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H. F. DUBBEN ET AL
AUTOMOBILE HEADLIGHT
Filed Oct. 17, 1924

Fig. 1

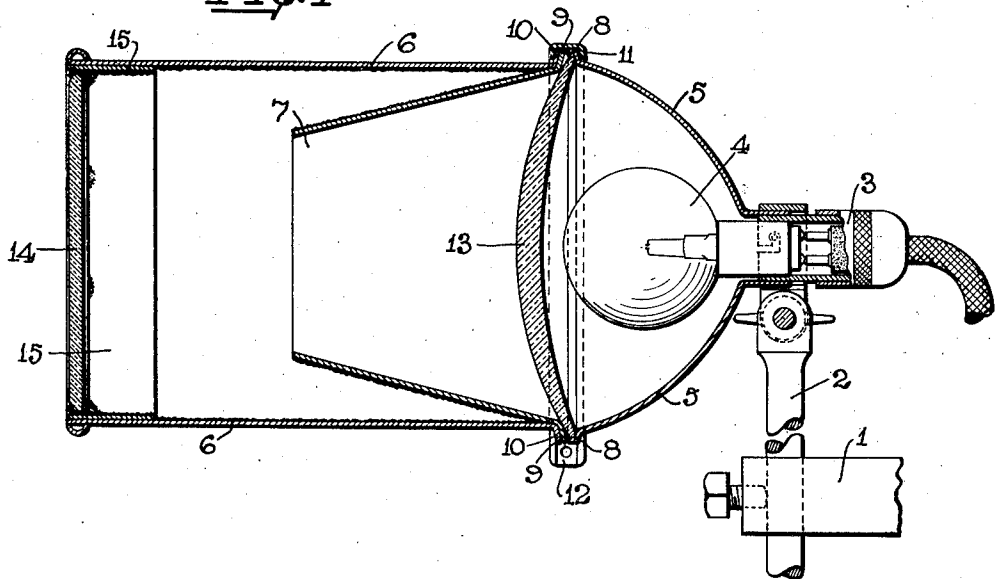


Fig. 2

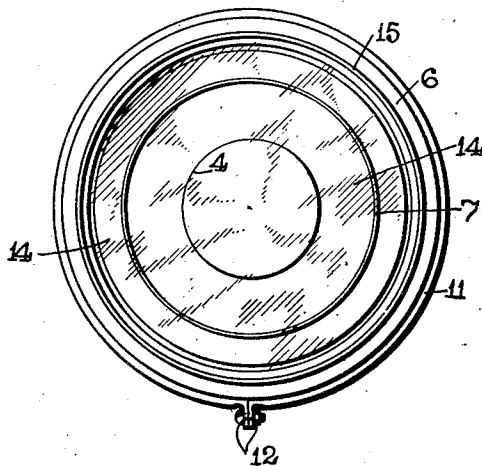


Fig. 3

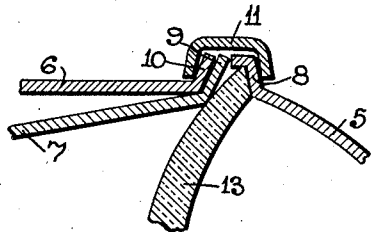
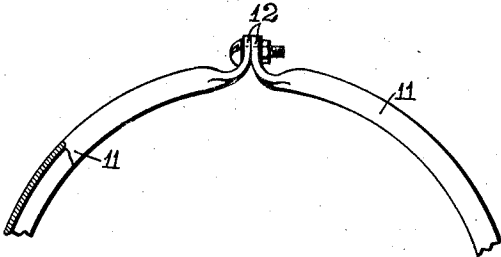


Fig. 4



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AUTOMOBILE HEADLIGHT.

Application filed October 17, 1924. Serial No. 744,168.

To all whom it may concern:

Be it known that we, HARRY F. DUBBEN and FRANK B. EASTON, citizens of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Automobile Headlights, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to illuminating devices such as the so-called headlights used on automobiles. The purpose of the invention is to provide a simple and inexpensive device whose direct rays will not strike the eyes of persons in the vicinity unless they be directly in front. The broad invention comprises an improved guard supported in front of the usual or any suitable source of light; and the invention further comprises certain features of structure, and arrangement hereinafter set forth and claimed.

