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2,109,115

EYESHADE

Filed July 29, 1935

Fig. 1

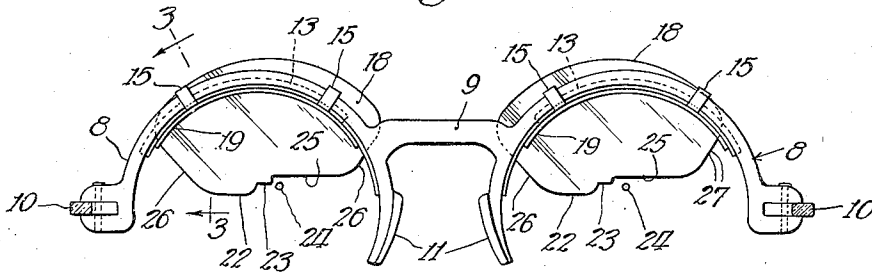


Fig. 2

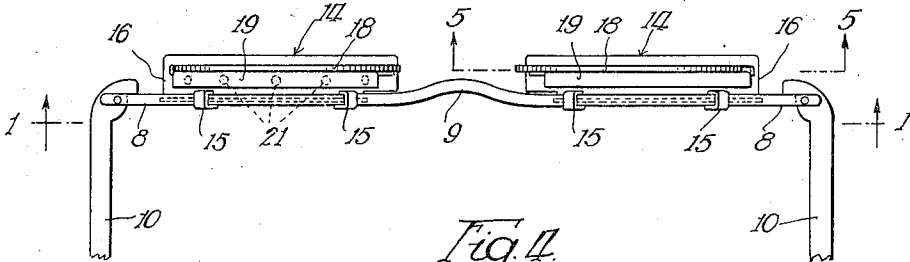


Fig. 4

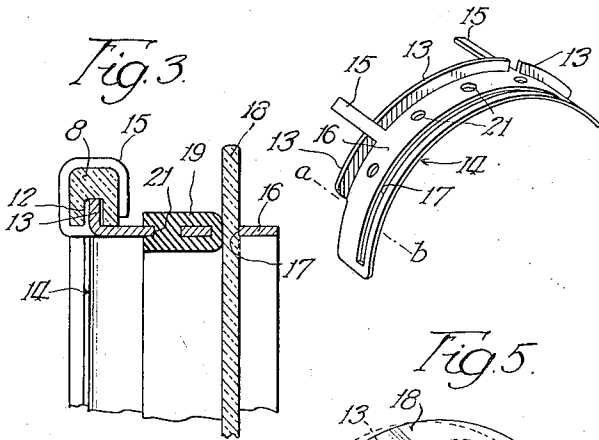


Fig. 6

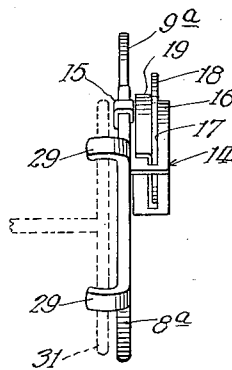
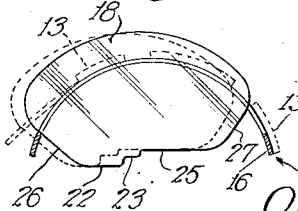


Fig. 5



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EYESHADE

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13 Claims. (Cl. 2—12)

This invention relates to eye-shades, and particularly to the type of shade adapted to be worn on the person of the user.

The present invention is especially well adapted for use by motor vehicle drivers, and particularly for driving at night when the extremely bright lights on approaching vehicles are most disconcerting and annoying.

One object of the present invention, therefore, is to provide a novel and efficient construction and arrangement of eye-shade which will effectively shade and protect the user's eyes from the glare of the lights on approaching vehicles, and at the same time permit of a clear unobstructed view of the road ahead.

Another object of the invention is to provide a novel construction and arrangement of eye-shade, which, while protecting against lights approaching from the front and permitting a clear view of the road ahead, will also provide efficient and desirable protection for one's eyes from the reflected light in one's own rear-view mirror caused by lights approaching from the rear, which is almost as annoying and fraught with possibly as much danger of temporarily blinding a driver, as is the direct glare of lights approaching from the front.

