(No Model.)

E. E. CARY.

INCANDESCENT ELECTRIC LAMP.

No. 501,491. Patented July 18, 1893.

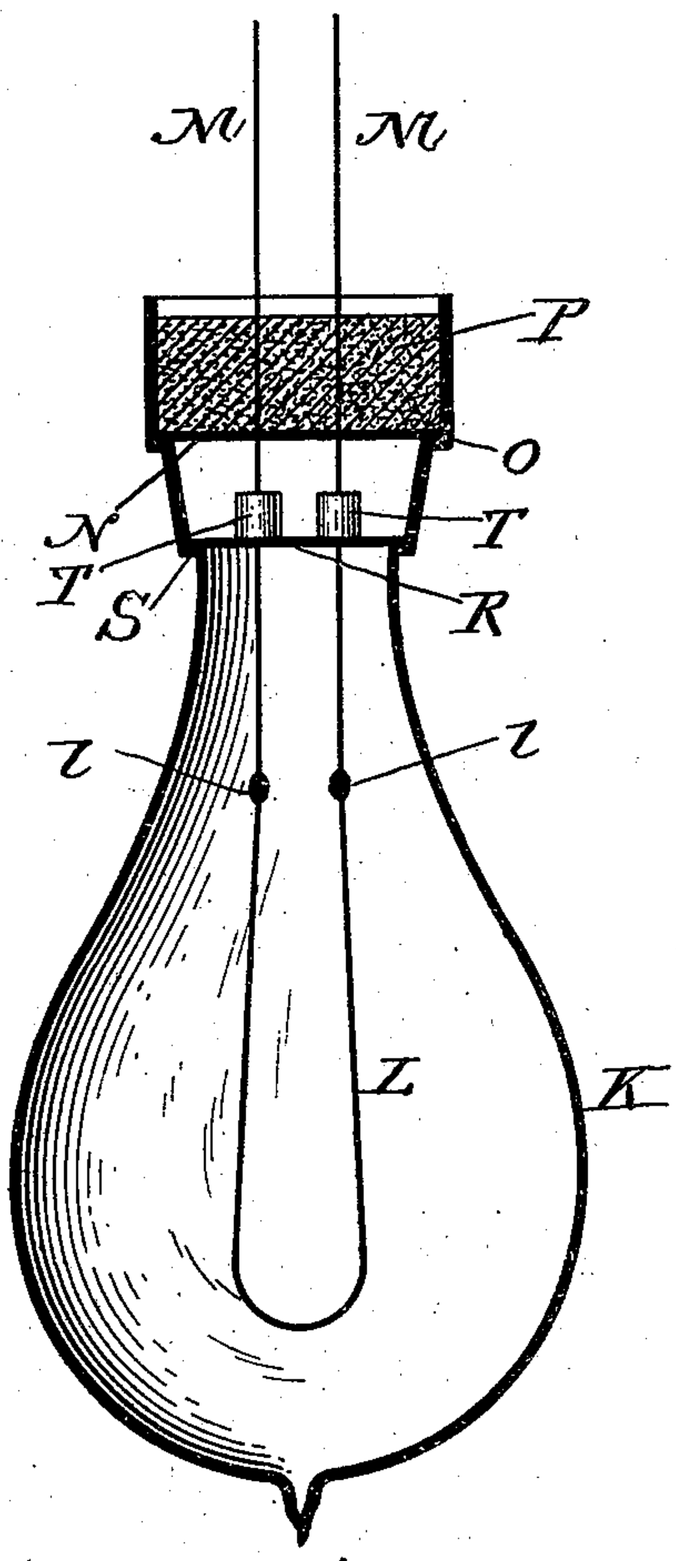

Fig. 1.

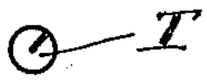

Fig. 2.

WITNESSES.

Frank G. Parker.
Frank G. Flattie

INVENTOR

Edward Egbert-Cary
by William Emery Nickerson
atty.

UNITED STATES PATENT OFFICE.

EDWARD EGBERT CARY, OF BOSTON, MASSACHUSETTS.

INCANDESCENT ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 501,491, dated July 18, 1893.

Application filed April 6, 1893. Serial No. 469,289. (No model.)

To all whom it may concern:

Be it known that I, EDWARD EGBERT CARY, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Incandescent Electric Lamps, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention pertains to incandescent electric lamps of the kind in which the leading-in wires are inclosed and supported and the lamp globe made air tight by a fusible cement. It consists in a device for preventing the leading-in wires from conveying by conduction, the high temperature of that part of the lamp near the incandescent filament to the cement.

In the accompanying drawings:—Figure 1, shows partly in vertical section and partly in side elevation an incandescent electric lamp embodying my invention. Fig. 2, is a plan of a detail.

K is the globe of an incandescent electric lamp, L the filament attached at *l l* to the leading-in wires M M.

N is a disk of mica or other suitable substance resting upon the shoulder O formed in the neck of the lamp globe and which serves to partially support the leading-in wires M M and the plug of cement P, by which the lamp is rendered air tight.

R is a disk smaller but similar to the disk N and rests upon the shoulder S also formed in the neck of the lamp globe. The shoulder S is convenient and desirable but is not indispensable.

T T are two small cylinders of metal preferably of brass, into one side of which a fine saw-cut or slot has been made as far as the axial line, as shown in Fig. 2, and which are placed each on one of the leading-in wires M above the disk R. They are secured in position by being pressed with pliers until the saw cuts, into which the wires have been introduced, shut together and tightly grip the latter. These small bodies of metal T T, I call radiators and they serve the purpose of absorbing from the wires M M the heat which they conduct from the incandescent filament and the hotter parts of the lamp, and by presenting a large radiating surface disperse it and prevent its passage through the wires M M into the cement plug P above the disk N.

By using more than one of the radiators upon each wire, the effectiveness of them as radiators is very much increased as each successive radiator progressing toward the cement is cooler than its predecessor.

I do not desire to confine myself in the matter of the use of radiators for the purpose specified, to lamps in which the neck is closed by a cement plug only, as they are applicable to lamps in which the neck is closed by a glass stopper, the joint between which and the neck of the lamp is rendered air tight by means of a fusible cement.

The gist of my invention consists in attaching to the leading-in wires of an incandescent electric lamp in which a fusible cement is used in rendering the lamp globe air tight, radiators adapted to prevent said wires from softening the said cement by conducting to it, heat from the filament and hotter parts of the lamp.

I claim—

1. In an incandescent electric lamp, the combination of the glass lamp globe K, fusible cement plug P, filament L, and leading-in wires M M; with the radiators T T attached to said wires, substantially as and for the purpose set forth.

2. In an incandescent electric lamp in which a fusible cement is used to render the globe of the lamp air tight, radiators located within the lamp and attached to the leading-in wires, adapted to prevent the said wires from softening the said cement by conducting to it, heat from the filament and hotter parts, substantially as and for the purpose set forth.

3. In an incandescent electric lamp, radiators attached to the leading-in wires said radiators having a slot, by means of which, they are secured to said wires, substantially as and for the purpose set forth.

4. In an incandescent electric lamp, the combination of the glass globe K, filament L, disk N, cement plug P, and leading-in wires M M, with, the radiators T T, and disk R, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 4th day of April, A. D. 1893.

EDWARD EGBERT CARY.

Witnesses:
FRANK G. PARKER,
FRANK G. HATTIE.