Dec. 15, 1925.

1,565,860

E. H. LUKENBILL

AUTOMOBILE HEADLIGHT

Filed Oct. 16, 1924

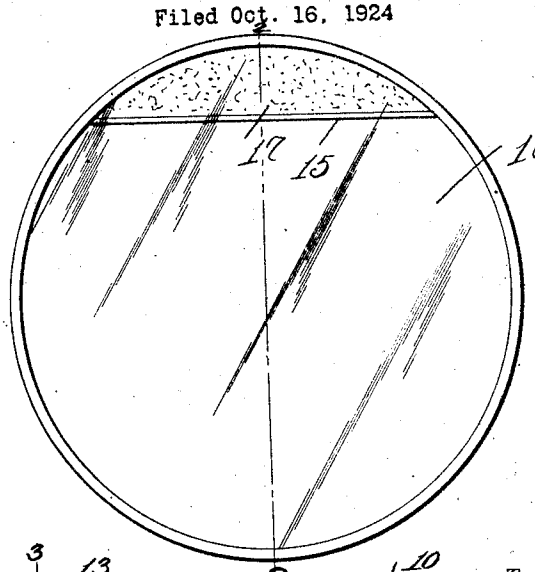


Fig. 1.

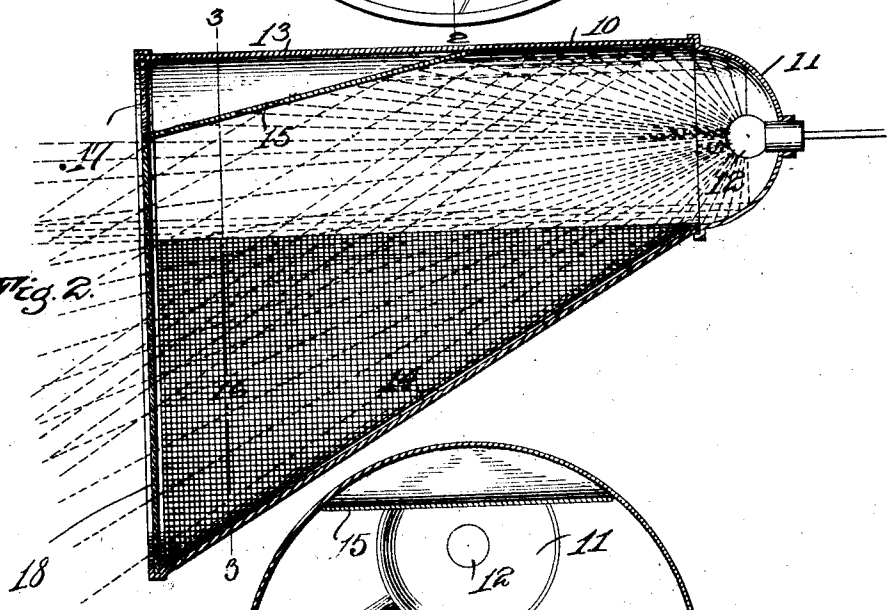


Fig. 2.

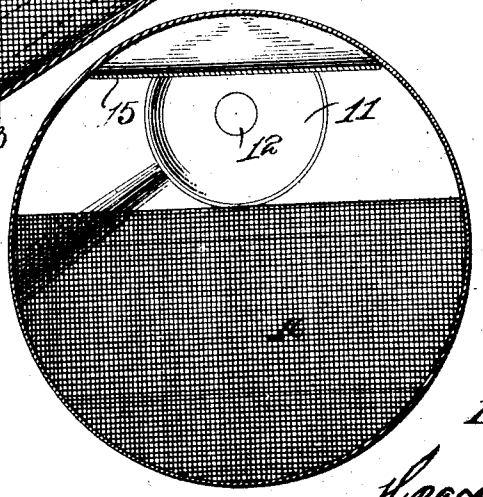


Fig. 3.

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UNITED STATES PATENT OFFICE.

EDGAR H. LUKENBILL, OF LINCOLN, ILLINOIS.

AUTOMOBILE HEADLIGHT.

Application filed October 16, 1924. Serial No. 743,894.

