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R. C. JACOBS

2,112,464

GLARE SHIELD BRACKET

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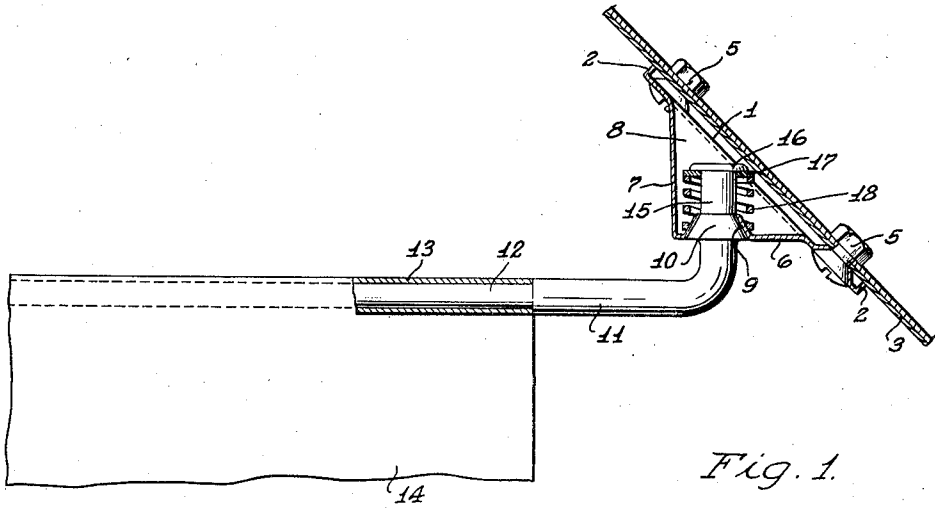


Fig. 1.

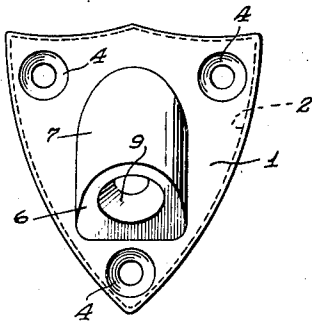


Fig. 2.

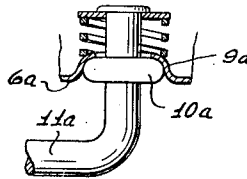


Fig. 5.

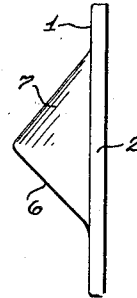


Fig. 3.

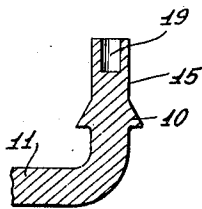


Fig. 4.

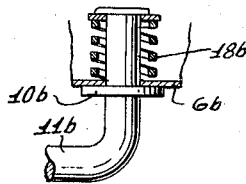


Fig. 6.

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GLARE SHIELD BRACKET

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2 Claims. (Cl. 248—289)

This invention relates to glare shields and means for supporting such shields on a roof header above the windshield of an automobile.

The principal object of the invention is to provide a glare shield embodying a bracket having a conical seat for the reception of a conical head on a bent arm, and means for holding the head within the seat whereby the other part of the bent arm may be swung in a horizontal arc. It is desirable in the interest of neatness in accessories of the type here contemplated that the hinge parts be concealed and in this respect the bracket and rod are so constructed that when assembly is completed and the bracket is attached to the roof header, the hinge parts are entirely concealed from view.

More particularly, the present shield includes a bracket having a conical seat, a bent arm having a headed end received in the seat, and a spring for holding the parts assembled with the head in the seat and for creating sufficient friction between the head and the seat whereby accidental relative movement will not take place. In order to conceal the hinge parts of a glare shield it has heretofore been proposed to mount them on one side of a bracket plate so that they project through and are concealed by the header when mounted thereon. Such structure requires that the header be provided with an opening for the reception of the hinge parts. The present structure does not require such an opening. It has also been proposed to conceal the head end and the spring in a bracket of substantially rectangular form, in which case the rod must extend through two walls of the bracket and have its end disposed at the top. Such constructions are undesirable because they are not neat in appearance, whereas in the present device the end of the rod is concealed within the bracket.

It is another object of the present invention to provide a glare shield bracket assembly wherein the parts are permanently assembled together and in this connection the bracket is so constructed that when the end of the bent arm and the spring have been assembled therein, the end of the rod is accessible so that the device may be placed in a machine for spinning over the end of the rod for permanently retaining the spring thereon.

With the above and other ends in view the invention is more fully disclosed with reference to the accompanying drawing, in which—

Figure 1 is a vertical section of the bracket and glare shield assembly;

Fig. 2 is a front elevation of the bracket;

Fig. 3 is a side elevation of the bracket;

Fig. 4 is a section of a detail;

Fig. 5 is a fragmental section of a modified detail, and

Fig. 6 is a fragmental section of a still further modified detail.

