

June 16, 1942.

A. MARTINEK

2,286,219

ANTIDAZZLE DEVICE

Filed July 28, 1938

6 Sheets-Sheet 1

Fig. 1.

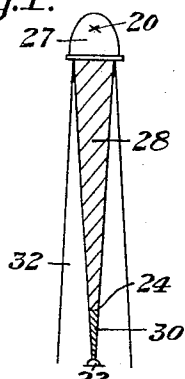


Fig. 2.

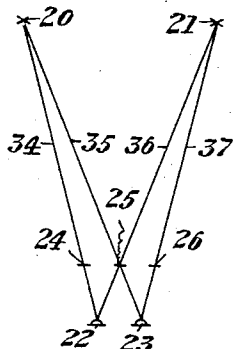


Fig. 3.

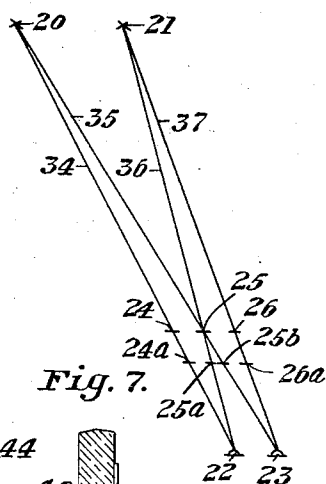


Fig. 4.

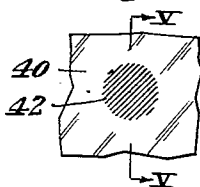


Fig. 5.



Fig. 6.

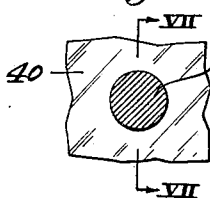


Fig. 7.

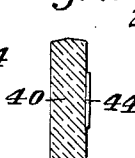


Fig. 8.

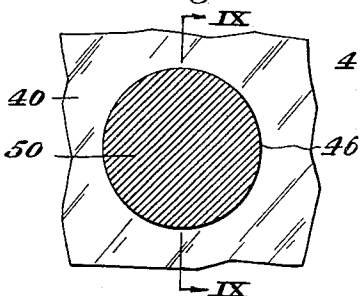


Fig. 9.

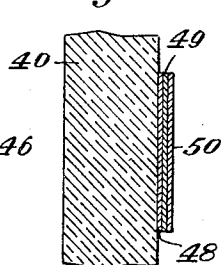


Fig. 10.

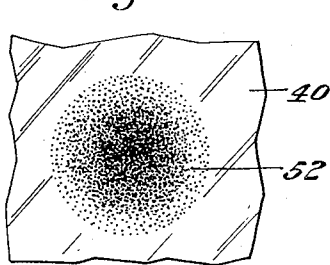


Fig. 11.

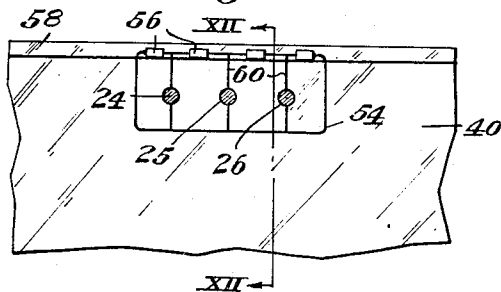
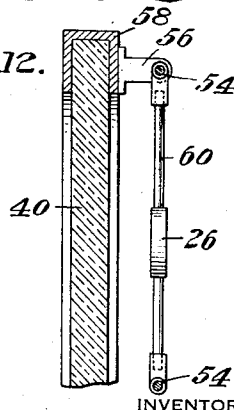


Fig. 12.



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Fig. 15.

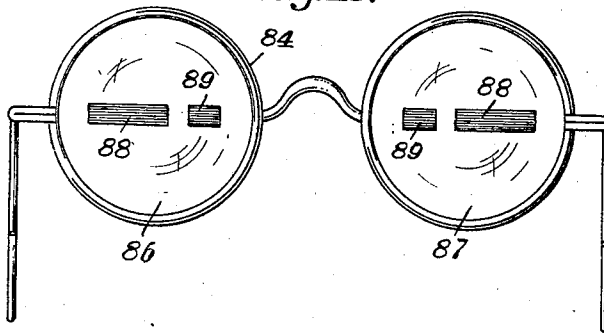


Fig. 16.

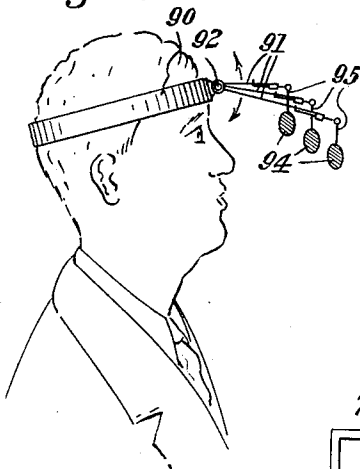


Fig. 17.

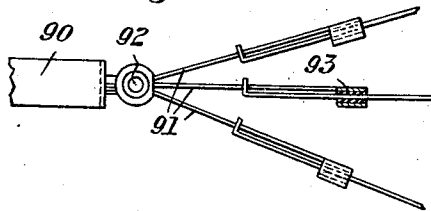


Fig. 18.

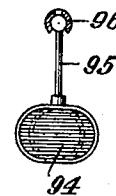


Fig. 14.

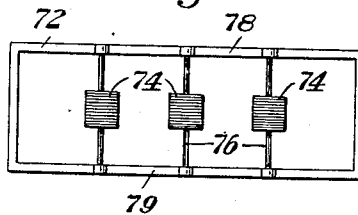


Fig. 13.

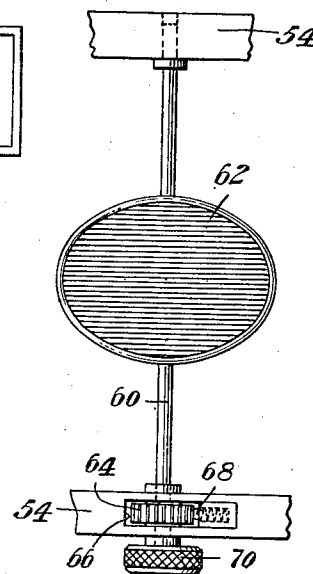


Fig. 19.

