

(No Model.)

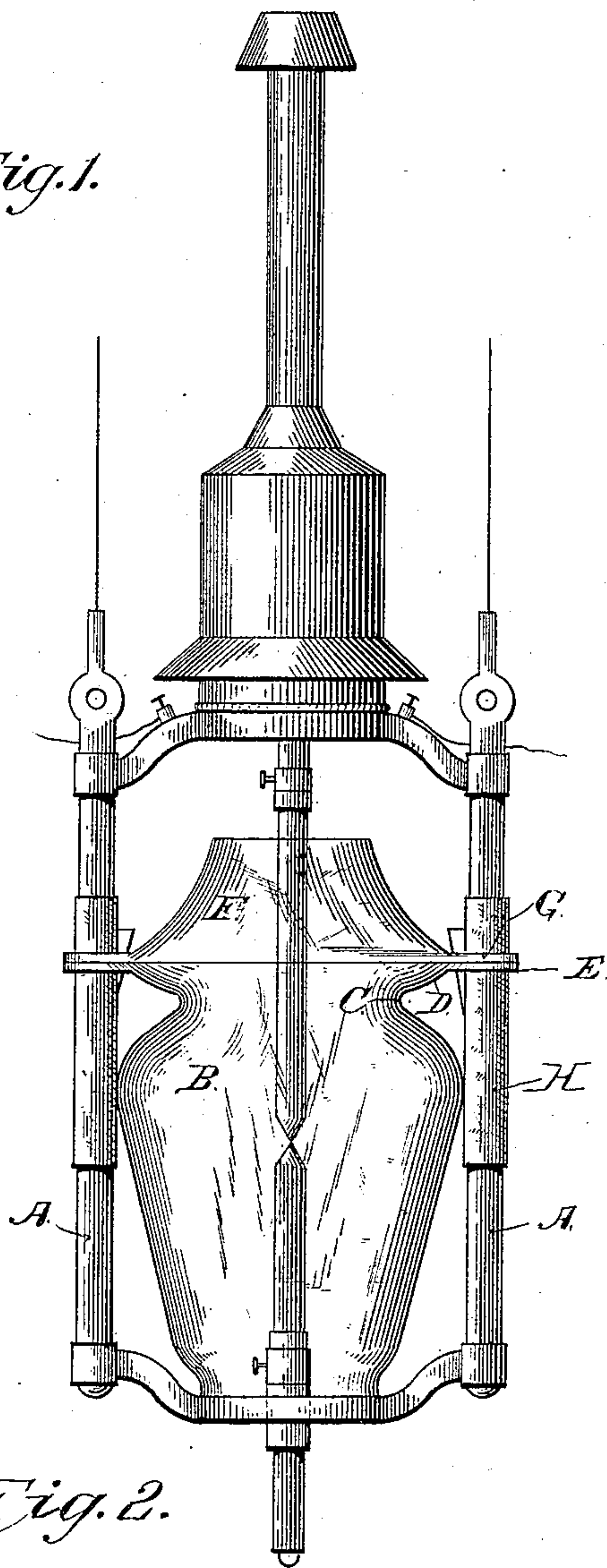
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GLOBE FOR ELECTRIC ARC LAMPS.

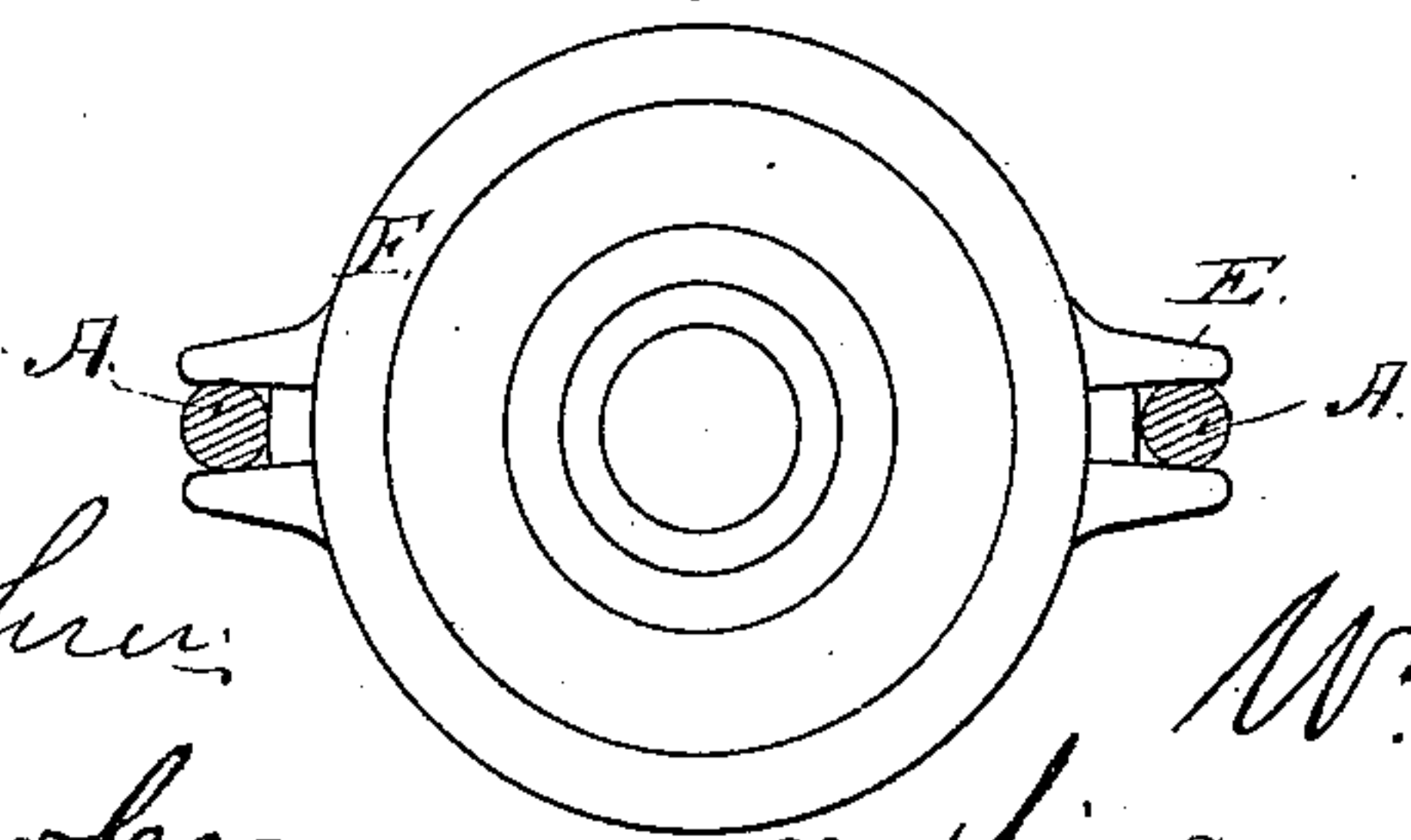
No. 390,846.