Another object of the invention is to provide a novel form of eye-shade which will amply protect the eyes against both direct and reflected light, and at the same time permit ample unrestricted view in a forward direction and laterally or to the sides of the wearer.

A further object of the invention is to provide a novel arrangement whereby the shading elements for the respective eyes may be adjusted independently of each other and with respect to the individual eyes in a manner to best suit the particular physical characteristics of the person by whom the shades are intended to be worn.

A still further object of the invention is to improve devices of the character described in sundry details hereinafter referred to and particularly pointed out in the appended claims.

One embodiment of the invention is shown for illustrative purposes in the accompanying drawing, in which:

Fig. 1 is a rear elevational view of a pair of eye-glass bows illustrating the application of my improved eye-shade thereto; the view being taken from the side of the wearer or, as indicated, by the line 1—1 of Fig. 2;

Fig. 2 is a plan view of the structure illustrated in Fig. 1;

Fig. 3 is an enlarged fragmentary sectional

elevational view taken as indicated by the line 3—3 of Fig. 1;

Fig. 4 is an enlarged perspective view of a frame for supporting the shade member or lens, and illustrating the position of certain parts before the eye-shade is assembled;

Fig. 5 is a diagrammatic elevational view illustrating one of the features characterizing the present invention; and

Fig. 6 is a side elevational view of the present invention illustrating the manner of attaching the eye-shade to spectacle or eye-glass frames worn by the user.

It is a well known fact among members of the optical profession that the distance between eye pupils varies widely in different individuals according to the shape and form of the face, skull, placement of the eye sockets and other physiognomic features.

It is, therefore, desirable to provide an eye-shade structure to be worn in front of the eyes, wherein the shading members may be adjusted independently of each other in order that the members may be properly positioned with respect to the particular eye pupil it is intended to serve.

The present invention provides a structure wherein the shading members may be vertically and horizontally adjusted, and may also be adjusted annularly to position the members in proper relation to each other and to the eye pupils.

Referring to the drawing, 8 indicates generally a pair of eye glass bows, shown in Figs. 1 and 2 as rigidly connected to each other by means of a nose bridge 9 and having temples 10 pivotally connected thereto, the bows 8, in the present instance, having a portion omitted adjacent their lower sides in order to lighten the structure and yet retain the nose pads 11, as shown in Fig. 1.

Each of the bows 8 is provided, respectively, with internal annular grooves 12 adapted to receive an annular flange 13 formed along one edge of an arcuately shaped frame, indicated as a whole by the numeral 14, the frame 14 being provided at arcuately spaced intervals with fingers 15 adapted to be bent upwardly and over the bows 8, as clearly illustrated in Fig. 3, and in a manner to provide a sliding connection between the frame 14 and the bows 8.

Formed in the body portion 16 of the frame 14 is an elongated slot 17 adapted to receive a shade member 18 formed, preferably, of suitable translucent material such as celluloid, colored glass or the like, and for securing the shade member

against accidental displacement with respect to the slot 17, a strip of friction material 19, such as rubber or the like, may be molded or otherwise connected to the body member 16 in a manner to position a portion of the friction material in the slot 17, and as is shown, in the present instance, the material 19 may be positioned also in a plurality of apertures 21 formed in the body member 16 of the frame 14 in a manner to more securely hold the friction material against accidental displacement with respect thereto.

It will be observed that by such an arrangement, the frame 14 may be adjusted annularly within the bows 8 by reason of the flange and groove connection 12-13 and the securing fingers 15 overlying the bow, and that the shade member or lens 18 may be adjusted with respect to the frames 14 in a plurality of directions as may be found desirable, the friction material yielding sufficiently for such adjustment and yet maintaining sufficient contact with the shade members to retain them in desired position.

It will be noted, particularly by reference to Figs. 4 and 5, that the body member 16 at one end thereof and the slot 17 formed therein extend a substantial distance beyond the adjacent end of the flange 13, thereby providing a structure wherein the extending end portion of the frame 16 may be flexed along the line *a-b* and as illustrated in Fig. 5 in the event that further movement of the shade member 18 is required beyond that provided when the body member 16 is in its full arcuate or normal position.