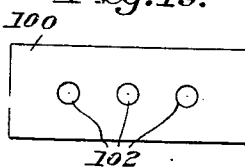
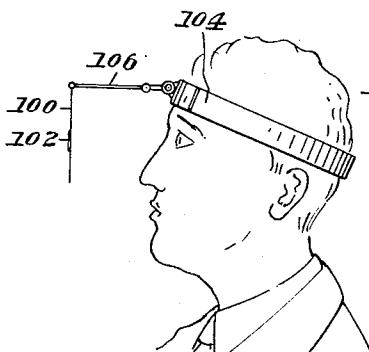


Fig. 20.



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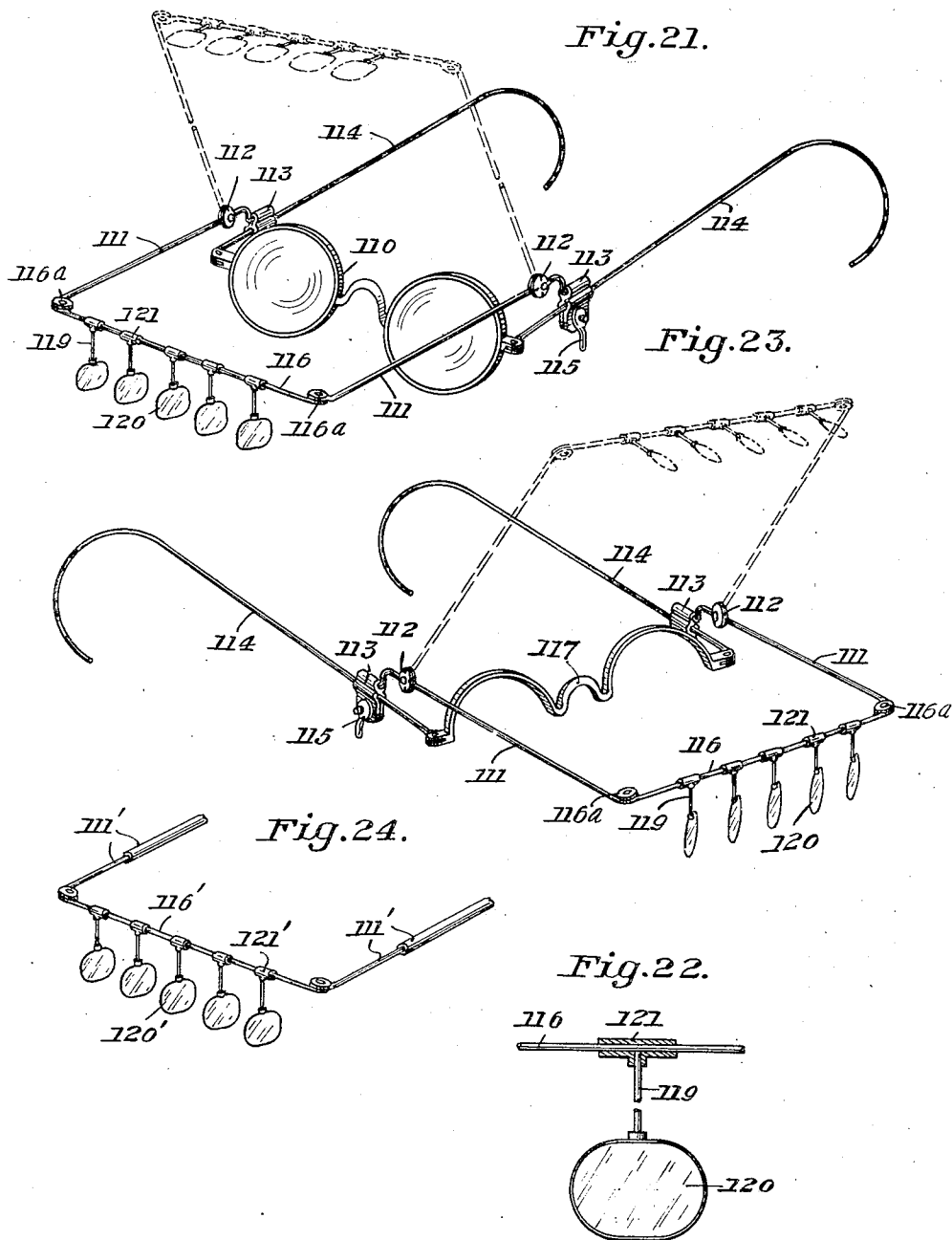
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Fig. 25.

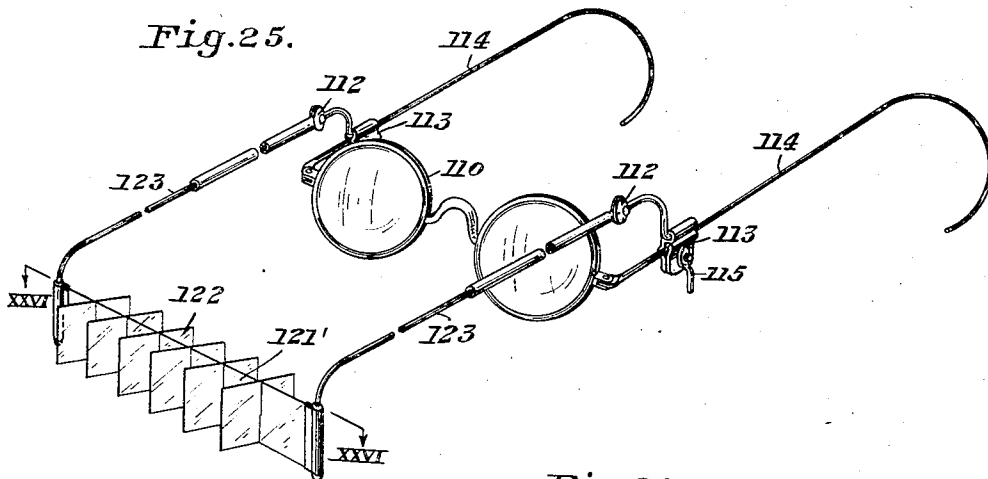


Fig. 26.

