Aug. 30, 1927. 1,640,831

O. E. HUNT

COWL LIGHT

Filed Aug. 14, 1924

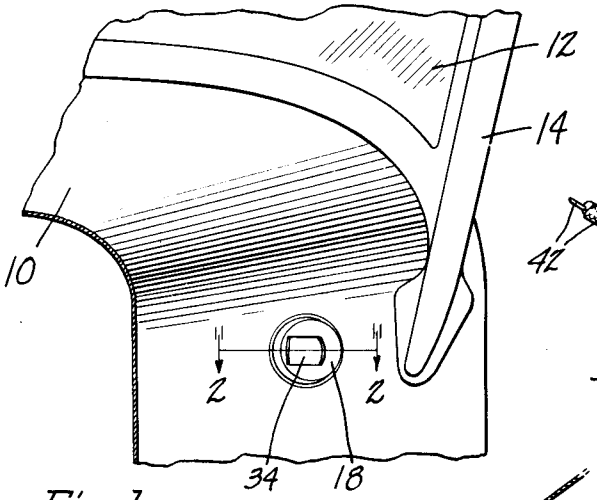

Fig. 1

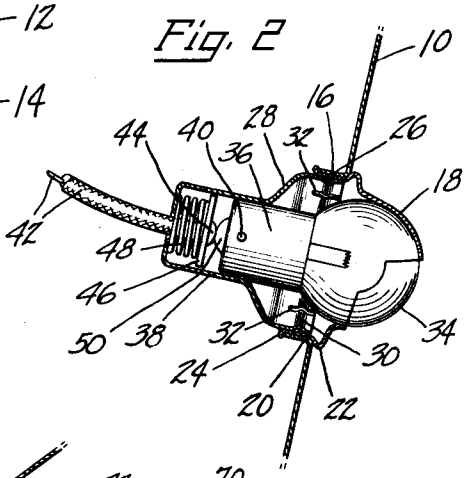

Fig. 2

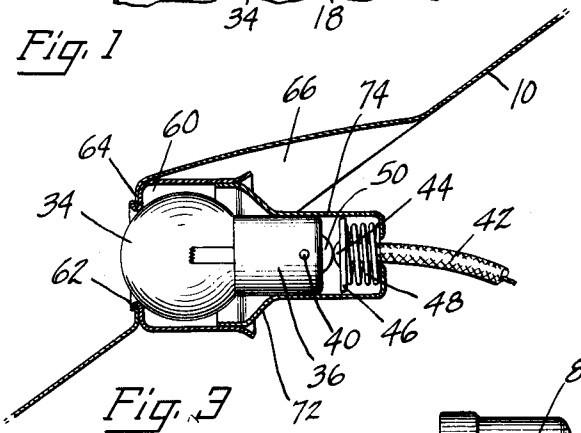

Fig. 3

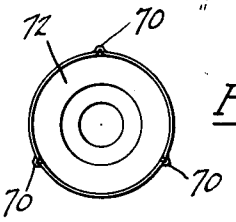

Fig. 4

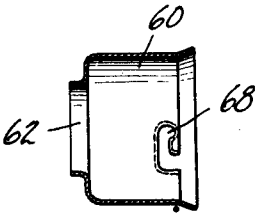

Fig. 5

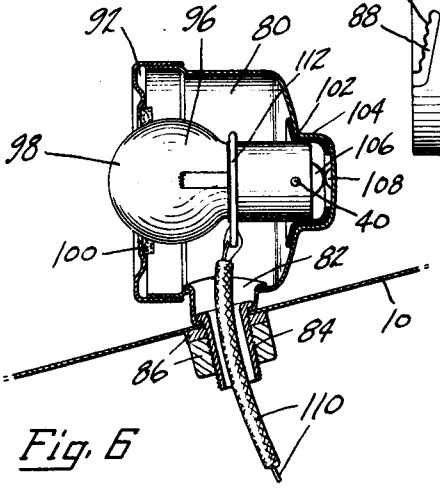

Fig. 6

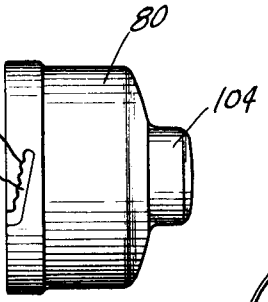

Fig. 7

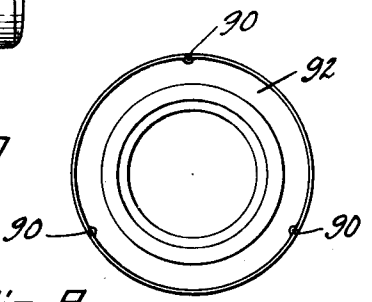

Fig. 8

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UNITED STATES PATENT OFFICE.

