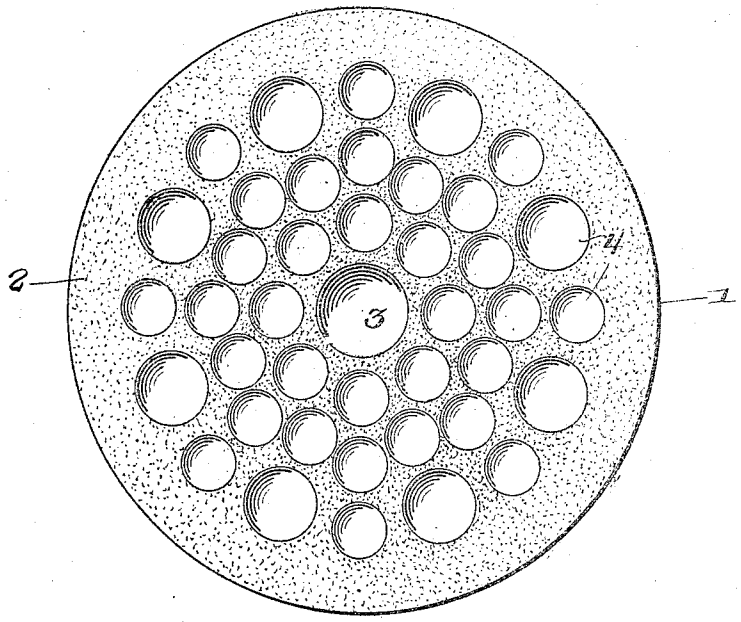
J. P. CASEY.

LIGHT DIMMER.

APPLICATION FILED MAR. 22, 1917.

1,243,652. Patented Oct. 16, 1917.

Fig. 1.



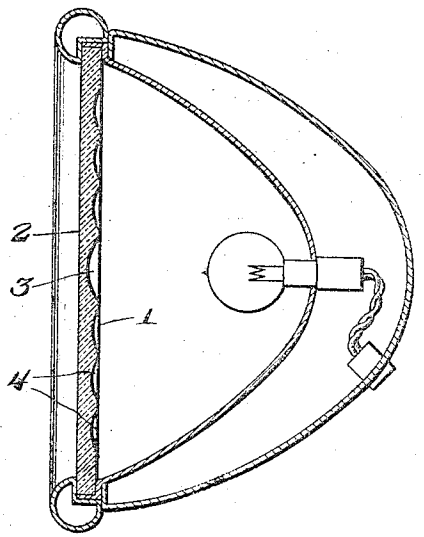


Fig. 2.

WITNESSES

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JOHN P. CASEY, OF FLEMINGTON, NEW JERSEY.

LIGHT-DIMMER.

1,243,652. Specification of Letters Patent. **Patented Oct. 16. 1917.**

Application filed March 22, 1917. Serial No. 156,704.

To all whom it may concern:

Be it known that I, JOHN P. CASEY, a citizen of the United States of America, residing at Flemington, in the county of Hunterdon and State of New Jersey, have invented new and useful Improvements in Light-Dimmers, of which the following is a specification.

This invention is an improved light rays refractor and diffuser especially adapted for use on the head light of an automobile or other vehicle for diffusing the light rays and eliminating the intense glare of the head light, the object of the invention being to provide an improved device of this character which may be manufactured and sold at low cost and which is entirely efficient and reliable in its operation.

The invention consists in the construction of a translucent lens having depressions forming plano-concave light diffusing portions as hereinafter described and claimed.

In the accompanying drawings:—

Figure 1 is a rear elevation of a head light dimming lens constructed in accordance with my invention.

Fig. 2 is a sectional view of the same, showing the lens in use in an automobile head light, the head light being represented in diagrammatic outline.

In accordance with my invention I provide a light diffusing lens 1 which is made of glass and plane outer and inner surfaces and the inner face 2 of which is ground so as to render the lens translucent, the ground face providing a slightly roughened surface which not only renders the panel translucent but increases refraction. The lens is provided in its inner face with a central depression 3 which is circular and concave and is also provided in its inner face with similar depressions 4 which are arranged in concentric circles with respect to one another and the central depression and are also arranged in staggered relation as shown. By the provision of these depressions the lens is formed with plano-concave light diffusing portions as will be understood, the said portions being clear. By the staggered relation of the depressions a maximum amount of the surface of the lens is occupied thereby and a uniform diffusion of the light is attained. The centrally arranged depression breaks up the central glare of the head light and the concentrically arranged depressions also coöperate in refracting the rays of light and breaking up the glare. Certain of the depressions of the outer circle are larger than the others. The central depression is the largest. These depressions can be pressed or cut in the lens as desired.

Having thus described my invention, what I claim is:—

A headlight diffuser comprising a lens having plane parallel surfaces, the inner one of which is ground, said lens being otherwise clear and said ground inner surface being provided with glare depressions forming plano-concave light diffusing portions, the ground surface of the lens rendering the same translucent at points between and without said glare depressions, one of said glare depressions being centrally arranged and the others being arranged in concentric circles and in staggered relation and being of progressively increased diameter as they approach the periphery of the lamp.

In testimony whereof I affix my signature.

JOHN P. CASEY.