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1,963,716

GLARE INTERCEPTING EYESHIELD

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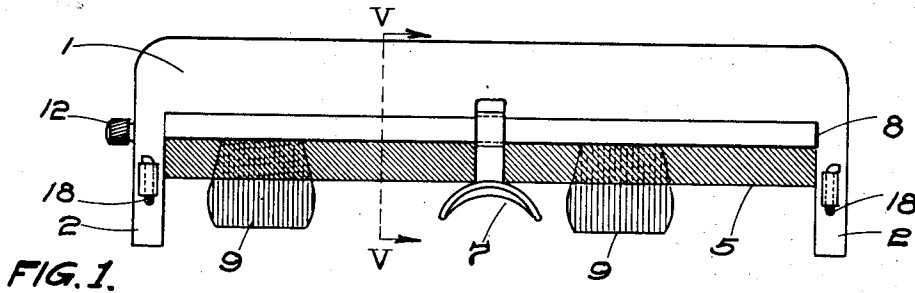


FIG. 1.

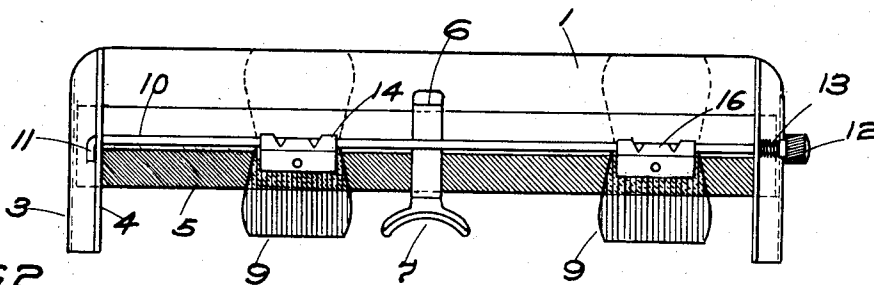


FIG. 2.

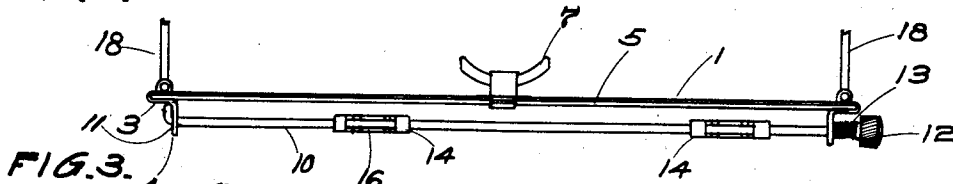


FIG. 3.

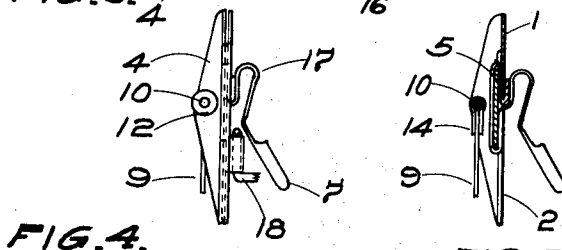


FIG. 4.

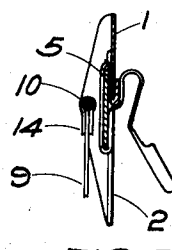


FIG. 5.

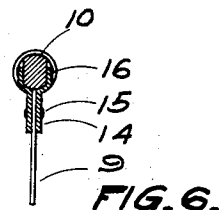


FIG. 6.

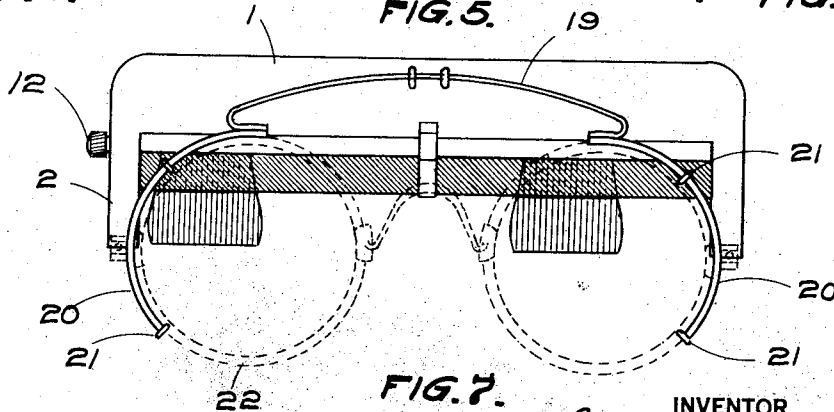


FIG. 7.

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GLARE-INTERCEPTING EYESHIELD

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4 Claims. (Cl. 2—12)

This invention relates to a glare-intercepting eye-shield which is intended especially for the use of drivers of automobiles, but it is well adapted for other uses where it becomes necessary to shield the eyes of the user from the glare of an intensely bright light.

