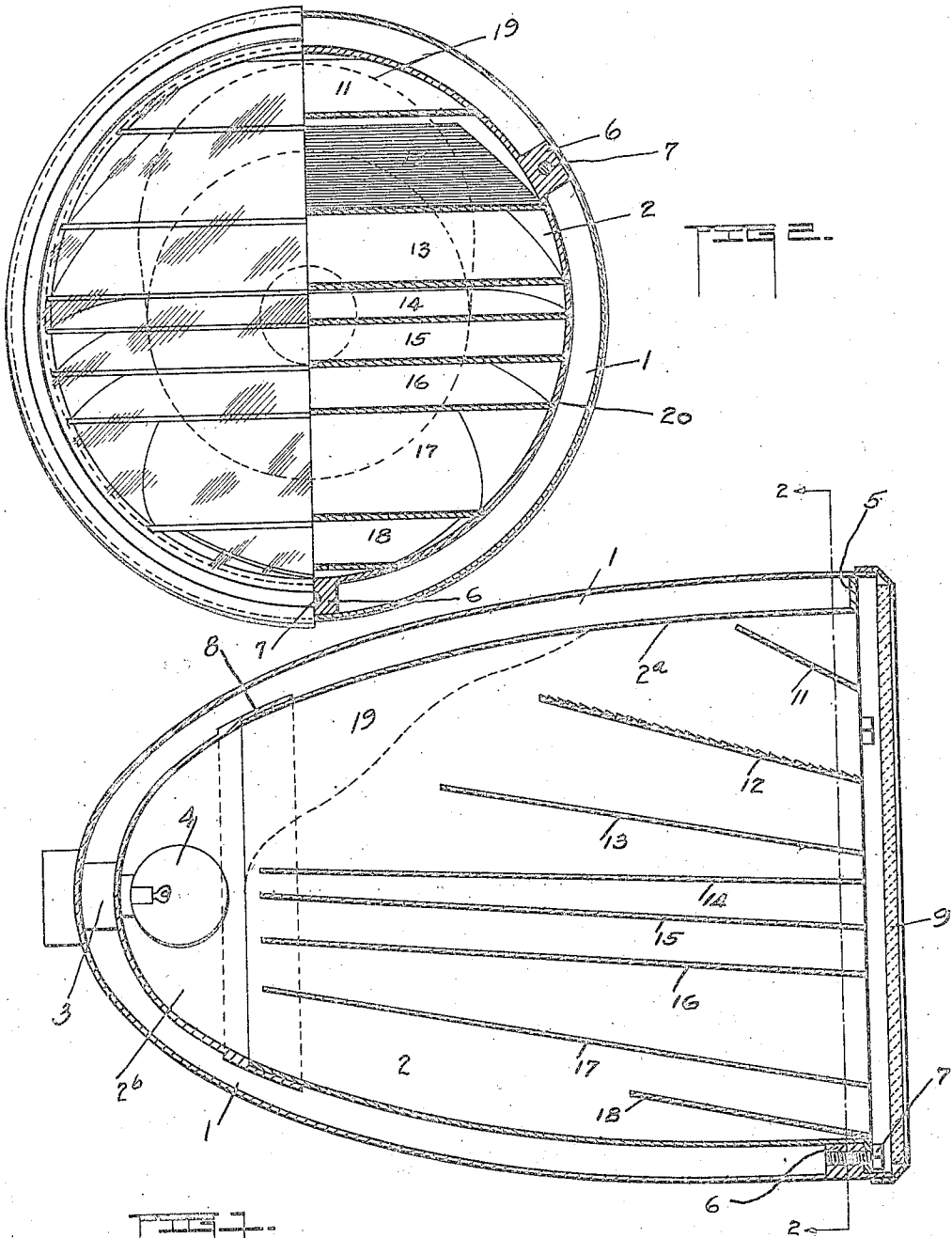


W. L. PEABODY.
HEADLIGHT.
APPLICATION FILED JUNE 16, 1920.

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Patented Oct. 31, 1922.



INVENTOR

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UNITED STATES PATENT OFFICE.

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HEADLIGHT.

Application filed June 16, 1920. Serial No. 333,325.

To all whom it may concern:

Be it known that I, WILLIAM L. PEABODY, a citizen of the United States, a resident of Decatur, in the county of Macon and State of Illinois, have invented new and useful Improvements in Headlights, of which the following is a specification.

This invention has reference to headlights and especially those used on automobiles.

The principal object of the invention is to provide a head-light having anti-glare means which will protect drivers in approaching automobiles, as well as pedestrians, from the glare of the light emitted from the head-lights on approaching automobiles; and which will allow those rays, either direct or reflected, that would fall upon the roadway, to take their natural course, and only intercept and redirect in a downwardly and forwardly direction, such rays as are inclined to rise above the line of level.

The invention has for a further object to so arrange the anti-glare means within the casing containing the lamp bulb and in front thereof, as to absolutely prevent one positioned in front of the head-light to see the lamp bulb, or any portion of the polished reflector surface, thus avoiding that blinding effect due to one's coming into the direct line of vision of the lamp bulb, or reflector.

