

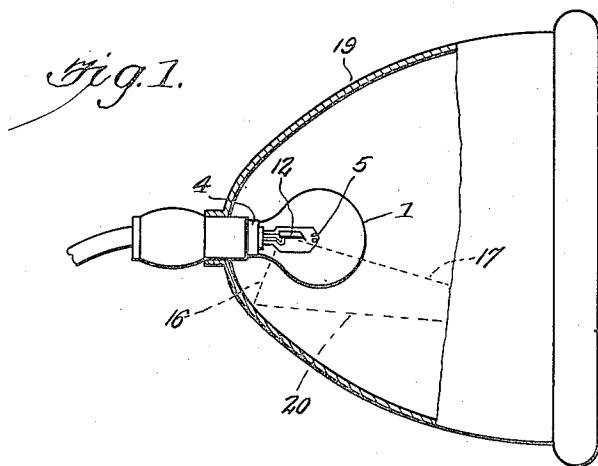
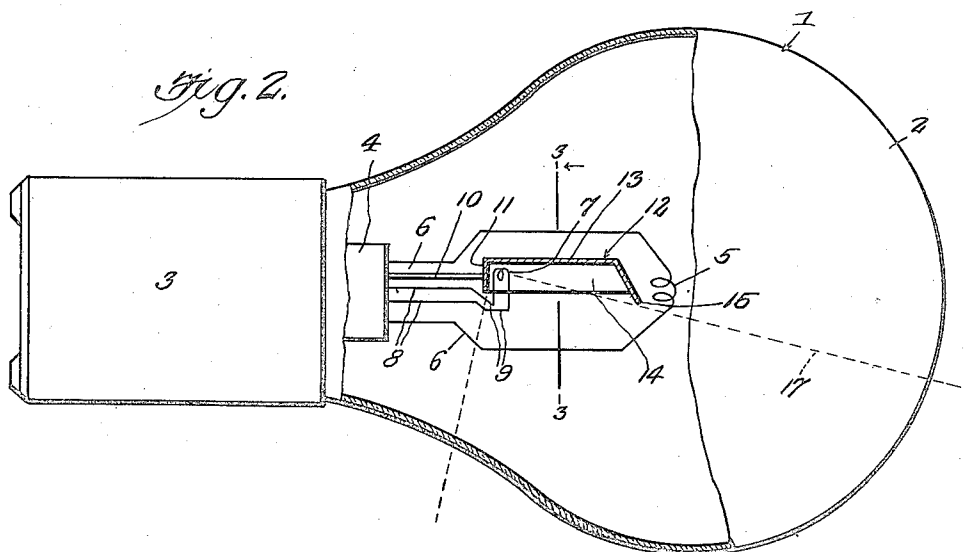
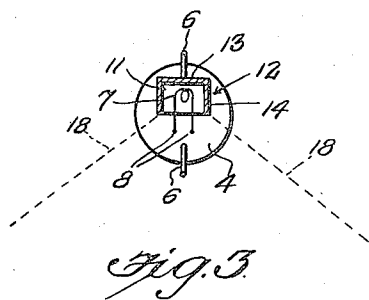
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ELECTRIC LIGHT

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ELECTRIC LIGHT.

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This invention relates to electric lamps and particularly to a lamp adapted for use in automobile headlights.

It is an object of this invention to provide an electric lamp for use in automobile headlights employing parabolic reflectors having a primary and secondary electrically energizable lighting filaments in which a shield is provided for the secondary filament having a top side, front and rear walls, for preventing projection of the light upwardly from the filament and permitting the lights to be projected downwardly and inclined in relation forwardly and sideways to a limited extent, but not rearwardly through the particular association of the shield with the filament so that the back wall lies substantially adjacent the filament.

The invention comprehends numerous other objects residing in the specific construction of the shield and its association in a particular manner with one of the filaments of an electric bulb, so that light from the filaments can only be projected into a small sector of the forward lower portion of a parabolic reflector in which the lamp is placed for preventing the light from shining on the back and upper sections of the reflector and thereby prevent glare in the eyes of an approaching driver, yet providing sufficient illumination on the roadway in front of the vehicle equipped with the lamp so that it may be operated without difficulty.

In the drawing forming part of this application:—

Figure 1 is a longitudinal sectional view through a portion of a headlight showing the same equipped with the electric lamp of this invention, other portions of the headlight being shown in side elevation.