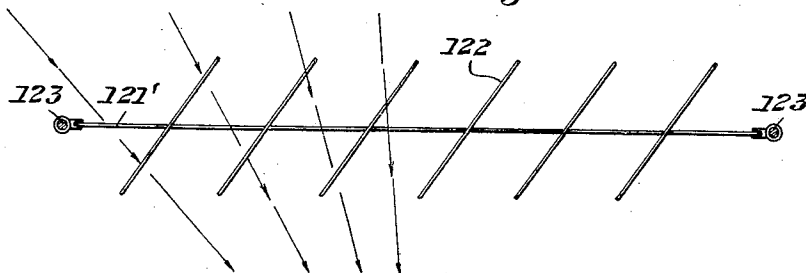
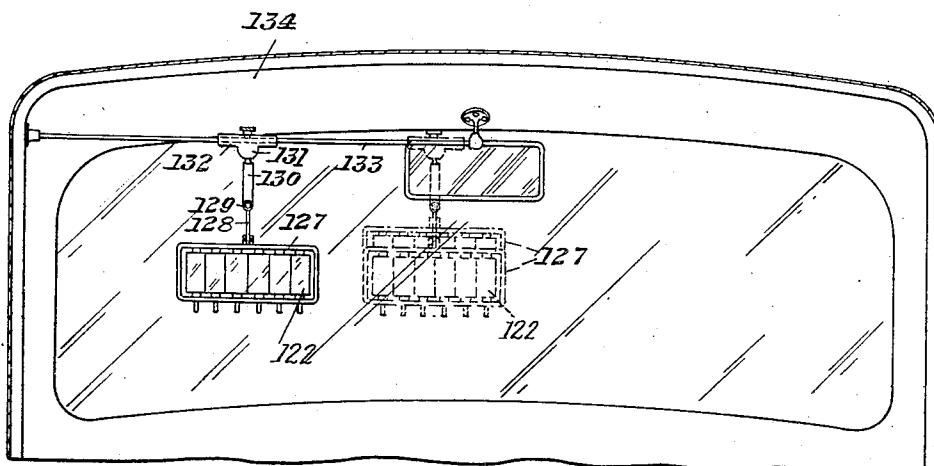


Fig. 27.



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Fig. 31.

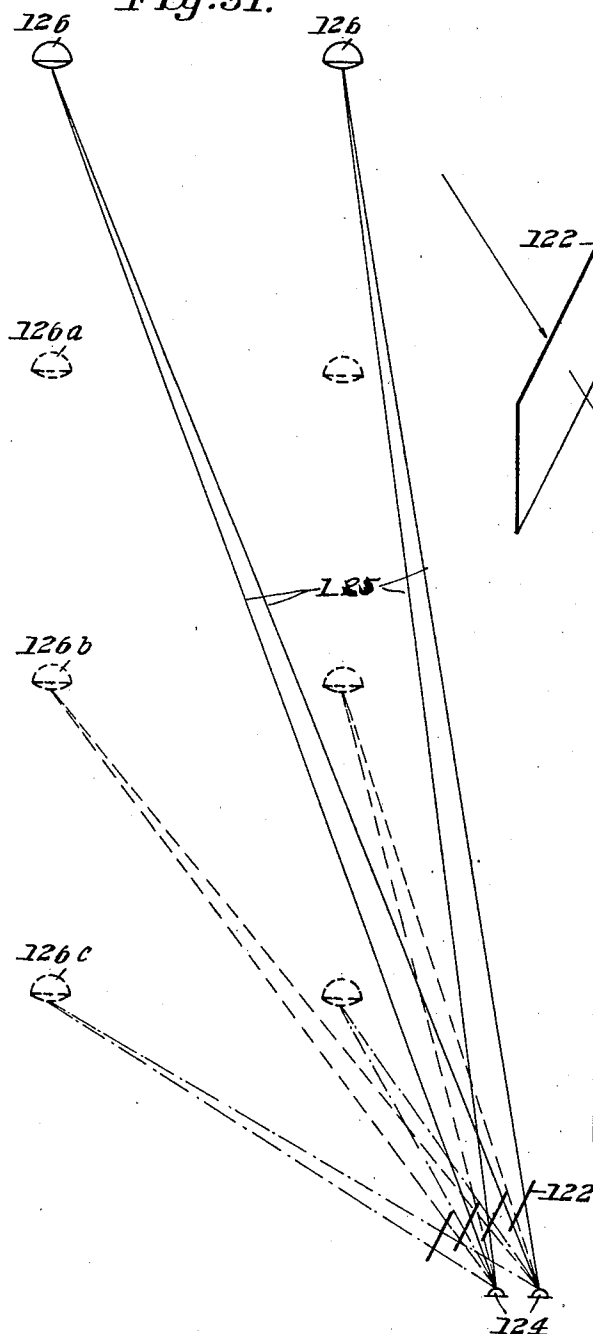


Fig. 32.

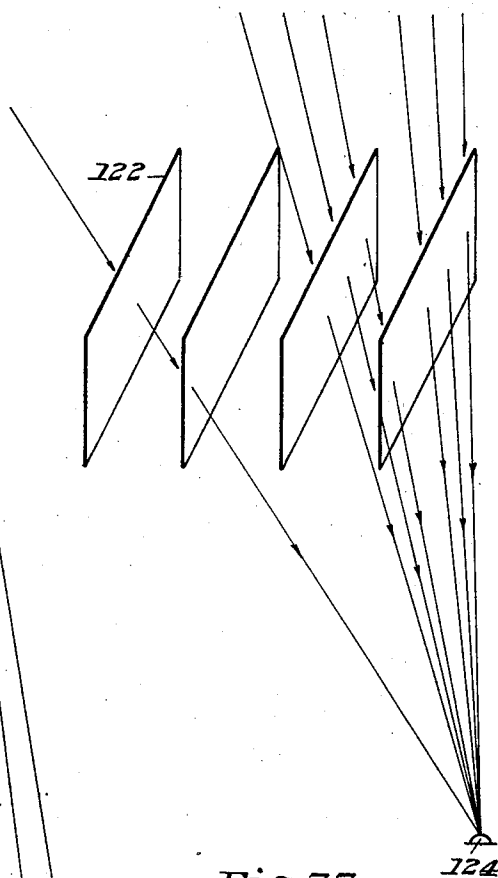
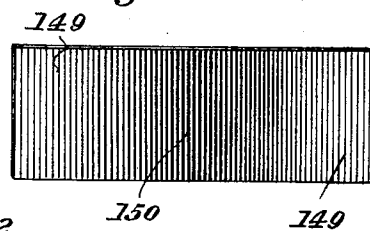


Fig. 33.



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ANTIDAZZLE DEVICE

Anthony Martinek, Pittsburgh, Pa.

