Sept. 7, 1937. H. A. DOUGLAS 2,092,371

MOUNTING MEANS FOR ELECTRIC LAMPS

Filed Jan. 18, 1934

Fig. 1.

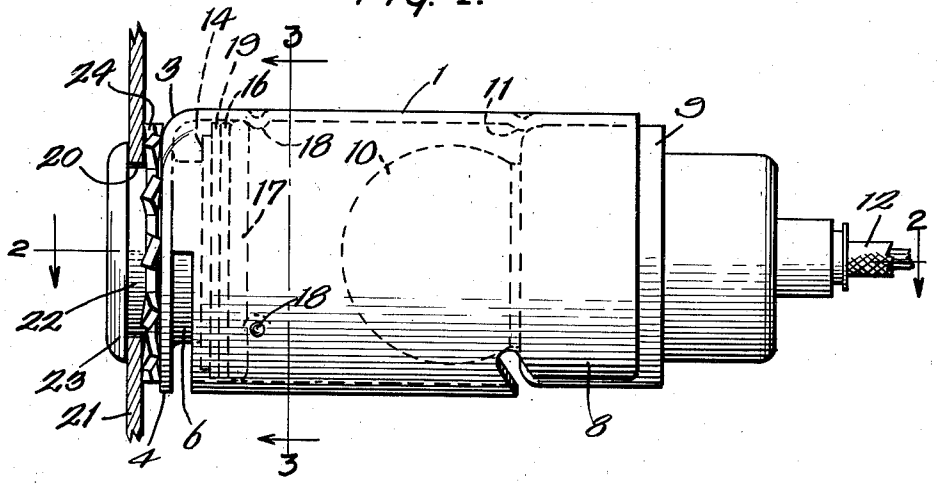


Fig. 2.

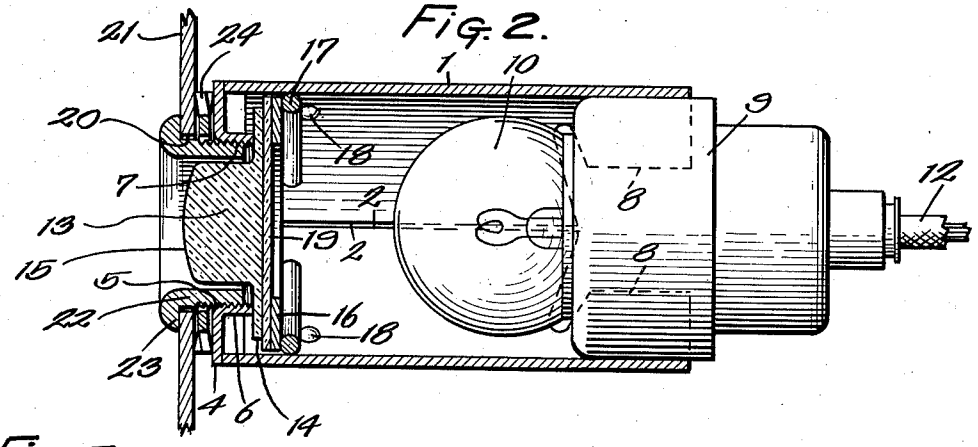
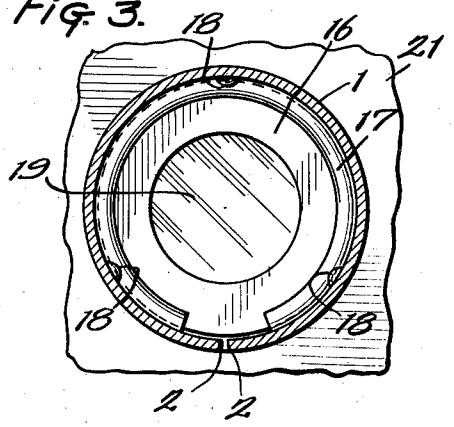


Fig. 3.



INVENTOR
HARRY A. DOUGLAS
BY Langdon Mann
ATTY.

Patented Sept. 7, 1937

2,092,371

UNITED STATES PATENT OFFICE

2,092,371

MOUNTING MEANS FOR ELECTRIC LAMPS

Harry A. Douglas, Bronson, Mich., assignor to Kingston Products Corporation, a corporation of Indiana

Application January 18, 1934, Serial No. 707,135

11 Claims. (Cl. 240—8.16)

This invention relates to mounting means adapted particularly for incandescent electric lamps.

The invention is of particular utility when employed in conjunction with dash lamps for automotive vehicles and the like, and, among other objects, aims to provide an improved and economical mounting which combines, in a one piece structure, both a retaining means for the lamp socket and a cowl for the lamp whereby the light thereof is suitably directed, as through the instrument board when employed as a tell-tale light indicator.

