

J. H. HUNT.
LAMP.

APPLICATION FILED FEB. 27, 1913.

1,276,924.

Patented Aug. 27, 1918.

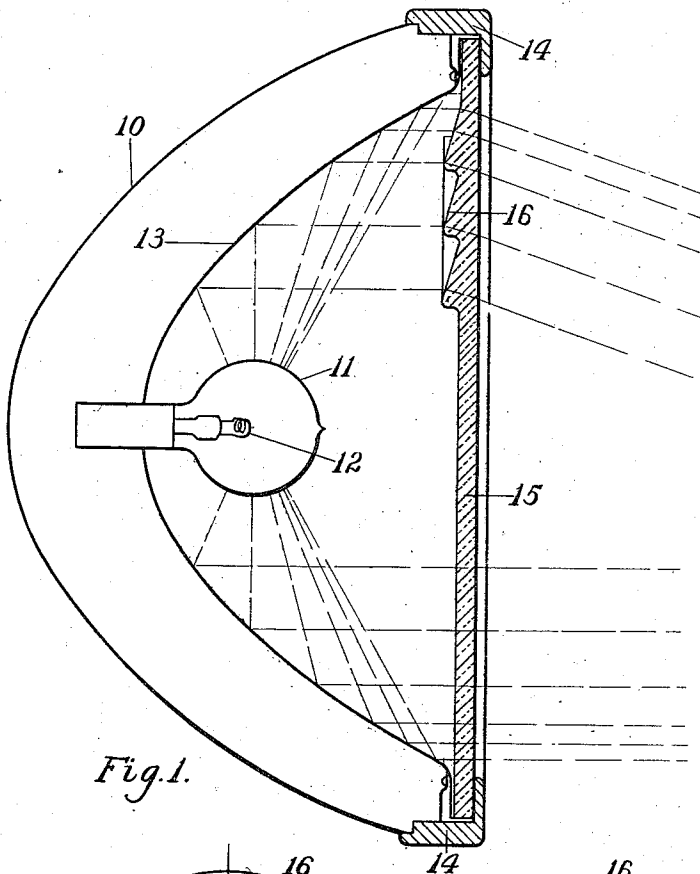


Fig. 1.

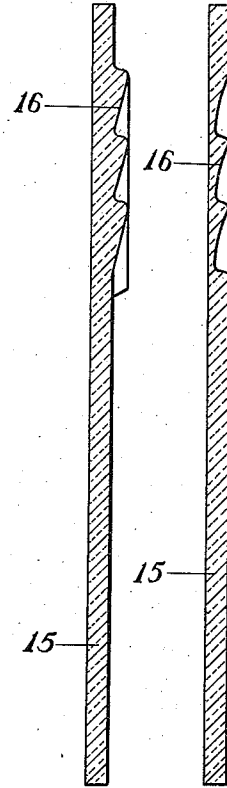


Fig. 4.

Fig. 5.

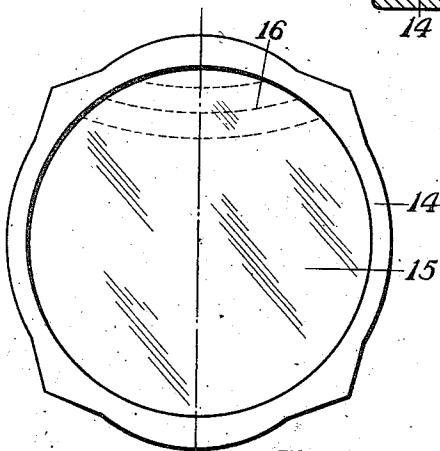


Fig. 2.

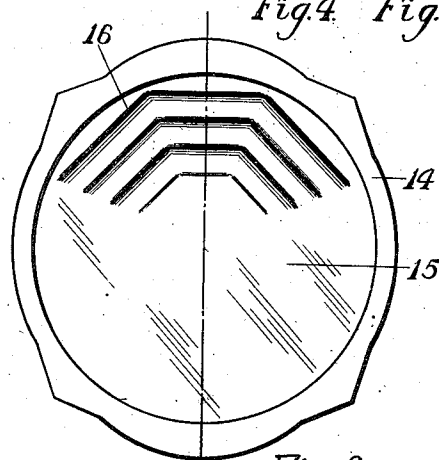


Fig. 3.

WITNESSES:—

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UNITED STATES PATENT OFFICE.

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LAMP.

1,276,924.

Specification of Letters Patent.

Patented Aug. 27, 1918.

Application filed February 27, 1913. Serial No. 751,083.

