United States Patent

[11] 3,614,713

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[73] Assignee **TRW Inc.**
Cleveland, Ohio

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[33] **Great Britain**
[31] **25244/67**
Continuation of application Ser. No. 733,658, May 31, 1968, now abandoned.

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[54] **ELECTRIC LAMPHOLDER**
2 Claims, 9 Drawing Figs.

[52] **U.S. Cl.** **339/128,** 339/220

[51] **Int. Cl.** **H01r 13/32**
[50] **Field of Search** ..... 339/215, 220, 221 L, 132, 220 L, 128, 181, 188, 189 L, 88; 248/27

[56] **References Cited**

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ABSTRACT: Lampholder comprising a metal shell having its inner end assembled in a bosslike recess on a base of insulating material, an electrical contact on the base extending into the recess for engaging the base contact on a lamp.

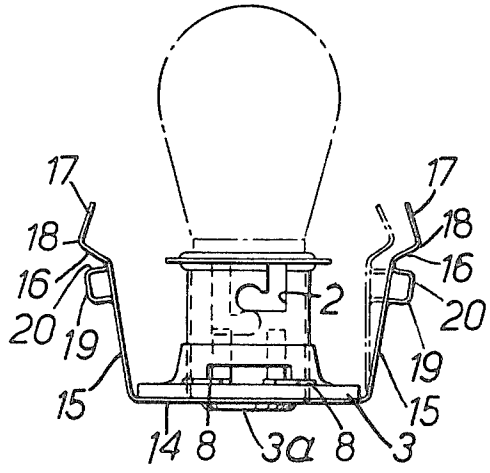


FIG. 1.

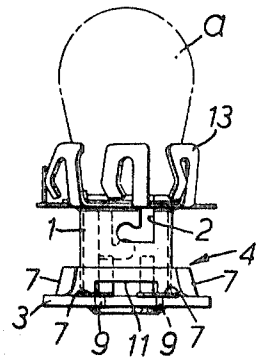


FIG. 2.

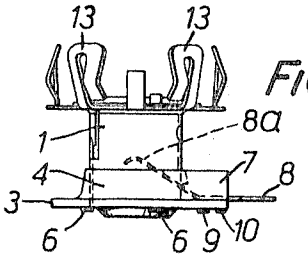


FIG. 3.

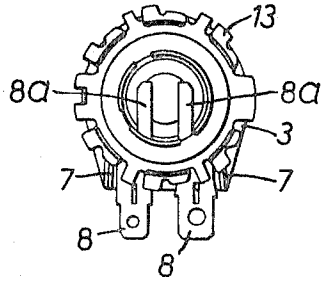


FIG. 4.

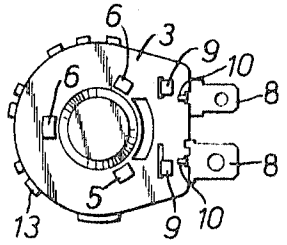


FIG. 5.

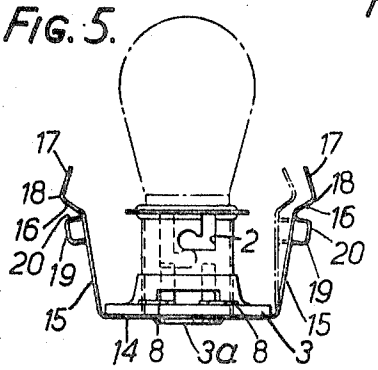


FIG. 6.

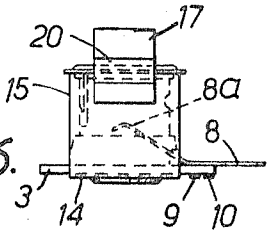


FIG. 7.

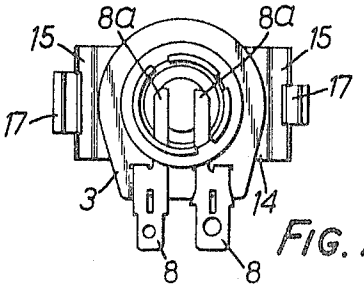


FIG. 8.

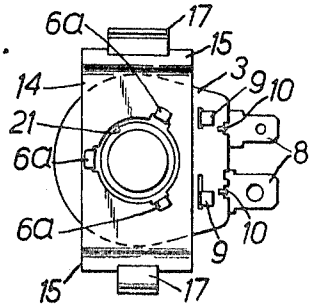
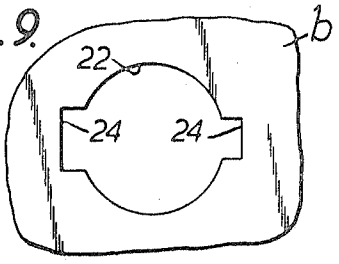


FIG. 9.



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ELECTRIC LAMPHOLDER

This is a continuation of application Ser. No. 733,658 filed May 31, 1968, now abandoned.

This invention relates to an electric lampholder.

SUMMARY OF THE INVENTION

According to the present invention, the lampholder comprises a hollow metal body defining a lamp cap receiving cavity, the body being attached to a base formed of insulating material having a recess shaped to receive one end of the body, at least one electrical contact being provided on the base and including an integral resilient portion extending into the recess so as to be disposed in the hollow body for engagement by the base contact of the lamp to be inserted.

