

No. 858,968.

PATENTED JULY 2, 1907.

K. H. EVANS.
LAMP SHADE FOR ROAD VEHICLES.
APPLICATION FILED FEB. 26, 1907.

Fig. 1.

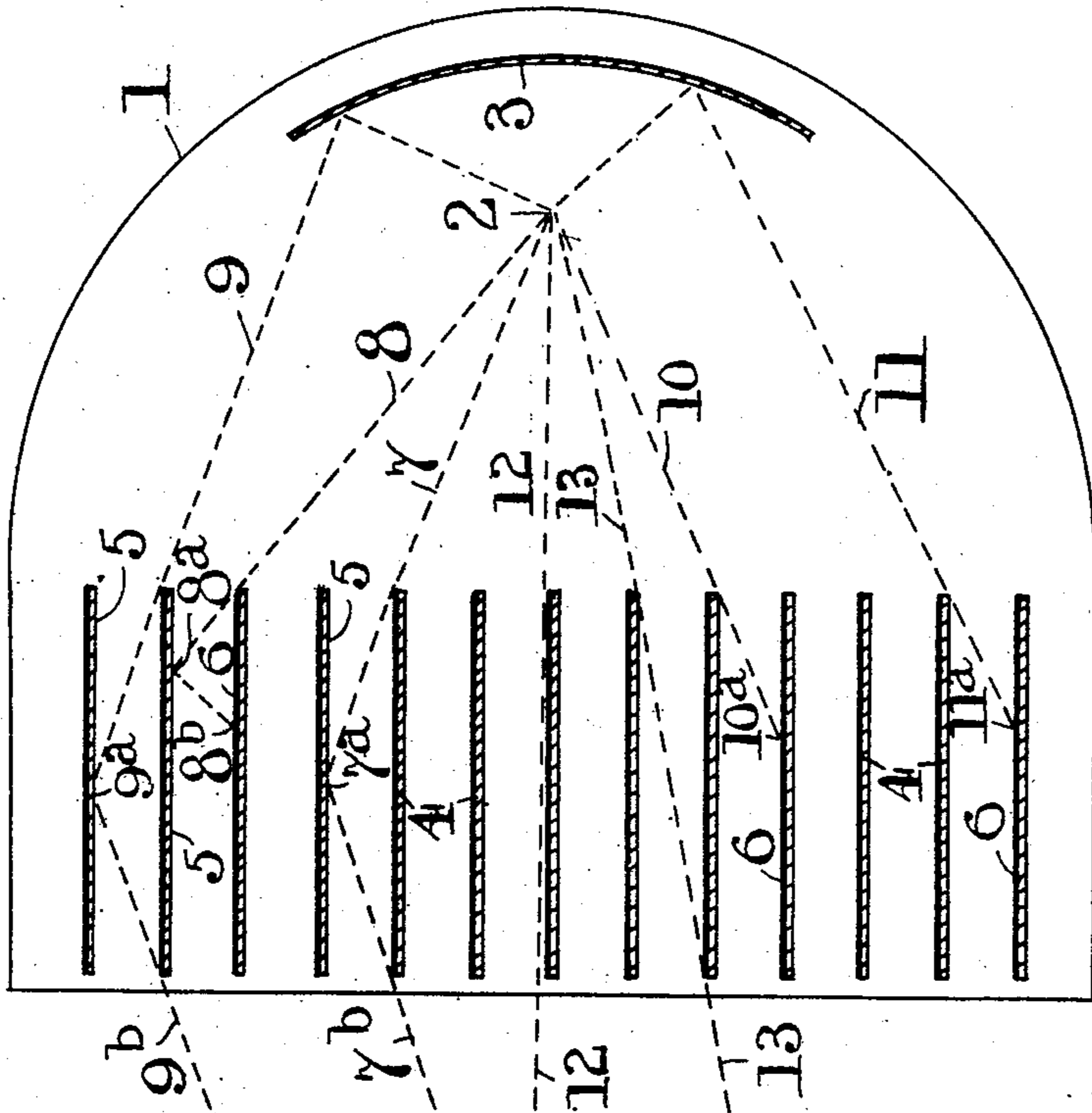
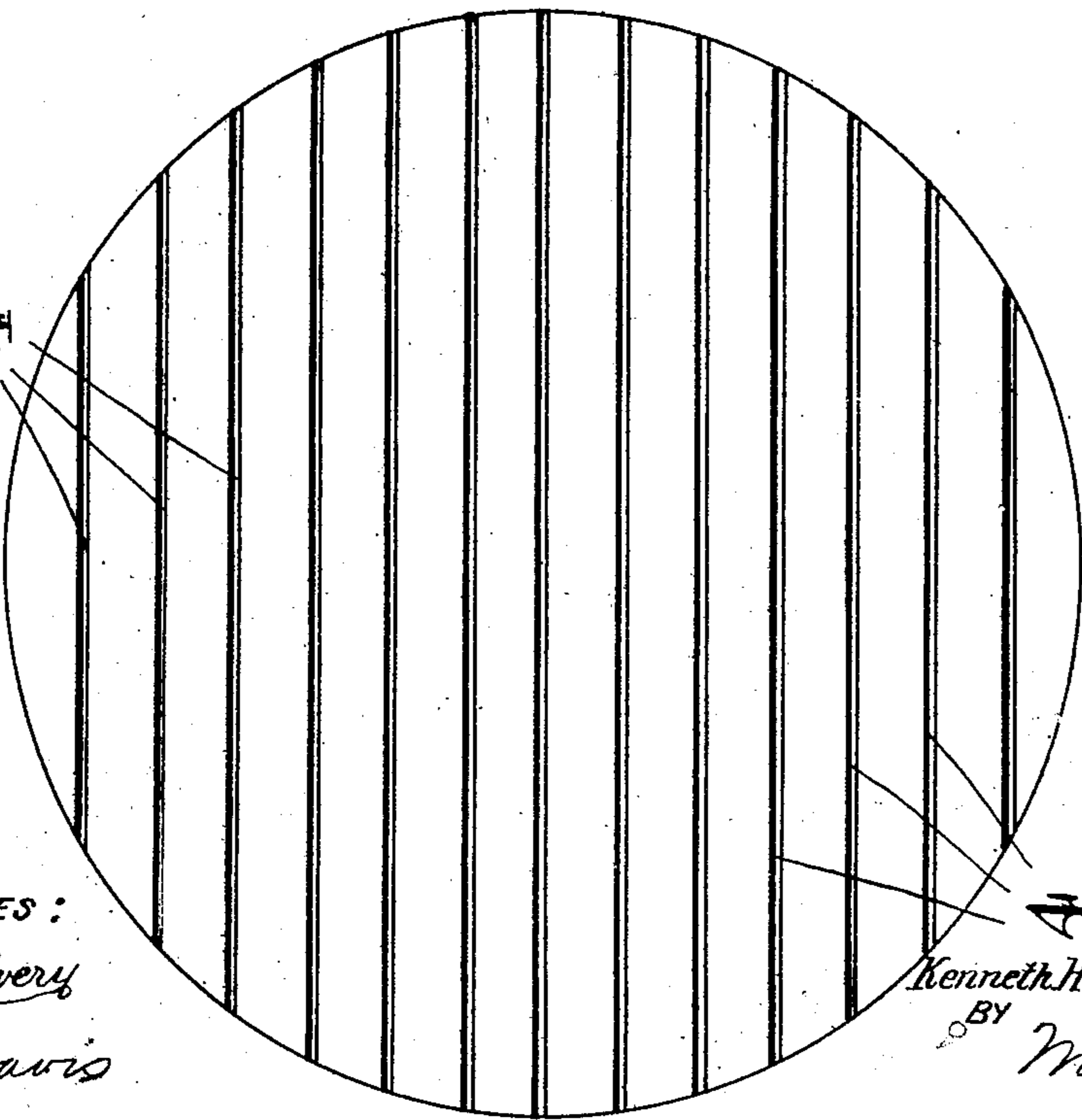


Fig. 2.



