N. S. STARR AND L. E. COLLIER.

PROTECTIVE DEVICE.

APPLICATION FILED OCT. 13, 1920.

1,391,915.

Patented Sept. 27, 1921.

2 SHEETS—SHEET 1.

Fig. 1.

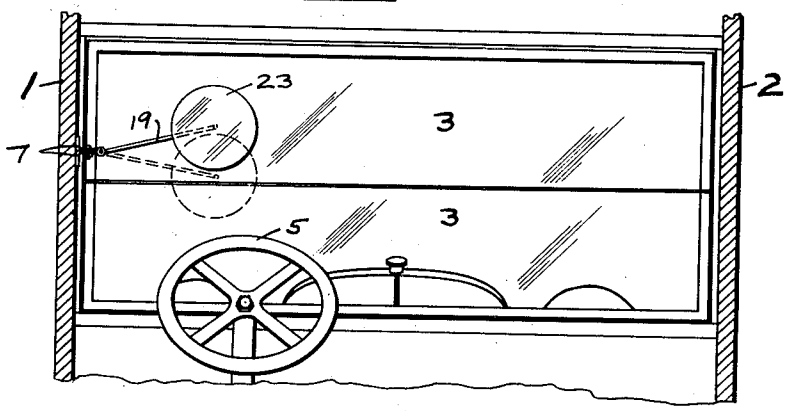


Fig. 2.

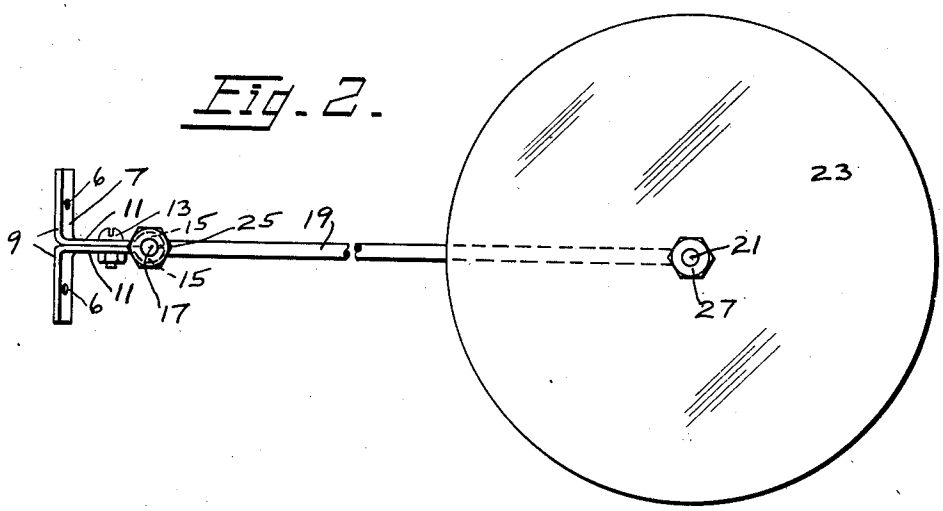
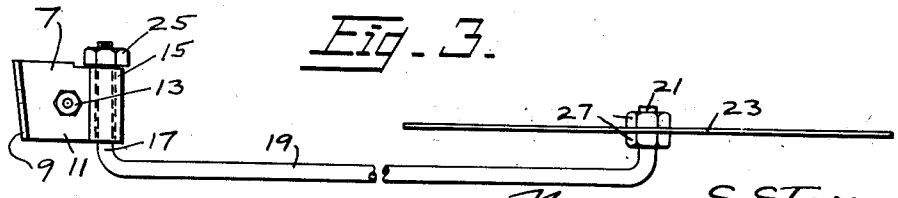


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

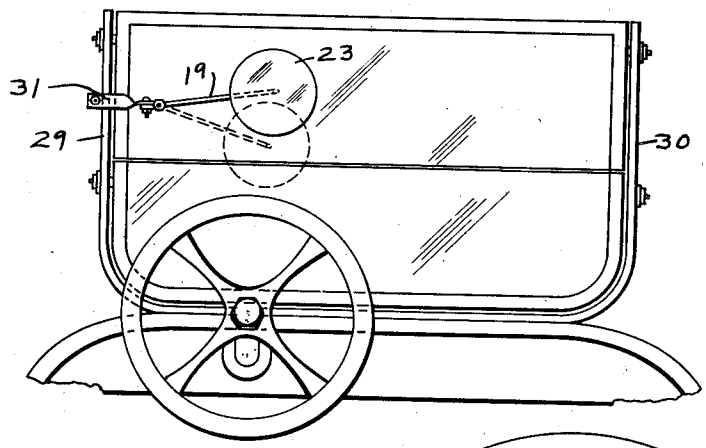


Fig. 5.