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*Fig. 1.*



*Fig. 2.*



Witnesses,

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# UNITED STATES PATENT OFFICE.

WILLIAM W. DOWNING, OF PEORIA, ILLINOIS.

## GLOBE FOR ELECTRIC-ARC LAMPS.

SPECIFICATION forming part of Letters Patent No. 390,846, dated October 9, 1888.

Application filed July 14, 1887. Serial No. 244,251. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. DOWNING, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Globes for Electric-Arc Lamps; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to electric-arc lamps, and particularly to the globes and manner of attaching the same.

The object of the invention is to produce a globe for electric-arc lamps so constructed that the light radiated in an upward direction shall be reflected downward.

Furthermore, the object of the invention is to produce a globe for electric-arc lamps provided with a cover where the entrance of snow or rain to the interior of the globe is prevented; and, furthermore, the object is to produce a globe provided with such means for attaching it to the frame of the lamp that the passage of heat from the metal frame to the glass is prevented, in order to obviate breakage of the glass by expansion and contraction caused by becoming heated by the heat generated by the light.

I have illustrated the invention in the accompanying drawings, in which—

Figure 1 is a view showing an electric-arc lamp having my improved globe and globe-attaching devices combined therewith, and Fig. 2 is a plan view showing the form of the globe and its projections.

In the drawings, A A represent the metal frames, to which are attached the carbon-holding devices and the globe B. The globe is made of any suitable material, preferably ground glass, and near its upper end it is contracted, forming a neck, C, and is then extended, forming the surface D, which inclines upward from the neck to the edge of the globe. This surface is so situated that the upward rays of light from the burning carbon strike thereon, and in order that a perfect reflecting-surface may be made the portion D is covered with a layer of brilliant paint, gilding, or the like.

F represents a cover, which may be made of glass, earthenware, or metal, and is of a size

to nearly or entirely close the opening in the top of the globe, and is preferably in the form of a truncated cone, in order to shed snow or the like, which would ordinarily accumulate in the inside of the globe and blur the light.

The globe and the cover are each provided on opposite sides with projections, (designated, respectively, by the letters E G,) and these projections are indented at their ends in such manner as to receive the rods A A of the lamp-frame, and those portions of the lamp-frames against which the projections rest are protected by a sleeve, H, of some material which is non-conducting, preferably asbestos, in order to prevent contact of the globe or cover with the rods, which may become heated by the passage of electricity therethrough.

Evidently the cover, the globe, or both together may be raised vertically without disengagement from the side rods, and hence it is unnecessary to remove either except at rare intervals or in case of breakage, when the lamp may be taken apart. However, the sleeve upon one rod may be slipped below the plane of the lugs, when the cover can be passed toward that rod, raised at its opposite edge, and detached entirely. Moreover, I do not intend to limit myself to the precise length of lugs shown, and contemplate using lugs of such length that the globe, when pushed toward the rod from which the sleeve has been displaced, may be disengaged from the opposite rods.

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

1. The combination, with the frame-work of an electric-arc lamp, of a globe and a cover therefor, each having projecting lugs adapted to engage said frame work and retain the cover and globe in place.

2. A globe for electric-arc lamps, provided with the cover, each having the notched projections, in combination with the rods A A, having the sleeve of non-conducting material, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM W. DOWNING.

Witnesses:

JOHN MAY,  
DAVID H. MEAD.