

(No Model.)

E. J. OPENLANDER.
GLOBE PROTECTOR FOR ELECTRIC ARC LAMPS.

No. 460,652.

Patented Oct. 6, 1891.

Fig. 1.

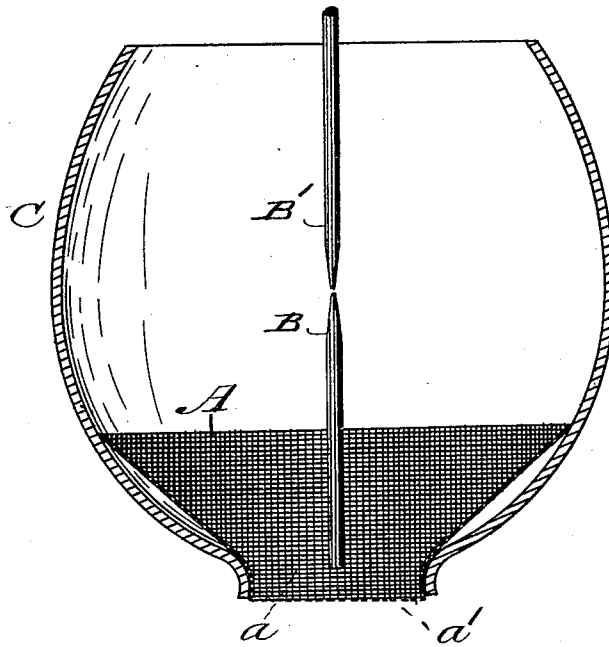
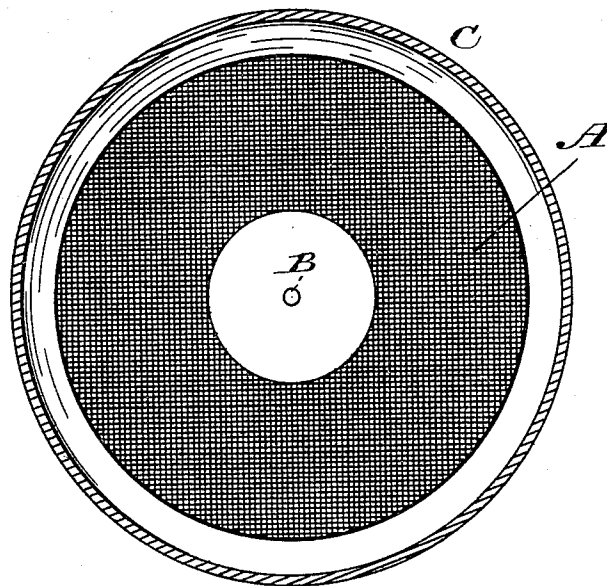


Fig. 2.



WITNESSES
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UNITED STATES PATENT OFFICE.

EDWARD J. OPENLANDER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-THIRD
TO JOHN C. KING, OF SAME PLACE.

GLOBE-PROTECTOR FOR ELECTRIC-ARC LAMPS.

SPECIFICATION forming part of Letters Patent No. 460,652, dated October 6, 1891.

Application filed March 14, 1891. Serial No. 385,082. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. OPENLANDER, of St. Louis, Missouri, have made a new and useful Improvement in Globe-Protectors for Electric-Arc Lamps, of which the following is a full, clear, and exact description.

The improvement relates to the protection of the shade used in diffusing the light of an electric lamp. The improvement is also of use in reflecting the light.

It consists, mainly, in a perforated guard, substantially as is hereinafter described and claimed, aided by the annexed drawings, making part of this specification, in which—

Figure 1 is a vertical section of an electric lamp having the improvement, only that portion of the construction being exhibited which is needed for an understanding of the improvement, and Fig. 2 a horizontal section of the same.

The same letters of reference denote the same parts.

Difficulty is experienced in the use of arc electric lights from heated particles—such as sparks of copper—dropping from the carbons onto the glass shade and causing the same to break. I overcome the difficulty referred to by means of a perforated guard A, which is made to encircle the lower carbon B within the usual shade C, substantially as shown. Any heated particles flying from the lamp are received upon the guard, and thereby prevented from causing injury to the shade, at the same time the perforations *a* in the guard permit sufficient light to pass downward to illuminate the space more directly beneath the lamp, and by making the guard of suitable material—bright perforated sheet metal, for instance—the guard is useful in directing the light upward and outward from the lamp.

The guard is of the conical shape shown, and it is preferably made of perforated sheet metal, although it can be formed of other material. It is preferably made detachable from the lamp and shade, although it might be more or less of a fixture thereupon.

The carbons B B' are constructed and operated in the usual manner, and the shade is of any suitable shape to receive and, if desired, to sustain the guard, substantially as shown.

There is a central opening *a'* in the guard for various purposes.

I claim—

1. In an electric lamp, the combination of the shade and the guard, said shade having the usual opening at its bottom to connect with the cup which supports the shade and carbons, and said guard being dished in shape and having a central opening and resting upon the bottom of said shade, with its said central opening connecting directly with said shade-opening, substantially as described.

2. In an electric lamp, the combination of the shade and guard, said shade having the usual opening at its bottom to receive the cup for supporting the carbon, and said guard being foraminous and of truncated-cone shape, and having a central opening smaller in diameter than the shade-opening and resting upon the bottom of said shade with its central opening connected with the shade-opening, and having its upper edge against the globe, but not touching between these points, substantially as described.

Witness my hand this 12th day of March, 1891.

EDWARD J. OPENLANDER.

Witnesses:

C. D. MOODY,
B. F. REX.