The broad invention is susceptible of embodiment in various forms but will be best understood in connection with the accompanying drawings and the appended description which set forth, but merely by way of illustration, a preferred embodiment.

In said drawings,

Fig. 1 is a longitudinal median section, partly in side elevation, indicating a simple embodiment which at this time is the preferred one;

Fig. 2 is a front view of the improved guard; and

Figs. 3 and 4 are details on a larger scale.

In these drawings 1 represents a suitable relatively stationary portion of an automobile or other apparatus; 2 is a standard mounted in a socket in said portion 1 and secured in place as by a set-screw, and at its upper end carrying a socket-member 3 which has a socket for an electric-light bulb and also a suitable switch; a lamp 4 is demountably held in said socket; and said socket-member also supports a concave reflector 5, within whose concavity said lamp is presented concentrically. The concavity of this reflector may be of any desired curvature, preferably paraboloid. All of the foregoing may be of the usual or any desired structure and arrangement.

The improved guard comprises two tele-

scoped open-ended members, secured together to the front of said reflector, namely, an outer member 6, and a tapering inner member 7 whose larger end fits into and is secured to the rear end of the outer member. Preferably the inside of said outer member is black, while the inside of the inner member is bright and polished. The cross-section of these two members may be of any desired shape, but preferably is circular (like the margin of the reflector), the inner member being the frustum of a cone, and the outer member a cylinder. As here shown the margin of the reflector has an outwardly extending flange 8, and complementary flanges 9 and 10 are provided on the rear end of the two guard members; while a split ring 11, of U-shape in cross section, receives the three assembled flanges within its channel, and is held in position by a bolt passed through apertured ears 12 provided on the ends of said split ring and secured by a nut. If desired, a lens 13 may have its margin interposed between flange 8 and the other flanges, to be clamped in position by the split ring. As here shown said lens is a concavo-convex glass. Preferably the front of the outer member is closed by a front lens 14, here shown as a plain glass disc fitted in an annular channel on a ring 15 which telescopes into and is frictionally held by the front end of the outer member 6.

As indicated, the rear end of the guard is co-extensive with the margin of the reflector. Preferably the taper of the inner member 7 is at an angle less than forty-five degrees to its bore, while the length of the outer member 6 is sufficient to shut off practically all rays coming through the last named opening directly from the reflector. As a result all the direct rays that pass through said opening, whether coming from the lamp itself or from the reflector, pass directly forward within a relatively-small beam, the passage of the other rays being shut off by the inner or the outer member of said guard.

The full details of the preferred embodiment have been described, but only for the sake of illustration and not as a limitation; and it is to be distinctly understood that changes may be made in the structure and arrangement of the parts disclosed, the front and the rear lenses may be omitted,

and modifications resorted to, without departing from the spirit of the invention which is set forth by the appended claims.

The invention having thus been fully described, what is claimed is:

1. An automobile headlight containing, in combination, a concave reflector outwardly flanged around its margin, a lamp located within the concavity of said reflector, and secured to the front thereof a guard comprising two open-ended members fitted one within the other and outwardly flanged at their fitted ends, the interior of the outer member being blackened, the inner member tapering and having its larger end fitted into the rear end of said outer member, a retaining split-ring of U-shape in cross section with its channel receiving the three flanges aforesaid, and means for maintaining said ring in clamping engagement with said flanges.

2. An automobile headlight containing, in combination, a concave reflector, a lamp located within the concavity thereof, and secured to the front thereof a guard comprising two open-ended members fitted one with-

in the other, the outer member having its interior blackened, and the inner member tapering and having its larger end fitted into and secured to the rear end of said outer member, the rear end of said guard being of the same cross sectional size as said reflector, and the length of said outer member being such as to cut off practically all rays coming through said inner member directly from said reflector.

3. An automobile headlight containing, in combination, a concave reflector, a lamp located within the cavity thereof, and secured to the front thereof a guard comprising two open-ended members fitting one within the other, the outer member having its interior blackened, and the inner member tapering and having its larger end fitted into and secured to the rear end of said outer member, the rear end of said guard being of the same cross-sectional size as said reflector.

In testimony whereof we affix our signatures.

HARRY F. DUBBEN.
FRANK B. EASTON.