E. G. JOHANSON.

LENS SCREEN.

APPLICATION FILED JULY 25, 1917.

1,255,755. Patented Feb. 5, 1918.

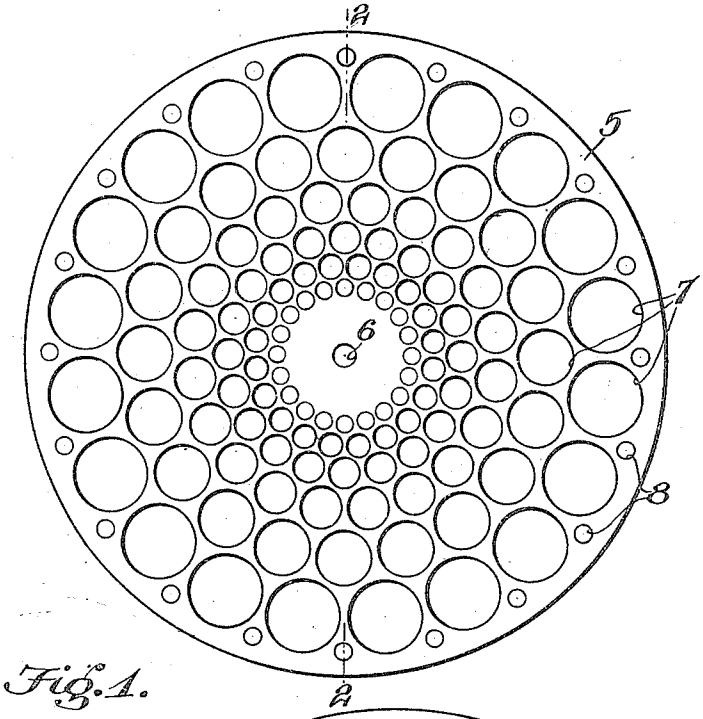


Fig. 1.

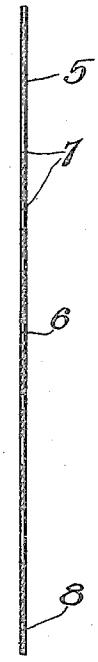


Fig. 2.

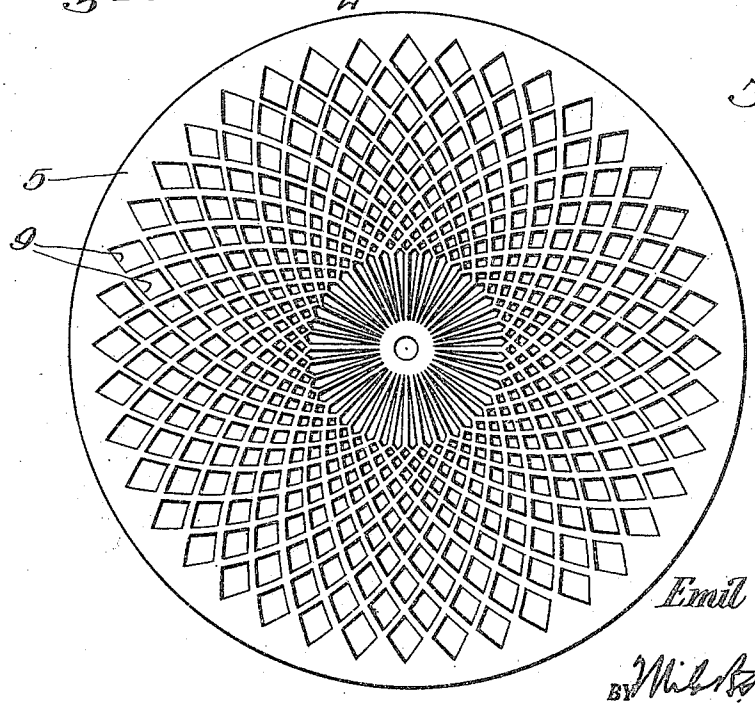


Fig. 3.

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UNITED STATES PATENT OFFICE.

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LENS-SCREEN.

1,255,755. Specification of Letters Patent. Patented Feb. 5, 1918.

Application filed July 25, 1917. Serial No. 182,666.

To all whom it may concern:

Be it known that I, EMIL G. JOHANSON, a subject of the King of Sweden, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Lens-Screens, of which the following is a specification.

This invention relates to automobile headlights and the like, and its object is to provide a simple and inexpensive device which will diffuse the light rays and eliminate glare.

In order that the invention may be better understood, reference is had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an elevation of the device;

Fig. 2 is a section on the line 2—2 of Fig. 1; and

Fig. 3 is an elevation of a modification.

Referring specifically to the drawing, the device which is the subject matter of the present invention comprises a thin, circular disk 5 of metal or other stiff and opaque material. The disk is perforated, per showing in Figs. 1 and 2, with a central aperture 6, and with a series of circular perforations 7, the latter being arranged in concentric circles, the perforations of one circle being situated in alternation with those of the next inner and outer circles. On account of the concentric arrangement of the circles, the perforations 7 increase in diameter radially outward from the center of the disk. In alternation with the outermost circle of perforations 7 is a series of apertures 8, any of which may be associated with the central aperture 6 for the application of a punching tool designed to punch out one radial row of perforations 7 as a unit at one time. Of course, the apertures 6 and 8 have no function, or are not necessary, when all the perforations 7 are punched out at one time by a machine of corresponding capacity.

In use, the perforated disk is placed against the inner face of the headlight glass or lens. The light emitted by the lamp will be broken up or scattered in passing through the perforations in the disk, the blinding or glaring effect thus being eliminated. The amount of light emitted will not be lessened appreciably, but its quality will be softer on account of the diffusing effect of the perforated disk, and the lantern-like optical effect produced on a dark night will make the headlights of the vehicle a novel attraction. The disk, on account of its simplicity, should be very inexpensive to manufacture, and for the same reason should be easy to install and cheap to renew.

Fig. 3 shows a modification of the above-described disk, being cut with diamond-shaped perforations 9, arranged similarly to the circular perforations 7 in the structure of Figs. 1 and 2. As a matter of design the perforations nearest the center are elongated to permit narrow beams of light to penetrate the central portion of the disk.

I claim:—

1. A lens screen comprising a disk of stiff material, provided with perforations arranged in concentric circles, the perforations increasing in size radially outward from the center of the disk, and the perforations of one circle being staggered with respect to those of the next inner or outer circle.

2. A lens screen comprising a disk of stiff material provided with perforations which are relatively small at the center of the disk, and gradually increase in size radially outward from the center.

In testimony whereof I affix my signature.

EMIL G. JOHANSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."