F. A. SWAN.

ELECTRICAL FITTING.

APPLICATION FILED JUNE 28, 1907.

967,997. Patented Aug. 23, 1910.

Fig. 1.

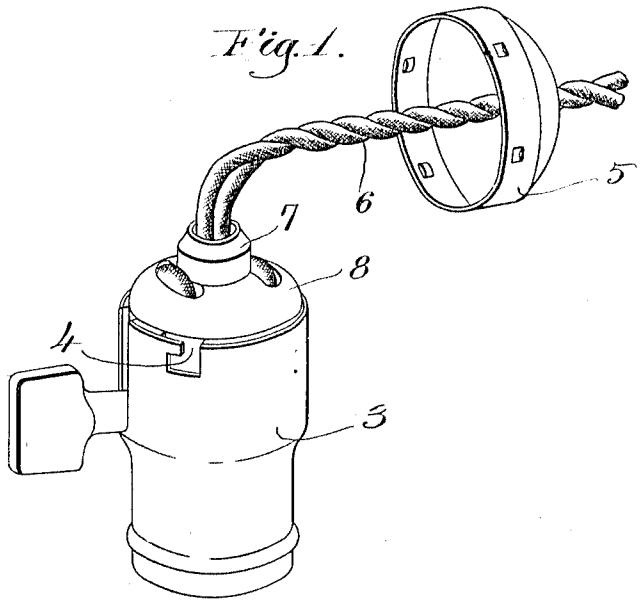


Fig. 2.

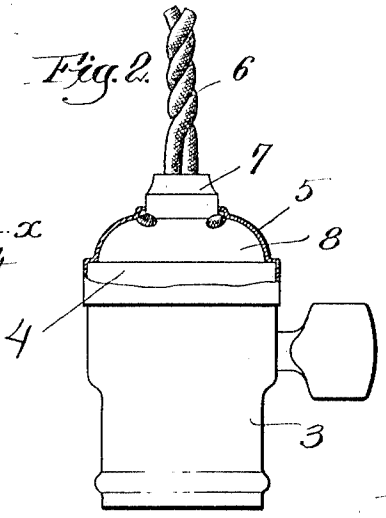


Fig. 3.

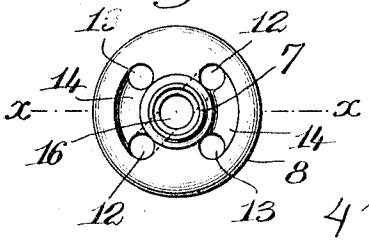


Fig. 4.

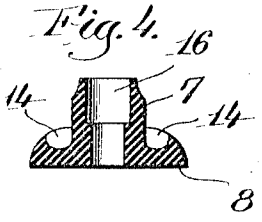


Fig. 5.

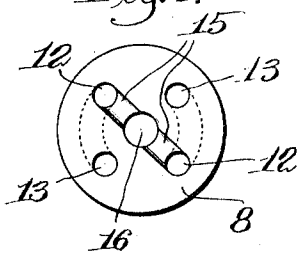
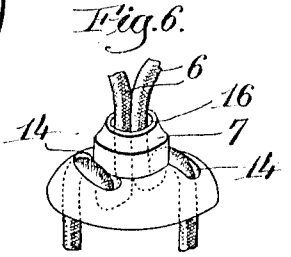


Fig. 6.



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UNITED STATES PATENT OFFICE.

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ELECTRICAL FITTING.

967,997. Specification of Letters Patent. Patented Aug. 23, 1910.

Application filed June 28, 1907. Serial No. 381,214.

To all whom it may concern:

Be it known that I, FREDERICK A. SWAN, a citizen of the United States, and a resident of Cliftondale, in the county of Essex and State of Massachusetts, have invented an Improvement in Electrical Fittings, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

This invention relates to lamp sockets and especially to pendent lamp sockets and has for its object to provide a novel strain relief adapted to be placed on the interior of the socket and arranged to take any strain to which the conductor cord may be subjected thereby relieving the terminals from such strain.

The features wherein my invention resides will be more fully hereinafter described and then pointed out in the appended claim.

Figure 1 is a perspective view of a lamp socket; with the cap removed showing one embodiment of my invention; Fig. 2 is a side view partly in section; Fig. 3 is a top plan view of the insulating bushing; Fig. 4 is a section on the line x—x, Fig. 3; Fig. 5 is a bottom plan view of the head of the bushing; Fig. 6 is a perspective view showing the way in which the wires are fitted into the bushing.

For the sake of illustrating my invention I have shown it in connection with a lamp socket but I wish it understood that it may be used in other fittings.

In the drawings 3 is the shell of a lamp socket; 4 is the porcelain member to which the terminals are connected; 5 is the cap which may be secured to the lamp socket by any suitable fastening; and 6 are the conducting cords which lead into the cap through the opening therein and are connected to the wire terminals of the socket in usual manner.

My invention relates to the strain relief member shown particularly in Figs. 3 to 6, and which comprises a bushing 7 adapted to be inserted through the aperture in the cap and having integral therewith a head 8 which fits within the cap and rests against the porcelain face of the socket. This head 8 is provided with two pairs of apertures 12 and 13 through which the conductor cords 6 may be passed. The apertures are situated on a circle exterior to the bushing 7. The apertures 12 and 13 are preferably connected on top of the head by grooves 14 which are exterior to the bushing 7 and the central aperture 16 of the bushing is connected with the apertures 12 on the bottom of the head by grooves 15.

In the illustrated form of my invention the head 8 is of a size to substantially fill the space within the cap 5, and where the head is of this size I prefer to form on top of the head grooves 14 which connect the apertures 12 with the apertures 13 in which grooves the wire is received, as shown, and also to provide on the bottom of the head other grooves 15 connecting the two apertures 12 with the central opening 16 through the bushing. By means of this construction the wires may be received within the grooves.

In using the device the wires may be threaded through the central aperture of the bushing and then up through the apertures 12 and down through the apertures 13 and the ends of the wires may then be connected to the terminals of the socket, the connection being made so that the head 8 will rest against the end of the porcelain 4. The cap is then put on as usual, and when it is put in place the bushing 7 will extend up through the aperture in the socket thus completely insulating the same. Because of this construction it will not be necessary to provide the cap with a screw-threaded neck, as is usually done, into which the bushing may be screw-threaded, or even to provide the cap with any neck at all, and the manufacture of the cap may thus be simplified.

In the embodiment of the invention herein shown the head 8 completely fills the interior of the cap and is of a shape to fit the latter. Where this construction is employed, it is not essential that the aperture for the cap 5 be made to fit the neck 7 as it is only sufficient to provide the cap with enough body to prevent the head from being drawn through the aperture therein.

The invention as herein illustrated is especially adapted for cord pendants because it provides a construction by means of which the terminals in the sockets are entirely relieved from strain.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

A strain relief for a lamp socket comprising a head shaped to be received inside of the cap of the socket and provided with two pairs of openings extending from the top

to the bottom thereof and also provided with a hollow neck or extension situated inside of said openings and adapted to be inserted through the aperture in the cap, the openings of each pair being connected by a groove formed in the top of the head outside of the neck whereby when the device is in a lamp socket the conductor cords may be passed down through the neck and then up through two of the openings and down through the other openings to form gripping bends, said grooves receiving the portions of the cords between the openings.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

FREDERICK A. SWAN.

Witnesses:

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