Application July 28, 1938, Serial No. 221,764

13 Claims. (Cl. 296—97)

This invention relates to anti-dazzle devices for use in protecting pedestrians, cyclists, motorists and other persons from the dazzling effect of bright lights of various kinds. The invention is particularly applicable for use in diminishing or obviating the glare or dazzling effect on the driver of one vehicle, hereinafter referred to as the driven vehicle, due to the light from the headlamps of the brilliant type carried by a second approaching vehicle, hereinafter referred to as the on-coming vehicle, but it is not restricted thereto.

It is known to use a tinted windscreen constituting a light filter on the driven vehicle for reducing glare, but such tinted windscreens extend across, and to some extent affect, the entire field of vision of the observer. Also, it has been proposed to provide an anti-dazzle device that is to be carried or worn by a person and comprises a screen mounted to swing about a pivotal axis lying above the eyes and the line of sight of the user, the arrangement being such that the field of vision of each eye was divided at the "straight-ahead" line of vision into two parts, one at each side of that line, whereof one part was entirely screened. In other words, the field of vision was screened at one side, so that the fully screened field of vision could be obtained by changing the direction of the line of sight by moving the head and looking sideways, or by looking out of the corners of the eyes. This practice if continued for long periods is likely to injure the eyes.

The present invention has for its main object to restrict the size of the screened part of the field of vision to a minimum just sufficient for its purpose, while leaving the rest of the field of vision clear from any screening effect.

According to the invention there is provided an anti-dazzle device for use between an eye of an observer and a source of light impinging thereupon, wherein a relatively small screen that is to lie in the line of sight joining the eye and the source of light, is of such a size and is to be situated at such a distance from the eye that while effectively obviating the glare and dazzle effect of the said source on the eye, it leaves the remainder of the field of vision clear. The function of the screen is thus partly or wholly to cut off a beam of light which is directed by the source to the eye without intercepting the rays that fall on the face of the observer around the eye. In other words, the shadow of the screen cast by the source of light on the face of the observer substantially coin-

cides with the pupil of the eye. Employing an astronomical analogy and regarding the source of light as the sun and the screen as a transparent or opaque moon, the size and position of the screen in relation to the observer is such that the sun is totally eclipsed by the moon.

When the anti-dazzle device is for use with both eyes of an observer, the two relatively small screens each arranged as set forth in the preceding paragraphs will be spaced apart one from the other across the field of vision and allotted each to one of the two eyes.

When two sources of light that are spaced apart across the field of vision are to be screened simultaneously, the anti-dazzle device may comprise three or more relatively small screens each as set forth above arranged in a row, a middle screen of the row serving to shield one eye from one source, and the other eye from the other source.

The anti-dazzle device may be mounted on the windscreen of a driven vehicle, preferably so as to be movable in relation thereto.

Alternatively, the anti-dazzle device may comprise a support that is to be carried by the user, for example mounted on his head as for example, associated with spectacles or eyeglasses.

Other features of the invention relating to the mounting and arrangement of the screens in various forms will be described hereinafter.

Several embodiments of the invention are diagrammatically illustrated by way of example in the accompanying drawings, wherein:

Figures 1, 2 and 3 are diagrams described hereinafter;

Figure 4 is a fragmentary showing in elevation of one form of anti-dazzle screen according to the invention, and

Figure 5 is a section taken on the line V—V in Figure 4;

Figure 6 is a fragmentary showing in elevation of another screen, and

Figure 7 is a section taken on the line VII—VII in Figure 6;

Figure 8 is a fragmentary showing in elevation of another screen, and

Figure 9 is a section taken on the line IX—IX in Figure 8, and

Figure 10 is a fragmentary showing in elevation of yet another screen according to the invention;

Figure 11 is an elevation showing part of a windshield and one form of anti-dazzle device according to the invention mounted thereon and movably adjustable thereon, and

Figure 12 is an enlarged sectional view taken on the line XII—XII in Figure 11;

Figure 13 is an elevation showing an anti-dazzle device according to the invention mounted rotatably, and

Figure 14 is an elevation showing another form of anti-dazzle device comprising rotatable screens;

Figure 15 is an elevation showing spectacles provided with an anti-dazzle device;

Figure 16 is a view in perspective showing an anti-dazzle device adapted to be worn by the observer;

Figure 17 is a plan view thereof with certain parts omitted for clarity;

Figure 18 is a view in elevation showing a detail, with a portion in section of a detail of the structure of Figure 16;

Figure 19 is a front elevation showing a modified anti-dazzle device adapted to be worn by the observer;

Figure 20 is a side elevation showing the same in use;

Figure 21 is a perspective view of another modification of the device for the use of persons who wear spectacles;

Figure 22 is a view upon a large scale showing partly in elevation and partly in section a detail of the structures of Figures 21 and 23;

Figure 23 is a view similar to Figure 21 showing a form of the device including an ophthalmic mounting without lenses, to be used by persons who do not wear spectacles;

Figure 24 is a partial view in perspective illustrating a further modification;

Figure 25 is a perspective view of a further modified form of the invention including spectacles;

Figure 26 is a view partly in plan and partly in section along the line XXVI—XXVI of Figure 25;

Figure 27 is a transverse sectional view through a motor car body looking forwardly and showing the mounting of a device similar to that of Fig. 25 inside the windshield;

Figure 28 is a view similar to Fig. 27 showing a slightly modified construction;

Figure 29 is a view partly in section along the line XXIX—XXIX of Figure 28 partly in plan;

Figure 30 is a view partly in section upon an enlarged scale along the line XXX—XXX of Figure 28;

Figure 31 is a diagram illustrating the principle on which the devices of Figures 25 to 30 operate;

Figure 32 is a similar diagram to that of Figure 31 and slightly modified; and

Figure 33 is an elevation of one form of individual screen which may be incorporated in the devices shown in Figures 25 through 30.

Like reference characters designate like parts throughout the several views.

Referring first to Figure 1 showing a single source of light 20, one eye 22 and a screen 24 between the source and the eye, the source 20 is mounted in a headlamp 27 which casts a beam of light towards and around the eye 22 of an observer. The screen 24 is small in relation to the field of vision and to the size of the cross-sectional area of the beam of light, and is of such a size and situated at such a distance from the eye that it effectively obviates the glare and dazzle effect of the source of light on the eye, but leaves clear the remainder of the field of vision. From the standpoint of the observer, the beam of

light is thus divided into a central conical portion 28 which is invisible to the observer and casts a shadow 30 on his eye 22, and a surrounding circular portion 32 which illuminates the parts of the observer's face around his eye 22. Preferably, the shadow is so small as substantially to coincide with the pupil of the eye, so that to the observer, the screen 24 has the appearance of a transparent or opaque moon totally eclipsing the light of the headlamp. Consequently, although all glare and dazzle effect is avoided, a clear field of vision around the headlamp is afforded to the observer's eye 22.