To enable the invention to be fully understood, it will now be described, by way of example, with reference to the accompanying drawings in which:

FIG. 1 is a side view of the lampholder according to one embodiment of the invention;

FIG. 2 is a side view of the lampholder when moved through an angle of 90°;

FIG. 3 is a plan view of the lampholder;

FIG. 4 is an under plan view thereof;

FIG. 5 is a side view of the lampholder according to a modified form of the invention;

FIG. 6 is a side view taken at 90° to the view illustrated in FIG. 5;

FIG. 7 is a plan view;

FIG. 8 is an under plan view; and

FIG. 9 is a plan view of an apertured support to which the modified holder is adapted to be attached.

As illustrated in the drawings, the lampholder comprises a hollow body 1 formed of sheet metal and of cylindrical shape so as to define a cavity for receiving the base cap of an electric lamp which is diagrammatically indicated by *a* in FIG. 1. As shown, the body 1 is formed with bayonet slots 2 for engagement by lateral pins on the lamp cap. The body 1 is attached to a base formed of insulating material which comprises a platelike portion 3 formed with an integral boss element 4 defining a recess 5 in which the inner end of the body 1 forms a close friction fit and is secured by lugs 6 integral with the inner end of the body 1 and extending through and bent over slots in the base 3. Upstanding walls 7 integral with the base 3 extend from the boss element 4 in spaced relation so as to define a channel.

A pair of contacts 8 are positioned on the portion of the base located in the channel and are anchored by integral lugs 9 extending through and bent over slots in the base and further integral lugs 10 are bent over the edge of the base. Resilient portions 8*a* of the contacts extend through a slot 11 in the bosslike element 4 so as to lie within the area of the hollow body 1 for engagement by base contacts on the lamp cap when the latter is inserted into the holder.

At the outer end of the hollow body, that is the end remote from the base 3, the hollow body is provided with a radial flange 12 having integral resilient fingers 13 for snapping into an aperture in a support such as part of the body of a motor vehicle to secure the lampholder thereto.

The axial length of the hollow body 1 is considerably shorter than that of other known lampholders and, for example, the body may have an axial length approximately equal to the internal diameter of the body.

The modified form of lampholder illustrated in FIGS. 5 to 8 is similar to that illustrated in FIGS. 1 to 4 with the exception of the means for attaching the holder to an apertured support. In FIGS. 5 to 8 parts identical to those in FIGS. 1 to 4 are given identical reference numerals.

In the modified lampholder the radial flange 12 and resilient fingers 13 are omitted and the means for attaching the holder to the apertured support comprises a sheet metal member including a base 14 and a resilient arm 15 extending at an angle from each of two opposite ends. Each arm is formed at its free end with a resilient lug bent to provide outwardly and inwardly diverging portions 16, 17, respectively, defining a shoulder 18. Adjacent the connection with the arm 15 the lug is shaped to form a boxlike projection 19 defining a shoulder 20. As indicated in FIGS. 7 and 8, one of the lugs has a greater transverse width than the other.

As shown more particularly in FIG. 8, the base 14 is formed with an aperture 21 into which a portion 3*a* of the platelike portion 3 extends, the base 4 of the attaching member being secured by lugs 6*a* integral with the inner end of the body 1 extending through slots in the member 3 and the base 14.

The modified holder is adapted to be assembled with a support such as indicated by *b* in FIG. 9 which has a central opening 22 and offset slots 23, 24, of different size and having a width respectively corresponding to the respective lugs on the arms 14.

To assemble the holder with the support, the body 1 with or without an assembled lamp, is presented to the opening 22 so that the lugs are respectively aligned with a slot of corresponding width. By flexing one or both the resilient arms 14 inwardly, the end portions 17, 18 are inserted into the slots so as to snap over the edge whereby the holder is retained by the shoulders 20 abutting one face of the support and the diverging portions 16 the opposite face.

The different width of the lugs and slots from polarizing means ensuing that the holder is always correctly assembled with the support.

The assembly of the holder is best effected by positioning the holder at an angle to the support and inserting the end portions 16, 17 of one of the lugs into its slot and then pivoting the holder towards the support and flexing the other lug inwardly and snapping it into the other slot.

I claim:

1. An electrical socket assembly comprising a tubular body, a platelike base, a fastener member and at least one electrical element, the body having a series of integral first lugs extending from one end and having means of engaging a lamp bulb, the base formed of insulating material having slots formed therethrough and the electrical element comprising a resilient contact portion at one end and an integral terminal portion, adapted to engage a lead, at the other end and integral lugs, the resilient contact portion extends within the body and the integral lugs engaging the base, the first lugs of the body engaging through some of the slots of the base whereby the base and body define a lamp-receiving cavity and the first lugs of the body also engaged through slots formed in the fastener member, the fastener member having at least two resilient arms extending therefrom along the sides thereof and spaced from the body.

2. An electrical socket assembly as set forth in claim 1 wherein each of the resilient arms has a projection for engagement with an apertured support.