The shield illustrated in the accompanying drawing is adapted to shield the eyes of the user from the glare of on-coming automobiles as well as from those that are approaching from or following in the rear, in which latter case, the glare is reflected from the mirror which is positioned in the car of the user in front of and somewhat above the driver's eyes.

Hereafter, in this specification, for the sake of brevity as well as certainty of reference, the interceptor of glare from an on-coming car will be termed the red interceptor, and the interceptor of glare from a car in the rear, which glare is reflected from the mirror in the car of the user, will be termed the green interceptor as indicated in the drawing.

Applicant has discovered that the most efficient and satisfactory organization for the purpose specified, is one in which the red intercepting elements for the glare of on-coming automobiles may be positioned so that the right hand, vertical edge of each of said elements will be about opposite the center of the pupil of the eye of the user, with the intercepting body of said element extending to the left, substantially as shown in Fig. 1 of the drawing; when so positioned the view directly ahead is not intercepted, but the eyes are effectually shielded from the glare of the lights of an automobile that is passing to the left of the user of the eye shield; in order to attain this mode of operation, the red interceptors are made independently adjustable to either the right or the left, to suit individual cases as to pupillary distance, eye defects, individual characteristics, preferences, etc.

The construction of my improved glare-quenching organization is clearly shown in the accompanying drawing, in which:

Fig. 1 is an elevation of the rear face of the organization, and by the term "rear face" is meant the face which is in juxtaposition to the face of the wearer.

Fig. 2 is an elevation of the front face of said organization.

Fig. 3 is a view looking downward upon the top edge of Fig. 2.

Fig. 4 is an end view of the left end of Fig. 1.

Fig. 5 is a section on line V—V of Fig. 1.

Fig. 6 is a vertical section through the red interceptor and its carrying rod.

Fig. 7 is a rear elevation of this device showing how it is adapted to be attached to and worn with spectacles, the term "spectacles" being here employed as defined in Webster's New International Dictionary, at definition "4".

The primary member of this organization consists of a frame having a beam portion 1, which is provided at each end thereof with downwardly extending legs 2; as illustrated in these drawings said frame is formed from sheet metal; the metal is removed intermediate the legs and each end is folded upon itself so that each leg is composed of two thicknesses of metal, then the inner edges of the folded over portion 3 is again bent outwardly to form the outwardly, or forwardly projecting flanges 4 which project perpendicularly to the forward face of the frame; within the interstices formed between said folded over portions is inserted an end of the green interceptor 5, as indicated in dotted lines in Fig. 2 and in full lines in Fig. 3; at the central portion of said frame said interceptor 5 is additionally secured to the frame by means of the clip 6, which clip serves also as an attaching means for the nose-piece 7.

For the purpose of imparting longitudinal stiffness to the beam 1, the lower portion of the metal thereof, intermediate said legs 2 is bent upwardly upon itself into contact with the adjacent inner face of the metal, as indicated at 8.

The red interceptors 9 are mounted upon said frame in the following manner: Flanges 4 are each provided with a suitable eye for the reception of the adjacent ends of a carrier rod 10 which extends longitudinally across the front face of frame; one end of said rod is bent at a right angle, as at 11, for contact with the opposing outer face of the adjacent flange 4; the other end of said rod is provided with a small thumb-wheel 12, between the inner face of which and the opposing face of the adjacent flange 4 is interposed a compression spring 13; the state of compression of said spring 13 being of such extent as to tend to hold said rod in any position of rotative adjustment. Upon said rod, at each side of the nose-piece 7 is mounted a red interceptor 9 as shown in Figs. 2 and 3, and more especially in the enlarged transverse section Fig. 6.

By reference to said Fig. 6 it will be noted that a clip 14 embraces said rod with its ends depending therefrom and brought into close relation to each other, and between juxtaposed faces of the depending ends of said clip is inserted the upper

end of the interceptor member 9, in which position said interceptor is firmly secured, as by a rivet 15; said rod 10 is slightly flattened upon opposite sides, and said clip is provided with resilient leaf portions 16 —Fig. 6— which contact closely with said flattened portion of said rod, the tendency of which contact is to restrain rod 10 from turning within the clip, and thus to cause said interceptors 9 to be actuated to either the position shown in full lines, or that shown in dotted lines in Fig. 2, as by means of the thumb-wheel 12. Thus mounted, said interceptors 9 may be moved longitudinally upon their carrier rod 10, and be adjusted independently of each other, and more especially, so that each of said interceptors can be adjusted to the position so that the right hand edge of each,—as regarded by the wearer—may be brought substantially to the position where it is opposite the center of the pupil of the eye, respectively, thus intercepting the glare of the lights of an on-coming automobile, and at the same time being in non-interference with a view of the road ahead. It has been found that each wearer of this new type of interceptor adjusts said red interceptors 9 to a slightly different position, thus indicating that said relatively independent, lateral adjustability fills a long felt want.