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COWL LIGHT.

Application filed August 14, 1924. Serial No. 732,095.

This invention relates to automobiles, and is illustrated as embodied in a Chevrolet having a novel cowl light arrangement. An object of the invention is to provide an inexpensive lamp and housing arrangement eliminating the usual lens by substituting therefor a projecting end of an electric bulb in the housing, while at the same time providing a cowl light which is especially neat and attractive in appearance and which can be readily assembled. Various desirable and novel features of the invention will be apparent from the following description of several illustrative embodiments shown in the accompanying drawings, in which:

Figure 1 is a front elevation of one side of the cowl of an automobile, showing one cowl light;

Figure 2 is a section on the line 2—2 of Figure 1, showing the cowl light in horizontal section;

Figure 3 is a vertical section through a cowl, showing a differently-arranged cowl light;

Figure 4 is a front elevation of the rear part of the lamp casing of Figure 3;

Figure 5 is a vertical section through the front part of the lamp casing of Figure 3, before it is secured to the cowl;

Figure 6 is a vertical section through a cowl, showing a third form of cowl light;

Figure 7 is a side elevation of the rear part of the lamp casing of Figure 6; and

Figure 8 is a rear elevation of the front part of the lamp casing of Figure 6.

As illustrated in Figure 1, the various lights are mounted in the cowl 10 of an automobile, in front of and below the windshield 12 and approximately at the level of the bottom of the windshield stanchion 14.

In the arrangement of Figures 1 and 2, the cowl is formed with an opening for the light which is surrounded by an inwardly-drawn flange 16. The lamp casing is in two interengaging parts, the front part 18 having a cylindrical base 20 fitting within the flange 16 and a bead 22 seated against the cowl. The base 20 is peened or spun over to secure it to the flange 16 at 24. Inside of the base 20 is an inner peripheral bead 26, the rear part 28 of the casing having a corresponding bead 30 and being slotted at 32 so that it can be sprung into place.

The front part 18 of the casing is formed with an opening, through which projects a substantially spherical glass front 34 of an electric bulb of conventional construction, thus eliminating the usual lens. The bulb is held at its front end by engagement with the edge of the opening in part 18 of the casing. At its rear end, the cylindrical base 36 of the bulb, which is ordinarily of metal forming one contact for the filament circuit, is grounded to the casing and is supported by fitting within a cylindrical portion or socket 38 of part 28 of the casing. In order to permit the use of standard bulbs, having a projection 40 for the bayonet joint of the ordinary socket, portion 38 may be slotted or grooved in any desired manner to provide the necessary clearance for the projection. An insulated wire 42 passes axially into portion 38 of the casing, and is soldered or otherwise secured to an axially-arranged contact 44 on an insulating washer 46. A spring 48 engaging washer 46 urges contact 44 against the usual contact 50 in the base 36 of the electric bulb.

In the arrangement of Figures 3, 4, and 5, the front part 60 of the lamp casing has a tubular flange 62 spun over the edge of a flange 64 surrounding an opening in the cowl 10, the cowl being pressed outwardly at 66 to afford room for the lamp casing. The front part 60 has bayonet slots 68 to receive projections 70 pressed outwardly at the open end of the rear part 72 of the lamp casing, to provide interengaging members holding the two parts of the casing together.

In this arrangement, the spherical front part 34 of the electric bulb projects through the opening defined by flange 62, and through the opening in the cowl, and is held by engagement with the edge of the opening. The base 36 of the bulb is supported in, and grounded to, a cylindrical portion 74 of part 72 of the casing, which portion may be slotted or grooved to provide clearance for projection 40. As in the first arrangement, contact 44 from wire 42 is urged against contact 50 of the bulb by a spring 48 engaging an insulating washer 46.

