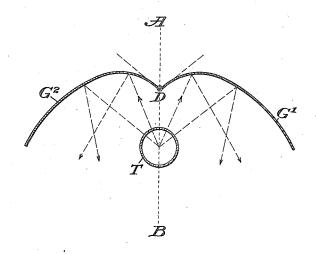
J. C. POLE.
REFLECTOR FOR VAPOR LAMPS.
APPLICATION FILED APR. 30, 1910.

1,153,443.

Patented Sept. 14, 1915.



WITNESSES: Chasf Clagett Tho GA Brown Joseph C. PoliNVENTOR

BY

ATTORNEY

## UNITED STATES PATENT OFFICE.

JOSEPH C. POLE, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO COOPER HEWITT ELECTRIC COMPANY, OF HOBOKEN, NEW JERSEY, A CORPORATION OF NEW JERSEY.

REFLECTOR FOR VAPOR-LAMPS.

1,153,443.

Specification of Letters Patent. Patented Sept. 14, 1915.

Application filed April 30, 1910. Serial No. 558,749.

To all whom it may concern:

Be it known that I, Joseph C. Pole, a subject of the Emperor of Austria-Hungary, and resident of New York, county of New York, State of New York, have invented certain new and useful Improvements in Reflectors for Vapor-Lamps, of which the following is a specification.

The problem of supplying suitable re-

10 flectors for mercury vapor lamps is attended with some difficulties owing to the fact that the mercury arc, so-called, is opaque to its own light and, therefore, absorbs the total amount of light received
15 from a reflector. It is, therefore, necessary, in order to secure the best results in the way of reflection, to so constitute or arrange the reflectors that the light reflected therefrom shall pass by but not through the lighting tube.

One arrangement for accomplishing this result is illustrated in the drawing wherein, T, is a section of the tube of a mercury vapor lamp and G<sup>1</sup>, and G<sup>2</sup>, are reflectors which, in this instance, are symmetrically arranged with respect to an imaginary line A, B, meeting at point D, at an angle. By observing the arrows and the dotted line connected therewith, it will be seen that no portion of the light reflected from the mir-

rors  $G^1$ , and  $G^2$  strikes the tube T. All the reflected light passes by the said tube and may, therefore, serve the useful purpose for which it was intended.

The curves given to the mirrors  $G^1$  and  $G^2$  may be segments of circles, parabolas or any other suitable curve, according to the requirements of light distribution to which it is intended that the reflectors should contribute. The only condition is that the light should be so reflected as to pass by tube T and should not strike any portion thereof.

I claim as my invention:—

The combination with a source of light, 45 of a reflector consisting of two similar truncated segments symmetrically arranged with respect to the source of light, the said segments meeting at a point directly above the said source and presenting to the source felecting curves which cause the rays returned from the reflector to pass the source of light.

Signed at New York, in the county of New York, and State of New York, this 55 15th day of April, A. D. 1910. JOSEPH C. POLE.

Witnesses:

WM. H. CAPEL, Thos. H. Brown.