To all whom it may concern:

Be it known that I, JOHN H. HUNT, a citizen of the United States, and resident of Detroit, Wayne county, State of Michigan, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

This invention relates to lamps, and particularly to lamps for motor vehicles. It is shown as employing an electric bulb as the light medium, but of course may be used with any other light medium that is applicable to the lamp shown.

In the use of lamps or headlights on motor vehicles, it is desirable that the lamp should throw a beam of light as far ahead as possible, and that some of the rays of the lamp should also be deflected to light the road immediately in front of the vehicle and at both sides. It is, of course, an easy matter to throw practically all of the rays of an electric bulb forwardly in a single beam by the use of a parabolic reflector, and of course this is the usual method of doing this. Also, the usual method heretofore of deflecting some of the rays of the lamp downwardly and to the sides has resulted in throwing some of the rays upwardly also, which results in making the lamp more glaring to the drivers of other vehicles approaching from the front of the lamp. This deflection is usually accomplished by flaring the outer circumference of the parabolic reflector so that the light rays which strike the outer part of the parabola will be deflected at a less angle and therefore thrown in a somewhat conical beam forwardly and radially from the front of the lamp.

One of the objects of the present invention is to provide a lamp having a true, or substantially true, parabolic reflector, and in which some of the rays from the parabola are deflected downwardly, while none of them are deflected upwardly, so that practically none of the rays from the lamp will extend higher than the lamp itself.

Another object of the invention is to provide a lamp in which the downwardly deflected rays are slightly diffused, so that they will be spread out in front of the car for some little distance.

Another object of the invention is to provide a lamp in which, in addition to deflecting some of the rays downwardly, some of them shall be deflected to both sides of the

lamp, but in which none of the rays are deflected upwardly.

Other objects of the invention will be apparent from the following description, taken in connection with the drawings which form a part of this specification, and in which,

Figure 1 is a vertical sectional view through a lamp embodying this invention;

Fig. 2 is a front view of the lamp shown in Fig. 1, on a smaller scale;

Fig. 3 is a front view of a lamp, showing another form of prisms;

Fig. 4 is a vertical section through the front lens of a lamp, showing a form of prisms different from that shown in Fig. 1; and

Fig. 5 is a view similar to Fig. 4, and showing still another form of prisms.

Referring to the drawings, 10 indicates the outer casing of a lamp, which may be of any conventional form, and 11 is the electric bulb which forms the light medium, and from the filament 12 of which the light emanates. The bulb 11 is suitably secured in the casing 10 in any conventional manner and is properly adjusted therein so that its filament 12 will be in proper focal position relative to the parabolic reflector 13 for throwing all of the rays of the lamp forwardly from the reflector. The reflector 13 is shown as secured to the forward rim 14 of the casing, and the front glass 15 of the lamp is also secured in said rim in any preferred manner.

It is obvious that if the front glass 15 were entirely plain, practically all of the rays of the lamp would be directed forwardly in a single beam, and if the lamp was employed on a motor vehicle it would throw a beam of light substantially horizontally ahead of the car for a considerable distance. However, the road immediately in front of the vehicle would receive practically no illumination and driving would be difficult.

For the purpose of directing a small percentage of the lamp's rays downwardly on to the road immediately in front of the vehicle, the front glass 15 is provided, according to this invention, with one or a series of prisms 16 extending across the glass in a generally horizontal direction. These prisms may extend exactly horizontal across the glass, or they may be curved slightly, as indicated in Fig. 2. Again, they may be angular in form, parts of them extending horizontally

and other parts extending diagonally, as shown in Fig. 3.

It is also apparent that the prisms may be formed on the inside of the glass, as shown in Figs. 1 and 2, or they may be formed on the outer surface thereof, and raised, as shown in Figs. 3 and 4. Again, the prisms may be cut into, or sunken below, the surface of the glass, as shown in Fig. 5; and the surface of the prisms may be slightly concaved or convexed in cross section, as shown in Fig. 5, for the purpose of slightly diffusing the deflected rays and thereby spreading the deflected rays some little distance from the vehicle.

It will be noted that none of these prisms in any way deflects, or causes any of the rays to be directed, upwardly, so that the driver of an approaching vehicle is not bothered to so great an extent by the glare of the lamps.

Having thus described my invention, what

I claim and desire to secure by Letters Patent is:

1. In a lamp, the combination with a parabolic reflector, of a front glass having a section thereof formed with horizontally and diagonally extending prisms.

2. In a lamp, the combination with a reflector, of a front glass plain throughout a greater portion, a relatively smaller portion of said glass being formed with horizontally and diagonally extending prisms.

3. In a lamp, the combination with a parabolic reflector, of a front glass having a section of its upper half formed with horizontally and diagonally extending prisms.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN H. HUNT.

Witnesses:

JOHN D. WILSON,
LE ROI J. WILLIAMS.