July 5, 1966 G. A. WALLACE 3,259,776

SEALED BEAM HEADLAMP WITH PLURAL OPTICAL DEVICES

Filed Feb. 5, 1963

Fig. 1.

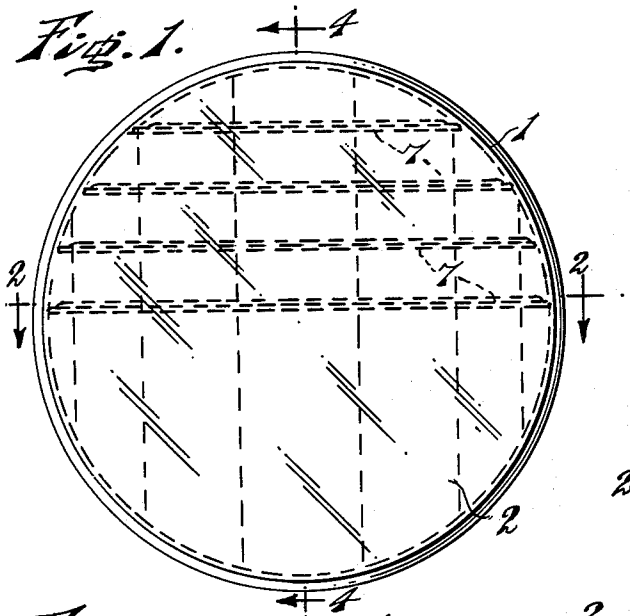


Fig. 4.

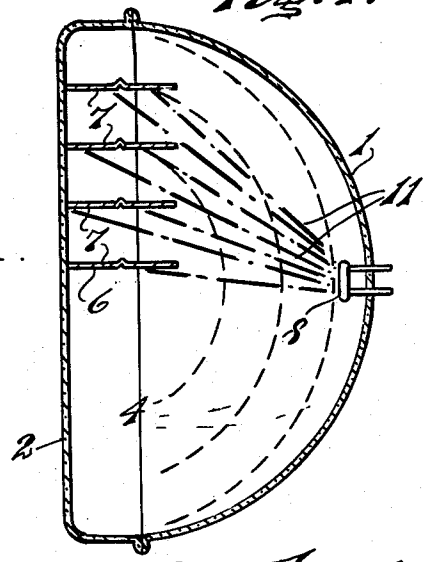


Fig. 2.

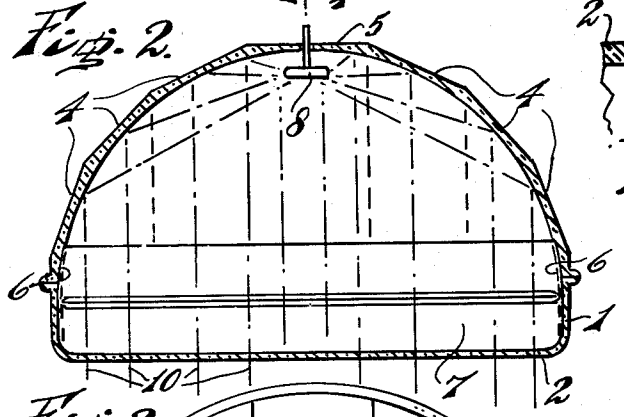


Fig. 5.

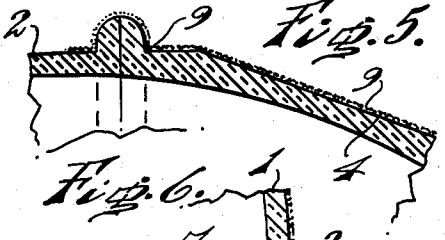


Fig. 6.

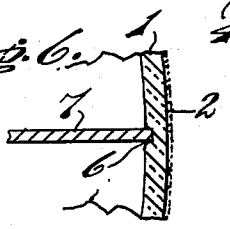
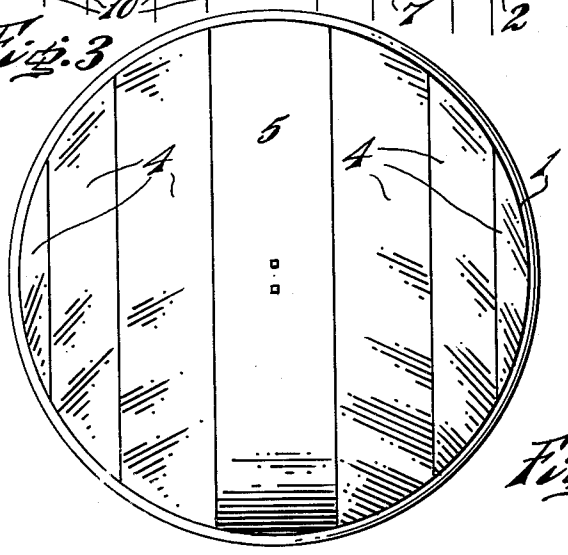


Fig. 3



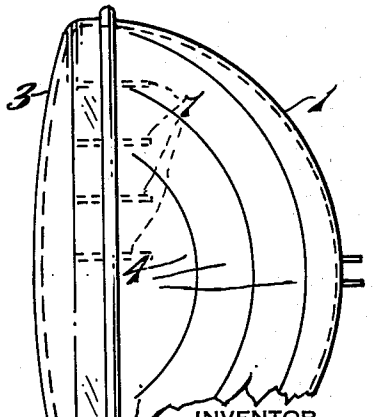


Fig. 7.

