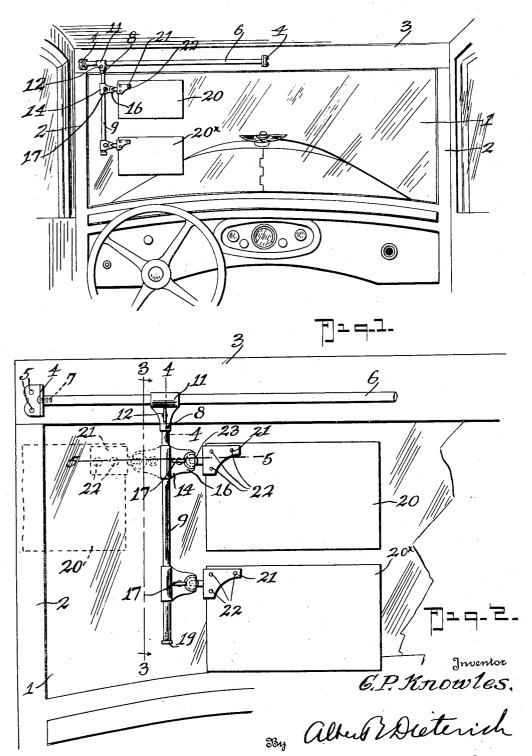
G. P. KNOWLES

GLARE SHIELD

Filed Oct. 26, 1932

2 Sheets-Sheet 1



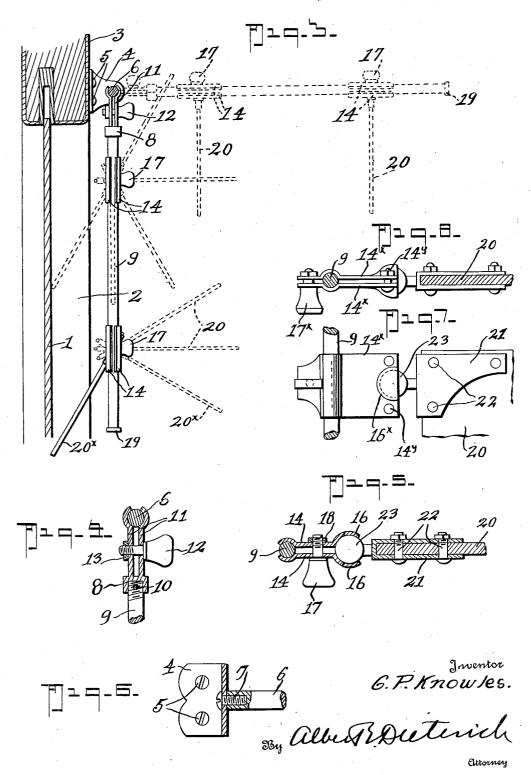
Attorney

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UNITED STATES PATENT OFFICE

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GLARE SHIELD

George P. Knowles, Sumter, S. C.

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5 Claims. (Cl. 296—97)

My invention relates to the art of motor vehi- rod 9 is screwed so that the axis of the rod lies cles and it especially has for its object to provide a glare shield which will adequately protect the driver against blinding light from with-5 out, caused either by the lights of an approaching vehicle or the reflected rays of the sun striking on the hood, the lamps, or some other polished part of the car.

Further, it is an object of my invention to pro-10 vide a glare shield which is of light weight, simple in construction, neat in appearauce, one that can be applied to all cars now in use and one that can be held up out of the way when not in use without occupying much space and without 15 projecting into the way of the operator or pas-

Other objects of my invention will in part be obvious and in part be pointed out hereinafter.

To the attainment of the aforesaid objects and 20 ends, the invention still further resides in the novel details of construction, combination and arrangement of parts, all of which will be first fully described in the following detailed description, then be particularly pointed out in the ap-25 pended claims, reference being had to the accompanying drawings in which:

Figure 1 is a view looking from the driver's seat toward the windshield and illustrating my invention in use.

Figure 2 is an enlarged elevation illustrating several positions of adjustment of the shield

Figure 3 is a cross section on the line 3—3 of Figure 2.

Figure 4 is a detailed section on the line 4-4

of Figure 2. Figure 5 is a cross section on the line 5-5 of Figure 2.

Figure 6 is an enlarged detail view of the rod-40 holding bracket.

Figure 7 is an elevation of another small clamp for the ball and socket joint.

Figure 8 is a top plan view thereof.

In the drawings in which like numerals of reference indicate like parts in all the figures, 1 represents the windshield, 2 the side posts and 3 the cross bar of the frame above the windshield.

To this cross bar 3 are secured by screws 5 50 suitable brackets 4 between which the supporting rod 6 is held by screws 7 passing through the bracket into the ends of the bar. The rod 6 is held horizontally and parallel to the windshield

Mounted on the rod 6 is a first clamp unit 8

normal to the axis of the cross rod 6.

In order that the rod 9 may not accidentally become unscrewed it may also be pinned in the socket of the clamp as at 10. The clamp unit 60 also includes the resilient fingers 11 which grip the rod 6 and are held in any position of adjustment along the rod by means of a clamp screw 12 passing through the fingers 11 into a nut 13 which is brazed, welded, or otherwise secured to 65 one of the clamp fingers. It will thus be seen that the first clamp unit is not only capable of swivel-adjustment around the axis of the rod 6. but is also adjustable along the rod 6 from end to end and may be held in any of its adjusted 70 positions by tightening up the clamp screw 12.

A second clamp unit is provided which is composed of half members 14 having ball-socket elements 16 to receive the ball 23 hereinafter again referred to, a clamp screw 17 and nut 18 being 75 provided to secure the clamp members 14 tightly to the rod 9 and to the ball 23. It will thus be seen that the second clamp unit is not only swivelly adjustable around the axis of the rod 9, but is adjustable along the rod 9 from end to end, 80 there being a stop screw 19 located at the lower or free end of the rod 9 to prevent the second clamp member accidentally slipping off.

