

H. SALSURY.
LAMP.

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942,589.

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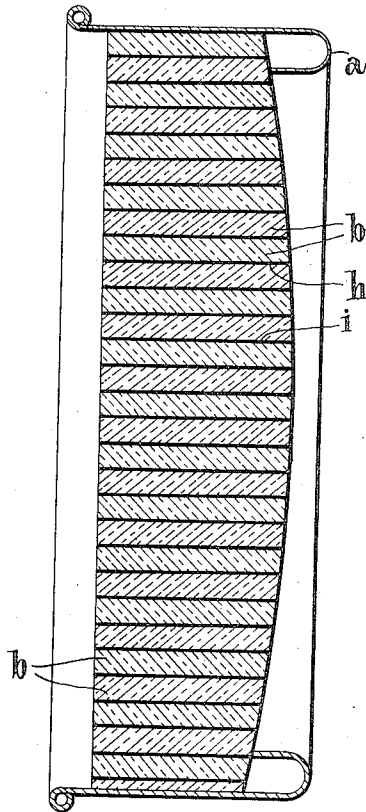


Fig. 1.

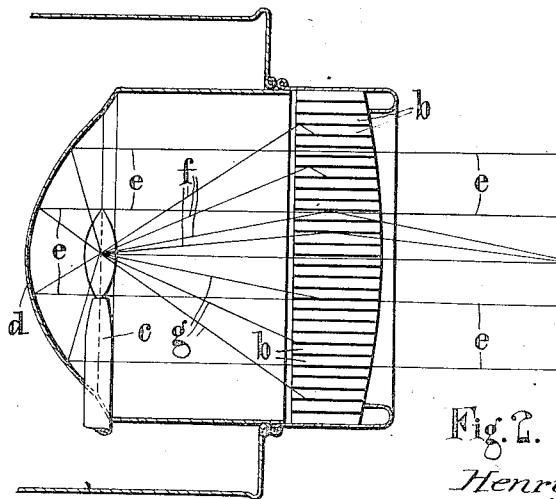


Fig. 2.

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HENRY SALSBUURY, OF LONDON, ENGLAND.

LAMP.

942,589.

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To all whom it may concern:

Be it known that I, HENRY SALSBUURY, a subject of the King of Great Britain and Ireland, and residing at 124 Long Acre, London, England, have invented certain new and useful Improvements in and Relating to Lamps, of which the following is a specification.

My invention relates to lamps, and is especially applicable to such as are used in conjunction with motor vehicles.

As the beam of light projected from the lamps of a motor or other vehicle is generally of a more or less divergent character, any one approaching the vehicle from an opposite direction to that in which it is traveling, will enter the zone of light at a distance from the vehicle depending on the character of the projected beam. When the intervening distance between the vehicle and the observer is short or the light is of great intensity, as for example when acetylene is used as the illuminating agent, it is found that the eyes of the observer are so affected that he is unable to locate the exact position of the vehicle. This peculiar effect on the eyesight is termed glaring, and is very objectionable and dangerous when the vehicle concerned is traveling at a high speed and is met by an observer in another vehicle traveling in the opposite direction.

According to the present invention, by providing suitable surfaces within the lens or glass of the lamp, the rays of light which would otherwise be projected upward and produce glaring in the eyes of any one approaching, are reflected downward and the main beam of light emitted from the lamp restricted to a level below that of the line of vision of the observer.

My invention therefore has for its object to provide an improved lens or glass, which will prevent the objectionable effects of glaring especially noticeable in connection with acetylene lamps.

My invention consists in a lens or glass of the solid or built up type, in which surfaces are formed for substantially preventing upward projection of the rays from the lamp within the limit in which the intensity of the light would be such as to produce glaring.

My invention further consists in the improved lenses or glasses and lamp to be hereinafter described.

Referring now to the accompanying draw-

ings which illustrate my invention and form part of my specification, and in which like characters of reference indicate corresponding parts in both views, Figure 1 shows a part sectional elevation of a lens constructed according to my invention, Fig. 2 shows a sectional elevation of a lamp illustrating the action of my improved lens or glass.

In carrying my invention into effect according to one form, I provide a lens or glass which is formed by cementing or otherwise assembling together in a mount *a* (Figs. 1 and 2), a number of horizontally disposed strips or laminae, *b*, of glass or other translucent material. The dimensions of the strips may of course, vary according to circumstances, in the example illustrated the dimensions being $1\frac{1}{2}$ " wide x $\frac{1}{4}$ " thick. The strips or laminae are polished on their upper faces *h* and ground on their lower faces *i*, so that any rays of light which strike obliquely against the upper faces of the laminae are to a great extent reflected downward, while those which strike against the lower faces are absorbed to a great extent. The lens is then ground to any desired shape and mounted in a lamp, Fig. 2.

The burner, *c*, is placed for example in the focus of a parabolic reflector, *d*, which projects the reflected light in a series of parallel rays, *e*, through the laminae, *b*, of the lens. The direct light from the burner however is projected in a divergent beam, the upwardly inclined rays, *f*, of which are reflected downward by the upper surfaces of the laminae, while the downwardly inclined rays, *g*, are absorbed by the lower surfaces.

The design of the lamp should be such, that any rays which may happen to be projected in an upward direction intercept the observer's line of vision at a point where their intensity is so much diminished as to produce no objectionable results. It will thus be seen that practically only horizontal and downwardly inclined rays of light are emitted from the lamp.

In some cases the upper surfaces of the laminae may be silvered while the lower surfaces may be ground or coated with a light absorbing material, or may be ground and coated with a light absorbing material, while in other cases both the surfaces of the laminae may be ground.

By means of my invention it will be evident that the rays of light which would otherwise issue in an upward direction, are

reflected downwardly or substantially horizontally by the upper surfaces of the laminæ, the downwardly directed rays being wholly or partially absorbed by the non-reflecting or light absorbing surfaces on the lower faces of the laminæ. The objectionable effect of glaring is thus entirely avoided, as any rays of light which may disperse in an upward direction are restricted to the zone in which their intensity is sufficiently diminished to produce no objectionable results.

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

1. As an article of manufacture, a glass formed of laminæ having reflecting surfaces on one side of said laminæ and light absorbing surfaces on the other side of same.

2. As an article of manufacture, a glass formed of laminæ having a polished surface on one side of said laminæ and a ground surface on the other side of same.

3. In combination, a source of light, a plurality of translucent laminæ disposed edgewise to the rays of light from said source, means disposed between the laminæ for reflecting certain of the rays of light passing through said laminæ, and means dis-

posed between said laminæ for absorbing certain other of said rays of light.

4. As an article of manufacture a glass having reflecting and light absorbing surfaces disposed edgewise to the light transmitting surfaces of said glass.

5. In combination a source of light, and a plurality of translucent laminæ disposed transversely to the rays from said source, said laminæ having reflecting surfaces on their upper sides and light absorbing surfaces on their lower sides.

6. As an article of manufacture a glass having a plurality of parallel light absorbing surfaces disposed edgewise to the light transmitting surfaces of said glass.

7. As a new article of manufacture, a glass having a plurality of light-absorbing surfaces disposed edgewise to the light transmitting surfaces of said glass.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY SALSURY.

Witnesses:

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