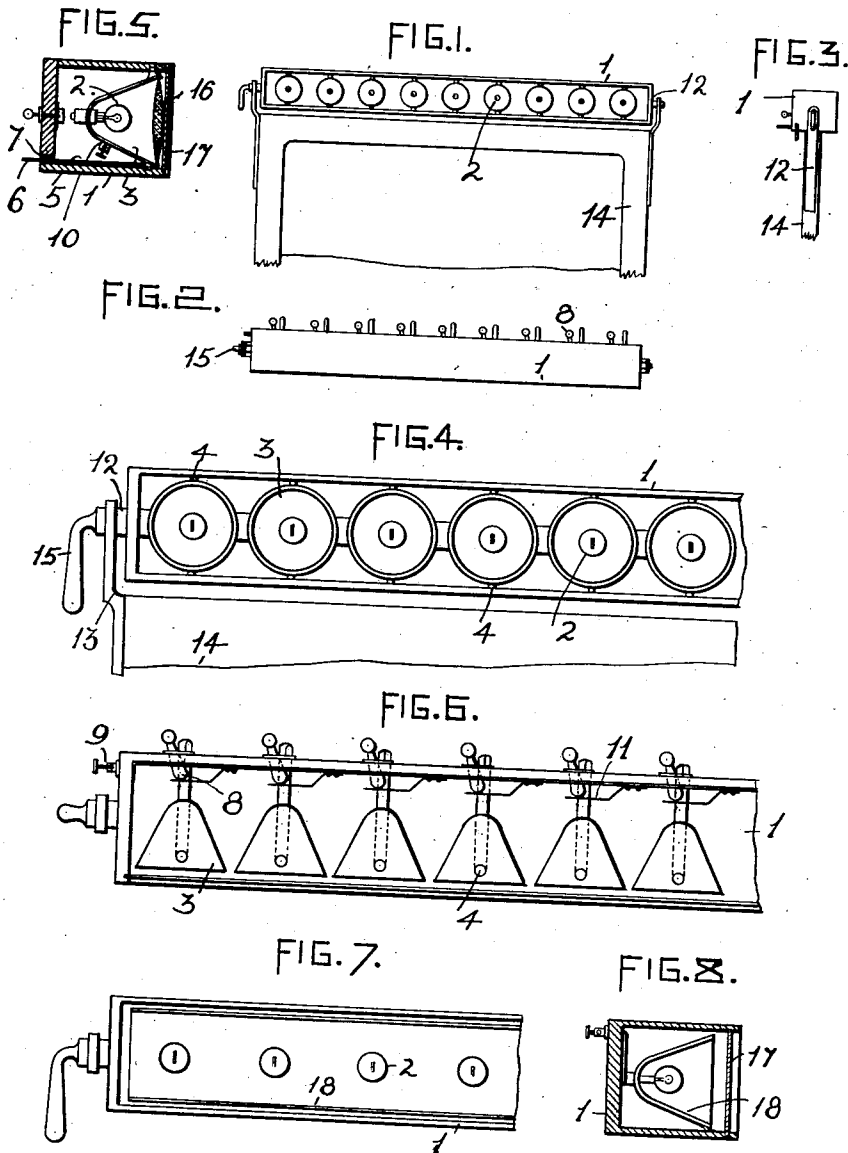


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LANTERN FOR VEHICLES.

APPLICATION FILED OCT. 2, 1911.

1,033,253.

Patented July 23, 1912.



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UNITED STATES PATENT OFFICE.

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LANTERN FOR VEHICLES.

1,033,253.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JOHN GEORGE AULSEBROOK KITCHEN, of Lancaster, in the county of Lancaster, England, and ISAAC HENRY STOREY, of Ambleside, Westmoreland county, England, have invented new and useful Improvements in Lanterns for Vehicles, of which the following is a specification.

This invention relates to improvements in the construction and arrangement of lanterns for vehicles.

The object of this invention is to obtain greater efficiency (1) by using a row of smaller lamps, burners with more lights than usual all mounted on a single base or in a single lantern so as to obtain a similar or equal lighting effect; (2) by making such row adjustable so that for temporary purposes, the light therefrom can be directed rearward or downward and (3) by providing means for setting each unit of the row so that the rays of light from all can be converged to one spot in advance.

For economical reasons and general convenience electric lamps are preferably used.

The base or lantern carrying the row of burners, filaments or lamps may be conveniently mounted on the dash board, or preferably supported on a frame or wind screen at some distance above the eyes of the driver, by which arrangement, there is no tendency for the light beam to affect or obscure the sight in the direction in which the vehicle is traveling.

