April 24, 1934. C. L. CLEBURNE 1,956,273

ELECTRIC LAMP HOLDER AND THE LIKE

Filed May 24, 1932

Fig. 1.

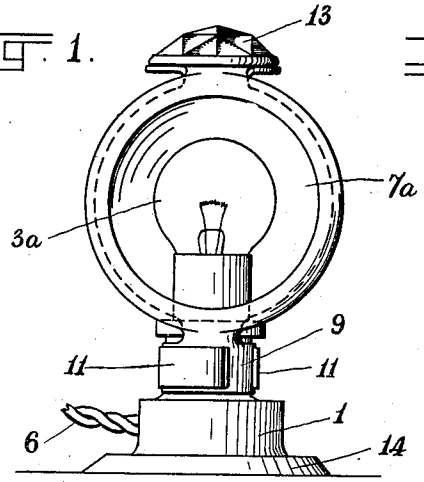
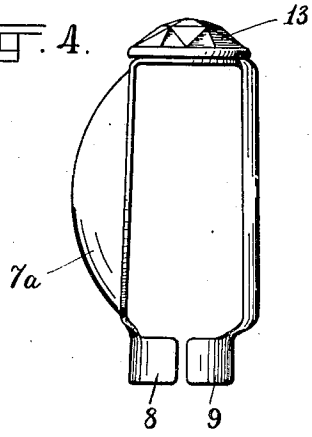


Fig. 4.



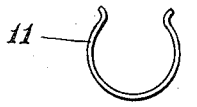


Fig. 5.

Fig. 2.

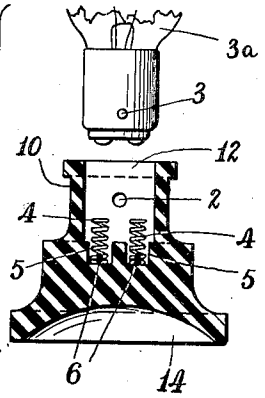


Fig. 6.

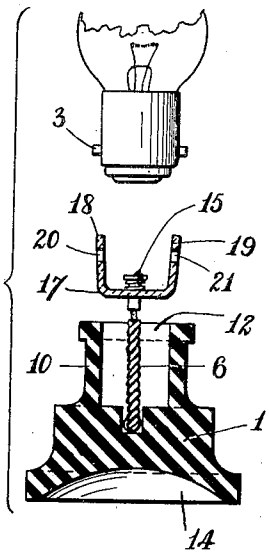


Fig. 3.

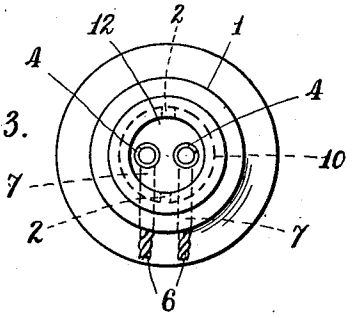


Fig. 7.

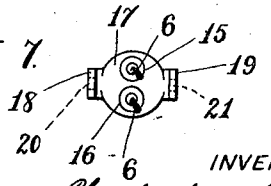
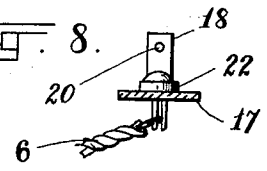


Fig. 8.



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ELECTRIC LAMP HOLDER AND THE LIKE

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Application May 24, 1932, Serial No. 613,199
In Great Britain May 28, 1931

3 Claims. (Cl. 240—52.2)

The present invention relates to improvements in electric lamp holders and the like, and has particular reference to inspection lamps for motor cars and other purposes although it is applicable to other uses such as, for example, electric reading lamps.

An object of the present invention is to provide an improved insulating and shock absorbing socket member for resiliently gripping the base of an electric lamp, rendering unnecessary the usual lamp socket in which the terminals and the insulation therefor are arranged within a metal casing having means to engage the usual pins or screwed end of the base of the lamp bulb, and to provide such a socket member as can be readily secured to a supporting surface and can be combined with a reflector or guard cage to form an effective lamp structure which is notably simple to manufacture and to assemble or disassemble.

Other objects of the invention will be in part obvious and in part pointed out in the following description.

In order that the invention may be the more readily understood reference is made to the accompanying drawing in which:—

Fig. 1 is a front elevation of one form of socket according to the invention assembled with an electric lamp and a reflector therefor.

Figs. 2 and 3 are sectional elevation and plan views respectively of the india-rubber socket, Fig. 2 showing the lamp ready for insertion therein.

Fig. 4 is a side view of the reflector.

