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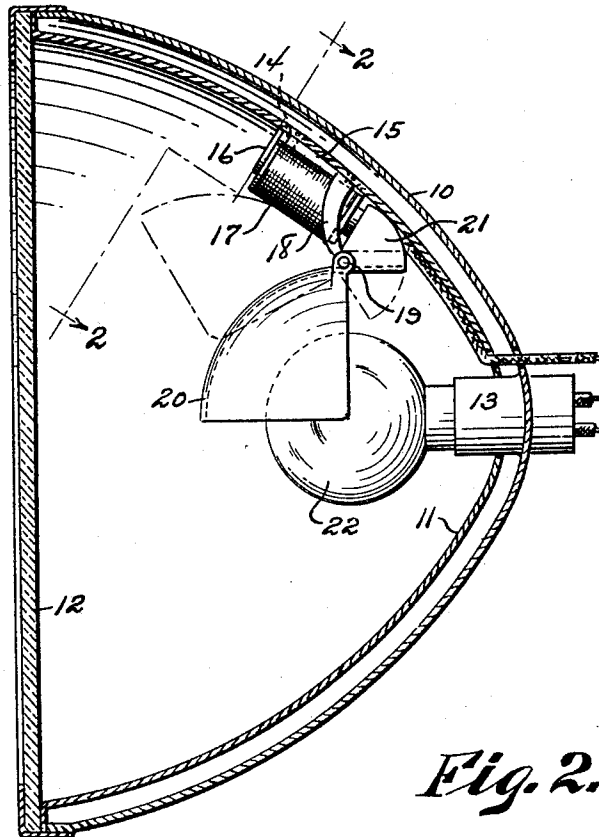
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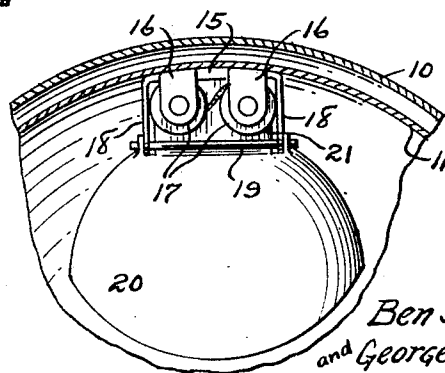
HEADLIGHT DIMMER

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*Fig. 1.*



*Fig. 2.*



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## UNITED STATES PATENT OFFICE.

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## HEADLIGHT DIMMER.

Application filed June 4, 1927. Serial No. 196,524.

This invention relates to head lamps for automobiles and has for an object the provision of a lamp which will provide a maximum amount of light for the driver of the vehicle and which may be operated to prevent the glare from interfering with approaching drivers without dimming the light.

Another object of the invention is the provision of a lamp which includes a shield or hood having novel means for moving the same into and out of position to control the forwardly directed rays of light, novel means being provided for mounting the hood and the hood controlling means.

With the above and other objects in view, the invention further includes the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

In the drawings:—

Figure 1 is a sectional view through a head lamp with the invention applied.

Figure 2 is a section taken substantially on the line 2—2 of Figure 1.

Referring to the drawings in detail wherein like characters of reference denote corresponding parts, the reference character 10 indicates the lamp casing within which is mounted a reflector 11, the casing being closed by a lens 12 and having a lamp socket 13 extending therein. All of the foregoing may be of the usual or any preferred construction and forms no part of the present invention.

Mounted within the casing and secured to the reflector 11 by means of screws 14 is a bracket which includes an attaching base 15. This base has extending from one end spaced ears 16 to which are secured electromagnets 17. Also extending from the base at opposite sides thereof are arms 18. These arms curve downwardly and rearwardly and provide bearings for a pivot rod 19 upon which is mounted a shield or hood 20. Ears 21 extend from this shield or hood to engage the rod 19 and the parts are so arranged and located that the shield may be moved pivotally either to the position shown by full lines in Figure 1 or the position shown by dotted lines in said figure.

Secured to the hood 20 is a weight 21 which acts to normally elevate the hood to the position shown by dotted lines in Figure

1, so that the hood will be out of the path of the forwardly directed rays of light from the bulb 22. The weight 21 also provides an armature in the field of the magnets 17, and when these magnets are energized the armature will be attracted so that the hood 20 will be moved downward against the action of gravity and held in such position as long as the magnets remain active. Some of the forwardly directed rays of light from the bulb 22 will be intercepted and these rays will be prevented from interfering with the vision of drivers or other persons facing the lamp. Sufficient of the light rays however will be projected forwardly to enable the driver of the vehicle to have a clear view of the roadway.

Normally, the hood is arranged in the dotted line position shown in Figure 1 and a suitable switch may be mounted within convenient reach of the driver. This switch may contain indicia to indicate bright or dim and when a vehicle is approaching, the switch may be moved to dim position to energize the magnets and move the hood downward as previously explained. After the vehicle has passed, the switch may be moved to bright position, whereupon the magnets will be de-energized and the hood elevated by the weight 21.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is here reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention what is claimed is:—

In combination with an automobile head lamp, a bracket mounted within the lamp casing above the bulb and including an attaching base, ears extending from one end of the base, electromagnets secured to the ears, arms extending from opposite sides of the base beyond one end of the magnet, a hood pivotally attached to the arms and a weight secured to the hood and adapted to hold the hood normally elevated and to be attracted by the magnets when the latter are energized, to lower the hood and intercept some of the rays of light.

In testimony whereof we affix our signatures.

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