

A. S. KNIGHT.
SUPPORT FOR INCANDESCENT LAMP FILAMENTS.
APPLICATION FILED JULY 19, 1909.

951,400.

Patented Mar. 8, 1910.

Fig. 1.

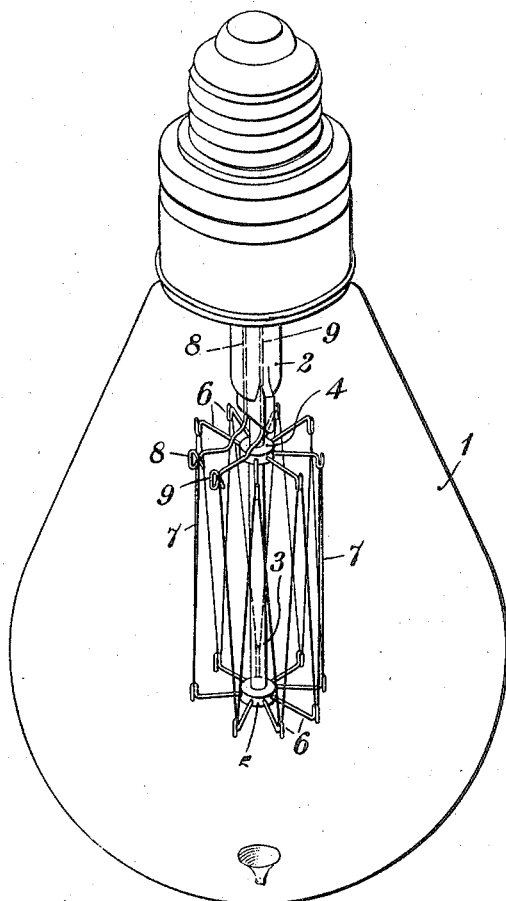
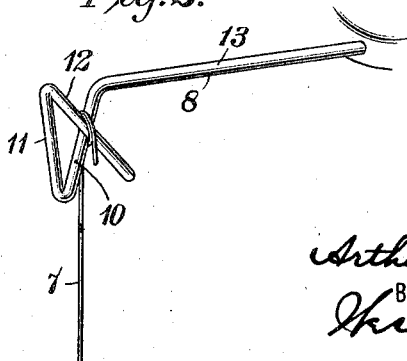


Fig. 2.



WITNESSES:

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SUPPORT FOR INCANDESCENT-LAMP FILAMENTS.

951,400.

Specification of Letters Patent.

Patented Mar. 8, 1910.

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To all whom it may concern:

Be it known that I, ARTHUR S. KNIGHT, a subject of the King of Great Britain, and a resident of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Supports for Incandescent-Lamp Filaments, of which the following is a specification.

My invention relates to incandescent lamps and particularly to lamps in which tungsten and similar metallic filaments are employed.

The object of my invention is to provide a terminal member for lamps of the character indicated to which a filament may be easily and quickly attached and with which a good electrical connection will thereafter be automatically maintained.

Incandescent lamps are frequently constructed by applying continuous filaments in zig-zag form to spaced supports therefor, and by winding the ends of the filaments around the terminal supports for the purpose of making mechanical and electrical connections thereto. However, with the forms of terminals heretofore commonly employed, the connections of the filaments thereto have not always been electrically good, and it is the purpose of the present invention to provide a terminal member with which a permanent and uniformly secure electrical and mechanical connection is insured.

Figure 1 of the accompanying drawing is a side view of a lamp embodying my invention, and Fig. 2 is an enlarged view of one of the terminal devices and a portion of a filament.

The lamp comprises, as usual, a bulb 1 into which projects a stem 2 and an arbor 3 that extends along the axis of the bulb and is supported at one end by the stem 2. The arbor 3 is provided, near its ends, with enlargements 4 and 5 in each of which are mounted a plurality of laterally projecting supporting members or anchors 6 for a filament 7, that is applied thereto in a zig-zag form, and that may be composed of either tungsten or of any other suitable material adapted to be heated to incandescence upon the passage of a sufficient current there-through. Current is conducted to and from

the filament 7 by means of terminal wires or members 8 and 9 that extend through the stem 2 and project into the bulb 1. The ends of the terminals are looped and preferably comprise three straight portions 10, 11 and 12, the portions 10 and 12 of which are disposed at angles to the main portions 13 of the terminals and cross each other in substantially the form of the letter X. The portions 11 which connect the portions 10 and 12 are substantially perpendicular to the main portions 13 of the members.

The ends of the filament are wound about the portions 10 and 12 of the terminal members at the point of crossing thereof and in the outer angles formed between the same. By reason of the inclination with respect to each other of the portions 10 and 12 of the terminals, the winding of the filament about them forces it into intimate contact therewith, and a good electrical connection is thereby insured. The shape of the ends of the terminal members is also such that the filament is not permitted to move longitudinally thereof, and thus a good mechanical connection is also provided.

I claim as my invention:

1. An incandescent lamp comprising a looped terminal, the end portion of which crosses and extends beyond an intermediate portion.

2. An incandescent lamp comprising a looped terminal the end portion of which crosses and extends beyond an intermediate portion, and a filament wound about the said end and intermediate portions of the terminal at the point of crossing thereof.

3. An incandescent lamp comprising a terminal having a looped substantially X-shaped end.

4. An incandescent lamp comprising a terminal having a looped substantially X-shaped end, and a filament wound about the terminal in the outer angles at the base of the loop.

In testimony whereof, I have hereunto subscribed my name this 7th day of July, 1909.

ARTHUR S. KNIGHT.

Witnesses:

GEORGE W. BEADLE,
R. C. KARCHNER.