Other objects and advantages will be apparent from the following description, taken together with the accompanying drawing, showing illustrative embodiments of my invention in which—

Figure 1 is a side elevation parts being shown in section, showing one embodiment of my invention;

Figure 2 is a longitudinal sectional view of parts included in Figure 1 and being a section taken on the line 2—2 of Figure 1;

Figure 3 is a sectional view of the structure of Figure 1 taken on the line 3—3, Figure 1.

While not necessary to this invention, it is preferable to construct the housing for receiving the lamp and lamp socket as taught in this applicant's prior copending application, Serial No. 644,282, filed November 25, 1932, which issued October 30, 1934, as Patent 1,978,934, but other types of housing construction may be used without departing from the scope of the invention.

In the embodiment of this invention illustrated, the housing 1 is preferably struck from a rectangular blank of somewhat resilient sheet metal, such as brass, and bent longitudinally to substantially cylindrical form with the transverse edges 2 brought together to form a split spring. The blank is attached by an integral neck 3 to a substantially circular extension 4 thereof which is bent about the neck portion 3 to cover one open end of the housing 1. The end closure 4 is formed with a circular opening 5 concentric with the axis of the casing with the metal thereabout continued inwardly to form an annular flange 6 the interior 7 of which is screw-threaded for a purpose hereinafter described. It is also preferable in forming the blank to strike out tongues 8 on the end opposite the circular extension 4 which may be slightly contracted when the blank is bent to form the housing 1 to enhance the function of the housing in resiliently retaining the socket 9 which is received therein together with a commercial incandescent lamp 10 mounted in the socket. The housing may be provided with an indentation 11 to limit the insertion of the socket therein. The socket 9 may also carry the usual current conductor 12 shown in Figures 1 and 2 which may be spring pressed into engagement with the contact of the lamp of the single pole type in the customary manner in this type of lamps.

As shown in Figure 2, a cylindrical block or disc 13 of transparent or translucent material having an outstanding flange 14, is arranged axially within the threaded flange 6 of the casing closure 4 with the upper surface of the block flange 14 in engagement with the end of the casing closure flange 6. The block 13 is of less diameter than that of the opening 5 of the casing closure 4 to space the circumference of the block a distance from the screw-threaded inner surface 7 of the flange 6 and is preferably of such thickness as to extend beyond the outer surface of the casing closure 4 and terminate in an end 15 of spherical formation. The block 13 is preferably held in engagement with the casing closure flange 6 by an annular positioning member 16 of slightly less diameter than that of the casing 1 to be readily received therein and with a central opening of approximately the same diameter as that of the casing closure flange 6. The positioning member 16 is preferably held in position by a resilient split ring 17 engaging the member and interior of the casing, which in turn may be held in position by indentations 18 formed in the adjacent walls of the casing 1. If desirable a disc 19 of transparent or translucent material of the same diameter as the positioning member 16 may be interposed between the said member and the block 13, as shown in Figure 2.

When it is desired to attach the housing 1 to be positioned at the rear of an instrument board of an automotive vehicle with the disc 13 visible to the driver when the lamp 10 is energized to act as a telltale light to indicate for example that the tail light is energized, that the lubricating oil for the motor is properly circulating, that the heater motor is operating or like purposes, an opening 20 is provided in the instrument board 21 through which the disc or block 13 may be visible to the driver. A shouldered exteriorly screw-threaded sleeve 22 is passed through said opening with the shoulder 23 thereof in engagement with the surface of the instrument board and the threaded portion thereof adapted to mate with the threads of the casing closure flange 6 and having a bore of sufficient

diameter to receive the disc or block 13 whereby the threading of the casing 1 upon the sleeve on the side of the instrument board opposite the sleeve flange 23 readily secures the casing or housing in place. It is also preferable to provide a lock washer 24 upon the sleeve 22 between the rear of the instrument board 21 and the housing closure 4 to hold the housing securely in place.

What I claim is:

1. A telltale lamp and means for mounting the same upon the instrument board of an automotive vehicle to be visible to the driver when the lamp is energized including a cylindrical housing having an end closure and means for receiving and mounting a lamp at the open end, said end closure having a central circular opening and a threaded annular flange margining said opening extending into said housing, a transparent flanged disc mounted within the housing with the flange thereof in engagement with the inturned flange of the end closure and the body thereof extending through and beyond the end closure, a member in engagement with the housing and inner side of the disc to secure the disc in position, in combination with a shouldered threaded sleeve adapted to pass through and engage its shoulder with the instrument board and its threaded portion threaded upon the inturned end closure flange to draw the housing against the instrument board with the body of the transparent disc received within the shouldered sleeve to be visible from the exterior of the said board without projecting therebeyond.

