

(No Model.)

C. COERPER.
REFLECTOR FOR ARC LAMPS.

No. 534,424.

Patented Feb. 19, 1895.

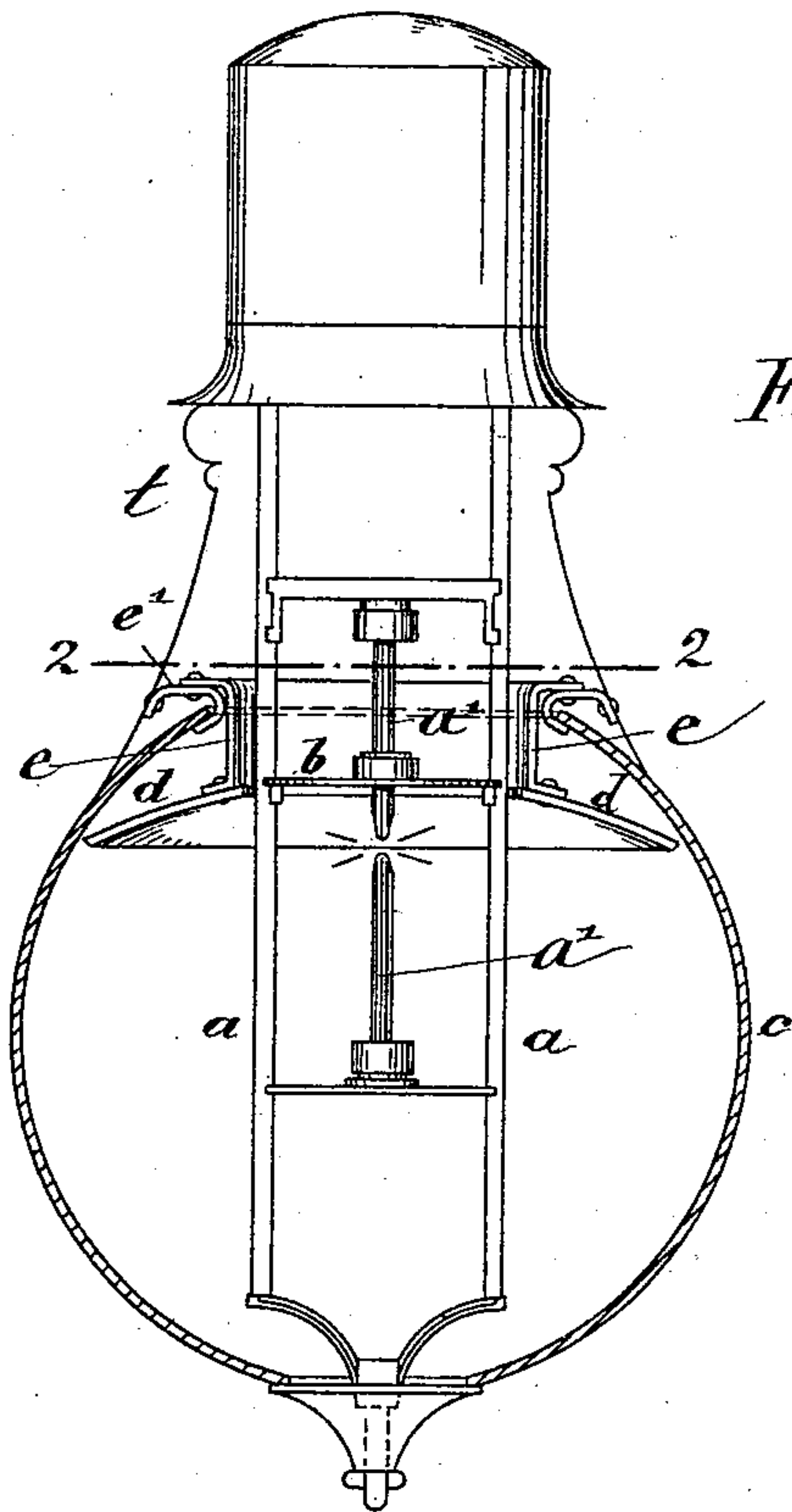


Fig. 1.

