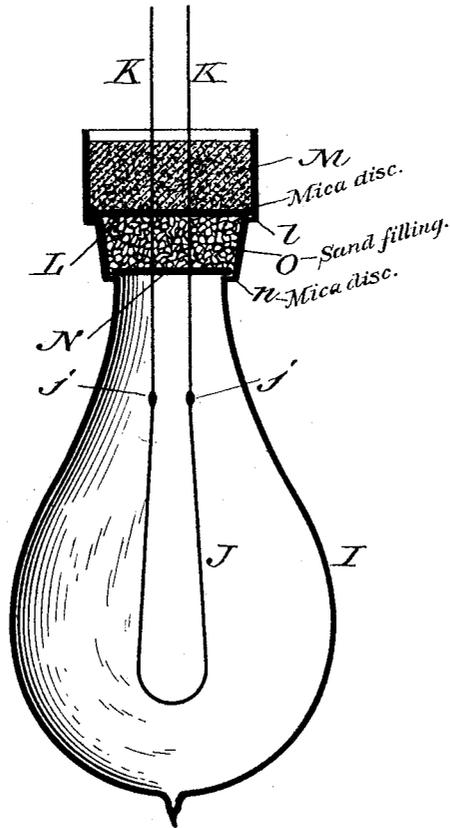


(No Model.)

W. E. NICKERSON.
INCANDESCENT ELECTRIC LAMP.

No. 500,078.

Patented June 20, 1893.



WITNESSES.

Frank G. Parker
Frank G. Hattie

INVENTOR

William Emery Nickerson

UNITED STATES PATENT OFFICE.

WILLIAM EMERY NICKERSON, OF CAMBRIDGE, MASSACHUSETTS.

INCANDESCENT ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 500,078, dated June 20, 1893.

Application filed April 5, 1893. Serial No. 469,188. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM EMERY NICKERSON, of Cambridge, in the county of Middlesex 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 drawing, is a specification.

My invention relates to incandescent electric lamps of that class in which the neck of the lamp globe is closed and the leading-in wires supported by a cement plug.

It consists of a device by which the heat from the incandescent filament is prevented from affecting the cement plug by which the lamp globe is made air tight.

In the accompanying drawing I represents the glass globe of an incandescent electric lamp, J the filament attached at *j j* to the leading-in wires K K.

L is a disk of mica or other suitable substance resting upon a shoulder *l* formed in the neck of the lamp globe, and serving to support the fusible cement plug M, and the leading-in wires K K.

N is a disk smaller but similar to L and rests upon the shoulder *n* also formed in the

neck of the lamp globe. The space between the disk L and the disk N is occupied by the sand O or other non-conducting substance containing no volatile constituents and not affected by temperature attained in an incandescent lamp and which has been reduced to a granular form. The sand serves the purpose of very perfectly preventing the radiant heat of the filament from passing into the cement plug which is liable if highly heated to become soft and weak to the detriment of the lamp.

I claim—

In an incandescent electric lamp, the combination of the glass globe I, filament J, leading-in wires K K, disk L, cement plug M, the disk N, and the filling of sand O, 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 3d day of April, A. D. 1893.

WILLIAM EMERY NICKERSON.

Witnesses:

FRANK G. PARKER,
FRANK G. HATTIE.