In the drawings attached hereto, Figure 1 represents in elevation our improved lantern mounted upon the upper part of the wind screen of a motor vehicle; Fig. 2 represents a plan of the same looking from above; Fig. 3 an end elevation; Fig. 4 an enlarged front elevation of part of the lantern; Fig. 5 a cross section and Fig. 6 a plan with the top removed. Fig. 7 represents in front elevation a lantern with a single reflector and Fig. 8 a cross section of the same.

In the lantern illustrated in Figs. 1 to 6 the casing 1 carries a series of electric lamps 2, each having a separate reflector 3. Each lamp and reflector are fixed together and are so mounted that they can be initially set in the lantern so that the rays from each converge to a desirable spot in advance say longitudinally central with the vehicle. For this purpose each reflector is pivotally

mounted in the casing, so as to swivel in a horizontal plane, the pivots being indicated at 4. Each reflector also has an arm 5 fixed to it and the arm may pass to the outside of the casing as shown at 6. No means for fixing each separate reflector is shown other than that due to the friction of the arm in the slot 7 in the casing which can be made sufficient for this purpose. Contact may be established with each lamp through a tumbler switch such as 8 see Fig. 6, the terminal for the current being indicated by 9 and that for earth by 10. With this arrangement, any one lamp or more can be cut out. For instance the two end and center lamps only might be used alone in some cases say in a lighted district and the whole for unlighted roads. The spring contact 11 shown in conjunction with the switch 8 would be retained as it permits the reflector 3 to be moved without breaking contact.

The lantern casing 1 is pivotally mounted at 12 in brackets 13 fixed to the wind screen 14 so as to swivel about a horizontal axis and permit the angle to be varied at will whereby the projection of the light rays on to the road can be carried to different distances in advance of the vehicle. The casing can be locked in position at the desired angle by means of the handle 15. Each reflector is shown with a lens 16 and the casing with a glass front 17 so as to keep out dust.

In the lantern shown in Figs. 7 and 8, the lamps 2 are initially fixed in the desired position. One reflector 18 is used and runs the full length of the casing as shown. Lenses are dispensed with, and a glass front 17 is provided. This construction provides a cheaper lantern than that described with reference to Figs. 1 to 6 but is less efficient.

What we claim as our invention and desire to secure by Letters Patent of the United States is:—

1. In a vehicle lantern device, the combination with a supporting portion of the vehicle, of an elongated casing pivoted on said portion to swing about a horizontal axis, reflectors provided with lens mounted in said casing to swing about vertical axes, lamps in said reflectors, individual means for adjusting said reflectors, and individual spring switches for cutting the lamps in and out of circuit and maintaining them in

circuit, when cut in, irrespective of the adjustment of said reflectors, substantially as described.

2. In a vehicle lantern device, the combination with a supporting portion of the vehicle, of a casing pivoted on said portion to swing about a horizontal axis, reflectors mounted in said casing to swing about vertical axes, lamps in said reflectors, individual means for adjusting each reflector, and individual switches for maintaining said lamps in circuit irrespective of the adjustment of said reflectors, substantially as described.
3. In a vehicle lantern device, the combination with a supporting portion of the vehicle, of a casing pivoted on said portion to swing about an axis, reflectors mounted in said casing to swing about axes angularly disposed with respect to the axis about which said casing swings, lamps in said reflectors, and means for connecting said lamps with a circuit, substantially as described.
4. In a vehicle lantern device, the combination with a dash-board or like supporting portion of the vehicle, a casing mounted on said support to swing about an axis, and a plurality of lamps mounted on said casing to swing about axes angularly disposed with respect to the axis on which said casing is mounted to swing whereby the rays of said lamps may be converged, substantially as described.
5. In a vehicle lantern device, the combination with a supporting portion of the vehicle, of a lamp support mounted to swing on said portion, and a plurality of lamps independently adjustable on said support whereby the rays of said lamps may be converged, substantially as described.

6. In a vehicle lantern device, the combination with a supporting portion, of a lamp support mounted to swing on said supporting portion, a plurality of lamps mounted on said support and each lamp being adjustable to converge the rays of said lamps, and means for extinguishing certain of said lamps, substantially as described.

7. In a vehicle lantern device, the combination with a supporting portion, of a lamp support mounted to swing on said supporting portion, a plurality of lamps mounted on said support and each lamp being adjustable to converge the rays of said lamps, and means for cutting said lamps into and out of circuit, substantially as described.

8. In a vehicle lantern device, the combination with a supporting portion, of a lamp support mounted to swing on said supporting portion, a plurality of lamps independently adjustable on said supporting portion to converge the rays of said lamps, and individual means for each lamp for maintaining the lamps in circuit irrespective of their adjustment.

9. In a vehicle lantern device, the combination with a supporting portion, of a lamp support mounted to swing on said supporting portion, a plurality of independently adjustable lamps on said support, and individual spring switches for cutting the lamps in and out of circuit and maintaining them in circuit, when cut in, irrespective of the adjustment of said lamps, substantially as described.

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