Fig. 5 is a plan view of a separate clamping ring.

Fig. 6 is a sectional elevation of a variant device using a separate terminal and lamp carrier of insulating material, showing these parts and the lamp separated.

Fig. 7 is a plan view of the separate insulator shown in Fig. 6.

Fig. 8 shows a similar insulator having a modified form of terminal.

Referring more particularly to Figs. 1 to 5, 1 is the india-rubber socket which is holed at 2, 2, for the reception of the usual bayonet fastening pins 3, of a standard electric bulb 3a, the engagement of the pins and holes being made by springing the socket wall over the pins.

The base of the socket is provided with single or double contacts to which the lead or leads is or are connected.

Two terminal contacts 4, 4 are shown in the form of cylindric spiral springs let into longitudinal holes 5, 5 into which the leads 6, 6 from a suitable source of current supply are entered by way of the lateral passages 7, 7.

Various other forms of contacts may be used, e. g. pin or stud contacts will serve.

The reflector structure 7a which may serve additionally to protect the lamp, consists of a split ring base, 8, 9 adapted to be sprung round the upper wall 10 of the socket.

In the example shown the split ring sections 8, 9 normally tend to spring apart, and they are caused to close and grip round the elastic socket wall 10 and contract it tightly onto the cap of the electric bulb 3a, by a spring clamping ring 11.

In lieu of the reflector structure any suitable frame or cage or like protecting device may be used.

If desired the clamping ring may be integral with the reflector structure, cage or the like, but it is preferred to employ a separate clamping ring since such an arrangement permits the reflector structure to be constructed of a relatively pliable and easily worked metal.

The cage or reflector may be provided with transparent or translucent plain or coloured windows, or arranged to surround and protect a transparent plain or coloured globe or like. In Figs. 1 and 4 a coloured glass piece 13 is shown embodied in the reflector structure to enable the device to be used as an emergency vehicle tail lamp.

The mouth 12 of the socket is preferably exterally flanged or beaded to form a locking face for the clamping ring and/or the ring sections 8, 9 when forced or clipped on the socket or strained tightly thereon.

For motor inspection lamps or other purposes the socket may be formed integral with or attached to an india-rubber base which conveniently and advantageously may be shaped as indicated by 14 to serve as a suction attaching device.

When the base and socket are formed integral, it will be convenient to form the unit by moulding, the whole article when assembled forming a new article of manufacture which will be buffered against those shocks or impacts which would be likely to injure the lamp or other part of an assemblage of more rigid components.

In a modified form of the invention illustrated in Figs. 6 and 7 the terminal contacts 15, 16 are carried by an insulator 17 adapted to be pressed into the socket and to be frictionally held thereby. The insulator may be arranged with upstanding limbs 18, 19 which

are free to yield slightly when the base of the electric lamp is inserted between them, suitable holes 20, 21 being provided into which the usual bayonet pins on the lamp are sprung.

In the insulator shown in Fig. 3 the terminals are resiliently mounted by means of india-rubber washers 22.

If desired rigid terminal contacts may be used if the socket is so arranged that when the lamp or plug are pushed home and retained in position the contacts are elastically opposed by the rubber base of the socket to preserve good electric connection.

I claim:

1. Electric lamp holder comprising in combination an elastic india-rubber member comprising a concave base for securing it by suction to a support and a lamp socket portion; terminals in said portion; said socket portion admitting the peripheral wall of the base of the lamp bulb to be directly engaged by the internal rubber wall of the socket portion while the lamp contacts engage their terminals so as to be held by a frictional and elastic grip, and clamping means for tightening said socket portion round the bulb base.

2. Electric lamp holder comprising in combination an elastic india-rubber member comprising a concave base for securing it by suction to a support and a socket portion to receive the base of the lamp bulb, said socket portion having openings to receive pins on the bulb base; terminals mounted in the socket portion and insulated from each other by said member; a detachable metal lamp adjunct comprising a split ring base; and a separate spring clip embracing said split ring base and serving thereby to secure said adjunct to the socket portion and to tighten said socket portion around the base of the lamp bulb in direct elastic engagement therewith.

3. Electric lamp holder comprising in combination an elastic india-rubber member comprising a concave base for securing it by suction to a support and a socket portion to receive the base of the lamp bulb; a staple-like insulating piece adapted to be inserted in said socket, said piece carrying terminals and having means engaged by the base of the lamp bulb to prevent rotation of the bulb; a detachable lamp adjunct comprising a split ring base; and a separate spring clip embracing said split ring base and serving thereby to secure said adjunct to the socket portion and to tighten said socket and said insulating piece on to the base of the lamp bulb.

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