W. A. GREENLAW.

LAMP DIMMING DEVICE FOR MOTOR CARS.

APPLICATION FILED JAN. 3, 1911.

1,005,197. Patented Oct. 10, 1911.

Fig. 1.

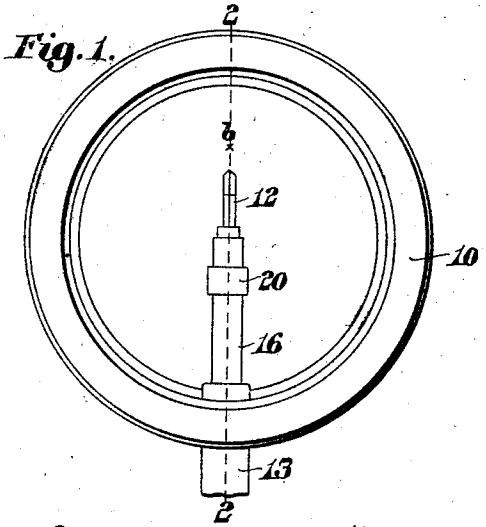


Fig. 2.

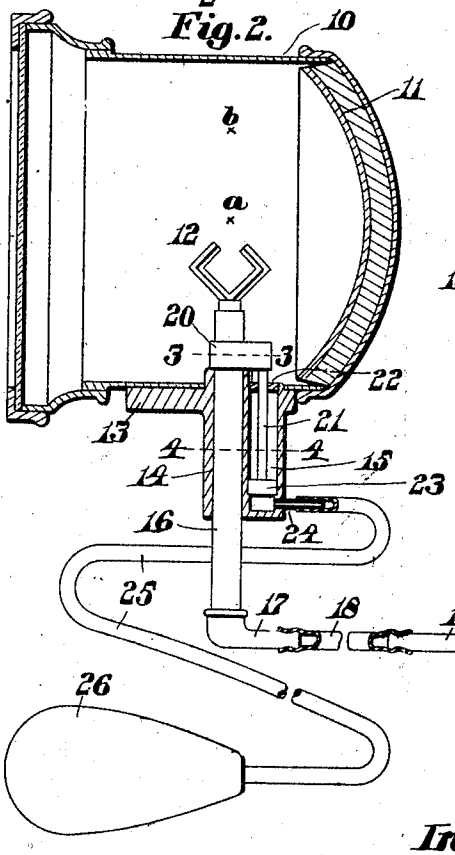


Fig. 3.

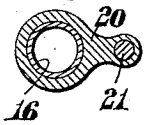
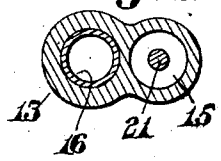


Fig. 4.



Witnesses:

Nathan C. Lombard

Mary C. Smith

Inventor:

Warren A. Greenlaw,

by Walter E. Lombard,

Atty.

UNITED STATES PATENT OFFICE.

WARREN A. GREENLAW, OF MELROSE, MASSACHUSETTS.

LAMP-DIMMING DEVICE FOR MOTOR-CARS.

1,005,197. Specification of Letters Patent. Patented Oct. 10, 1911.

Application filed January 3, 1911. Serial No. 600,835.

To all whom it may concern:

Be it known that I, WARREN A. GREENLAW, a citizen of the United States of America, and a resident of Melrose, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Lamp-Dimming Devices for Motor-Cars, of which the following is a specification.

This invention relates to improvements in vehicle lamps and particularly that class of lamps which are of the searchlight type, the object of the invention being to provide a means for temporarily changing the angle of the rays from the reflector so as to prevent persons coming in the opposite direction from becoming blinded thereby.

Heretofore many devices have been provided in which disks or other members are moved relative to the burner of the lamp so as to entirely cut off the light or the rays from the reflector. These devices have been found more or less objectionable owing to taking up so much room within the lamp, and as a consequence cutting off many of the rays from the reflector when the full effect therefrom is desired.

To overcome these objections is the object of the present invention, and it consists in making the burner itself slidable in a suitable bearing formed upon the lamp casing and providing a means for moving this burner in its bearing by means of air pressure under the control of the chauffeur or other operator.

The invention further consists in certain novel features of construction and arrangement of parts which will be readily understood by reference to the description of the drawings and to the claims hereinafter given.

Of the drawings: Figure 1 represents a front view of a lamp embodying the features of the present invention. Fig. 2 represents a vertical section of the same, the cutting plane being on line 2, 2 on Fig. 1, showing in elevation a tube and bulb for supplying air pressure to move the burner in its bearing, and Figs. 3 and 4 represent respectively horizontal sections, the cutting planes being on line 3, 3 and 4, 4 on Fig. 2 of the drawings.

