

Oct. 10, 1961

J. M. A. KROES

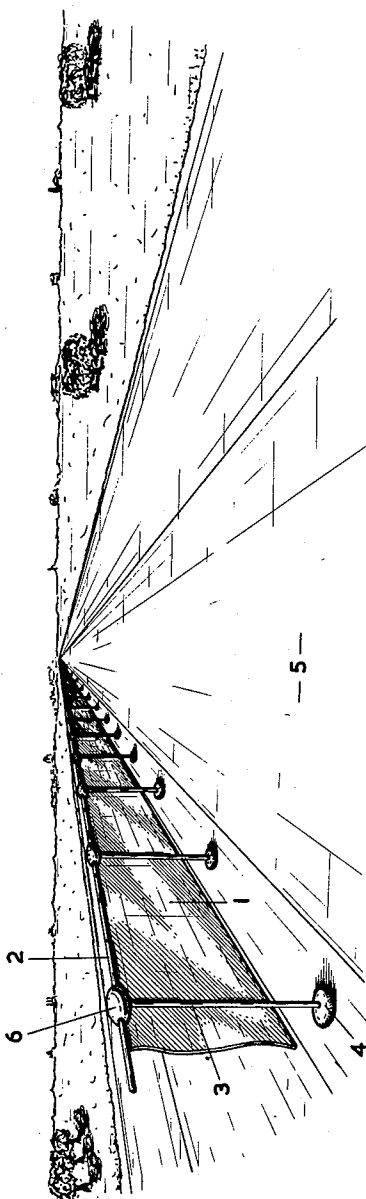
3,004,145

ANTI-BLINDING SCREEN WITH BUILT-IN LAMP MEANS FOR
THE ILLUMINATION OF ROADS WITH SEPARATE TRACKS

Filed Jan. 13, 1959

2 Sheets-Sheet 1

FIG. 1



INVENTOR.

JACOB MEEUWES ARNOLD KROES

BY

Irwin S. Thompson

ATTY.

Oct. 10, 1961

J. M. A. KROES

3,004,145

ANTI-BLINDING SCREEN WITH BUILT-IN LAMP MEANS FOR
THE ILLUMINATION OF ROADS WITH SEPARATE TRACKS

Filed Jan. 13, 1959

2 Sheets-Sheet 2

FIG. 2

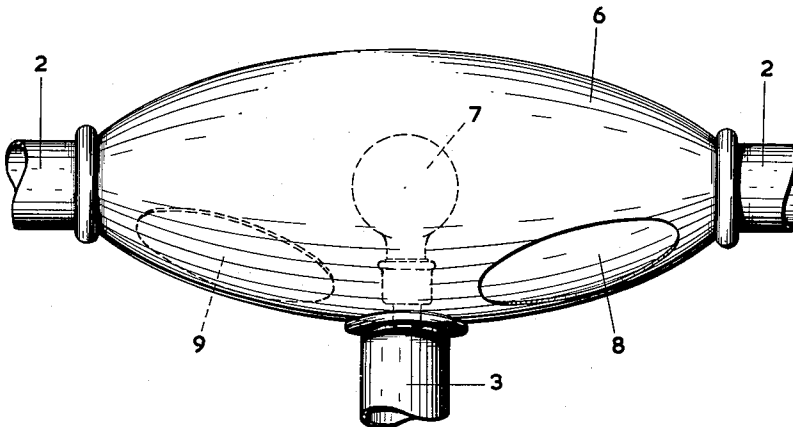


FIG. 3

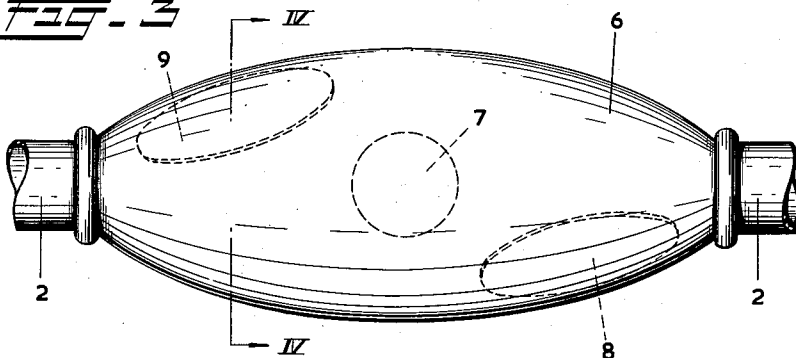
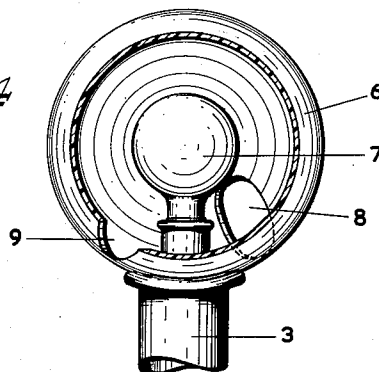


FIG. 4



INVENTOR.

JACOB MEEUWES ARNOLD KROES

BY

Irwin S. Thompson

ATTY.