To all whom it may concern:

Be it known that I, EDGAR H. LUKENBILL, a citizen of the United States, residing at Lincoln, in the county of Logan, State of Illinois, have invented certain new and useful Improvements in Automobile Headlights; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in headlights, and particularly to headlights for vehicles.

With practically all headlights now in use on automobiles, and particularly when the bright lights are burning, the glare in the eyes of an approaching driver is confusing, and often results in such driver steering his car off the road, causing damage to the car as well as injury or death to the occupants. This glare is due to the fact that the reflected light rays from the headlights shine upwardly as well as downwardly and laterally, and it is the upwardly directed rays that meet the eyes of the approaching driver. As now constructed, the interior face of the concave lamp casing is reflective, with the result that the light rays are reflected upwardly from the lower portion of the casing, and reach the eyes of the approaching driver, in spite of the fact that translucent or colored shields are arranged to partly cover the upper portion of the lens of the casing. It is therefore the object of this invention to render this lower portion of the lamp casing nonreflective, in connection with the upper reflector and opaque shield, so that no light rays will be deflected upwardly, all rays passing from the front of the lamp casing in a horizontal direction, or downwardly and forwardly, thereby preventing any rays reaching the eyes of an approaching driver.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawing.

In the drawing.

Figure 1 is a front elevation of a headlight made in accordance with the present invention.

Figure 2 is a vertical longitudinal central sectional view on the line 2—2 of Figure 1.

Figure 3 is a vertical transverse sectional view on the line 3—3 of Figure 2.

Referring particularly to the accompanying drawing, there is shown a headlight casing 10, which is approximately conical in shape, with a concave reflector 11 in the rear or smaller end, an electric lamp 12 being disposed through the center of said reflector. The casing 10 has its upper side disposed in a horizontal plane, as indicated at 13, while the lower side inclines downwardly as shown at 14. Secured in the upper portion of the casing 10 is a flat metal plate 15, which extends from the forward end of the casing to a distance approximately two-thirds of the length of the casing, the marginal edges of the said plate being along lines which are approximately parallel with the line of the lower side of the casing. The lower face of this plate 15 is in the form of a reflector. The interior of the lower portion of the casing is rendered nonreflective, as indicated at 16, by some dull material, as paint, or the like, whereby to prevent reflection of the light rays from the lamp. The upper marginal edges of this nonreflective surface are approximately parallel with the upper horizontal portion of the wall of the casing. A translucent or opaque shield 17 is disposed at the forward end of the reflector plate 15, to cover the portion of the lens 18, which lies between the plane of the forward end of said reflector plate and the forward end of the upper portion of the wall of the casing, which serves to prevent the reflector 15 from being visible from the front of the automobile. The shield 17 may be a separate metal plate, or this portion of the lens may be colored or apaque.

By this construction, the light rays which pass horizontally from the casing pass under the reflector 15, and the shield 17, while the rays which strike the reflecting face of the plate 15 are deflected downwardly and forwardly onto the road. The light rays which strike the nonreflective surface 16 are thus prevented from passing upwardly into the eyes of an approaching driver. It will readily be seen that no light rays will pass from the headlight above the lower line of the reflector and shield, and in view of the fact that the approaching driver is considerably above this line, no glare will meet

his eyes, no matter how bright the light in the headlights. Furthermore, it will not be necessary for the driver to use dimmers, as he can drive with his bright lights on without annoyance to approaching drivers, while at the same time permitting him to properly light up the road ahead. Ordinarily, when passing or approaching another automobile, the driver changes from his bright lights to his dim lights, but with the present device no dim lamps are necessary.

The lamp is of the double filament type, thus making provision for dimming when the automobile is parked.

To provide for economy in material, in making the lamp casing, the upper arched portion, above the plate 15 may be dispensed with and the upper portion formed flat and in the plane of the plate, said plate being a portion of the casing.

What is claimed is:

An automobile headlight including a forwardly flared casing the lower portion of the interior of which is nonreflective, a source of light and a reflector in the smaller end of the casing, an opaque shield covering the upper portion of the lens of the lamp casing, and an inclined flat reflector extending from the lower portion of said shield upwardly and rearwardly to a point intermediate the length of the top of the casing.

In testimony whereof, I affix my signature.

EDGAR H. LUKENBILL.