Oct. 28, 1941. P. MINCHILLO 2,260,473

NONGLARE HEADLIGHT BULB FOR AUTOMOBILES

Filed June 20, 1940

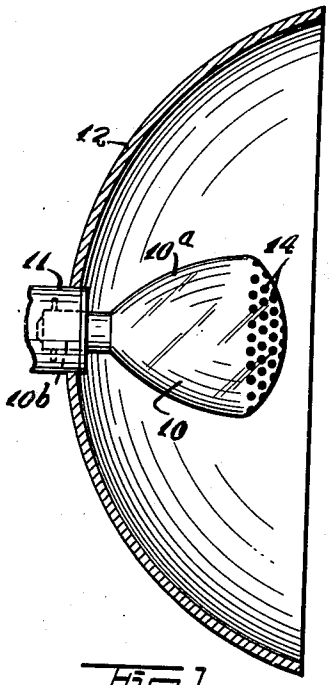

Fig. 1.

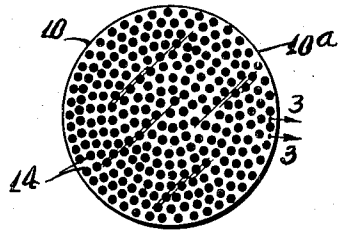

Fig. 2.

Fig. 3.

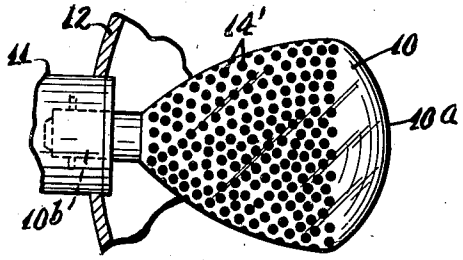

Fig. 4.

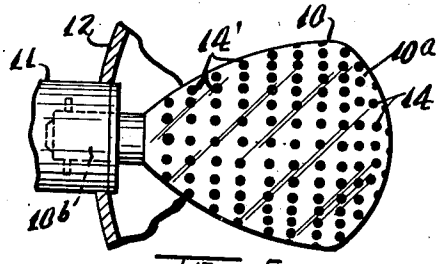

Fig. 5.

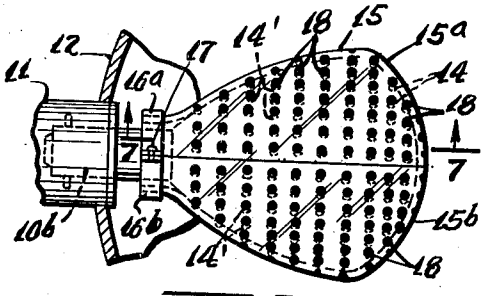

Fig. 6.

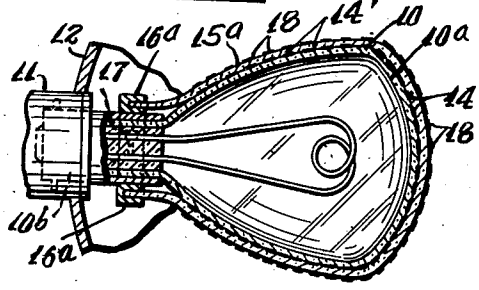

Fig. 7.

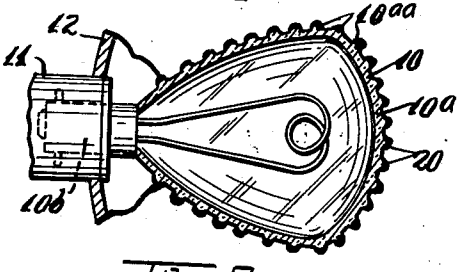

Fig. 8.

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Patented Oct. 28, 1941

2,260,473

UNITED STATES PATENT OFFICE

2,260,473

NONGLARE HEADLIGHT BULB FOR AUTOMOBILES

Pasquale Minchillo, Medford, Mass.

Application June 20, 1940, Serial No. 341,425

2 Claims. (Cl. 240—48.6)

This invention relates to new and useful improvements in an non-glare headlight bulb for automobiles.

The invention proposes to characterize the headlight bulb by the fact that it comprises a standard automobile headlight bulb having a glass bulb, and a plurality of opaque dots on the bulb material to make it non-glare.

More specifically, the invention proposes to form the dots by painted or printed or other material preferably engaged on the outer surface of the bulb.

Still further the invention contemplates several modified forms in which the dots are arranged at different areas on the glass bulb.

Still further the invention contemplates a modified form in which a glass shell made of sections is mounted on the glass bulb and is provided with opaque dots alignable with the opaque dots of the glass bulb and adapted to be adjusted to various positions in partial alignment or completely out of alignment, as desired, to vary the non-glare effect.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a side elevational view of a reflector and bulb constructed in accordance with this invention.

Fig. 2 is a front elevational view of the bulb, per se.

Fig. 3 is a fragmentary enlarged sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a fragmentary side elevational view similar to a portion of Fig. 1 but illustrating a modified construction.

Fig. 5 is another fragmentary side elevational view similar to Fig. 1 but illustrating a still further modified form.

Fig. 6 is another fragmentary side elevational view similar to a portion of Fig. 1 but illustrating another modification.