2. A telltale lamp including a cylindrical housing having an end closure and means for receiving and mounting a lamp at the open end, said end closure having a central circular opening and a threaded annular flange margining said opening extending into said housing, a transparent flanged disc mounted within the housing with the flange thereof in engagement with the inturned flange of the end closure and the body thereof extending through and beyond the end closure, a member in engagement with the housing and inner side of the disc to secure the disc in position, and means surrounding the body of the disc in threaded engagement with the inturned closure flange to secure the housing upon a support and out of engagement with the disc.

3. Means for mounting an electric lamp on a panel, comprising: receiving means for receiving and holding the socket of the lamp and forming a hood for the lamp; said receiving means having a re-entrant portion forming a tubular member terminating interiorly of the receiving means; a light transmitting portion, supported against the inside edge of said tubular member; and means for securing said receiving means to the panel.

4. Means for mounting an electric lamp on a panel, comprising: receiving means for receiving and holding the socket of the lamp and forming a hood for the lamp; said receiving means having a re-entrant portion forming a tubular member; a light transmitting portion, supported against an inside edge of said tubular member, said light transmitting member extending through said tubular member in spaced relation therewith; and means for securing said receiving means to the panel, said means extending through the space between said light transmitting member and said tubular member, and engaging a surface of said tubular member.

5. Means for mounting an electric lamp on a panel, comprising: receiving means for receiving and holding the socket of the lamp and forming a hood for the lamp; said receiving means having a re-entrant portion forming a tubular member terminating interiorly of the receiving means; a light transmitting portion, supported against an inside edge of said tubular member, and extending outwardly through said tubular member beyond the outlines of said receiving means; and means for securing said receiving means to the panel.

6. Means for mounting an electric lamp on a panel, comprising: receiving means for receiving and holding the socket of the lamp and forming a hood for the lamp; said receiving means having a re-entrant portion forming a tubular member terminating interiorly of the receiving means; a light transmitting portion, supported against an inside edge of said tubular member, and extending outwardly through said tubular member beyond the outlines of said receiving means; and means for securing said receiving means to the panel so that the outer end of said light transmitting material is in proximity to the panel.

7. A telltale lamp, and means for mounting the same upon the instrument board of an automotive vehicle, including a housing; apertured means passing through the instrument board and engaging one end of the housing to hold the housing to the instrument board; a lamp mounted within the housing at its other end and visible through the aperture in said engaging means; and a light transmitting member, secured within said housing, and disposed between the lamp and the engaging means.

8. A telltale lamp, and means for mounting the same upon the instrument board of an automotive vehicle, including a housing; apertured means passing through the instrument board and engaging one end of the housing to hold the housing to the instrument board; a lamp mounted within the housing at its other end and visible through the aperture in said engaging means; a light transmitting member disposed between the lamp and the engaging means; and means, independent of said engaging means, for holding said light transmitting member in operative position with respect to said housing.

9. A telltale lamp, and means for mounting the same upon a panel, including a housing having a reentrant apertured portion, apertured engaging means abutting one surface of the panel, and having a part passing through the panel, said part and the adjacent surface of said reentrant aperture portion having interengaging means operable to hold said housing to said panel, a lamp mounted within the housing and visible through the aperture in said engaging means, and a light transmitting member disposed between the lamp and the engaging means, said light transmitting member having a part supported against the inside edge of said reentrant portion.

10. Means for mounting an electric lighting device on an apertured panel, comprising: a housing, having means for receiving the socket for the lamp, and also having an aperture; a light transmitting member having a portion extending through said housing aperture in spaced relation with respect to the margin of said housing aperture; and securing means, provided with an aperture so that said light transmitting portion is visible, said securing means having a part engaging one side of the panel, and a part extending through the panel aperture and disposed

in the space between the light transmitting member portion and the margin of said housing aperture, said latter part and the margin of said housing aperture having cooperating means to effect holding of said housing to the other side of the panel.

11. Means for mounting an electric lighting device on an apertured panel, comprising: a housing, having means for receiving the socket for the lamp, and also having an apertured reentrant portion; a light transmitting member having a portion supported against the inner edge of said reentrant portion, and also having a portion extending through said housing aperture in spaced relation with respect to the margin of said reentrant portion; and tubular securing means having a part engaging the panel, and a part extending through the panel aperture and disposed in the space between the light transmitting member portion and the margin of said reentrant portion, said latter part and the margin of said reentrant portion having cooperating means to effect holding of said housing to the other side of the panel.

HARRY A. DOUGLAS.