(No Model.)

J. CRIGGAL.

SOCKET FOR INCANDESCENT ELECTRIC LAMPS.

No. 457,109. Patented Aug. 4, 1891.

Fig. 7.

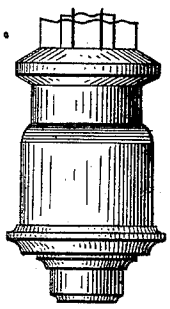


Fig. 1.

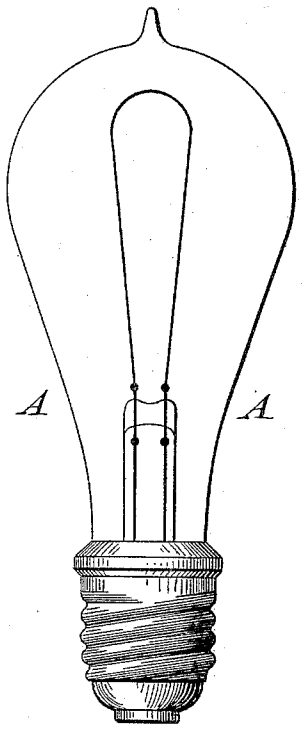


Fig. 8.

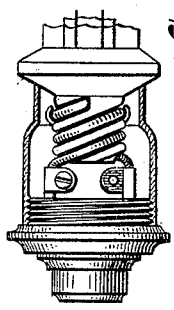


Fig. 3.

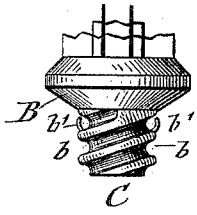


Fig. 5.

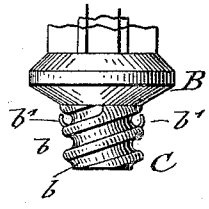


Fig. 4.

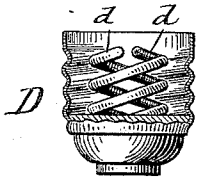


Fig. 6.

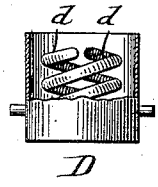
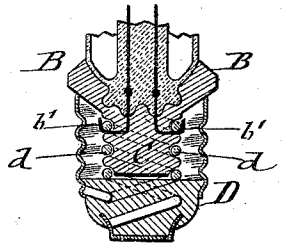


Fig. 2.



WITNESSES:

F. W. Rosenbaum.

Charles Schroeder

INVENTOR:

John Criggal

BY Goepel & Paegener

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN CRIGGAL, OF NEWARK, NEW JERSEY.

SOCKET FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 457,109, dated August 4, 1891.

Application filed January 3, 1891. Serial No. 376,604. (No model.)

To all whom it may concern:

Be it known that I, JOHN CRIGGAL, of Newark, in the county of Essex and State of New Jersey, a subject of the Queen of Great Britain, have invented certain new and useful Improvements in Sockets for Incandescent Electric Lamps, of which the following is a specification.

This invention refers to an improved socket for incandescent electric lamps, so that the lamps can be used with any kind of holder, whereby the interchanging of the lamps of one system with those of another system may be readily accomplished and the loss of the expensive sockets arising from the breaking of the lamp or the destruction of its filament obviated.

The invention consists of an incandescent electric lamp provided with a base of suitable non-conducting material, said base having a screw-threaded shank and metallic eyes at the opposite points of said shank, in combination with a socket formed of spiral retaining-wires that engage the threaded shank and the eyes of the same, so as to firmly interlock therewith and transmit the current to the filament in the lamp, as will be fully described hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of an incandescent electric lamp with my improved base and socket. Fig. 2 is a vertical transverse section of said base and socket. Figs. 3 and 4 are a side view of the base of the lamp and a sectional side elevation of the wire connection arranged in the socket adapted for one system of holders. Figs. 5 and 6 are a side view of the base of the lamp and a sectional side elevation of the socket used in another system of holders, and Figs. 7 and 8 are a side view and a sectional elevation of a holder and of still another construction.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents an incandescent electric lamp, which is connected with a base B, that is made of suitable plastic material, said base being provided with a shank C, having two spiral threads *b b* of quick pitch and eyes *b'* at diametrically-opposite points of the shank and preferably at the upper ends of said threads, as shown clearly in Figs. 2, 3, and 5. The threaded shank C is made integral with the base B, while the eyes *b'* are connected with the platinum conducting-wires that lead to the filament at the interior of the lamp. Every incandescent lamp, whatever be its type or manufacture, is intended to be provided with a base B and a threaded shank C, having metallic eyes *b' b'*. The shank C is connected with a socket D of any suitable type, according to the system of lamps employed, the Edison Standard lamp, for instance, having an exterior threaded brass shell which fits into a corresponding holder of the bracket or chandelier, while in other systems of lamps the sockets are provided with radial pins or other devices that make the connection with the corresponding holders, as the case may be. The base of each socket D, whatever be its construction, is filled with non-conducting material, and into the same are inserted two spiral retaining-wires *d d* of the same pitch as the threads of the shank C, which permit the easy and quick screwing in of the threaded shank into said spiral wires until the ends of the spirals *d d* engage the eyes *b'* and form electric contact therewith. The spiral wires *d d* are also connected with the metallic parts of the sockets, said metallic parts forming contact with similar parts of the holder, so as to conduct the current into the lamps. Each socket D, of whatever system of holders, is provided with these spiral wires having the same pitch, so that the socket can be used in connection with a lamp having a threaded shank, whatever be its manufacture. Consequently an Edison lamp could be used with a Thomson-Houston socket or Westinghouse socket, or an Edison socket with a lamp of any one of these types, or with the socket and holder of the construction shown in Figs. 7 and 8, as by the shank and retaining-wires employed a lamp of any system can be used regardless of the special constructions of holders employed. By this arrangement the use of electric incandescent lamps is greatly facilitated and the introduction or interchange of any system rendered feasible, provided lamps are provided with

threaded shanks and the sockets made detachable and provided with retaining spiral wires for the shanks.

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

1. The combination of an incandescent electric lamp having a base with a double-threaded shank and metallic eyes at opposite points of the shank, with a socket provided with spiral wires of the same pitch as the threads of the shank and adapted to engage the eyes on the shank, substantially as set forth.

2. An incandescent electric lamp provided with a non-conducting base having a double-threaded shank and metallic eyes on said shank, substantially as set forth.

3. A socket for incandescent electric lamps, provided with a base or filling of non-conducting material, and two spiral conducting-wires secured to said base or filling and forming an interior socket for the shank of the lamp, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOHN CRIGGAL.

Witnesses:
PAUL GOEPEL,
CHARLES SCHROEDER.