a patent in Great Britain, No. 9,227, bearing date June 14, 1890,) of which the following is a specification.

My invention relates to improvements in lamps; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a sectional elevation of a lamp provided with reflectors according to this invention. Fig. 2 is a plan view of the upper reflectors from below. Fig. 3 is a sectional elevation showing a modification of the lamp shown in Fig. 1.

The lamp is provided with four lower distance-reflectors *a*, arranged around the base of the gas-pipe inside the lantern for throwing the rays of light horizontally, as indicated by the lines in the drawings. An annular concave reflector *b* is secured in the upper part of the lantern and is adapted to throw the rays of light onto the reflectors *a*. The reflector *b* is surrounded by upper distance-reflectors for throwing the light outside the lantern. These reflectors may be arranged to throw the light vertically downward, as shown by the lines marked *c* in Fig. 1, in which the upper distance-reflectors are

marked *c*; but the said reflectors may be arranged to reflect the light outside the lantern in any direction. In the modification shown in Fig. 3 two of these upper distance-reflectors are marked *g* and reflect the light horizontally. The remaining two reflectors *c* alternate with the reflectors *g* and are arranged to throw the light downward. Additional reflectors *p*, as indicated in dotted lines, may also be used below the reflectors *g* for throwing the light downward.

What I claim is—

1. In a lamp, the combination, with the lower distance-reflectors *a*, of the annular concave reflector *b* for throwing the light onto the said reflectors *a*, and the curved upper reflectors surrounding the said reflector *b* and adapted to throw the light outside the lamp, substantially as and for the purpose set forth.

2. In a lamp, the combination, with the lower distance-reflectors *a*, of the annular concave reflector *b* for throwing the light onto the said reflectors *a*, and the curved upper reflectors *g*, surrounding the reflector *b* and adapted to throw the light horizontally outside the lamp, substantially as and for the purpose set forth.

In testimony whereof I affix my signature to the foregoing specification.

HECTOR LEAK.

Witnesses:

JOHN G. WILSON,
WALTER GUNN.