Jan. 25, 1927. 1,615,336

C. A. MIDDLETON

GLARELESS HEADLIGHT

Filed April 2, 1924

Fig. 1.

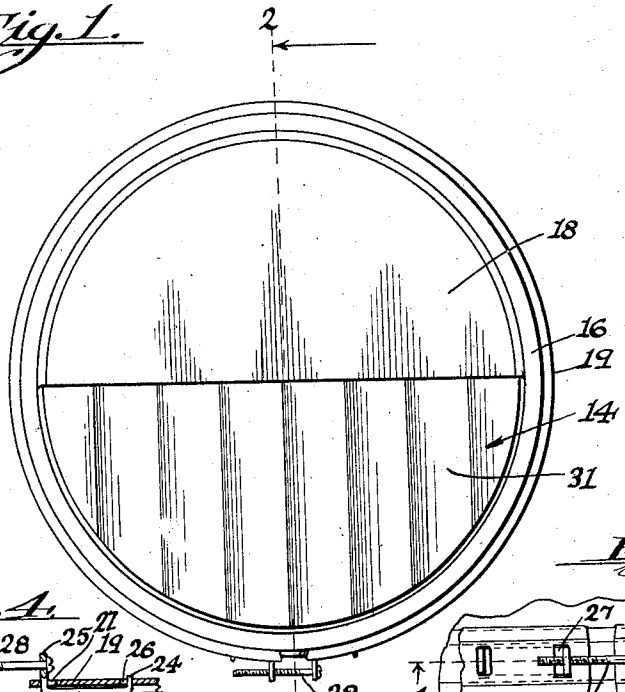


Fig. 4.

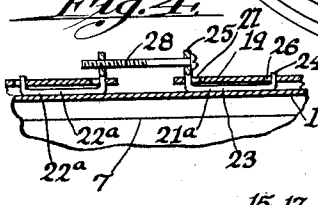


Fig. 3.

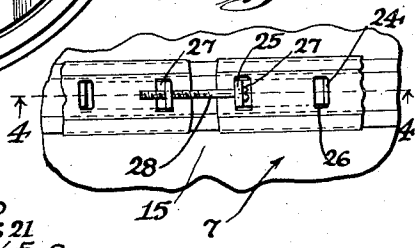
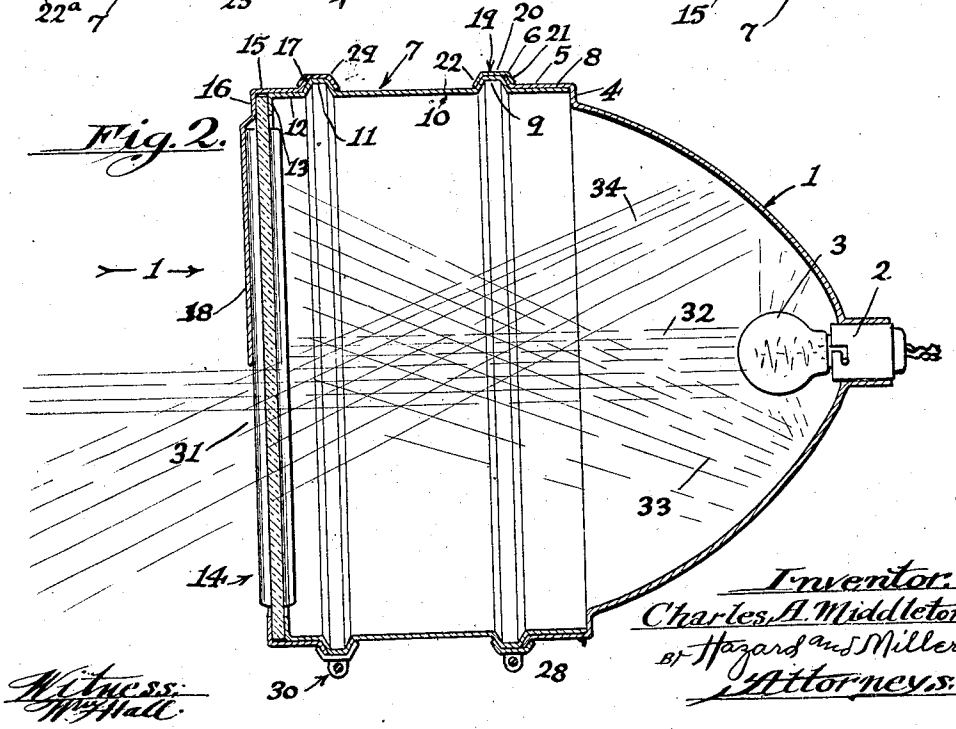


Fig. 2.



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Patented Jan. 25, 1927. 1,615,336

UNITED STATES PATENT OFFICE.

CHARLES A. MIDDLETON, OF MONTEBELLO, CALIFORNIA.

GLARELESS HEADLIGHT.

Application filed April 2, 1924. Serial No. 703,626.

My invention relates to glareless headlights and consists of the novel features herein shown, described and claimed.

The objects and advantages will appear from the drawings and specification.

The drawings illustrate the invention.

