June 15, 1937. A. DE ARANZADI E IRUJO

ANTIGLARE ILLUMINATION APPARATUS

Filed Aug. 18, 1934

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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This invention is directed to apparatus for illuminating the road during passing of approaching cars. It consists of means for illuminating the road in such a way as to enable drivers to pass safely and have a clear view of the road behind the other car, until their own head lights are switched on fully. It is generally accepted as a rule of the road that upon approaching a vehicle traveling in the opposite direction, the powerful headlights which produce a glare in the eyes of the oncoming driver are turned off and replaced by regulation passing lights. This operation is usually effected when the approaching vehicles are about 350 yards or more apart. The regulation passing lights allow the two vehicles to advance safely until they are about 100 yards apart. At this point each car is about to enter the dark zone on the left side of the other. The period in which the cars approach from a point of about 350 yards apart to a point of about 100 yards apart can be considered to be the first phase of the passing.

The second phase begins when the cars are about 100 yards apart and terminates when the cars are side-by-side each other and the bright head lights are again turned on. This second phase is the shortest but most dangerous, as the dazzling of the regulation passing lights compels the drivers to go on blind without noticing obstacles which could appear during the passing or immediately thereafter.

An object of this invention is to furnish the cars with a light system complementary to the regulation lights for passing, that will illuminate the side of each car (each car illuminates the portion of the road where the other has to go) during the second phase of the passing, with a very intense and diffused light avoiding as far as possible dark patches in the illuminated zone. This light is directed almost parallel to the axis of the road and in such a way as not to dazzle either the coming or the following car.

The present invention will be more easily understood by following the accompanying drawings.

Figure 1 is a vertical section through the antiglare apparatus and its holder, according to the invention.

Fig. 2 is a perspective view illustrating the disposition of the spherical mirror in relation to the half disk.

Fig. 3 is a perspective view of the shield and the channel clamping ring.

Fig. 4 is a perspective view of an apparatus similar to Fig. 1, but without the spherical mirror and shield.

Fig. 5 shows a plan view of a car furnished with the new lamps.

The anti-glare apparatus has a special bulb (A) of higher power which operates at a very high temperature. The car's usual battery is strong enough for these lamps as their use is limited to a few seconds.

Great illuminating intensity is necessary for the satisfactory result of this invention and taking advantage of the short duration of the second phase of the crossing, I can strengthen the intensity of the bulbs, increasing their current consumption and working temperature, to limits not reached as yet in automotive construction.

The apparatus has a parabolic reflector, B which carries the lamp socket, C with its spring contact, D. All these interior elements are protected by a casing, E.

A cap-shaped spherical mirror F is provided to direct the light towards the upper part of the reflector, so that the light rays projected by the lower portion of the bulb are usefully employed. It is supported by a disk G, the upper portion of which is removed for the passage of light and the lower portion of which prevents the light from passing through the lower portion of the front of the apparatus.

The disk G is encircled by a flange T affixed in the rim of reflector B. Flange T forms a circular cavity carrying a gasket H for supporting the lens I. This lens is fluted vertically in order to broaden the light beam.

J is a gasket which closes the small space between the lens I and the casing E, making the inner part of the apparatus dust- and water-tight. Gasket J, moreover, provides an elastic packing between the clamping ring K and the lens. When screw U is tight, ring K retains the lens I and the reflector B against the casing E.

The visor-like shield L, which is carried by ring K, prevents the driver of the on-coming car from being dazzled. The height and direction of the apparatus can be adjusted. The lower part of the shield lies in a horizontal plane passing through the axis of the apparatus. Its length is calculated to let out most of the light, which is directed obliquely downward onto the road. Moreover, it serves as a reflector directing the horizontal and upwardly directed beams downwardly. The road is thus illuminated from the lower part of the apparatus.

M is a cable or conductor which connects the
I claim as my invention:

1. An anti-glare projecting lamp, comprising a casing, a parabolic reflector mounted therein, a bulb supported by said reflector, said casing and reflector having nesting forwardly extending flanges, an annular member concentrically mounted in the flange of the reflector, a semi-circular disk carried by the lower half of said annular member, reflecting means carried by said disk for projecting light falling thereon upwardly and rearwardly to the upper portion of said parabolic reflector, a visor projecting forwardly from the front of said lamp and extending downwardly to the axis of said parabolic reflector, said annular member being provided with an annular recess, a lens gasket in said recess, a lens positioned against said gasket, and clamping means extending circumferentially about said casing for retaining said lens, annular member and reflector in assembled position.

2. An anti-glare projecting lamp according to claim 1, in which said reflecting means comprises a cap-shaped spherical mirror having a straight upper edge substantially in alignment with the lower horizontal edge of the visor.

3. In an illuminating system for automotive vehicles, comprising in combination with an automotive vehicle a projecting lamp mounted at the rear lower portion of the left front fender in a position to project light rearwardly parallel to the road, and an anti-glare projecting lamp mounted on the rear portion of the left side of the car and positioned to direct light forwardly parallel to the road, said anti-glare device comprising a casing, a parabolic reflector mounted therein, a bulb supported by said reflector, said casing and reflector having nesting forwardly extending flanges, an annular member concentrically mounted in the flange of the reflector, a semi-circular disk carried by the lower half of said annular member, reflecting means carried by said disk for projecting light falling thereon upwardly and rearwardly to the upper portion of said parabolic reflector, a visor projecting forwardly from the front of said lamp and extending downwardly to the axis of said parabolic reflector, said annular member being provided with an annular recess, a lens gasket in said recess, a lens positioned against said gasket, and clamping means extending circumferentially about said casing for retaining said lens, annular member and reflector in assembled position.

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