WITNESSES:

W. M. Avery

J. P. Davis

INVENTOR

Kenneth Horstall Evans

BY

Mum Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

KENNETH HORSFALL EVANS, OF EXETER, ENGLAND, ASSIGNOR TO WELDHEN & BLERIOT LIMITED, OF LONDON, ENGLAND.

LAMP-SHADE FOR ROAD-VEHICLES.

No. 858,968.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed February 26, 1907. Serial No. 359,516.

To all whom it may concern:

Be it known that I, KENNETH HORSFALL EVANS, a subject of the King of Great Britain, and a resident of 87 Sidwell street, Exeter, in the county of Devon, England, engineer, have invented certain new and useful Improvements in a Lamp-Shade for Road-Vehicles to Prevent Powerful Lamps Being a Danger to other Road-Users and to Increase Their Effective Range, of which the following is a specification.

10 This invention relates to the lamps of road vehicles and more especially of motor-driven vehicles, and it has for its object to provide a device whereby those rays of light projected by a lamp, which would otherwise be directed upwards at more than a predetermined small inclination to the horizontal, will be either cut off or deflected downwards without interfering with the horizontal or nearly horizontal rays, so that practically no rays will be permitted to diverge to a height sufficient to cause danger or annoyance by dazzling the eyes of persons looking towards the vehicle which carries the lamp or proceeding in a direction contrary to that in which said vehicle is traveling.

20 In the accompanying drawings which illustrate the invention diagrammatically, Figure 1 represents a longitudinal vertical section of a lamp to which the device is applied, and Fig. 2 represents a front elevation of the device shown separately.

30 According to the present invention the lamp 1 to which the device is applied is provided with a shade which is presented in the path of the beam of light projected either directly from the original source 2 of the light or from the reflector 3 or other virtual source, this shade being constituted by a plurality of plates 4 which extend in horizontal or nearly horizontal planes from side to side of the light-emission aperture or passage with which the shade, as a whole, is coextensive.

40 The lower side 5 of each plate 4 is a reflecting surface and the upper side 6 a blackened or non-reflecting surface, so that those rays of light which fall on the underside 5 of any of the plates are reflected downwards while those rays which fall on the upper side 6 of any of the plates are absorbed. Hence, any ray such as 7, 8 or 9 which (on being projected outwards

from its actual or virtual source) diverges upwards from the horizontal beyond a limit of inclination dependent on the ratio of the distance between adjacent plates to the width of the plates, will strike the reflecting under-surface 5 of one of the plates as at 7^a, 8^a, or 9^a and be reflected downwards therefrom, either issuing from the lamp in a downward direction as at 7^b and 9^b or being caught and absorbed by the non-reflecting upper surface 6 of the next lower plate as at 8^b. Similarly, any ray such as 10 or 11 which (on being projected outwards) diverges downwards from the horizontal beyond a limit of inclination dependent on the same conditions as above stated, will strike and be absorbed by the non-reflecting upper surface of one of the plates as at 10^a, 11^a.

It will be obvious that of those outwardly directed rays such as 12 and 13 which proceed horizontally or nearly horizontally from the actual or virtual source of light, none will be interfered with excepting the relatively small number which strike the rear edge of the plates 4, which should therefore be made as thin as practicable.

Preferably, the plates (which may be mounted in any convenient manner) would be of equal width and extend in parallel and equidistant planes.

Claims.

1. The combination with a lamp for a road vehicle of a device adapted to prevent rays of light outwardly directed from within the lamp diverging upwards at more than a predetermined inclination to the horizontal, said device being constituted by a plurality of plates extending in approximately horizontal planes across the path of the beam of light, each plate having a reflecting under surface and a non-reflecting upper surface, substantially as described.

2. A shade for a lamp for use on a road vehicle, constituted by a plurality of plates extending in approximately horizontal planes across the path of the beam of light, each plate having a reflecting under surface and non-reflecting upper surface, substantially as and for the purpose set forth.

KENNETH HORSFALL EVANS.

Witnesses:

W. LINFORD BROWN,
H. LINFORD BROWN.