20 is the glare shield plate which is composed of colored glass, celluloid, or other suitable ma- 85 terial. It is secured to a holder 21 by bolts 22, the holder having the ball 23 hereinbefore referred to.

It is to be noted that with my construction when the clamp unit 8 is tightened the rod 9 is 90 rigidly held with respect to the rod 6 which is in turn rigidly mounted on the cross bar 3. Therefore the only strain on the ball and socket joint is that due to the weight of the glare shield plate itself. Hence the likelihood of the glare 95 shield plate becoming displaced when once the screw 17 has been tightened is reduced to the

By my arrangement also it will be seen that by loosening the clamp screw 12 the rod 9 may be 100 swung around the horizontal axis of the supporting rod 6 to any of a series of positions as indicated by dotted lines in Figure 3. Likewise when the screw 17 is loosened the glare shield plate may be swung around the axis of the rod 9 to 105 any of a series of positions and also it may be moved universally with respect to the second clamp member by virtue of the ball and socket joint. Hence it is obvious that my glare shield 55 having a rod socket into which one end of a plate can be placed in any position whatsoever 110 necessary to protect the driver from glare, no matter from what direction or angle it may come. Several of the positions of adjustment are illustrated in Figures 2 and 3 of the drawings.

Instead of making the clamp which holds the shield to the rod 9 as indicated in Figures 1 to 5 inclusive, the two parts 14x—14x may be screwed or riveted together adjacent the socket 16x so as to maintain a relatively permanent engagement with the ball 23 and hold the shield plate by retaining friction at any angle to which it may be put. The clamp screw 17x may also be located at the extreme end of the clamp. This construction is illustrated in Figures 7 and 8.

A second shield 20x of like construction to the shield 20 may be used on the same rod 9 with the the first shield if desired. These shields 20x—20x may be superposed or folded together in line with the rod 9 by raising the lower shield and turning it bottom edge up, or both shields may be held edge to edge as one continuous shield. Many other adjustments and combinations of the positions of shields 20x—20x can be made to suit the conditions met with in practice, as will be clearly seen by those familiar with the use of the invention.

I also wish it understood that various changes in the form, proportions and design of the various parts of my invention may be made without departing from the spirit of the same or the scope of the appended claims.

From the foregoing description, taken in connection with the accompanying drawings, it is believed that the complete construction, arrangement and advantages of my invention will be clear to those skilled in the art.

What I claim is:

1. In a glare shield for motor vehicles, a horizontal rod, means for mounting said rod on the top front cross bar of the vehicle above the windshield thereof, a clamp unit longitudinally slidable along and swivelly mounted on said horizontal rod and including means to hold said unit in any position along said rod, a second rod rigidly secured at one end to said clamp unit, a second clamp unit longitudinally slidable along and swivelly mounted on said second rod and including a ball socket and a clamp means for securing said second clamp unit to said second rod in any position along said rod, a glare shield plate, a plate holder secured to said plate and having a ball held in said socket and secured by said securing means of said second clamp unit.

2. In a glare shield for motor vehicles, a horizontal rod, means for mounting said rod on the fop front cross bar of the vehicle above the windshield thereof, a clamp unit longitudinally slidable along and swivelly mounted on said horizontal rod and including means to hold said unit in any position along said rod, a second rod rigidly secured at one end to said clamp unit, a second

clamp unit longitudinally slidable along and swivelly mounted on said second rod and including a ball socket and a clamp means for securing said second clamp unit to said second rod in any position along said rod, a glare shield plate, a plate holder secured to said plate and having a ball held in said socket and secured by said securing means of said second clamp unit, the axis of said second rod being located normal to the axis of said second rod substantially as shown for the purposes described.

3. In a glare shield for motor vehicles, a horizontal rod, means for mounting said rod on the top front cross bar of the vehicle above the windshield thereof, a clamp unit longitudinally slidable along and swivelly mounted on said horizontal rod and including means to hold said unit in any position along said rod, a second rod rigidly secured at one end to said clamp unit, a shield plate, means to mount said shield plate on said second rod, said mounting means comprising a clamp unit longitudinally slidable along and swivelly mounted on said second rod, a plate holder, and a ball and socket joint between said 100 plate holder and the adjacent clamp unit.

4. In a glare shield for motor vehicles, a horizontal rod, means for mounting said rod on the top front cross bar of the vehicle above the windshield thereof, a clamp unit longitudinally slidable along and swivelly mounted on said horizontal rod and including means to hold said unit in any position along said rod, a second rod rigidly secured at one end to said clamp unit, a pair of shield plates, means to mount each plate on 110 said second rod separately from the other, each of said mounting means comprising a clamp unit which is longitudinally slidable along and swivelly mounted on said second rod, a plate holder and a ball and socket joint between said plate 115 holder and the adjacent clamp unit.

5. In a glare shield for motor vehicles, a horizontal rod, means to mount said rod rigidly on the top front cross bar of the vehicle parallel to and above the wind shield, a second rod, a split 120 clamp unit rigidly secured to one end of said second rod and including resilient clamp fingers to grip said horizontal rod and means cooperating with said fingers to secure said clamp in any position along said horizontal rod, said clamp unit 105 being swivelly engaged with said horizontal rod, a second clamp unit swivelly and slidably engaging said second rod and comprising a pair of plates each having one half of a socket for a ball and one half a bearing recess for said second rod, 100 a glare shield plate, a plate holder secured to said plate and having a shank with a ball to lie in the socket of said pair of plates, means to clamp said plates together thereby to grip said second rod and said ball. 135

GEORGE P. KNOWLES.

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