Feb. 9, 1926. 1,572,623

S. S. STALEY

SCREEN FOR AUTOMOBILE LAMPS

Filed August 24, 1923

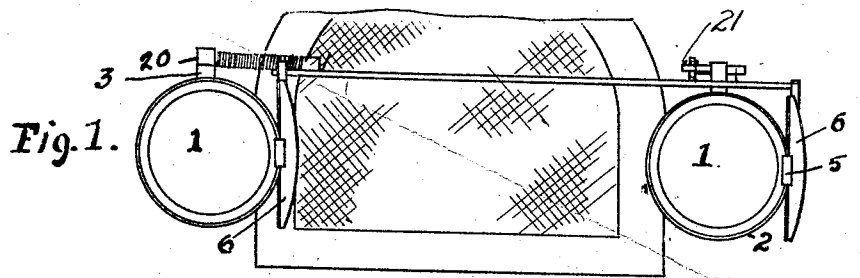


Fig. 1.

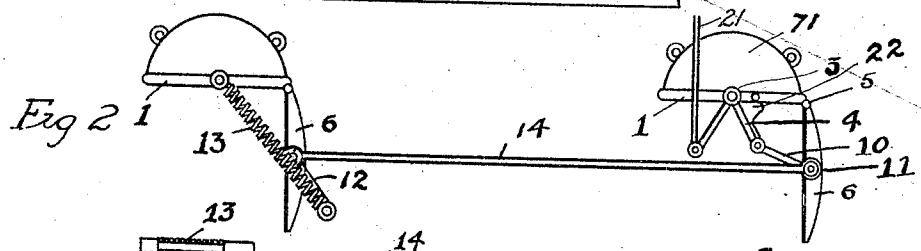


Fig 2

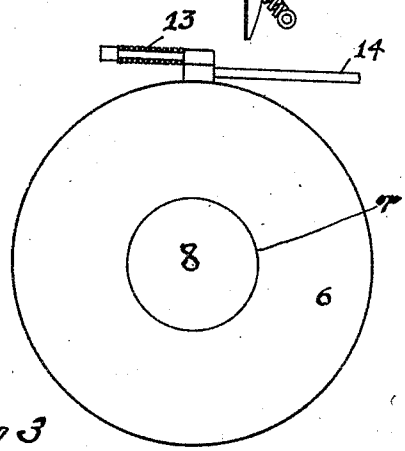


Fig 3

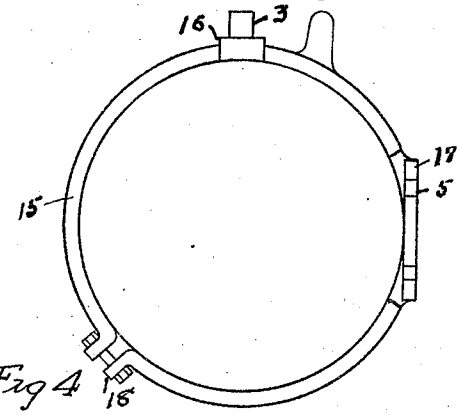


Fig 4

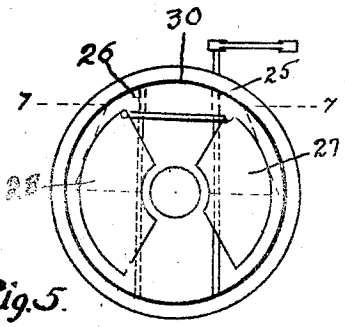


Fig. 5.

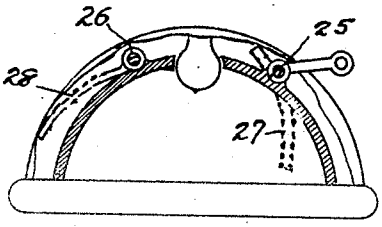


Fig 7

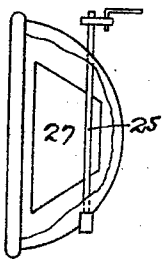


Fig. 6.

Samuel S Staley INVENTOR

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UNITED STATES PATENT OFFICE.

SAMUEL S. STALEY, OF READING, PENNSYLVANIA.

SCREEN FOR AUTOMOBILE LAMPS.

Application filed August 24, 1923. Serial No. 659,032.