Figure 2 diagrammatically illustrates two sources of light 20, 21 in front of the two eyes 22, 23 of an observer, and three screens 24, 25, 26 interposed between the source and the eyes. For the sake of clearness, instead of showing beams of light from headlamps having the light sources 20, 21 two rays of light 34, 35 from the light source 20 and two rays of light 36, 37 from the light source 21 to the two eyes are illustrated. The middle screen 25 of the row of three screens lies at the point of intersection of the two rays 35, 36, and serves to screen the eye 22 from the light source 21 and also the eye 23 from the light source 20, while the two outer screens 24 and 26 each intercepts the rays 34 and 37 respectively from one of the light sources. In this way, the glare from the two light sources 20, 21 on the two eyes is effectively prevented while leaving the remainder of the field of vision clear. It is obvious that the observer has a clear field of vision all round and between the three small screens which occupy a relatively small portion of that field. If the screens lie in a plane other than that including the intersection of rays 35 and 36, the number of screens will be increased to four as shown at 24a, 25a, 25b and 26a in Figure 3.

As is well known, the headlamps of an on-coming vehicle are observed by the driver of a driven vehicle not in the straight-ahead position, but towards one side of the roadway. To meet such conditions, as illustrated in Figure 3, the three screens 24, 25 and 26 are preferably situated not directly in front of the eyes of the observer, but towards the side at which the on-coming vehicle is being driven. To accommodate variations in the direction of the beams of light according to the relative positions of the two vehicles, the size of each screen need not be the minimum described above with reference to Figure 1, in which the shadow coincides with the pupil of the eye, but it may be somewhat larger, so that the shadow will cover the entire eyeball. Further, if the driver moves his head only very slightly laterally in a direction towards the side away from the on-coming vehicle, he can readily accommodate himself to movements of the beams due to the approach of the headlights towards him until the on-coming vehicle is so close that the headlights cause no inconvenience.

Figures 4 and 5 show part of a windshield 40 having a circular anti-dazzle screen 42 integral therewith. This screen may be tinted or opalescent or of some other nature according to the composition of the windshield 40. For example, if the windshield 40 is of glass, the screen 42 may be white opal.

Figures 6 and 7 show a windshield 40 having an anti-dazzle screen 44 affixed thereto on its face nearest the observer.

Figures 8 and 9 show a windshield 40 having an anti-dazzle screen designated generally 46 af-

fixed to its face nearest the observer. This screen 46 comprises a plurality of layers 48, 49 and 50 of differently tinted transparent or translucent material superposed one on another, the various layers of which may be of different colors. When sufficient colors are provided, they may be those of the spectrum.

Figure 10 shows an anti-dazzle screen 52 that is applied to a windshield 40, the degree of transparency of which increases in strength from the centre of the screen towards the periphery thereof, so that it is more opaque at the centre than at its edge. Such a screen may be integral with or attached to the windshield, and its edge may merge into the surrounding clear field of vision.

In some cases, the anti-dazzle screens may be so mounted on the windshield of a vehicle as to be movable in relation thereto. As shown in Figures 11 and 12, a frame 54 is pivotally mounted by means of brackets 56 on the frame 58 of the windshield so as to be movable towards and away from the latter into and out of a position of use. If desired, the frame 54 may be slidable in the brackets 56 in the longitudinal direction of the frame 58, that is parallel to the transverse axis of the driven vehicle. Three stout wires or stems 60, each carrying one of the three screens 24, 25 and 26, are rotatable in the upper and lower longitudinal members of the frame 54, so that the anti-dazzle screens are readily rotatable from a broadside-on position of use into an edgewise out-of-use position, that is, from an operative position relatively parallel to the windshield to an inoperative position relatively normal to the windshield.

The anti-dazzle screens may be circular, oval, rectangular, or of any convenient shape. An oval screen 62 shown in Figure 13 is rotatably mounted in a frame 54 and provided with means for holding it in an adjusted angular position. This holding means comprises a toothed wheel 64 that is fast on the stem 60 in a slot 66 in the frame. A snap-catch in the form of a spring-pressed ball 68 coacts with this wheel for holding the screen in any position into which it is adjusted or a knob 70 fast on the stem 60 is turned. The screen 62 can thus be set at an angle, such for example, as 45°, to the line of vision, so as to appear substantially circular as viewed by the eye.

Figure 14 shows a construction comprising a rectangular frame 72 in which are mounted three or more rectangular screens 74, in a manner analogous to slats of a Venetian blind, so that they can swing about a vertical axis from a broadside-on to an edgewise-on position with respect to the observer. For this purpose, the spindles 76 carrying the screens 74 are journaled with a tight fit in the upper and lower longitudinal members 78, 79, respectively, of the frame 72 and can be turned by hand by the observer. Alternatively, the spindles 76 may be arranged to be rotated as described above with reference to the spindle 60 shown in Figure 13.

The advantage of disposing the screens 62 and 74 at an oblique angle will be explained later, by reference to some of the other figures of the drawings.

Instead of mounting the screens on a windshield they may be carried by a support that is to be worn by the user, for example mounted on his head. Such a construction is shown in Figure 15. A pair of spectacles 84 embodies lenses 86 and 87 upon each of which two screens 88, 89 are mounted. As illustrated, these screens are

rectangular and extend horizontally across the optical axes of the lenses, but in some cases they may be of some other shape and may be situated either just above, or below, or to one side of the axes. The screens on each lens are preferably of such a size that they cut off the glare from both of two approaching headlights and thus perform the function of the screens described above placed further away from the eyes. The screens 88 and 89 function in a manner similar to that of screens 24a, 25a, 25b and 26a shown in Figure 3.

Figures 16, 17 and 18 show another form of device incorporating the invention adapted to be worn by the user. A head band 90 has three or more supporting fingers 91 extending forwardly therefrom being mounted for adjustment in a universal socket 92. Each finger has a telescopic adjustment 93 and an oval screen 94 of glass, Celluloid or the like, mounted on a rod 95 depending therefrom. Each rod 95 is connected to its finger by a ball and socket joint 96.

With the apparatus in place as shown, the user can readily adjust each and all of the screens 94 by hand to the proper positions for cutting off the rays 34, 35, 36 and 37 as indicated in Figure 3. Each screen is preferably positioned by manual adjustment at such an angle to the vertical plane containing the wearer's eyes that the screen appears circular, as shown in dotted lines in Figure 18. This arrangement protects the eyes from the glare of on-coming headlights.