Similar characters designate like parts throughout the several figures of the drawings.

In the drawings, 10 represents a casing of a lamp of any well-known construction, provided with a reflector 11 and a burner 12. Secured to the casing is a radial member 13 provided with an opening therethrough and a chamber 15 parallel to said opening. In the opening 14 is slidably mounted the tubular portion 16 of the burner 12, having secured to its lower ends the shouldered nozzle 17, which is adapted to limit the upward movement of said member 16 in said opening 14. To the nozzle 17 is secured a flexible tubular member 18, the opposite end of which is connected to a fixed pipe 19 leading to any suitable source of gas supply. Secured to the upper end of the member 16 is a member 20, having a lateral projection to which is secured the piston rod 21 extending downwardly through the closing cap 22 of the chamber 15, and having mounted on its lower end the piston 23. Beneath the piston 23 is an air inlet pipe 24, the outer end of which communicates with the flexible tubular member 25, having a bulb 26 at its opposite end, by squeezing which air is adapted to be forced into the chamber 15 below the piston 23 and thereby raise the burner 12 so that the center of its flame will be moved from the point *a* to point *b*, as indicated in Fig. 2 of the drawings. The curvature of the reflector 11 is such that when the center of the flame is at the point *a* the rays from the reflector will be projected parallel to the axis of the lamp 10. When, however, the chauffeur or operator sees a motor car coming in the opposite direction and it is desired to prevent further outward projection of the rays of light to prevent the operator of the other machine from becoming blinded thereby, the chauffeur or operator having the bulb 26 under his control, squeezes the same, thereby forcing air through the tube 25 into the chamber 15, and causes the burner 12 to be raised so that the center of its flame is at the point *b*, the member 18 making a flexible connection between the gaspipe 19 and the slidable tubular member 16 to permit this movement. When the burner 12 has reached the point *b* the rays of light from the reflector will be projected downwardly therefrom, thereby making it impossible for any rays to be projected that would be liable to blind the operators in approaching cars. While this objectionable feature is wholly overcome by the present invention, it also serves another purpose, and that is, when thus operated, the

rays are thrown downwardly so that the road in advance of the car is plainly visible, while, with the other devices heretofore mentioned, when the light is dimmed by shutting off the rays of light from the reflector, the road in advance of the car is darkened. Often, in driving along a country road, where ditches exist on either side thereof, the lamp may be turned slightly about its vertical axis and the burner lifted, as has been heretofore described, so that the rays from the reflector may be projected downwardly and to one side of the car, thereby keeping the ditch in view at all times and thus avoiding an accident.

It is believed that the operation and many advantages of the invention will be thoroughly understood without any further description.

Having thus described my invention, I claim:

1. In a lamp, the combination with a reflector; a slidable burner normally positioned at a predetermined point opposite said reflector and provided with a laterally projecting member; and means for forcing fluid against said member and thereby moving said burner from said position.

2. In a lamp, the combination with a reflector; a slidable burner normally positioned at a predetermined point opposite said reflector; and means for applying fluid pressure to said burner to move it from its normal position.

3. In a lamp, the combination with a reflector; a slidable burner normally positioned at a predetermined point opposite said reflector; means for applying fluid pressure to said burner to move it from its normal position; and means for limiting said movement.

4. In a lamp, the combination with a reflector; a slidable burner normally positioned at a predetermined point opposite said reflector; a piston connected therewith and movable in an inclosed chamber; and means for forcing fluid into said chamber to operate said piston.

5. In a lamp, the combination with a reflector; a radial extension to the casing of said lamp provided with an opening therethrough and a chamber parallel to said opening; a burner slidably mounted in said opening; a piston movable in said chamber; a connection between said piston and burner; and means under the control of the operator for moving said piston.

6. In a lamp, the combination with a reflector; a radial extension to the casing of said lamp provided with an opening therethrough and a chamber parallel to said opening; a burner slidably mounted in said opening; a piston movable in said chamber; a connection between said piston and burner; and means for forcing fluid into said chamber beneath said piston.

7. In a lamp, the combination with a reflector; a slidable burner normally positioned at a predetermined point opposite said reflector and provided with a laterally projecting member; a supply pipe; a flexible tubular member between said pipe and burner; and means for forcing fluid against said laterally projecting member and thereby moving said burner from said position.

Signed by me at 4 Post Office Sq., this 23d day of December, 1910.

WARREN A. GREENLAW.

Witnesses:
WALTER E. LOMBARD,
NATHAN C. LOMBARD.