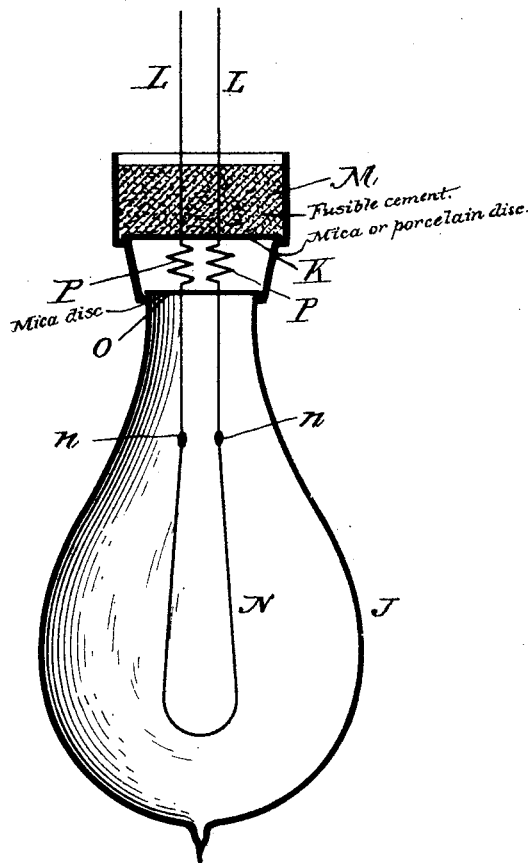


(No Model.)

W. E. NICKERSON & E. E. CARY.  
INCANDESCENT ELECTRIC LAMP.

No. 500,077.

Patented June 20, 1893.



WITNESSES.

Frank G. Parker  
William L. Parry.

INVENTORS

William Emery Nickerson  
Edward Ogbert Cary  
by William Emery Nickerson Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM EMERY NICKERSON, OF CAMBRIDGE, AND EDWARD EGBERT CARY,  
OF BOSTON, MASSACHUSETTS.

## INCANDESCENT ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 500,077, dated June 20, 1893.

Application filed April 5, 1893. Serial No. 469,180. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM EMERY NICKERSON, of Cambridge, county of Middlesex, and EDWARD EGBERT CARY, of Boston, in the  
5 county of Suffolk, State of Massachusetts, have invented a new and useful Improvement in Incandescent Electric Lamps, of which the following, taken in connection with the accompanying drawing, is a specification.

10 Our invention relates to that class of incandescent electric lamps in which the neck of the lamp globe is closed by, and the leading-in wires pass through, a fusible cement plug.

15 It consists in a device which prevents the leading-in wires from transmitting the heat from the incandescent filament and the hotter parts of the lamp into the fusible cement plug, and another useful purpose set forth hereinafter.

20 In the accompanying drawing J represents the glass globe of an incandescent electric lamp, K a disk of mica, porcelain or other suitable substance which serves as a support for the leading-in wires L L and for the cement  
25 plug M.

N is the filament attached at *n n* to the leading-in wires L L.

30 O is a disk similar to but smaller than the disk K, and is located in the neck of the lamp between the disk K and the filament, and

serves to prevent the heat of the latter from striking the disk K and the cement plug M with full force.

The wires L L are convoluted at P P into a crimped or helical form, for the purpose of  
35 increasing the length of wire between the filament N and the cement plug M, in order that the amount of heat conducted by the wires L L from the incandescent filament N to the cement plug M may be reduced to a mini-  
40 mum. The convolutions further serve to keep the disk R in position and prevent it from moving toward the disk K.

I claim—

45 In an incandescent electric lamp, the combination of the glass lamp globe J, disk K, cement plug M, and filament N; with the leading-in wires L L, said wires having convolutions between the filament N and the cement  
50 plug M, substantially as and for the purpose set forth.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, on this 3d day of April, A. D. 1893.

WILLIAM EMERY NICKERSON.  
EDWARD EGBERT CARY.

Witnesses:

FRANK G. PARKER,  
WILLIAM H. PARRY.