The invention has for a further object to construct the reflector portion of the head-light of removable sections, whereby the one containing the anti-glare means may be easily, quickly and conveniently removed for the placing of a new lamp bulb when necessary.

That the invention may be more fully understood, reference is had to the accompanying drawings forming a part of the description, illustrating a preferred embodiment of the invention, in which:

Figure 1 is a longitudinal sectional view through a head-light embodying my invention, and

Figure 2 is a front elevation of the head-light partially in section as the same would appear if taken on the line 2—2 of Figure 1.

Like characters of reference denote corresponding parts throughout the figures.

In the drawings, 1 designates a shell or casing preferably semi-elliptic in shape. Within this casing and spaced therefrom, is a reflector body 2 of substantially the same

shape as the shell or casing. At the rear end of the head-light the reflector body and casing are joined and spaced by means of the attachment 3 which holds the lamp bulb 4. At the front end of the head-light the reflector body is formed or provided with the annular flange 5 which engages with the shell or casing 1, and the latter having lugs 6, bolts 7 passing through the flange 5 and into said lugs serving to unite the forward end of the reflector body 2 to the shell or casing 1.

I prefer to make the reflector body 2 in two separable sections, the front section 2^a and the rear section 2^b. The dividing line of these two sections is preferably immediately in front of the lamp bulb 4, as shown. To unite the two sections, the section 2^b has formed thereon or has attached thereto the offset and forwardly extending gripping flange 8 with which the forward section 2^a may have a telescopic relation and against which the said flange 8 may have a frictional impinging relation to hold the parts assembled.

The headlight is provided with the usual glass or lens front 9 contained within a ring 10, the latter detachable from the headlight, by being hinged thereto, or connected in any other suitable manner.

Arranged in the reflector body, and preferably connected with the front section 2^a thereof, are a plurality of laminae or thin plates 11, 12, 13, 14, 15, 16, 17 and 18. These plates are preferably all flush with the forward edge of the reflector body 2, and with the exception of the plates 14, 15, 16 and 17, which stop short of the rear edge of the section 2^a of said body, are of different lengths; therefore, terminate in the section 2^a at different points. All of said plates are arranged angularly to the plane of the lamp bulb and are in non-parallel relation with each other. In other words, while the front edges of each and all of said plates lie cross-wise of the head-light and in a horizontal plane, their bodies which are each and all inclined upwardly and rearwardly, have different inclinations. Preferably the front edge of the plate 11 is positioned in a horizontal plane below the horizontal plane of the rear edge of plate 12; this is also preferably true of the other plates which are positioned in horizontal planes, below the horizontal planes of the rear edges of the next

and succeeding plates, respectively. With this arrangement, a person standing in front of the head-light and looking therein cannot see the lamp bulb, nor will any of the rays therefrom come within the line of vision of such a person. All he will see is the upper unpolished non-lustrous surfaces of said plates. Such non-lustrous surfaces may be obtained by the use of dull paint or in any other way common to the trade. The lower surfaces of all the plates may be highly polished. In this way, rays of light directed against the lower polished surfaces of the said plates will be deflected downwardly and forwardly. Should it be desired to further dim the upper surfaces of the plates, they may be made in saw teeth fashion, see plate 12, so that all reflected light will hit the back of the teeth and the person in front of the head-light will see the front or darkened side of such teeth only.

The arrangement of the plates 13, 14, 15, 16 and 17 is such that the rays of light from the lamp are directed forwardly and downwardly below the plane of the lamp, and will illuminate the road immediately in front of the automobile and a good distance forward thereof. Further, the rays of light passing between the said plates 13, 14, 15, 16 and 17 are direct rays from the lamp or reflector, and will produce a great volume of light upon the road, without deflection of any kind.

The section 2^b of the reflector body 2 has preferably the form of a parabola, the prevalent structure in lamps of this character and it has its interior surface highly polished and constitutes the main reflector por-

tion of the headlight. In addition thereto, a part of the upper surface of the section 2^a of the reflector body 2 is also highly polished. This highly polished surface is within the area designated by the dotted line 19, Figure 1. These polished surfaces are so arranged as to reflect the light from the lamp through the head-light, and onto and from the polished surfaces of the anti-glare plates, as will cause the light to be emitted from the head-light in a plane below the lamp bulb.

The plates may be secured to the section 2^a of the body 2, by slotting the said body as at 20 Figure 2, inserting the plates in such slits and then welding the plates therein. This is only one of many ways of connecting the plates to the reflector body, and I do not wish to be limited thereto.

By removing the ring 10 and taking out the bolts 7, the section 2^a of the reflector body with the attached plates may be detached from the head-light casing and allow access to be had to the lamp bulb, to remove it for any reason and substitute another therefor.

What I claim is:

Anti-glare means for automobile headlights, comprising a plurality of spaced plates, the front edges of certain of which are in a horizontal plane below the horizontal plane of the rear edges of the next and succeeding plates, and the upper surfaces of certain of said plates being of saw tooth fashion.

In witness whereof, I have hereunto affixed my hand this 3rd day of June, 1920.

WILLIAM L. PEABODY