

(No Model.)

C. G. PERKINS.
ELECTRIC INCANDESCENT LAMP.

No. 287,319.

Patented Oct. 23, 1883.

Fig. 1.

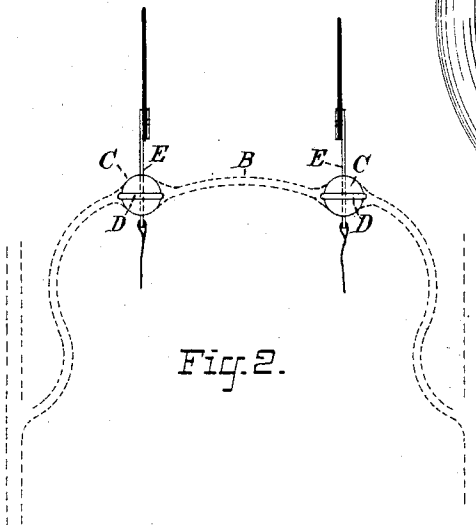
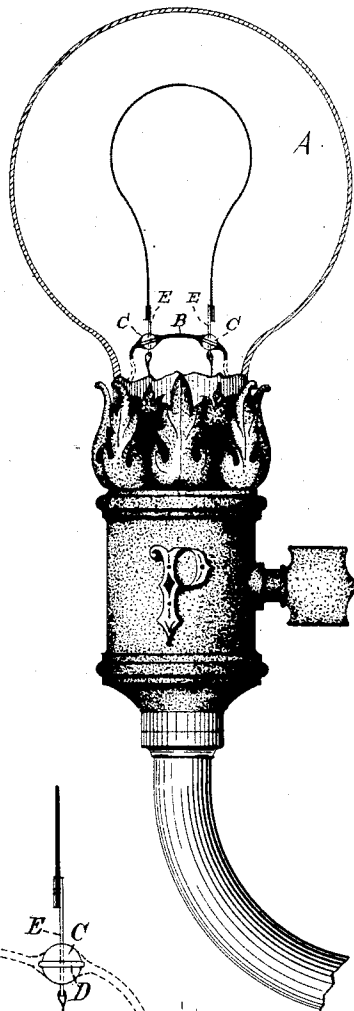


Fig. 2.

ATTEST:
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UNITED STATES PATENT OFFICE.

CHARLES G. PERKINS, OF NEW YORK, N. Y., ASSIGNOR TO THE IMPERIAL
ELECTRIC LIGHT COMPANY, OF SAME PLACE.

ELECTRIC INCANDESCENT LAMP.

SPECIFICATION forming part of Letters Patent No. 287,319, dated October 23, 1883.

Application filed April 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. PERKINS, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in the Method of Preparing Carbon - Holders for Incandescent Lamps before Sealing the Same in the Lamp, of which the following is a specification.

My invention relates to the sealing of electrical conductors in the base of the vacuous chamber of an electric incandescent lamp, said conductors holding the carbon filaments within said chamber.

Heretofore the clamping device for holding the carbon filaments within an incandescent lamp has been sealed in the base of the vacuous chamber by means of melting the glass, so as to allow it to encircle the shank of the clamp. In doing so the melted glass would naturally follow the line of the shank, in consequence of which it would form a tapering shape, encircling the shank at a considerable distance below the base of the vacuous chamber. This manner of sealing is objectionable from the fact that the slightest pressure brought to bear on the shank by attaching thereto the conductors leading to the external line-wires would cause the glass encircling the shank to crack at the smaller end of the taper, which would in time, by constant jarring, cause the crack to assume a larger dimension, ultimately destroying the lamp. This objection is obviated by my invention, which consists of a carbon-filament holder having a glass bead encircling its shank. Said bead is provided with an annular rim integral therewith, which enables the glass to be sealed thereto to catch on easily, thus sealing the bead in the base of the vacuous chamber without interfering with the parts from which the shank projects.

In the drawings, Figure 1 represents a section of the globe of an electric incandescent lamp, showing the manner in which the beads are sealed in the base of the vacuous chamber. The lamp is represented as being mounted on an ornamented switch-box. Fig. 2 represents an enlarged view of the glass beads encircling the shank of the clamping device and the position which they assume when sealed

in the base of the vacuous chamber, as represented by dotted lines.

In the drawings, A represents the globe of an electric incandescent lamp.

B is the glass forming the base of the vacuous chamber.

C is the glass bead, provided with an annular rim, D, the whole of which is represented as being sealed in the glass forming the base B.

E E are the shanks of the clamping device supporting the carbon filament within the globe A.

The bead is first formed on the shank of the clamp or holder. It is then provided with an annular rim, the object of which is to give the melted glass, in which the bead is to be sealed, a perfect locking contact, which is accomplished without interfering with that portion of the bead from which the shank of the clamping device projects. Thus it will be seen that it will be utterly impossible to break or crack the glass encircling the shank when either bending or mounting said shank with the conductors leading to the external line-wires.

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

1. In combination with an electric incandescent lamp, a clamping device or holder having its shank provided with a glass bead, which is also provided with an annular glass rim integral therewith, the whole sealed in the base of the vacuous chamber of the lamp, substantially as shown and described.

2. The method of preparing the carbon-holders for sealing in the base of the vacuous chamber in an incandescent lamp, which consists, first, in forming a glass bead on and around the shank of the holders, and then forming an annular glass rim upon the bead, substantially as shown and described.

Signed at New York, in the county of New York and State of New York, this 6th day of April, A. D. 1883.

CHARLES G. PERKINS.

Witnesses:

J. A. HURDLE,
HENRY F. LIPPOLD.