Fig. 7 is a fragmentary sectional view taken on the line 7—7 of Fig. 6.

Fig. 8 is a fragmentary sectional view of a non-glare bulb constructed in accordance with this invention and shown applied to a reflector.

The non-glare headlight bulb for automobiles, in accordance with this invention, comprises a standard automobile headlight bulb 10 having a glass bulb 10a and a socket portion 10b. The bulb is intended to engage within the usual socket 11 of an automobile headlight having a reflector 12. Thus far the device is conventional. However, it now departs in the fact that the glass bulb 10a is provided with a plurality of opaque dots 14. These dots are relatively closely spaced together. Preferably, the dots are approximately one-eighth of an inch in diameter. Sixteen to twenty of them are arranged in a square inch of area. These dots 14 may be painted, printed or in any other manner formed on the material of the glass bulb. However, they must be formed of material which is opaque, preferably black in color.

In the form of the invention illustrated in Figs. 1 to 3 the dots 14 are arranged on the front portion of the bulb 10. These dots will serve to cut down the glaring effect of direct rays of light passing through the front of the bulb.

In Fig. 4 a modified form of the invention has been disclosed which is substantially identical to the prior form, distinguishing merely in the fact that opaque dots 14' are arranged upon the sides of the bulb. These opaque dots cut down the glare of the reflected rays of the bulb.

In Fig. 5 another form of the invention has been disclosed in which the bulb is provided with opaque dots 14 on its front face and opaque dots 14' on its side. This bulb may be advantageously employed as a headlight for vehicles since it cuts down both the glaring direct, and the glaring indirect rays of the lamp.

In Figs 6 and 7 another form of the invention has been disclosed which distinguishes from the prior form in the fact that an arrangement has been provided whereby it is possible to control the degree of glare of the headlight. It should be understood that as the glaring rays are cut down the light of the bulb is also cut down. For this reason it may be desirable to permit more or less of the glaring rays to pass.

More specifically, there is a glass shell 15 fashioned to snugly fit about the glass bulb 10a. This shell 15 is made from two half sections 15a and 15b. Each of these sections is mounted in a substantially U-shaped half ring member 16a and 16b respectively. These half ring members together encircle the base portion of the bulb. Fastening elements 17 engage through adjacent end portions of the substantially U-shaped half ring members 16a and 16b to releasably connect them together. The shell 15 is provided with a plurality of opaque dots 18 arranged to normally align with the dots 14 and 14'. When desired the fastening elements 17 may be loosened, to

loosen the members 16a and 16b and then it is possible to turn these members so as to turn the glass shell 15 and move the alignment of the dots 18, and 14 and 14' out of alignment to any desired extent. In this way the obstruction to glaring rays may be increased or decreased as desired.

The fastening elements 17 comprise screws which connect together the adjacent ends of the half ring members 16a and 16b. In other respects this form of the invention is similar to the previous form.

In Fig. 8 another modified form of the invention has been disclosed which distinguishes from the prior form in the fact that the non-glare headlight comprises a standard automobile headlight bulb 10 having a glass bulb 10a provided with a plurality of pimples or projections 10aa upon its outer surface. These projections are preferably one-eighth of an inch in diameter and arranged approximately 16 to 20 per square inch. The outer surfaces of these projections 10aa are covered with opaque material 20. This material preferably is black paint having heavy pigments.

In other respects this form of the invention is similar to the previous forms, and like parts are identified by like reference numerals.

It is to be understood that the opaque dots may be of any desired size and may be formed in the glass during the manufacture of the bulb.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. A non-glare automobile headlight bulb, comprising a lamp having a glass bulb, a plurality of opaque closely spaced non-reflecting dots arranged circumferentially on said glass bulb, a glass shell completely encasing said glass bulb, a plurality of opaque closely spaced non-reflecting dots arranged circumferentially on said glass shell and in aligned positions with the dots of said bulb, and means for rotatively supporting said shell on said bulb, whereby said shell may be turned relative to said bulb to move said aligned dots out of alignment, said shell being formed from two half shell sections engaging said glass bulb, said means, comprising a half ring substantially U-shaped member rigidly mounted on the base of each of said shell sections and engaging around said glass bulb at its base, and means for releasibly connecting together the adjacent ends of said half ring substantially U-shaped members.

2. A non-glare automobile headlight bulb, comprising a lamp having a glass bulb, a plurality of opaque closely spaced non-reflecting dots arranged circumferentially on said glass bulb, a glass shell completely encasing said glass bulb, a plurality of opaque closely spaced non-reflecting dots arranged circumferentially on said glass shell and in aligned positions with the dots of said bulb, and means for rotatively supporting said shell on said bulb, whereby said shell may be turned relative to said bulb to move said aligned dots out of alignment, said shell being formed from two half shell sections engaging said glass bulb, said means, comprising a half ring substantially U-shaped member rigidly mounted on the base of each of said shell sections and engaging around said glass bulb at its base, and means for releasibly connecting together the adjacent ends of said half ring substantially U-shaped members, comprising outwardly extending lugs formed on the adjacent ends of said half ring substantially U-shaped members, and screws threadedly engaged through said lugs.

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