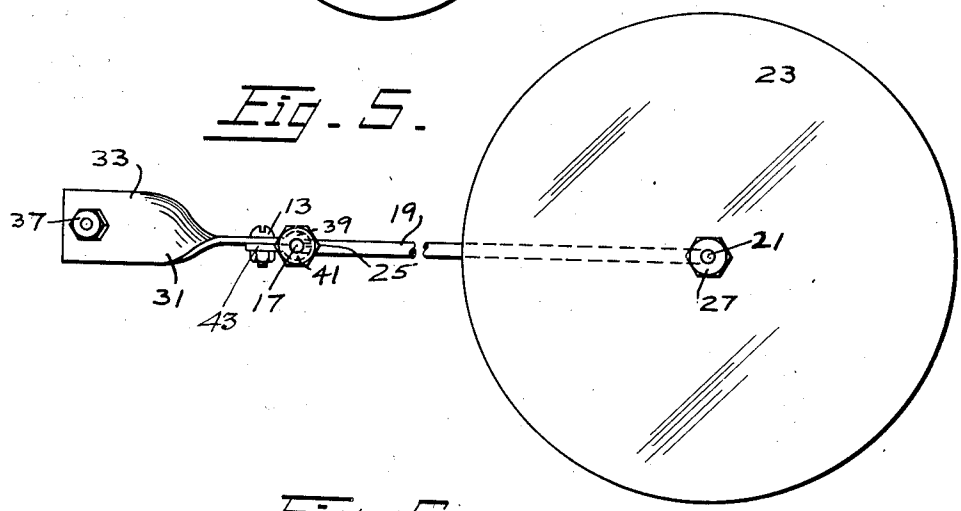
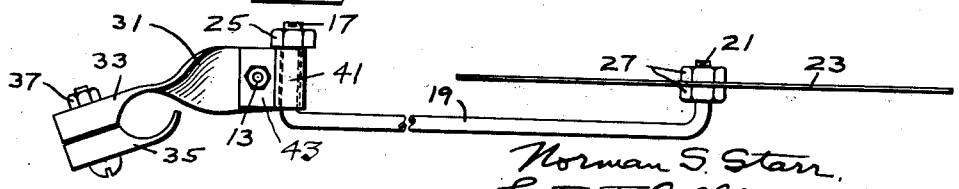


Fig. 6.



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UNITED STATES PATENT OFFICE.

NORMAN S. STARR AND LESTER E. COLLIER, OF MOWEAQUA, ILLINOIS; SAID COLLIER ASSIGNOR TO SAID STARR.

PROTECTIVE DEVICE.

1,391,915. Specification of Letters Patent. Patented Sept. 27, 1921.

Application filed October 13, 1920. Serial No. 416,601.

To all whom it may concern:

Be it known that we, NORMAN S. STARR and LESTER E. COLLIER, citizens of the United States, and residents of Moweaqua, Shelby county, Illinois, have invented an Improvement in Protective Devices, of which the following is a specification.

This invention relates to protective devices, and with regard to certain more specific features, to means for protecting the eyes of the driver of an automobile, from the glare of sunlight, headlights of other automobiles, or other sources of illumination.

Among the several objects of the invention may be noted the provision of a simple and inexpensive protective device adapted to meet the varying requirements of service; the provision of a compact and neat-appearing protector instantly adjustable and adapted to be retained in its several adjusted positions; and the provision of a reliable and durable device serving to give effective protection without materially interfering with the operation of the vehicle. Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly comprises the features of construction combinations of elements, and arrangements of parts, which are exemplified in the constructions hereinafter described and the scope of the application of which will be indicated in the following claim.

In the accompanying drawings, in which are shown two of various possible embodiments of this invention,

Figure 1 is a fragmentary transverse sectional elevation of an automobile, showing the steering wheel, wind-shield and associated parts in rear elevation, and the device of the present invention in position for use,

Fig. 2 is a rear face view of the device *per se;*

Fig. 3 is an end view of Fig. 2;

Fig. 4 is a view similar to Fig. 1, showing a modification;

Fig. 5 is a rear face view of the protective device shown in Fig. 4; and

Fig. 6 is an end view of Fig. 5.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring now more particularly to Fig. 1 of the accompanying drawings, there is illustrated a portion of an automobile, comprising body frame members 1, 2, upon or adjacent which is mounted the wind-shield 3. The steering-wheel 5 is shown, to illustrate the driver's position in the car. The car here shown is of a closed type, as distinguished from the open type of car shown in Fig. 4, hereinafter described.