Figures 19 and 20 show a modified construction of anti-dazzle device to be worn by the user. A transparent rectangular support 100 of glass or other convenient material carries three or more anti-dazzle screens 102 which may be of circular, oval or other shape. Headgear comprising a band 104, and one or more rods 106, one end of which is attached to the band and the other end of which is attached to the support 100, pivotally support the screening device so that the anti-dazzle screens 102 are spaced away from the user's eyes in front thereof a distance which may be, for example, three or four inches. When not in use the anti-dazzle device can be swung upwards out of the line of sight of the user.

Each of these screens 88, 89, 94 and 102 may be constructed similarly to those described above with reference to Figures 4 to 10.

Figure 21 illustrates a form of device adapted to be mounted on a pair of spectacles 110 of conventional construction. The anti-dazzle attachment comprises side bars 111 hinged at 112 to clips 113 attachable to the temple bars 114 of the spectacles. A cam lock lever 115 removably holds each of the clips 113 on its temple bar. A cross bar 116 is hinged at 116a to the side bars 111. Screens 120 are rotatably mounted on rods 119 depending from sleeves 121 slidable on the cross bar 116.

It will be understood that the anti-dazzle attachment for spectacles shown in Figure 21 can be tilted up to the dotted line position when not needed or may be entirely removed from the spectacles by releasing the locking levers 115 and opening the clips 113. The anti-dazzle attachment, furthermore, may be folded in the manner of ordinary spectacles, by virtue of the hinges 116a. Each of the screens 120 may be individually adjusted angularly and transversely.

Figure 23 shows a structure identical with that of Figure 21 except that the anti-dazzle attachment is mounted on a frame 117 without lenses,

for the use of persons who do not wear spectacles.

Figure 24 shows a modification of the attachment illustrated in Figs. 21 and 23. According to this modification, side bars 111' are constituted by telescoping members permitting back and forth adjustment of the cross bar 116' hinged thereto. Screens 120' are rotatably mounted on sleeves 121', the sleeves being slidable on the cross bar as already described. Figure 24 shows five screens 120'.

Figure 25 illustrates a further modification of anti-dazzle device comprising a transverse screen 121' having a plurality of separate screens 122 spaced therealong and disposed at an oblique angle thereto. The screens 122 are parallel to each other and are rigidly secured in any convenient manner to the screen 121'. All the screens are composed of transparent colored material. The device is supported by side bars 123 extending forward from hinges 112 and clips 113, as in the structure shown in Figures 21 to 23. While Figure 25 shows a device mounted on spectacle frames, it may also be mounted on a lensless frame as in Figure 23.

Figures 31 and 32 illustrate how the devices of Figures 25 and 26 operate to shield the wearer from glare, and also those of Figures 28 and 29, as will later be evident. As there shown, the wearer, whose eyes are indicated at 124, may look forward through the screens 122 in such manner that light rays reflected from objects in view traverse only one of the screens. If the observer looks laterally toward the left, however, the light rays impinging on his eyes traverse a plurality of the screens 122. The effectiveness of the device in shielding the observer's eyes from the glare created by approaching head lamps is illustrated by the lines 125 representing light rays from head lamps 126 passing through successive positions 126a, 126b, etc. It will be noted that the closer the head lamps come to the observer's eyes, the greater is the screening effect produced to protect the observer from glare, the direct light from the head lamps then passing through a plurality of screens as clearly shown in Figures 26 and 31. At the same time, his straight ahead view is not impaired, his view then passing through but one screen, likewise as clearly shown in said figures.

In the subjoined claims for convenience I characterize as "transverse" the plane of the shield as a whole which intersects the line of sight of the user at substantially a right angle as he looks ahead at an oncoming car at a substantial distance away. Such a plane obviously is approximately normal to the longitudinal axis of the motor vehicle with which the shield is used, the variation from normal being chiefly a product of the fact that the line of sight of both eyes of the driver is not accurately speaking a line at all but is a horizontal section of a cone the base of which is the distance of approximately two and one half inches between the human eyes and the apex of which is the source of light all as clearly shown in Figure 31 and of the fact that as the car approaches this cone swings more to the driver's left. Each line of sight between each eye and each source of light at all positions of the oncoming car will intersect at least one screen, according to the forms of the invention shown in these Figures 25 through 32. It will be readily seen therefore that in the forms of the invention illustrated in these figures the individual screens are placed so close together in relation to their length and angular relation to the

transverse plane that necessarily the leading edge of each (except of course the one on an end) is disposed in a line substantially normal to this transverse plane which intersects the trailing portion of an adjacent screen. It is also clear from the foregoing portion of this specification and from the drawings that the trailing edge of the screen placed on that one end (the right end in those parts of the world in which vehicles pass to the right) necessarily will be intersected by a line substantially normal to the transverse plane of the shield which passes through the leading edge of the adjacent screen, without giving account to the slight variation due to binocular vision. The angular and spatial arrangement which is necessary to accomplish certain of the important results of my invention must fall within the foregoing definition and meet the test that at least one screen must always be interposed between each eye of the driver and the direct rays of the oncoming vehicle, the group of screens which compose my unitary shield thereby in practical effect forming one continuous screen but of greater effectiveness when the glare is greater.

Figure 32 shows this method of functioning but on a somewhat larger scale, the screens 122 being shown in isometric.

Figure 27 shows a combination of screens 121' and 122 mounted within a suitable frame 127 carried on a rod 128. A hinge joint 129 connects the rod 128 to a rod 130. The latter is connected by a universal joint 131 to a slide 132 movable along a guide rod 133. The latter is secured to a motor car body 134 of usual construction just above and inside the windshield. As illustrated in dotted lines, the anti-dazzle device of Figure 27 may be shifted laterally to the most convenient position for the driver, to serve the requirement of either the "keep right" or "keep left" rule of traffic. In case of a right-hand drive motor car, of course, the rod 133 would be disposed on the right-hand side of the body instead of the left as shown.

Figure 28 shows a further modification in which screens 122' are mounted in a frame 135 for individual adjustment by means of knobs 136. The screens are preferably adjusted as shown in Figure 29.

