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COMBINATION HEADLIGHT AND FOG LIGHT FOR AUTOMOBILES

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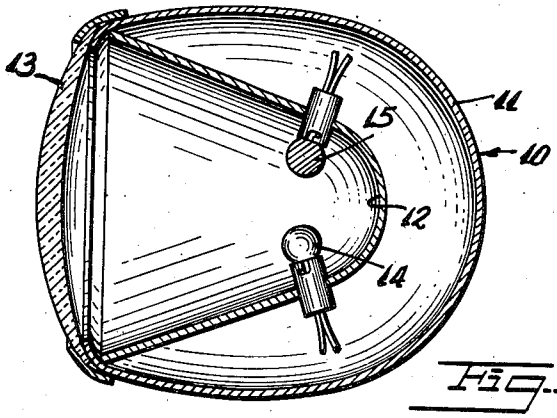


Fig. 1.

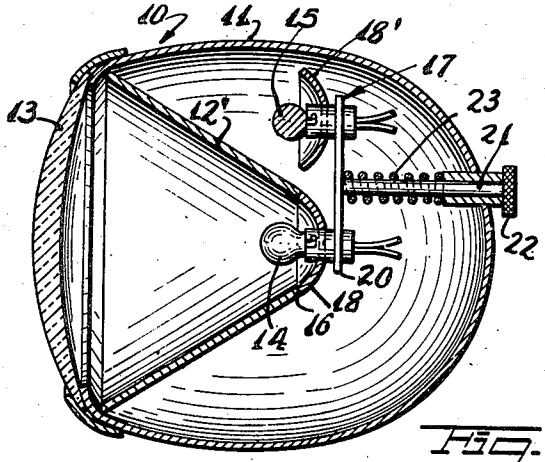


Fig. 2.

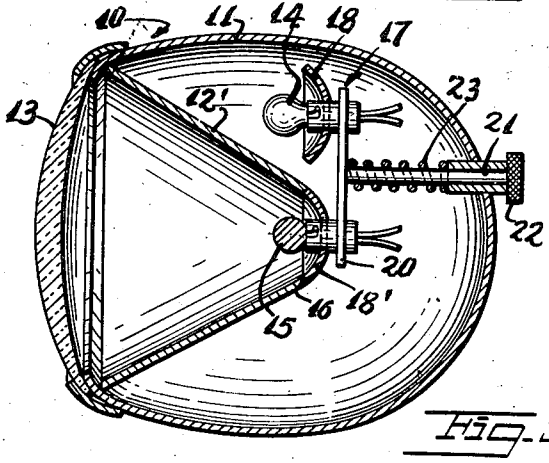


Fig. 3.

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COMBINATION HEADLIGHT AND FOG LIGHT FOR AUTOMOBILES

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3 Claims. (Cl. 240—37)

This invention relates to new and useful improvements in a combination headlight and fog light for automobiles.

Heretofore, it has been discovered that a frosted amber bulb or lamp is better suited for use in fogs than the usual white light lamps. For this reason it has become customary to sell fog lamps as extra equipment. This invention proposes the construction of a head lamp which contains the usual clear glass bulb to be used in ordinary weather, and also contains an amber frosted bulb to be used during fogs. The advantage of the construction, in accordance with this invention resides in the fact that one head lamp is sufficient for use in all kinds of weather instead of the two now required.

The dominant advantage of the new construction is that car manufacturers can place the new head lamps upon cars as standard equipment at practically no additional cost and supply a head lamp which may be used in fogs as well as in clear and other weather.

For further comprehension of this 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 sectional view of a head lamp constructed in accordance with this invention.

Fig. 2 is a sectional view similar to Fig. 1 but illustrating a modified form of the head lamp embodying the same invention.

Fig. 3 is a sectional view of the head lamp shown in Fig. 2 with the parts in a different position.

The combination head lamp and fog light for automobiles, in accordance with this invention is used in combination with a standard automobile head lamp 10. This head lamp consists of the usual housing 11 containing the usual reflector 12 and enclosed by the usual lens 13. The usual clear glass bulb 14 of single or multi-filament is mounted upon the reflector 12. The invention now departs from standard construction in that the head lamp is also provided with a frosted amber bulb 15 for a fog light which may be alternatively used with the clear bulb 14 when desired. The details of the electrical wiring necessary to switch from the lamp 14 to the lamp 15 will not be given in this specification as the circuit would be obvious to any one skilled in the art, and the circuit itself forms no part of the invention.

