Oct. 3, 1950 P. VILLEPLÉ 2,524,280

ELECTRIC BULB SOCKET

Filed Aug. 7, 1946

Fig. 1

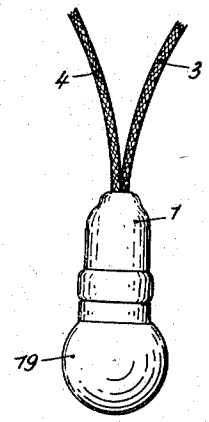


Fig. 2

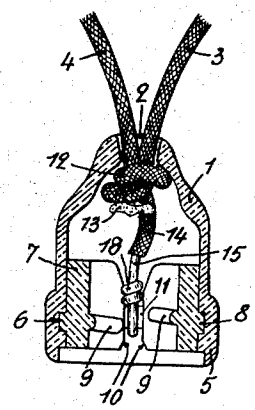
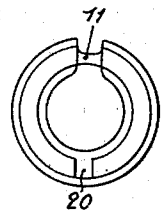


Fig. 3



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ELECTRIC BULB SOCKET

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This invention has for its object an electric bulb socket characterized primarily thereby that, in addition to being made exclusively of pressed insulating material, preferably of pressed plastic material, and including no metal parts, it is provided with fastening means for each electric lead and arranged in such manner that the stripped ends of said leads will be clamped yieldingly by either terminal on the bulb to be held in said socket when said bulb is in position therein, whereby an excellent contact is obtained.

In a preferred embodiment of the invention said socket has a calix- or bell-like shape and is provided in the apex or remote end thereof with an aperture wherethrough the lead pair can be threaded which preferably are to be knotted together once they have been inserted in said socket, the diameter of said aperture being such as to retain the knot formed at the ends of said leads.

Where said socket is designed to be fitted with a bulb in which one terminal is located centrally on the end of the cap while the other terminal is provided by the screw thread at the side of said cap, the socket is formed laterally with a groove in which one lead of the pair can be laid in such manner that its stripped end shall come into contact with the screw thread on the bulb cap by which it will be compressed laterally, while the stripped end of the other lead is arranged within the bottom of the socket in such manner that it will be compressed by the other bulb terminal.

A socket of the kind described may suitably be made up of a pair of members to be screwed into one another; the outer bell-shaped member has a preforated bottom and a cylindrical skirt portion with an inside screw thread, whilst the inner cylindrical member is provided with an external screw thread to fit in the screw-threaded inside of the outer member and with an internal screw thread from the bulb cap to fit in; said member may be embodied as a slit ring whose abutting edges adjacent to the slit are only connected with each other by a small cross-bar round which the stripped end of the lead can be bent which is received in the free space between the edges at either side of the slit.

A particular embodiment of this invention is illustrated by way of example in the drawing appended hereto.

Figure 1 is an elevational view of a socket with its attached bulb.

Figure 2 is an enlarged vertical sectional view of the same socket without a lamp.

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Figure 3 is a plan view of the inner member of said socket.

The bell-shaped outer member 1 is formed with a central aperture 2 through which project the lead pair 3, 4; its skirt portion is screw-threaded in its inside at 6. The inner member 7 is provided with an external screw thread 8 and with an incomplete internal screw thread 9; said inner member is designed as a split ring leaving a substantial space between the edges 10 of the split; said edges are interconnected at the upper portion thereof by a solid web or cross-bar 11.

The leads 3 and 4 are knotted together at 12 within the cavity provided in the remote end of member 1; said knot 12, which is larger in size than the aperture 2, removes the said leads from the liability of being pulled out of the socket; the stripped end of lead 3 is expanded at 13 within the remote end of the socket flush with the under side of the knot 12; the end 14 of lead 4 extends beyond the expanded end 13 and the stripped lead 15 that emerges from the said extension 14 projects between the edges 10 of the slit in the inner member 7, is bent about the cross bar 11 and wound into a knot 18 which projects outside the space between the edges 10.

In that manner, as the bulb 19 is set into position by having its threaded cap screwed into the incomplete threads in the inner member 7, the central stud thereon will press upon the expanded portion 13, thus establishing an excellent conducive connection therewith, while the wormed cap will exert a pressure sidewise upon the knot 18 and thus make a very good contact therewith.

It should be well understood that the embodiment described hereinbefore is given merely by way of exemplification and by no means of limitation and that many modifications can be made therein without thereby departing from the scope of the invention.

Thus, for instance, in order to facilitate the screwing of the inner member 7 into the outer member 1, the former is preferably provided with a depression 20 located diametrically opposite the web 11; a screwdriver can thus be inserted on one side into the said recess and on the other side in contact with said web between either edge 10 of the slit, to serve for the screwing of members 7 and 1 into one another.

What I claim as my invention and desire to secure by Letters Patent is:

1. A socket made of plastic material and including no metal parts, for an electric bulb with

a screw cap and a central contact stud, comprising in combination a bell-shaped socket, a hole in the bottom of said socket, a pair of leads knotted together within said socket flush with said hole so that said knot cannot escape therethrough, a slit plastic ring, a thread on the inner wall of said socket and a thread on the outer wall of said ring matching each other, a thread on the inner wall of said ring, the slit in said ring being designed to accommodate the stripped end of one of the leads to form one contact for for the side of the bulb cap, by said stripped end being conductively engaged sidewise by the bulb cap once threaded home in the socket, the other contact being formed by the stripped end of the other lead which is cut off adjacent to said knot and retained by the same for conductive engagement with the central contact stud on the said bulb cap.

2. An electric bulb socket according to claim 1 comprising a cross-bar interconnecting the edges of the slit in the ring and round which the stripped end of the lead received in said slit can be bent or wound.

3. A socket for an electric bulb having a base contact and side contact comprising in combination a non-metallic cup with a screw thread on the internal face and a hole in the bottom thereof, a pair of insulated conductors passing through said hole, a non-metallic ring having an external screw thread complementary to the thread in said cup whereby said ring may be screwed into said cup, an internal thread on said ring to accommodate an electric bulb, and a deep slot in said ring intersecting said internal and external threads for receiving the bared end of one of the conductors, whereby a bared portion

of said one insulated conductor received by said slot may connect with the side contact of said bulb and a bared portion of said other conductor, knotted around said first conductor at said hole to retain said conductors within the cup, may connect with the base contact of said bulb.

4. A socket as in claim 3 wherein the slot in said ring is formed by splitting the ring substantially vertically.

5. A pressed plastic socket according to claim 3 wherein said non-metallic ring comprises a pressed plastic sleeve and said slot has its two edges interconnected by a web around which the stripped end of the lead received in said slit so wound that it will project inwards and thus provide for conductive engagement of said stripped end with the side of the lamp screw cap received in said sleeve.

PAUL VILLEPLÉ.

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