INVENTOR
George A. Wallace
BY
Herbert L. Fairbanks
ATTORNEY

United States Patent Office

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SEALED BEAM HEADLAMP WITH PLURAL OPTICAL DEVICES

George A. Wallace, Valley View Trailer Park, Doylestown, Pa.

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4 Claims. (Cl. 313—111)

The object of this invention is to devise a novel construction and arrangement of the component parts of a headlight, which will provide for the elimination of off-cast rays which might angle upwardly above the main path of light, thus preventing these rays from blinding or affecting the vision of the oncoming driver. It will provide for better visibility during foggy and unusual driving conditions.

A further object is to flatten out the light rays, to more effectively define the road or path in front of the vehicle.

For the purpose of illustrating the invention, I have shown in the accompanying drawings, preferred embodiments of it, which in practice, will give reliable and satisfactory results. It is, however, to be understood, that the various instrumentalities of which my invention consists, can be variously arranged and organized, and I therefore do not desire to be limited, except by the scope of the appended claims, to the exact arrangement of these instrumentalities as herein set forth.

FIGURE 1 is a front elevation of a headlight embodying my invention.

FIGURE 2 is a section on the line 2—2 of FIGURE 1.

FIGURE 3 is a rear elevation.

FIGURE 4 is a section on the line 4—4 of FIGURE 1.

FIGURE 5 is a fragmentary section, on an enlarged scale, of one of the prisms.

FIGURE 6 is a fragmentary section, on an enlarged scale, showing the recess in the wall of the rearwardly extending flange of the lens for mounting the louvers.

FIGURE 7 is a modified form showing a conventional shape of lens in the front of the light.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:

The headlight consists of a body portion **1**, of clear glass, having in general, the conventional shape, internally of a parabola, and a dished shaped front plate **2** of transparent material, closing the open end of the body portion and fused thereto to form an integral unit. This front plate may be flat on its outer face, or as shown in FIGURE 7, semi-circular as at **3**. The rear face of the body portion is provided with a parallel series of facets or prisms **4**, which are connected with each other in band formation, extending from the upper portion of the body portion. I provide three laterally spaced bands of prisms at each side of the center plane of the body portion. I also preferably provide a central prism **5**, centrally disposed on the rear of the body portion.

The lens portion is provided with a rearwardly extending circular flange to provide a dish shaped lens which is fused to the body portion, said flange being provided with recesses **6** to receive flat, opaque louvers **7**, which

are vertically spaced from each other and which may be reinforced by crimping or the like.

I provide a single filament **8**, mounted in the rear of the body portion, and centrally disposed therein.

The outer surface of the body portion and prisms are silvered as at **9**, to provide the mirror backing of conventional headlights.

The rays of light are reflected forwardly in a flattened pattern due to the provision of the prisms on the body portion of the light.

In FIGURE 2 I have illustrated the manner in which the rays of light are projected from the prisms, as by the dot and dash lines **10**. In FIGURE 4 the rays of light **11**, shown by heavy dot and dash lines, are shown striking the louvers and being prevented from forming off cast rays.

Some of the advantages of the present construction are as follows:

Elimination of glare to oncoming cars. The louvers attached to the inside of the lens act as curtains to prevent off cast rays of light from the filament from entering the atmosphere. This eliminates the glare that causes blindness to the oncoming drivers as well as eliminating the glare that is an annoyance to the driver in front.

The louvers are coated with a copper coating which will give the appearance of a dim light to the oncoming driver.

Conventional headlights penetrate through fog, but off-cast rays of light reflect back into drivers' eyes, due to mirror like particles of moisture which are present in fog. In the present invention, the elimination of the off cast rays prevent the reflection of light to obstruct the drivers' vision.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A headlight, comprising a body portion of transparent material having its inner face in the form of a parabola, a transparent plate secured to the front of the body portion, vertically disposed bands of prisms formed on the rear face of the body portion, a reflecting coating on the outer face of the body portions and the prisms, the body portion being adapted to receive a centrally disposed filament, and flat louvers disposed horizontally above the center line and seated in opposite sides of the body portion.

2. The construction defined in claim **1**, wherein the louvers are coated with a material to give the appearance of a dim light.

3. The construction defined in claim **1**, wherein the bands of prisms comprise a central band and a plurality of bands at opposite sides of the central band.

4. The construction defined in claim **1**, wherein the front plate is in the form of a semi-circular lens.

References Cited by the Examiner

UNITED STATES PATENTS

2,189,164 2/1940 Carlisle ---------- 313—114

GEORGE N. WESTBY, *Primary Examiner.*

C. R. CAMPBELL, *Assistant Examiner.*