Like characters of reference are employed throughout to designate corresponding parts.

The present bracket is formed by stamping and drawing methods from a sheet metal blank. It comprises a base 1 having a marginal wall 2 extending therearound in such manner that when the bracket is placed against a roof header 3 the marginal wall holds the base 1 spaced therefrom. The bracket has a plurality of holes 4 provided for the reception of securing elements 5 which secure the bracket to the header. The holes 4 are defined by inwardly extending walls, the terminals of which bear against the header 3 so that tightening of the securing elements does not tend to deform the base wall 1.

Extending obliquely from the base wall 1 is a wall 6 having a substantially semi-circular shape. The edge of the wall 6 is integral with an arcuate wall 7 which extends substantially normal thereto and merges with the base wall 1. The walls 6 and 7 thus combine to form a hollow or socket 8 which opens through the inner side of the bracket.

In the wall 6 is formed a conical seat 9, the seat projecting inwardly from the wall 6 so as to be concealed within the hollow or socket 8. Received in the conical seat 9 is a conical head 10 on a bent arm 11 having a part 12 extending into the tubular portion 13 of a glare shield 14. The end 15 of the bent arm, which extends into the hollow or socket 8, is spun over as indicated at 16 to retain a washer 17 thereon. Sleeved on the end 15, between the washer 17 and the outer wall of the seat 9, is a compressed coil spring 18. The spring 18 exerts sufficient pressure on the end 15 to maintain the head 10 in firm contact with the seat 9 and to thereby create friction which tends to hold the head against movement with respect to the seat.

The header 3 is ordinarily disposed at an angle substantially as shown and therefore when the bracket is assembled thereon as above described the seat 9 and head 10 provide a vertical hinge and permit the part 12 to be swung with respect to the bracket in a horizontal arc. It will remain stationary at any point in its arcuate movement because of the piston means above described.

It is contemplated that the bent arm 11 will be "cold headed", in order to provide the head 10

and also that it will be provided with a hole 19 in the end thereof so that the end thereof may be conveniently spun to provide for the retention of the washer 17. Due to the particular formation of the bracket, the end 15, although concealed from view as regards the outside of the bracket, is exposed at the inner side so that it may be placed in a machine for spinning over the end thereof. It will also be noted that the bracket formation is such as to support the end 15 so that it is unnecessary to provide an opening in the header through which it may project as was heretofore done.

In the interest of economy, both as to the conservation of material and ease of manufacture, the bracket is formed of comparatively light sheet metal and obviously in the case of light metal deformation of the bracket is liable to take place. As above described, the bracket is so constructed that it may be tightly secured to the header without deformation taking place. Another consideration in this respect is the lightness of the seat wall and it has been found that it has a tendency to split, sometimes during the forming process and sometimes after it has been placed in use. This condition is met by providing for engagement of the spring 18 with the outer wall of the seat, such engagement tending to hold the same firmly in engagement with the head 10 when splits are present in the wall thereof, and to prevent such splitting or tearing of the wall while the device is in use.

The conical seat and the conical head illustrated and described provide for a durable structure which may be economically manufactured, but it is obvious that the seat and head might take other forms, and the invention is not restricted to the particular formation. For example, as shown in Fig. 5 the bent arm 11a may be provided with a head 10a which, instead of being conical, is formed in the nature of a flange having an arcuate edge when viewed in section. The head 10a is, in this case, received in a correspondingly shaped socket 9a in the oblique wall 6a.

As shown in Fig. 6, the bent arm 11b may be provided with a flange or collar 10b which bears against one surface of the oblique wall 6b, in which case the spring 18b engages the wall 6b in a zone directly opposite the zone engaged by the flange. In this arrangement the spring pressure necessary to create friction for holding the bent arm in positions of adjustment does not tend to distort the comparatively thin wall 6b.

Although a specific embodiment of the invention has been illustrated and described it will be understood that various changes may be made within the scope of the appended claims without departing from the spirit of the invention, and such changes are contemplated.

What I claim is:

1. A glare shield mounting device comprising a bracket formed of sheet metal, said bracket comprising a base wall formed with a concavo-convex portion having a wall extending obliquely with respect to the base wall, said oblique wall having a portion struck inwardly thereof and providing a bearing disposed within the concavity and concealed from the exterior of the bracket, an arm having a portion received in said bearing, and means within said concavity acting upon said arm to hold it in said bearing and to frictionally resist rotation thereof.

2. Supporting means comprising in combination with a sheet metal bracket having a hollow portion through which an aperture extends at an oblique angle to the base of the bracket, an arm carried by the bracket and swingable about the axis of the aperture, said arm having a portion extending through and substantially smaller than the aperture, a shoulder portion carried by the arm and adapted to seat against the outside of the bracket, a head portion carried by the arm on the inside of the bracket, and a combined positioning and friction member carried by the arm and trapped and compressed between the head and bracket.

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