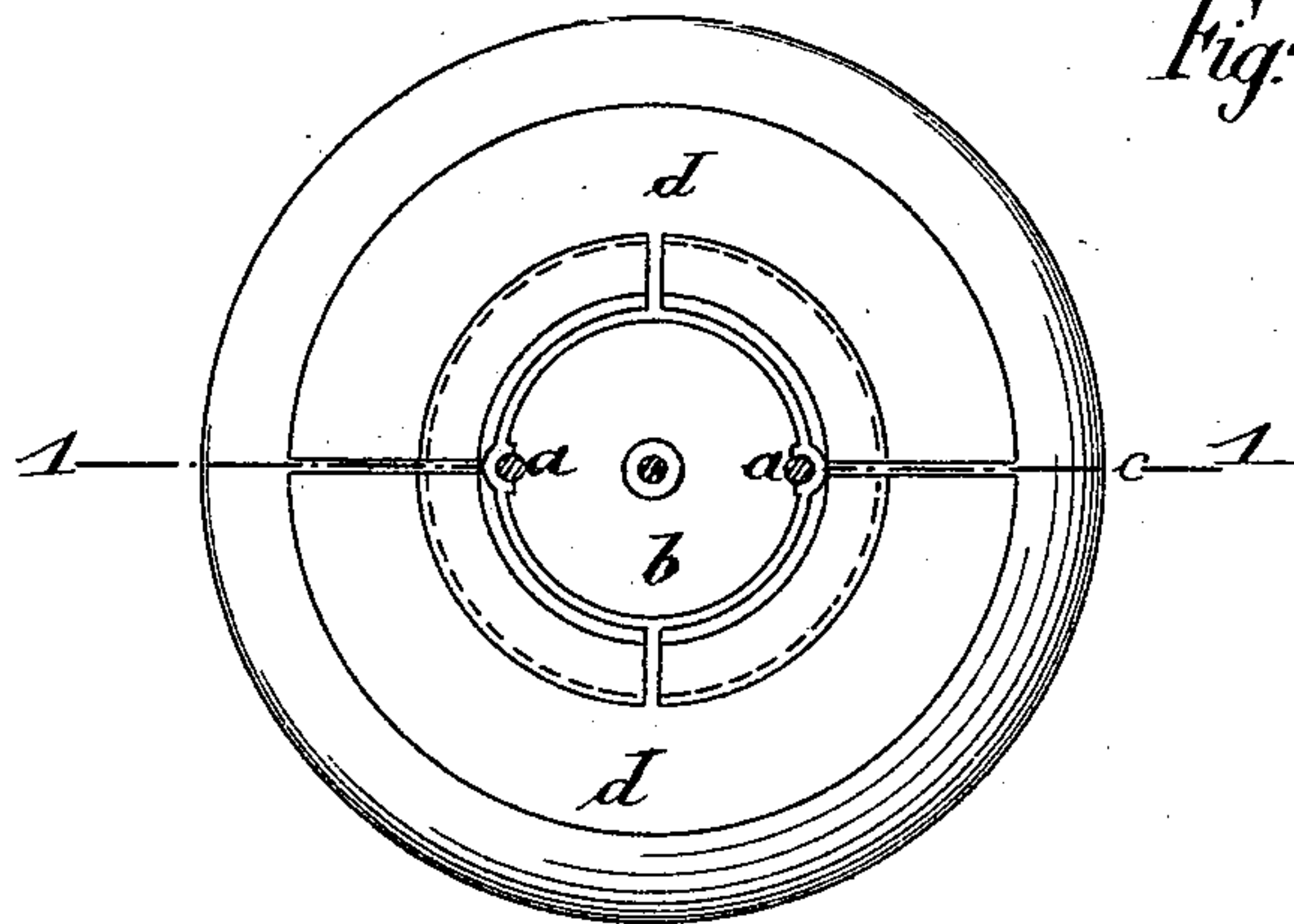


Fig. 2.

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CARL COERPER, OF COLOGNE, GERMANY.

REFLECTOR FOR ARC LAMPS.

SPECIFICATION forming part of Letters Patent No. 534,424, dated February 19, 1895.

Application filed May 15, 1894. Serial No. 511,303. (No model.)

To all whom it may concern:

Be it known that I, CARL COERPER, a citizen of the German Empire, and a resident of Cologne, Germany, have invented certain new and useful Improvements in Reflectors for Arc Lamps, of which the following is a specification.

In electric arc-lamps, and especially those in which the alternating-current is used, it is possible to obtain a favorable illumination only when the reflector is arranged immediately above the arc. With the ordinary lamp-globes, the reflector can have but comparatively small dimensions, for the reason that the size of the same has to be smaller than the mouth of the globe. The small size of the reflector diminishes the effect of the same, however, very considerably.

It is the object of the present invention to furnish an improved reflector of larger size than heretofore, so that the light of the arc can be diffused in a more effective manner.

The invention consists to these ends of a reflector for arc-lamps composed of an inner central reflector which may be introduced through the mouth of the globe and supported therein by means of the supporting rods of the carbons, and having an outer auxiliary sectional reflector of annular form which surrounds the central reflector, such auxiliary reflector being supported within the globe by any suitable means.

In the accompanying drawings,—Figure 1 is a vertical transverse section of the same on line 1, 1, Fig. 2. Fig. 2 is a plan-view of an electric arc-lamp, partly in section on line 2, 2, Fig. 1, and provided with my improved reflector.

Similar letters of reference indicate corresponding parts.

In the drawings, *a*, *a*, are the supporting-rods *c*, the lamp-globe and *a'* the carbons which are supported by the rods *a*. Arranged between the supporting-rods *a*, and supported by the same is a small reflector *b* which can be passed with the rods through the mouth of the globe *c*. For the purpose of utilizing such upwardly-inclined light-rays as would have

been reflected below the horizontal plane by the small reflector *b*, the reflector is enlarged by supporting in any suitable manner around the same an annular auxiliary reflector *d* which is like the reflector *b*, arranged within the glass-globe and is composed of several parts, preferably two, as shown.

In the present instance, the auxiliary reflector *d* is attached to the globe by means of hangers *e*, which are supported from the top-casing *t* above the lamp-globe *c*, through the medium of the hangers *e'* with which the rim of the globe may be engaged. The auxiliary reflector is always arranged within the globe in such a position that it forms in combination with the central small reflector *b* a substantially uniform reflecting surface. In this manner it is possible to employ in electric arc-lamps larger reflectors than heretofore immediately above or on a level with the arc without necessitating the changing of the ordinary glass-globes, and thereby the augmentation of the diffusion of the light is very considerable, particularly with alternating current arc-lamps.

It is evident without particular explanation that the sectional construction of the auxiliary annular reflector *d* enables the introduction of the same through the mouth of the globe, which would be impossible were the same made integral.

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

In an electric arc-lamp, the combination, with a central main-reflector supported within the globe by the supporting-rods of the carbons, of an annular auxiliary sectional-reflector surrounding the central reflector and being located within the globe of the lamp, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

CARL COERPER.

Witnesses:

FRITZ SCHRÖDER,
F. KAMMSSEN.