It will be observed from a comparison of Figures 29 and 31 and 32 that the principles of operation of the screens 122' are as shown in Figures 31 and 32. From an inspection of Figure 29, it will be observed that each of said screens is adjustably mounted for rotation upon a vertical axis each spaced in a line along said frame from the others thereof, the distance from front to rear between the vertical axis of each of said screens and a vertical edge of said screen being substantially greater than the distance between said axis and the vertical axis of a screen adjacent thereto. It will also be noted by an inspection of Figure 31 that the arrangement stated by the above sentence, without the element of adjustability, is exemplified therein. The frame has a slide 137 adjustable along a supporting rod 138. The ends of the latter are bent at right angles to each other, one end being received in the sleeve 139 and secured by a wing screw 140. The sleeve 139 is hinged at 141 to a hanger rod 142 hinged at 143 to a support 144 secured to the car roof. The hinges 143 and 141 permit swinging movement in planes at right angles to each other.

Figures 28 and 29 also illustrate screens 145

adjustably mounted before the usual rear vision mirror 146. The screens are carried on supporting rods 147 hinged to a vertical shaft 148. The screens 145 serve to shield the eyes of the operator of a motor car from the glare produced by the head lamps of cars approaching from the rear. As shown in Figure 29, the operator, when looking in the mirror 146 sees the images of the screens 145 laterally displaced from the screens themselves so that practically the entire surface of the mirror is shielded.

Figure 30 shows how the modifications of Figure 28 may be swung upwardly out of the way for daytime driving.

Figure 33 shows a type of screen suitable for the forms of the invention shown in Figures 25 through 30. This screen has a density which is less at the side portions 149 thereof than at the center portion 150. A screen of this type is even more effective than a screen of uniform density in providing increased glare protection as the headlights of an on-coming car approach the observer.

The form of the invention shown in Figures 25 through 30 is particularly effective in protecting the user against the glare produced by a succession of approaching cars, since they provide a continuous screening band or strip. It will be obvious furthermore, that the screens 122 and 122' should be inclined in a direction opposite to that shown in Figure 26 for use in territories where the traffic rule is "keep left".

When one or more layers of transparent or translucent material are employed in an anti-dazzle screen, it may consist of glass, the material known by the registered trade-mark "Cello," Celluloid, preferably non-inflammable Celluloid, or the like.

It will be appreciated that when in use, the improved anti-dazzle device whether mounted on the windshield or on the head of the driver of a driven vehicle has the effect of dimming the dazzling lights of on-coming vehicles while it leaves clear his sight for the rest of the field of vision. This enables the driver to see even behind the on-coming vehicle, it being immaterial whether the driven vehicle is using its own headlights either full strength or dimmed. In other words, the possibility exists that two vehicles moving in different directions towards each other can use their headlights at full strength without impairing the sight of the drivers of the two vehicles if both are equipped with the described anti-dazzle device.

Various modifications may be made in the details of construction described above without departing from the invention. For example, in some cases, wholly opaque screens, e. g. of metal, may be employed. Also, in some cases, the screens may lie in planes that are parallel to, but at different distances from the plane containing the eyes of the observer. Further, when the anti-dazzle device is for use with more than two sources of light likely to affect the observer, the device may comprise more than three relatively small screens of the kind described above arranged in a row. The device in the forms shown in Figures 15 and 16 may also be used as sun glasses.

The forms of the invention shown in Figures 15 through 20, in addition to avoiding the dazzling of the wearer by the light from on-coming vehicles, also serve to prevent glare from the head lamps of following cars upon reflection from the usual rear vision mirror, at the same

time the general field of vision is unobscured as in the case of the use of the device as protection against the glare from on-coming vehicles.

I claim:

1. A unitary anti-dazzle shield adapted for use before the eyes of a driver of a vehicle and directly in his line of vision, said shield being made up of a plurality of transparent light-obscuring screens, a mounting upon which said screens are disposed in vertical and spaced relation to each other and at substantial oblique angles of the order of twenty-five degrees or more to a transverse plane of said shield approximately normal to the longitudinal axis of said vehicle and so close together in relation to their dimension from front to rear and angular relation to said plane that substantially all light rays approximately parallel to said axis striking and traversing said shield will traverse at least one screen thereof and substantially all light rays striking and traversing said shield at a substantial angle to said line and from the direction opposite that toward which said screens are inclined will traverse a plurality of said screens, and means for attaching said mounting so that it may be disposed directly before the eyes of the driver of said vehicle.

2. An anti-dazzle shield comprising a plurality of transparent light-obscuring screens, and a unitary mounting upon which said screens are vertically disposed in spaced relation to each other which is adapted to be placed across the field of vision of a driver of a motor vehicle, said mounting including means by which it may be attached so that it may be placed directly before the eyes of said driver, each of said screens being disposed at an oblique angle of the order of twenty-five degrees or more to a line of sight extending between an eye of said driver thereof and a head light of an oncoming vehicle and with its leading edge inclined away from the side upon which said oncoming vehicle may lawfully pass said driven vehicle and at such distance from and in such angular and spatial relation to the screen adjacent thereto that all light rays from said head light while said oncoming vehicle is substantially straight ahead of said driver which strike and traverse said shield will traverse at least one of said screens making up said shield before reaching said eye while substantially all rays from said head light when said oncoming vehicle is relatively adjacent said driven vehicle and hence in lateral relation to the driver which strike and traverse said shield will traverse a plurality of said screens thereby subjecting the light from the oncoming vehicle to greater screening effect while said oncoming vehicle is adjacent and said light more dazzling than when said oncoming vehicle was relatively distant.

3. A unitary anti-dazzle shield adapted for use directly before the eyes of a driver of a vehicle, said shield comprising an obscuring screen disposed in a transverse plane of said shield, a plurality of other transparent light-obscuring screens mounted to intersect said transverse screen at oblique angles thereto of the order of twenty-five degrees or more and in vertical and spaced relation to each other whereby light striking said shield in a direction substantially normal to said transverse plane is subjected to less screening effect than light striking said shield when coming from a point disposed in advance of said shield and at the side of the longitudi-

nal axis thereof which is opposite that to which said oblique screens are inclined, and means for attaching said shield so that it may be placed before the eyes of said driver.

4. An anti-dazzle shield adapted for use before the eyes of a driver of a vehicle, said shield being made up of at least three transparent light-obscuring screens, a mounting in which said screens are disposed vertically in a row at a degree of obliquity of the order of twenty-five degrees or more to a transverse plane of the shield and forming a unitary structure, the leading edge of each of said screens except the screen disposed at one end of the row being intersected by a line which is approximately normal to said transverse plane and intersects the trailing portion of the screen adjacent thereto and the trailing edge of said end screen being intersected by a line which is approximately normal to said plane and intersects the leading edge of the screen adjacent thereto, and means for attaching said mounting so that it may be placed before the eyes of said driver.