1

3,004,145

ANTI-BLINDING SCREEN WITH BUILT-IN LAMP MEANS FOR THE ILLUMINATION OF ROADS WITH SEPARATE TRACKS

Jacob Meeuwes Arnold Kroes, 128 Louise de Colignystraat, The Hague, Netherlands
Filed Jan. 13, 1959, Ser. No. 786,623
3 Claims. (Cl. 240-25)

The invention relates to an anti-blinding screen with built-in lamp means for the illumination of roads with separate tracks.

An object of the invention is to provide a screen of the above mentioned type which is of simple construction, relatively cheap to manufacture and easy to repair if damaged.

Another object of the invention is to provide a screen of said type which is capable of effectively illuminating the road surface without any blinding effect.

Still another object of the invention is to provide a screen of said type which is adapted to accommodate the current supply leads for the lamp means.

According to the invention the screen comprises a supporting structure formed by tubular posts and tubular horizontal connecting members, the upper ends of the posts and the horizontal connecting members arranged at this level being connected with each other by means of coupling sleeves having light sources arranged therein, said sleeves being provided with light-transmitting apertures such that on each half of the road light can only radiate in the direction of traffic movement, whereas the bays of the supporting structure are closed over their full length and at least over the upper part of their height by means of untransparent plates.

This results in a screen of very simple construction, whereas the fact that the light is radiated only in the direction of traffic movement, effectively prevents any blinding effect. Due to the arrangement of the light sources within the coupling sleeves and the tubular form of the posts and horizontal connecting members, the current supply leads are easy to install.

Further according to the invention, the coupling sleeves may present substantially the form of a hollow ellipsoid, obtained by rotation of an ellipse about its major axis, which ellipsoid has two openings for receiving the horizontal connecting members at the points of smallest radius of curvature and one opening for receiving a post at the point of largest radius of curvature, and also two light-transmitting apertures diametrically disposed with respect to the last named opening and on the same side of the ellipsoid.

Further objects and advantages of the invention will be apparent from the following description of an embodiment thereof with reference to the accompanying drawings.

In the drawings:

FIGURE 1 shows a road having a screen arranged thereon;

FIGURE 2 is a side elevation of a nodal point of the supporting structure provided with a coupling sleeve;

FIGURE 3 is a plan view of a coupling sleeve;

FIGURE 4 is a vertical cross section through the coupling sleeve.

The height of the screen is about 4 feet, viz. about 3 feet 2 inches for the screen plate 1 and 10 inches of open space at the bottom. The lighting sleeves 6 are mounted at intervals of about 16 feet on the vertical posts 3 and in line with the horizontal connecting rods 2. The screen

2

plates which have a thickness of about half an inch, are made of a reinforced elastic material, e.g. wire netting filled with rubber. However, other suitable materials such as synthetic materials with or without reinforcement, may also be used. The vertical posts 3 rest on pedestals 4 of concrete on the road surface 5. The light source 7 radiates exclusively through the windows or apertures 8 and 9 (see FIGURES 2, 3 and 4).

The strongest illumination will thus be received by the traffic lane meant for the highest speed, whereas with a light radius of about 25 feet there remains sufficient illumination for the slower traffic lane or lanes. The light sectors formed at intervals of 16 feet will thus have an overlap of about 9 feet.

Due to the above invention lamps of small power are sufficient for obtaining a very effective and quiet illumination of the road surface and of the objects thereon, which illumination renders the use of head lights superfluous and can never give rise to any blinding effect. If nevertheless a driver should use his full head lights, the plates will prevent any blinding of the drivers of oncoming cars.

The screen according to the invention can also successfully be used in towns, provided that the width of the street or road permits a permanent separation of the traffic moving in opposite directions, and provided that places for crossing are left free.

What I claim is:

1. A screen placed between the separate tracks of a road to eliminate blinding effect of lights of oncoming traffic and provided with screened light sources for the illumination of said road, comprising a supporting structure consisting of tubular post members mounted along said road and tubular horizontal connecting members, coupling sleeves having apertures therein for connecting said tubular post members and tubular horizontal connecting members at the upper part of said tubular post members, a light source arranged in said coupling sleeves, said light source provided with a source of supply disposed within said tubular members, further apertures arranged in said coupling sleeves on each side of the axis thereof to transmit light from said light source in a direction to illuminate said road in the direction of traffic movement, and plate members mounted over the full length of said tubular horizontal connecting members and at least over the upper part of said tubular post members to eliminate blinding effect of lights of oncoming traffic.

2. A screen according to claim 1 wherein said coupling sleeve has a hollow ellipsoid form comprising apertures for receiving the tubular horizontal connecting members at the points of smallest radius of curvature, another aperture for receiving the tubular post member at the point of largest radius of curvature, and further light-transmitting apertures diametrically disposed with respect to said other aperture on the same side of the ellipsoid.

3. A screen according to claim 1 wherein said plate members consist of wire netting filled with rubber.

References Cited in the file of this patent

UNITED STATES PATENTS

205,607	Bird	July 2, 1878
743,687	Burnham	Nov. 10, 1903
1,794,467	Lucas	Mar. 3, 1931
2,135,400	Johnson	Nov. 1, 1938
2,173,594	Railey	Sept. 19, 1939
2,567,528	Rosenthal	Sept. 11, 1951
2,825,796	Lanmon	Mar. 4, 1958