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2,097,370

ELECTRICAL FIXTURE

Original Filed April 6, 1935

FIG. 1.

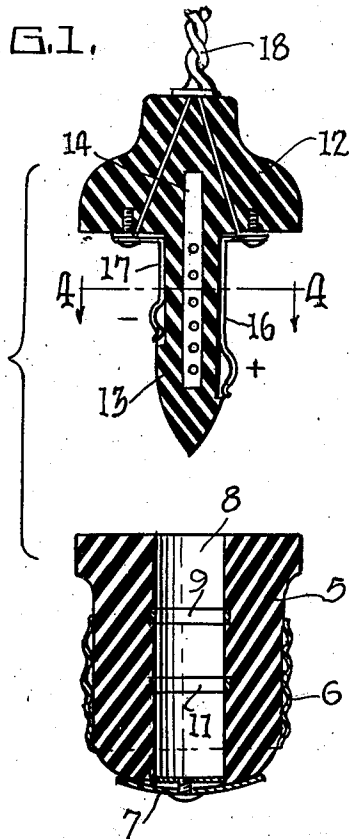


FIG. 2.

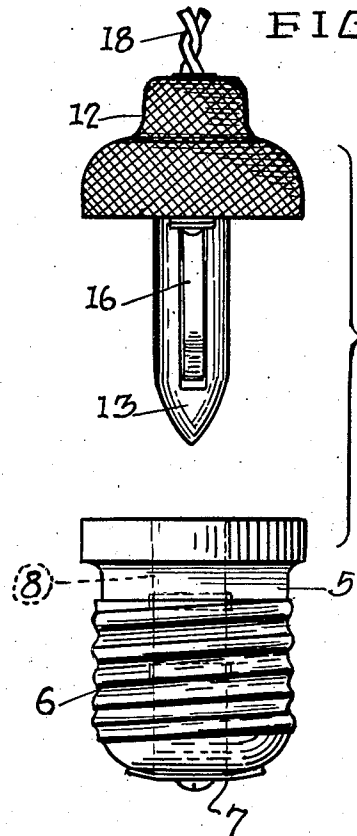


FIG. 3.

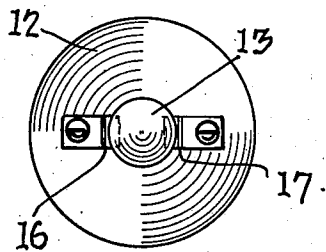
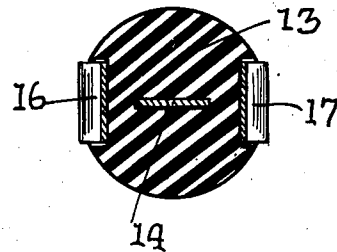


FIG. 4.



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ELECTRICAL FIXTURE

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2 Claims. (Cl. 173-343)

This invention relates to improvements in electrical fixtures, and has particular reference to an electric plug.

The principal object of the invention is to produce a plug wherein the cap portion of the plug may be rotated about in the plug and further the cap may be inserted in the plug in any desired position, and will at all times form a contact.

A further object is to produce a device which is economical to manufacture, neat in appearance and one which may be used as a substitute for the standard form of plug.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawing forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Fig. 1 is a vertical section of my device showing the cap and the plug separated,

Fig. 2 is a side elevation of my plug showing the cap and plug separated,

Fig. 3 is a bottom plan view of the cap shown in Fig. 1, and

Fig. 4 is a cross sectional view taken on the line 4-4 of Fig. 1 and on an enlarged scale.

The ordinary plug consists of a base portion and a cap portion, the base portion usually having two parallel openings therein, into which the prongs of the cap fit. It is often difficult to cause the prongs of the cap to enter the openings in the plug if the position of the plug cannot be seen. Applicant has, therefore, devised a plug and cap which will produce an electrical contact, no matter what position the cap enters the plug.

This is accomplished by providing a plug consisting of a base portion 5 having the customary metallic threaded conductor 6 secured thereto, and a base contact 7. A bore 8 extends through the base 5. Positioned within the bore 8 is a contact ring 9 which is electrically connected to the threaded conductor 6. A similar ring 11 is electrically connected to the contact 7. The cap consists of a top portion 12 and a grooved central extension 13 which is preferably reinforced as shown at 14. Contacts 16 and 17 are secured to the top 12 and are electrically connected to the wires of the ordinary conductor cord 18.

It will be noted that the contacts 16 and 17 lie in the grooved sections of the extension 13 and are each provided with a curved spring section extending slightly beyond the face of the said extension and that the contact 16 is longer than the contact 17. Consequently, whenever the cap is placed in the plug the contact 16 will engage the ring 11 and the contact 17 will engage the ring 9. With this arrangement it is possible to place the cap in the plug in any desired position and always secure an electrical circuit. The cap will be held in the plug through the friction of the curved spring portions of the contacts 16 and 17 with the interior of the bore 8.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:—

1. In a plug of the character described, comprising a base having a bottom contact and a threaded side contact, said base having a bore formed therein, a pair of spaced rings mounted flush in the bore and respectively electrically connected to the bottom and to the threaded contacts, and a cap having a projection capable of extending into the bore, said cap being grooved and carrying spring contacts arranged in said grooves, and being engageable with said spaced rings.

2. In a plug of the character described, comprising a base having a bottom contact and a threaded side contact, said base having a bore formed therein, a pair of spaced rings mounted flush in the bore and respectively electrically connected to the bottom and to the threaded contacts, a cap adapted to engage said base, said cap having a vertically grooved projection formed thereon, a pair of contacts of different lengths mounted on said cap and lying in said grooves parallel to the projection, whereby when the projection of said cap is engaged with the bore of said base, the shorter contact will engage one ring and the longer contact the other ring.

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