5. A spectacle frame including anti-dazzle shielding means, said frame comprising temple bars, side bars extending forwardly therefrom, a cross bar extending between said side bars, and a plurality of transparent light-obscuring screens vertically mounted upon said cross bar at a substantial degree of obliquity to said cross bar, the leading edge of each of said screens except the one disposed at one end of the row being intersected by a line which is approximately normal to said cross bar and intersects the trailing portion of the screen adjacent thereto and the trailing edge of said end screen being intersected by a line which is approximately normal to said cross bar and intersects the leading edge of the screen adjacent thereto.

6. An anti-dazzle attachment for spectacle frames or the like comprising side bars, a cross bar extending between said side bars, a plurality of transparent light-obscuring screens mounted on said cross bar at a substantial degree of obliquity to said cross bar, the leading edge of each of said screens except the one disposed at one end of the row being intersected by a line which is approximately normal to said cross bar and intersects the trailing portion of the screen adjacent thereto and the trailing edge of said end screen being intersected by a line which is approximately normal to said cross bar and intersects the leading edge of the screen adjacent thereto, and releasable means for securing said attachment to a spectacle frame having the usual temple bars, said releasable means including devices for releasably attaching said side bars to said temple bars.

7. A spectacle frame including anti-dazzle shielding means, said frame including the usual temple bars and usual cross bars adapted to support spectacle lenses, side bars extending forwardly from said temple bars to a point in advance of said usual cross bars and hingedly connected upon horizontal axes to said temple bars, a shield cross bar extending between said side bars at a point in advance of said usual cross bars, and at least three transparent light-obscuring screens vertically mounted on said shield cross bar at a substantial degree of obliquity to said shield cross bar, the leading edge of each of said screens except the one disposed at one end of the row being intersected by a line which is approximately normal to said shield cross bar and intersects the trailing portion of the screen ad-

jacent thereto and the trailing edge of said end screen being intersected by a line which is approximately normal to said shield cross bar and intersects the leading edge of the screen adjacent thereto, the hinged connection of said forwardly extending side bars permitting said screens to be tilted out of the line of the user's sight when they are not needed.

8. A spectacle frame including an anti-dazzle shield, said frame comprising usual temple bars, a cross bar including a nose bridge hinged upon vertical axes to each of said temple bars and extending therebetween, side bars extending forwardly from each of said temple bars, a shield cross bar extending between said extensions and hinged thereto upon vertical axes, and a plurality of transparent light-obscuring screens making up said shield obliquely mounted on said shield cross bar at a substantial degree of obliquity to said shield cross bar, the leading edge of each of said screens except the one disposed at one end of the row being disposed in a line which is approximately normal to said shield cross bar and intersects the trailing portion of a screen adjacent thereto and the trailing edge of said end screen being intersected by a line which is approximately normal to said shield cross bar and intersects the leading edge of the screen adjacent thereto.

9. An anti-dazzle shield comprising a plurality of obscuring screens vertically disposed in spaced relation to each other in a unitary mounting and means for positioning said shield upon a motor vehicle in a plane substantially normal to the longitudinal axis of said vehicle and directly across the field of vision of a driver thereof, each of said screens being disposed at a substantial oblique angle of the order of twenty-five degrees or more to said plane and with its leading edge inclined away from the side of said driven vehicle upon which an oncoming vehicle may lawfully pass said driven vehicle, the degree of obliquity of said screens to said plane in relation to their length and spacing being such that a line substantially parallel to said longitudinal axes of both of said vehicles while they are at a relatively great distance from each other and substantially in a straight line projected through said shield will intersect at least one of said screens thereby subjecting light from a head light of said oncoming vehicle while so distant to the light modifying action of one screen and being such that a line projected through said shield which will impinge upon a head light of said oncoming vehicle when it is in adjacent and lateral relation and about to pass said driven vehicle upon said lawful side, said line being substantially angular to both of said axes, will intersect a plurality of screens thereby subjecting such more dazzling light to greater light obscuring effect.

10. An anti-dazzle shield comprising a support which is adapted to be placed across the field of vision of a driver of a motor vehicle, at least three transparent light-obscuring screens, and means for adjustably mounting each of said screens for rotation upon a vertical axis each spaced in a line along said frame from the others thereof, the distance from front to rear between the axis of each of said screens and a vertical edge of said screen substantially parallel to said axis being substantially greater than the distance between said axis and the axis of a screen adjacent thereto.

11. An anti-dazzle shield adapted to be dis-

posed before the eyes of a driver of a vehicle, said screen being made up of at least three transparent light-obscuring screens composed of material the degree of translucency of which progressively differs from the center toward the periphery thereof, a mounting wherein said screens are vertically disposed in a row at a substantial degree of obliquity to a transverse plane of the shield, said screens and said mounting forming a unitary structure, the leading edge of each of said screens except the screen disposed at one end of the row being intersected by a line which is normal to said transverse plane of the said shield and intersects the trailing portion of the screen adjacent thereto and the trailing edge of said end screen being intersected by a line which is normal to said plane and intersects the leading edge of the screen adjacent thereto, and means for attaching said mounting so that said screens are directly disposed before the eyes of said driver.

12. A unitary anti-dazzle shield for disposition upon a motor vehicle which has attached thereto a supporting fixture, said shield including a support and a plurality of transparent light-retarding screens vertically mounted upon said support each at a substantial degree of obliquity of the order of twenty-five degrees or more to the transverse plane of said shield, the leading edge of each of said screens except the screen disposed

at one end of the row being intersected by a line which is approximately normal to said transverse plane and intersects the trailing portion of the screen adjacent thereto and the trailing edge of said end screen being intersected by a line which is approximately normal to said plane and intersects the leading edge of the screen adjacent thereto, and a movable connection attached both to said fixture and said support by means of which said support may be moved between a first position wherein said shield is disposed within the usual operating field of vision of a driver of the motor vehicle and with the plane of its support substantially normal to the longitudinal axis of the motor vehicle and a second position wherein said shield is disposed without said usual field of vision.

13. An anti-dazzle shield adapted for use directly before the eyes of a driver of a vehicle, said shield being made up of at least three transparent light-obscuring screens vertically obliquely mounted in a row a substantial distance from each other and forming a unitary structure the vertical edges of certain of said screens being extended different distances from a transverse plane of said shield substantially normal to a line parallel to the longitudinal axis of said vehicle and intersecting said screens.

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