To all whom it may concern:

Be it known that I, SAMUEL S. STALEY, a citizen of the United States, and a resident of the city of Reading, in the county of Berks and State of Pennsylvania, have invented a certain new and useful Improvement in Screens for Automobile Lamps, of which the following is a specification.

The present device limits by a very simple mechanism the spread of the light to the left of the driver. It operates on both lights simultaneously, is normally closed and is opened by the driver.

It consists of a screen for each lamp that stops the portion of the light beam that would spread to the left of the driver, in connection with means for turning these screens, to shut off those portions of the beam to a varying extent. This mechanism yieldingly draws the screens towards the closed position by turning them on hinges by means of springs and positively pushes them into a more or less open position. This positively acting part of the mechanism is under the control of the driver and operated from the driving position.

Fig. 1, is a front elevation of a motor car with the device in operative position. Fig. 2 is a plan view of the device; Fig. 3, is a front elevation; Fig. 4, is a detailed view of the operative portions of the device clamping the lamp. Fig. 5, is a front elevation of the lamp having my device in a modified form, where the screen forms a part of the reflector and is situated within the lamp structure. Fig. 6, is a side elevation of the same with part of the case walls removed; Fig. 7, is a plan view of a lamp containing this modified form of the device, with the upper wall of the lamp removed in part, to show the operative parts of the screen moving mechanism.

The lamps, 1, 1, of an automobile are provided with encircling clamps, 2, 2. These clamps are each provided with supports, 3, at the top; one of these supports carries the bell crank lever, 4, and the other serves as an abutment for the spring, 13; and are also provided with a hinge, 5, that carries the screen, 6. The spring is preferably directly attached to the retainer, 20, and the screen should preferably have a central aperture, 7, that may be filled with a frosted glass, 8, that will allow a mild light to pass through it. I prefer to connect the arm, 9, of the lever, 4 with the screen, 6, by the link 10 to give an easier pull to turn it on the hinges. The link, 10 is connected to the screen by a bearing 11, and a like bearing is also placed upon the other screen between which bearings is the link, 14, running from one bearing, 11 to the other bearing, 11. These bearings, 11 are preferably pivots extending upward from the highest points of the screens. Above the bearing for the link, 14, is placed on one of the screens an arm, 12, to which is secured a spring, 13, that tends to close the screens on the lamp. The clamps, 2, are preferably made with jaws which engage a portion of the lamp casing, connected to each other by the slightly flexible metal bands, 15, 15, 15. The jaw 16, may, very conveniently, be integral with the bearing 3 and the jaw, 17, with the hinge, 5, and the third jaw, 18, may form a clasp by which the clamp is tightened on the lamp, 1. The operating lever, or link 21, is connected to an arm of the lever 4, and runs to a point within easy reach of the driver. A stop, 22, limits the swing of the screen to the left.

The operation of the device is obvious. It can be used to keep any portion of the light from striking the road. It can be arranged to open wide enough to permit the emission of the whole cone of light, and gradually closed until as much of the left hand side of the road is obscured as wished.

In the form illustrated in Figs. 5, 6, and 7, the lamp has two vertical spindles, 25, and 26, the one on the left hand side of the lamp, 25, being somewhat further forward than the one, 26, at the other side of the lamp. The reflector has two detached segments which are movable, and rotate upon the spindles. The segment, 27, is mounted on the spindle, 25, and the segment, 28, on the spindle, 26. The link, 30, connects these segments, and the whole of these parts are so arranged relatively to each other that the rotation of the segment 27, exceeds that of the segment 28. If the segment 28 is turned inward it both changes the direction of the light reflected from it and also cuts off some of the rays coming from the source of lighting. These latter reach, however, the other reflector or its segment, and are reflected out to the right, and so are not lost.

I claim—

1. The combination of two screens, one on each lamp of an automobile and free to move

into a position cutting off the light on the left hand side of the driver, yieldingly acting mechanism tending to cause these screens to shut off the portions of the light extending forward and to the left hand side of the driver, and positively acting mechanism under the control of the driver, acting oppositely to the said yielding mechanism and opening the screens against the pressure of the said mechanism, the said screens being hinged at the left side of the lamps.

2. The device as defined in claim 1 with the following additional element namely;—in conjunction with a clamping band surrounding said lamp and supporting said screens.

SAMUEL S. STALEY.