

S. HEIMANN.
GLOBE FOR ELECTRIC ARC LIGHTS.

No. 565,269.

Patented Aug. 4, 1896.

Fig: 1.

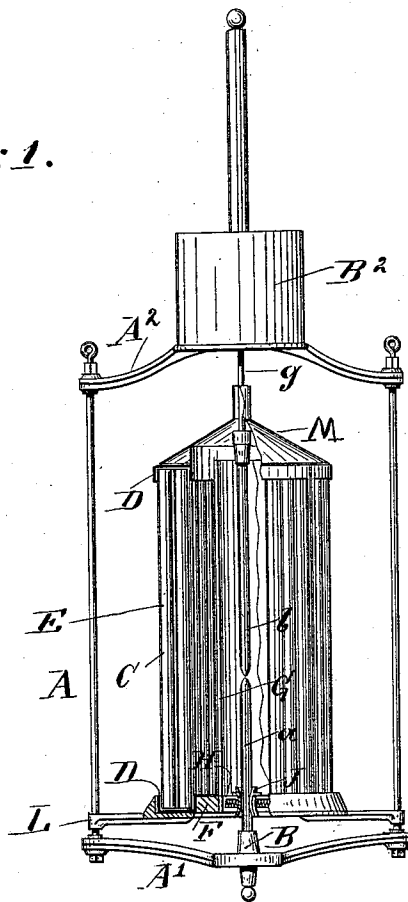


Fig: 2.

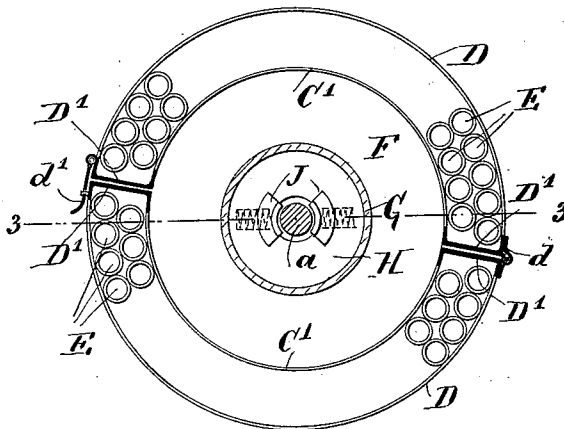
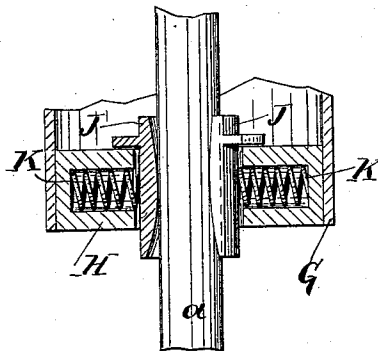


Fig: 3.



Witnesses
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H. M. Flannery

S. Heimann Inventor
By his Attorney Olean F. Gunn

(No Model.)

2 Sheets—Sheet 2.

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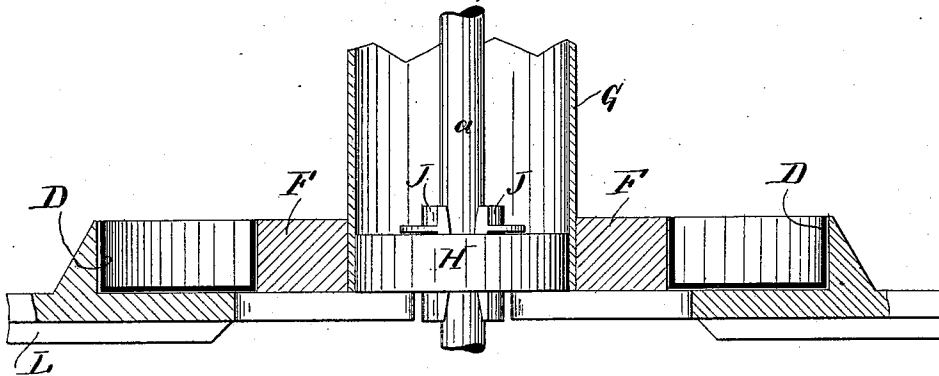


Fig. 4.