In Figs. 2 and 3 a modified form of the invention has been disclosed which distinguishes from the prior form in a construction by which the amber frosted bulb is mounted in a different manner in the head lamp. In accordance with this form of the invention the reflector 12' has a small opening 16 at its rear end. An adjustable lamp support 17 is mounted within the housing 11 and is located directly behind the reflector 12'. The clear glass bulb 14 is mounted on the lamp support 17 and extends through the opening 16. A small reflector 18 is mounted around the socket for the lamp 14 and fits into and closes the opening 16 of the reflector 12.

The amber colored bulb 15 is also mounted on the lamp support 17, but normally is located between the back of the reflector 12' and the housing 11. The socket of the amber frosted bulb 15 is provided with a reflector 18' adapted to engage across the opening 16 of the reflector 12'.

The lamp support 17 has a head portion 20 upon which the socket for the lamps 14 and 15 are mounted, and a stem portion 21 which extends out through the housing 11. The external end of the stem portion 21 is provided with a knob 22 by which it may be moved. A spring 23 is coaxially mounted on the stem 21 and normally urges the head portion 20 forwards. This spring 23 holds the reflector 18 in position across the opening 16.

The head lamp, as illustrated in Fig. 2, is now capable of acting in the usual way. To convert it to a fog lamp it is merely necessary to pull the knob 22 outwards so as to disengage the lamp 14 from the rear of the reflector 12', then turn the knob 22 through 180° and then allow the spring 23 to move the lamp support 17 forwards so that the amber frosted bulb 15 is now located through the opening 16 of the reflector 12'. Fig. 3 shows the parts in this latter condition. The head lamp is now capable of acting as a fog light.

It is to be understood that instead of frosted amber, yellow, or any other shade or color bulb may be used. The bulb may be of any desired size.

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 combination headlight and fog light for

automobiles having a reflector with an open back and a pair of spaced small reflectors one having a clear glass bulb and the other having an amber bulb, a support connecting said reflectors together in a position in which one small reflector closes the open back of said reflector with its respective bulb extended into the interior of said reflector with the other small reflector being disposed to one side of said reflector, a fixedly mounted tube, a stem slidably and rotatively extended through said tube and having one of its ends connected to said support intermediate of its ends, and resilient means urging said stem and support into a position in which said first mentioned small reflector will maintain its position across the open back end of said reflector, whereby said stem may be pulled against the action of said resilient means to move said small reflector away from said reflector and withdraw said bulb from the interior of said reflector so that said stem and support may be rotated relative to said reflector to align the other small reflector and its respective bulb with the open back of said reflector.

2. A combination headlight and fog light for automobiles having a reflector with an open back and a pair of spaced small reflectors one having a clear glass bulb and the other having an amber bulb, a support connecting said reflectors together in a position in which one small reflector closes the open back of said reflector with its respective bulb extended into the interior of said reflector with the other small reflector being disposed to one side of said reflector, a fixedly mounted tube, a stem slidably and rotatively extended through said tube and having one of its ends connected to said support intermediate of its ends, and resilient means urging said stem and support into a position in which said first mentioned small reflector will maintain its position across the open back end of said reflector, whereby said stem may be pulled against the action of said resilient means to move said small reflector away from said reflector and withdraw said bulb from the interior of said reflector so that said stem and support may be rotated relative to said reflector to align the other small reflector and its respective bulb with the open back of said reflector, said resilient means, comprising an expansion spring mounted coaxially on said stem and operating between adjacent portions of said support and said tube.

3. A combination headlight and fog light for automobiles having a reflector with an open back and a pair of spaced small reflectors one having a clear glass bulb and the other having an amber bulb, a support connecting said reflectors together in a position in which one small reflector closes the open back of said reflector with its respective bulb extended into the interior of said reflector with the other small reflector being disposed to one side of said reflector, a fixedly mounted tube, a stem slidably and rotatively extended through said tube and having one of its ends connected to said support intermediate of its ends, and resilient means urging said stem and support into a position in which said first mentioned small reflector will maintain its position across the open back end of said reflector, whereby said stem may be pulled against the action of said resilient means to move said small reflector away from said reflector and withdraw said bulb from the interior of said reflector so that said stem and support may be rotated relative to said reflector to align the other small reflector and its respective bulb with the open back of said reflector, and a knob mounted on the free end of said stem to facilitate the pulling and rotation of said stem.

EDWARD GRUNWALD.