In regard to the green interceptor 5 of this eye shield, its position vertically is substantially stationary, but the arm 17 of the nose-piece 7 is so constructed that it may be reshaped so as to raise the frame higher, or to give it a lower position, whereby any desire or need for a vertical adjustability is met.

This interceptor does not in any way interfere with the driver's view ahead, its sole office being that of an interceptor of the glare reflected from the rearwardly facing mirror in the driver's car, said glare being caused by the lights of cars approaching from or following in the rear.

Referring now to the construction shown in Fig. 7, it is pointed out that, while the construction previously described can be easily worn over vision-correcting glasses, it is deemed desirable to supply a special form which may be attached to the frame of spectacles, and for this purpose the usual bows,—a portion of which is indicated by the reference numeral 18 in Figs. 1 and 3,—are omitted and in the place thereof a spring clip 19 is attached at its central portion upon the face side of the beam 1; said clip, at each end thereof is provided with, or formed into a yoke portion 20, said yoke portions are each supplied with inwardly extending hooks 21 that are adapted to engage the frame 22 indicated in dotted lines in Fig. 7.

While the glare-quenching members 5 and 9 have in the foregoing description, been described as having the colors green and red respectively, it is evident that any other suitable colors, or the same color for both elements, may be used, and the material used for these members may be any suitable transparent material, of which there are many well known kinds, such as those having the commercial names "Celluloid", "Viscoloid", "Bakelite" and others.

In order to attain the most efficient and satisfactory results with my improved eye shield, each user of same should adjust the red shields to suit his individual requirements; said adjustment is made in the following manner:

At approximately 125 feet distant from the wearer, some vertical line, such as the corner of a house, the side of a telegraph pole or the center

line of a highway, should be selected; one eye should then be closed, and the right hand edge of the red interceptor for the open eye should be brought into coincidence with the chosen point or line; then the other eye should be closed, and the interceptor for the open eye should be adjusted so that its right hand edge coincides with the line or point chosen. When so adjusted the forward view will be substantially clear, but the glare of the lights of any automobile passing to the left will be effectually quenched.

The lower edge of the green shield is above the pupil of the eye of the wearer of my improved device and does not intercept the forward view, but its height above the pupil of the eye is such as to at all times intercept reflected glare from the mirror located above the wind shield of the user's car.

I claim the following:

1. In a glare-intercepting eye shield, the combination with a carrying beam adapted for extension across the forehead of and positioned above the eyes of the user, of an interceptor depending from said beam with its lower edge above the line of normal forward vision of the user, but interposed within the line of reflection from the mirror within the forward, upper portion of the car so as to intercept reflected glare from said mirror, a pair of glare interceptors carried by, depending from said beam and extending below the lower edge of said first mentioned interceptor for interposition in the line of forward vision of the wearer, each of which last mentioned interceptors are independently, laterally adjustable, as and for the purpose set forth, and means for securing the device so organized in position for use.

2. A glare-intercepting eye-shield consisting in combination with a carrying beam adapted for extension across the forehead of and positioned above the eyes of the wearer, of a glare interceptor depending from said beam with its lower edge above the line of normal, forward vision of the wearer, but interposed within the line of reflection from the mirror which is within the forward upper portion of the car so as to quench glare reflected by said mirror, a rod extending longitudinally of and rotatably carried by said beam adjacent the forward face thereof, a pair of glare interceptors carried by and extending away from said rod so that their extreme edges which are substantially parallel with said rod are positionable so as to extend below the lower edge of said first mentioned interceptor, said pair of interceptors being independently adjustable, longitudinally of said rotatable rod, and means for securing the shield so organized in position for use.

3. In a glare intercepting eye shield, the combination with a carrying beam for extension across the forehead, positioned above the eyes of the wearer and provided at each end thereof with downwardly extending legs, of a glare interceptor carried by, depending from and extending along the lower edge of said beam, the lower edge of said interceptor being above the line of normal forward vision of the wearer, but interposed in the line of reflection from the mirror in the forward, upper portion of the car of the user so as to quench glare reflected therefrom, a pair of glare interceptors carried by, depending from said bar and extending below the lower edge of said first mentioned interceptor for interposition in the line of forward vision of the user, each of which last mentioned interceptors are inde-

pendently, laterally adjustable as and for the purpose set forth, and means such as the well known bows of spectacles carried by said legs for securing said organization in position for use.

- 5 4. In a glare intercepting eye shield the combination with a carrying beam adapted for extension across the forehead of and positioned above the eyes of the user, of a glare interceptor depending from said beam with its lower edge
- 10 above the line of normal forward vision of the user but interposed within the line of reflection from the mirror within the forward, upper por-

tion of the car so as to intercept reflected glare from said mirror, a pair of glare interceptors carried by, depending from said beam and extending below the lower edge of said first mentioned interceptor for interposition in the line of forward vision of the wearer, each of which last mentioned interceptors are independently, laterally adjustable, as and for the purpose set forth, also vertically swingable into an out-of-use position, and means for securing the device so organized in position for use.

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