Figure 1 is a front elevation of a glareless headlight embodying the principles of my invention, the view being taken looking in the direction of the arrow 1 in Fig. 2.

Fig. 2 is a vertical longitudinal diametrical sectional detail on the line 2—2 of Fig. 1, and looking in the direction indicated by the arrows.

Fig. 3 is a fragmentary view in elevation of one of the clamps, indicated by the arrow 3 in Fig. 1.

Fig. 4 is a sectional detail on the line 4—4 of Fig. 3.

The details of the headlight shown in the drawings are as follows:

The parabolic reflector 1 has a lamp socket 2 at its axial center and a lamp 3 in the socket. An annular rim 4 extends outwardly from the outer edge of the reflector 1 to form a stop. An annular band 5 extends forwardly from the outer part of the rim 4 and has an outturned flange 6 at its forward edge. An extension shell 7 has a straight cylindrical portion 8 fitting in the band 5 against the rim 4, and has a bead 9 pressed or spun outwardly to engage against the flange 6, and has a straight central spacing portion 10 extending forwardly from the bead 9 and a second bead 11 at the forward part of the portion 10, a cylindrical band 12 in front of the bead 11, and an inturned flange 13 at the front of the band 12.

A vertically ribbed glass 14 fits against the flange 13, a band 15 has an inturned flange 16 fitting against the glass 14 and holding the glass against the flange 13, and the band 15 fits upon the band 12 and has an outturned flange 17 fitting against the front of the bead 11. A light baffle plate 18 is formed integral with the flange 16 and covers substantially the upper half of the space surrounded by the flange. A clamping band 19 has a flat central portion 20 and inturned flanges 21 and 22. The flat portion 20 fits against the flat portion of the bead 9, the inturned flange 21 fits against the outturned flange 6 and the inturned flange 22 fits against the front of the bead 9 so as to hold the extension shell 7 securely connected to the parabolic reflector 1. The band 19 is made of comparatively thin metal and the ends of the band are connected by clamping elements 21^a and 22^a, as shown in Figs. 3 and 4.

A bar of comparatively stiff metal is cut and formed to make a central portion 23, an upturned end portion 24, and an upturned end portion 25. The portion 23 is placed inside of one end of the band 19 and the upturned ends 24 and 25 are inserted through openings 26 and 27 in the band, and a connecting screw 28 is inserted through the upturned end 25. In a like manner, the clamping element 22^a is connected to the other end of the band 19, and the screw 28 is screw threaded through the upturned end, so that by manipulating the screw the band may be tightened or loosened. In a like manner the band 29 fits the bead 11 and the outturned flange 17, and is adjustably and removably connected by a clamping construction 30, similar to that shown in Figs. 3 and 4, so that by loosening and tightening the clamping construction 30 the glass 14 and baffle 18 may be removed or replaced or the like.

An object of this construction is to increase the distance between the lamp 3 and the light opening 31 below the baffle 18, so that the straight rays 32 of the lamp 3 will pass under the edge of the baffle 18 and the lower reflected rays 33 will pass forwardly and upwardly and strike the baffle 18, and so that the upper reflected rays 34 will pass under the edge of the baffle 18 and unite with the rays 32 at a point in front of the glass 14, thus producing a mixture of cross rays, which will give a good light without the usual objectionable glare.

Various changes may be made without departing from the spirit of my invention as claimed.

I claim:

1. A glareless headlight comprising a parabolic reflector, a lamp mounted at the axial center of the reflector, a rim extending from the reflector, an extension shell fitting the rim, a clamping band holding the extension shell in place, a glass mounting fitting the forward end of the extension shell, and a clamping band connecting the glass mounting to the extension shell, a glass in the glass mounting, and a baffle covering substantially one half of the opening through the shell.

2. A glareless headlight comprising a

parabolic reflector, a rim extending outwardly from the edge of the reflector, a straight band extending forwardly from the rim and having an outturned flange, an extension shell having an inner end fitting in the band against the rim, and a bead extending outwardly and fitting against the outturned flange, and a clamping band fitting the bead and overlapping the outturned flange, and clamping elements connecting the ends of the band, said elements comprising central portions fitting inside of the band, upturned ends extending through the ends of the band, and a screw connecting confronting upturned ends.

3. A glareless headlight comprising a parabolic reflector, a rim extending outwardly from the edge of the reflector, a straight band extending forwardly from the rim and having an outturned flange, an extension shell having an inner end fitting in the band against the rim, and a bead extending outwardly and fitting against the outturned flange, and a clamping band fitting the bead and overlapping the outturned flange, and clamping elements connecting the ends of the band, said elements comprising central portions fitting inside of the band, upturned ends extending through the ends of the band, and a screw connecting confronting upturned ends, a second bead extending outwardly from the extension shell, a band extending forwardly from the second bead and having an inturned flange, a second band fitting upon the last band and having an inturned flange, a glass mounted between the two flanges, a baffle plate covering the upper half of the space within the inturned flange, an outturned flange fitting the bead, and a second clamping band engaging the bead and the outturned flange.

In testimony whereof I have signed my name to this specification.

CHARLES A. MIDDLETON.