Mounted on the vertical member 1 by screws 6 or other suitable securing means is a two-part bracket 7, each part having portions 9 bearing against the adjacent surface of the frame 1 and a clamping portion 11 extending therefrom in a horizontal direction approximately perpendicular to said surface. The clamping portions 11 have registering perforations to receive a screw and nut 13 adapted to force the clamping portions together and segmental parts 15 facing one another and forming a bearing for the inner rearwardly-extending end 17 of a rod 19 that extends toward the right (Fig. 1) from the clamp and supports at its outer rearwardly-turned end 21 a translucent disk 23. The disk is thus mounted near the windshield, and on the rear or driver's side thereof.

The inner end of the rod is threaded to receive the retaining nut 25, and the outer end is likewise threaded to receive the cooperating retaining nuts 27 between which the disk 23 is rotatably mounted, yet held tightly enough so that it remains in its adjusted positions.

The disk is here shown as circular. Obviously it may have any desired shape.

The protective device may be attached to a member 1 of an automobile simply by securing the bracket 7 to such member by means of screws or the like, at a height convenient to the driver of the car, that is, the height at which the disk when used in its range of adjusted positions, two of which are shown in Fig. 1, will intercept rays of light such as those from the headlights of approaching automobiles. The length of the rod varies with the distance between the frame member 1 and the desired range of positions of the disk. The disk when in use subtends a small enough angle of the driver's vision so that the disk does not materially interfere with his operation of the car, and yet the rod is within easy reach of the driver so that he can readily adjust it from time to time while the car is in motion to

meet the varying directions, relative to the car, of the light rays to be intercepted. Similarly the member 23 may be rotated on the rod; such adjustment is advantageous when the member 23 is non-circular. The screw and nut device 13 is kept tight enough so that the rod may be easily rotated in the segmental parts 15 of the bracket, and yet securely held in adjusted positions.

During the daytime, and at other times when the protective device is not in use, it may be swung upwardly or downwardly to or near the limit of its travel, and is then out of the way.

The disk has been referred to as translucent. This construction is preferred because it enables the driver to distinguish the headlights or the like and follow their movements. Green celluloid about one-thirty-second inch in thickness has been found to be a suitable material. Colored glass may also be used.

Measurements that have been found suitable in service are, five inches for the diameter of the disk, six to eight inches for the length of the rod exclusive of its bent end-portions, and twenty to twenty-four inches for the distance between the disk and the driver's eyes. With variations in the last figure, due to varying designs of automobiles, the diameter of the disk would be proportionately altered. The length of the rod is also dependent upon the design of the car.

In Figs. 4, 5 and 6 is illustrated a modification particularly applicable to open cars having the wind-shield supported upon vertical rods 29, 30. In this instance the rod 19 is pivotally supported in a three-part bracket 31 comprising coöperating members 33, 35 adapted to fit around the wind-shield rod 29 and to be retained at a suitable height thereon by the screw and nut device 37. The member 33 terminates at its outer end in a horizontal disposed segmental portion 39 cooperating with a similar portion 41 of the third member 43 of the clamp. The second and third members are held together by a screw and nut device 13 provided for the same purpose as in Figs. 1, 2 and 3, namely, to clamp the inner end of the rod in any of its adjusted positions and yet permit the rod to be easily rotated from one position to another.

The operation of the modification shown in Figs. 4, 5 and 6 is the same as indicated above in connection with the embodiments shown in Figs. 1, 2 and 3, except for the manner of connecting the bracket to the car, which will be clear from the above.

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

As many changes could be made in carrying out the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

We claim:

A device of the class described, comprising a translucent celluloid disk member, a rod normally extending in a substantially horizontal direction when in service and having a bent threaded end, means on said end for mounting the disk member and securing it in its adjusted positions, the other end of the rod having a bent end, and a bracket comprising members adapted to be fastened to an automobile at a portion thereof adjacent the wind shield, one of said bracket members terminating in a portion coöperating with an adjacent portion of another member to form a bearing for the second end of the rod, and means for clamping said portions together to retain the rod in its several adjusted positions and yet permit the rod to be rotated within said portions by the driver while the car is in motion, to vary the position of the disk member.

In testimony whereof, we have signed our names to this specification this 8th day of October, 1920.

NORMAN S. STARR.
LESTER E. COLLIER.