In the arrangement of Figures 6, 7, and 8, the rear part 80 of the lamp casing has secured to its bottom a stamping 82 flanged to receive the head of a coupling 84 threaded

to receive nuts 86 clamping the casing to cowl 10. Part 80 has bayonet slots 88 to receive projections 90 depressed about the open rear end of the front part 92 of the casing. The bayonet slots have teeth 94, so that the parts may be forced together more or less, yieldingly to hold an electric bulb 96 having a substantially spherical glass front 98 projecting through an opening in the front of part 92, and held by engagement with the edge of the opening, or by engagement with a rubber or fibrous gasket 100. The bulb is held at its rear end by fitting within a cup 102 of insulating material in a cylindrical portion 104 of part 80, the contact 106 at the center of the base of the bulb being grounded at 108 to the casing. Current is supplied to the bulb by an insulated wire 110 passing through the coupling 84 and soldered or otherwise secured to a collar or wire 112 encircling the base of the bulb. Portion 104 may be made slightly elliptical or eccentric to provide clearance for projection 40.

While several illustrative embodiments have been described in detail, it is not my intention to limit the scope of the invention to those particular embodiments, or otherwise than by the terms of the appended claims.

I claim:

1. A cowl light comprising, in combination, a casing in two parts having interengaging portions, means to secure one of said parts to a cowl, said part having an opening, an electric bulb having a substantially spherical glass front, means to hold the bulb in said casing with the spherical front projecting outwardly through the opening and with the bulb held at its front end by engagement with the edge of the opening, means to ground one contact of the bulb to the casing, and a conductor insulated from the casing and in electrical communication with the other contact of the bulb.

2. A cowl light comprising, in combination, an electric bulb having a substantially cylindrical base and a substantially spherical glass front, a casing in two interengaging parts, one of said parts having an opening through which the spherical front of the bulb projects and the other part having a substantially cylindrical socket for the base of the bulb, the bulb being supported at its front end by the edge of said opening and at its rear end by its base fitting within the cylindrical socket, means to ground the bulb to the casing, and means to supply current to the bulb.

3. A part of a vehicle comprising, in combination, a cowl having a flanged opening, a lamp casing in two interengaging parts, one of the parts having a portion fitting within the flange of the opening and secured to the edge of the flange, and the other part of the casing having a forwardly-directed opening, an electric bulb having a substantially spherical front end projecting through an opening in said first part and held at its front end by engagement with the edge of said opening, the rear part of the casing having a substantially cylindrical socket receiving and grounding the base of the bulb, and an insulated conductor yieldingly held in electrical communication with the base of the bulb.

4. A part of a vehicle comprising, in combination, a cowl having an opening with an inwardly-drawn cylindrical flange, a casing part having a base fitting within and secured to the flange and having a bead seating against the cowl about the opening, said casing part formed with an opening in its front face and having a peripheral bead internally of its base, a cooperating casing part having a beaded open end slotted to spring into inter-fitting engagement with the beaded base of the first part, an electric bulb having a glass front end projecting through the opening in the first casing part and held by engagement with the edge of the opening, the bulb also having a base fitting within and grounded against a portion of the second casing part, and an insulated conductor in electrical communication with the bulb.

5. A lamp assembly comprising, in combination, a sheet metal supporting member having a flanged opening, a casing part having a base fitting within the flanged opening and secured to the flange and having an opening in its front face, a cooperating casing part having an open end fitting within the flanged opening and having a hollow cylindrical rear end, and an electric bulb having a cylindrical base fitting within the hollow cylindrical rear end and having a glass front end projecting through the opening in the first casing part and held by the edge of said opening.

6. A lamp assembly comprising, in combination, two inter-engaging parts forming a lamp casing, one of said parts being formed with an opening and the other with a cylindrical recess, and an electric bulb having a convex glass front end projecting through said opening and yieldingly supported by the edge of the opening and having a cylindrical base fitting within and grounded against said recess.

7. In combination, a casing having an opening, a lamp bulb visible through said opening and supported by said casing at both its inner and outer ends, and yieldable means urging the outer end of the bulb into contact with the edge of said opening.

8. A lamp assembly comprising, in combination, a casing having an opening, a transparent member containing a source of light and having a substantially spherical front, said transparent member being held

with its spherical front against the edge of said opening by resilient means.

9. A cowl light comprising, in combination, a body portion having an opening, a rearwardly projecting flange adjacent said opening, a retaining member adapted to be received by said flange, an electric bulb guided by said retaining member, and resilient means urging said bulb forwardly whereby the front of said bulb engages the edge of said opening in the body portion.

In testimony whereof I affix my signature.

ORMOND E. HUNT.