Witnesses
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S. Heimann Inventor
By *his* Attorney *Oscar F. Lenz*

UNITED STATES PATENT OFFICE.

SALOMON HEIMANN, OF NEW YORK, N. Y., ASSIGNOR TO LUCAS TOCH, OF SAME PLACE.

GLOBE FOR ELECTRIC-ARC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 565,269, dated August 4, 1896.

Application filed February 29, 1896. Serial No. 581,253. (No model.)

To all whom it may concern:

Be it known that I, SALOMON HEIMANN, a citizen of Germany, and a resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Globes for Electric-Arc Lights, of which the following is a specification.

The object of my invention is to provide a new and improved globe for electric lamps, which globe fully protects the electric arc from atmospheric influences, diffuses the light uniformly, and increases the brilliancy of the same.

In the accompanying drawings, forming a part of this specification and in which like letters of reference indicate like parts in all the views, Figure 1 is an elevation of an electric-arc lamp provided with my improved globe, parts being in section. Fig. 2 is an enlarged detail horizontal sectional view of the globe-cylinder and carbon. Fig. 3 is a vertical transverse sectional view on the line 3 3 of Fig. 2. Fig. 4 is an enlarged detail vertical transverse sectional view through the bottom part of the globe.

The frame of the lamp is of the usual construction and has two side bars A, connected by the bottom cross-piece A' and the top cross-piece A², which bottom cross-piece carries the bottom-carbon clamp B, the top cross-piece carrying the casing B², containing the mechanism for regulating the upper carbon.

The globe C is cylindrical in shape and is composed of two semicylindrical sections C', hinged to swing toward and from each other. Each section has a metal frame composed of a top and bottom semicircular U-shaped piece D, which top and bottom pieces D are connected at their ends by vertical metal strips D', of which one set are hinged to each other by hinges *d* and the other set is provided with a spring-catch *d'*, as shown in Fig. 2, so as to permit of opening and closing the globe. A series of glass tubes E are placed in two concentric rows in vertical position between said top and bottom piece D, which tubes are filled with water or any other suit-

able liquid and sealed at both ends, the said tubes being firmly secured and cemented at both ends in the U-shaped semicircular pieces D, so as to form a cylindrical wall of double thickness of glass tubes. A metal ring F fits snugly in the bottom circular frame formed of the bottom pieces D, and in the central opening of the same the lower end of a glass chimney G is secured, so as to be exactly in the center longitudinally of the cylindrical globe. The lower end of the chimney is closed by a centrally-apertured plug H, in which two spring-clamps J are secured, which are pressed toward each other by springs K, arranged in recesses in said plug.

The cylindrical globe rests on brackets L on the side rods A of the lamp-frame, and a hood M rests on the top of the cylindrical globe. The lower carbon *a* is pushed up through the hole in the plug H and presses the clamps J from each other more or less, according to the diameter of the carbon, and is then secured in the lower-carbon clamp B. The upper carbon *b* is secured in the clamp on the lower end of the rod *g* in the usual manner.

The globe can easily be removed and opened or closed for trimming the lamp or cleaning the globe or glass chimney.

I find that by burning the carbons in a chimney practically closed at the bottom the carbons burn much longer than when burned in the open, the light is very steady, and less pieces and chips of carbon fly off.

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

1. In a globe for electric-arc lights, the combination with a glass chimney, of a metal ring surrounding the lower end of said chimney, a cylindrical metal frame in the lower end of which said ring fits snugly and a series of glass tubes, held longitudinally and side by side in said cylindrical frame, substantially as herein shown and described.

2. In a globe for electric-arc lights, the combination with a glass chimney of an apertured plug in the bottom of the same, spring-clamps in said plug, a ring in which the lower end of

the chimney is held, a cylindrical frame fitting snugly on said ring and a series of glass tubes held longitudinally and side by side in said cylindrical frame, substantially as herein
5 shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in pres-

ence of two witnesses, this 27th day of February, 1896.

SALOMON HEIMANN.

Witnesses:

OSCAR F. GUNZ,
N. M. FLANNERY.