Fig. 2 is an enlarged detail view of the lamp showing the container and shield in longitudinal section.

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

1 indicates the improved electric bulb forming the subject matter of this invention which includes a translucent evacuated container 2 of usual construction mounted in the base 3 at the rear end, where it is provided with the stem 4 also of usual construction, which receives and through which passes the conductors for the filaments and also the supporting wires therefor. A primary electrically energizable filament is indicated at 5

which is supported on the wires 6 carried by stem 4 which also form conductors for the current, while a secondary filament is indicated at 7 having the opposite ends attached to the wires 8 also supporting and forming conductors for the current to energize this filament, independently of the filament 5.

It is to be noted that these wires 8 are formed with hook-shaped ends as indicated at 9 so that the filament 7 is supported above the longitudinal plane of the wires 8. A rod member 10 is mounted in the stem 4 and extends outwardly in substantial alinement with the filament 7 to the end portion of which is attached the rear wall 11 of the shield member 12. This shield member in addition to the rear wall 11, has an elongated top wall 13 from the opposite side of which depends a side wall 14 and at the forward end is provided with the front wall 15, the lower end portion of which extends below the lower edges of the rear and side walls as clearly illustrated in Fig. 2.

This shield member 12 is so mounted on the rod 10 and supported thereby within the container 1, that the rear wall 11 is in close proximity to the filament 7 as clearly illustrated in Fig. 2, while the rear portion of the top wall 13 is also in close proximity thereto. In this way, the lower edges of the side walls, the front wall, and the rear wall extend and terminate in a horizontal plane substantially below that of the filament, and prevent any light from the filament from being projected upwardly above the horizontal plane, and in addition only permit light projected in a substantially downward direction from the secondary filament 7. This is particularly true with respect to the rear wall which in close proximity to the filament, permits only rays to be projected downwardly therefrom and prevents rays of light from being projected rearwardly. The extent of this shielding of the filament 7 by the rear wall 11 is indicated generally by the dotted line 16 in Fig. 2, while a substantial amount of light may be projected forwardly and downwardly extending plane of the dotted lines shown at 17 in Fig. 2.

The dotted lines 18 in Fig. 3, clearly illustrate that the light is permitted to project from the filament 7 downwardly and to the sides through a relatively small arc.

When this lamp is applied in the reflector

19 as shown in Fig. 1 of a suitable automobile headlight, the primary filament 5 will be positioned so that it will be at the center of focus of the parabolic reflector, and in this position the light projected from the secondary filament 7 will be confined to illuminate and be projected on only a substantially small sector of the lower forward portion of the reflector 19 as indicated by the dotted lines 20 in Fig. 1, while no light will be permitted to project on the rear portion or the upper portion of said parabolic reflector.

It has been found from practical experience that the glare from motor vehicle headlights particularly those using two filament bulbs, is due principally to the light reflected from the upper portion of the parabolic reflector and principally to that projected from the back portion thereof, and this invention is designed to shield the light from the secondary filament from the entire upper segment of the reflector as well as the back portion thru the provision of the side and rear walls located closely adjacent to the filament and having the lower edges extending substantially below the horizontal plane thereof, while the front wall prevents the light direct from the filament from shining forwardly above the horizontal plane of the filament, but permits a substantial amount of light shining forwardly to be projected downward-

ly onto the surface of the roadway in advance of the vehicle equipped with the bulb.

It is particularly important therefore, in connection with this invention, that the shield be positioned in a special manner relative to the secondary filament, that is, with the rear wall in close proximity to the filament, and the side and rear walls depending substantially below the horizontal plane thereof as clearly shown in Figs. 2 and 3, for limiting the light projection onto the reflector to a substantially small portion of the forward lower part thereof.

Having thus described my invention, what I claim as new is:—

A reflector for electric lamps comprising a substantially rectangular shaped relatively elongated cover including a longitudinally extending top, a forwardly inclined front wall and vertical rear and side walls, said cover being open at its side opposite from said top and a light filament disposed therein, said front wall extending downwardly beyond the edges of the side walls and constituting a light deflector for the filament whereby to direct the rays thereof at an inclined angle from the horizontal plane thereof.

In testimony whereof I affix my signature.

CHARLES J. SCHROEDER.