The shade members 18, it will be noted, are intended to cover a substantial portion of the two upper quadrants of the respective bows, thereby protecting the eyes of the user against overhead lights such as reflections in the user's own rear view mirror, and it will be noted also that the members 18 are shown, in the present instance, as provided along their lower sides with a plurality of edge portions of different elevations, the edge portions 22 and 23 of the respective lens being in different horizontal planes and at the left side of the eye pupil, indicated at 24, while the edge portion 25 to the right of the eye pupil occupies a still higher plane and extends above and to the right of the eye pupil.

This construction of the lower portion of the shade member is most desirable in that the portions to the left of the eye pupil protect the eyes against the lights of approaching vehicles and yet permits a clear view of the road straight ahead below the edge portion 25, and while the step relation of the edges 22 and 25 serve quite efficiently to protect the eyes against closely approaching vehicles, it has been found desirable to provide an intermediate portion adjacent the edge 23 positioned intermediate the planes of the edges 22 and 25 to provide further protection against the lights of vehicles at greater distances, as would be the case of vehicles coming into a distant curve of the road or by vehicles pulling out of line to pass others, in which case the approaching vehicle would be brought more directly into the line of vision of the wearer.

It will be noted also that the end portions of the shade members are cut away as indicated at 26 and 27 in order to permit unobstructed lateral vision of the user.

The structure illustrated in Fig. 6 is substantially like that shown in Figs. 1 to 5, inclusive, except that the shade members are mounted in bows 8a connected together, preferably, by means

of a spring bridge 9a of well known construction, the bows being provided with vertically spaced inwardly extending prong-like members 29 adapted to engage the bows 31 (shown in dotted lines) and indicating a pair of ordinary spectacles or eye-glasses worn by the user.

It will be observed from the foregoing description that the present invention provides a novel construction and arrangement in eye-shades whereby the shade members may be conveniently and independently adjusted with respect to each other and with respect to the position of the individual eye pupils in a manner to provide suitable and efficient protection for the eyes of the individual user.

Obviously, the present invention is not limited to the precise construction and arrangement shown and described as the same may be variously modified. Moreover, all the features of the invention need not be used conjointly as the same may be used to advantage in variously different combinations and subcombinations.

What I claim as new and desire to secure by Letters Patent is:

1. An eye-shade comprising a frame adapted to be mounted in an eye-glass bow, a shade member having a plurality of face portions adjustably mounted in said frame, and resilient friction means engageable directly with a face portion of said shade member and with said frame for yieldably retaining the shade member in various adjusted positions vertically with respect to said frame and bow.

2. An eye-shade comprising a frame carried by an eye-glass bow, a shade member having oppositely disposed face portions adjustably mounted in said frame, and resilient friction means mounted on the frame and engageable directly with one of the face portions of said shade member for yieldingly retaining the shade member in various adjusted positions laterally with respect to said frame and bow.

3. An eye-shade comprising a frame adapted to be mounted in an eye-glass bow, said frame having a slot formed therein, friction means on said frame adjacent said slot, and a shade member adjustably mounted for vertical and lateral movement in said slot and engageable with said friction means.

4. An eye-shade comprising a frame adapted to be adjustably mounted in an eye-glass bow, said frame having a slot formed therein, friction means on said frame extending through a portion of said slot, and a shade member adjustably mounted for vertical, lateral and angular movement in said slot and engageable with said friction means.

5. An eye-shade comprising a frame adapted to be adjustably mounted in an eye-glass bow, said frame having a slot and a plurality of apertures formed therein, friction means on said frame extending through a portion of said slot and into said apertures, and a shade member adjustably mounted in said slot and engageable with said friction means.

6. An eye-shade comprising a frame including a body portion having a slot formed therein, a flange formed on said body portion and adapted to engage a groove on the inner side of an eye-glass bow, said body portion having a bendable finger adapted to engage the outer side of said bow, said body portion and slot formed therein extending a substantial distance beyond the adjacent end of said flange at one end of said

frame, and a shade member adjustably mounted in said slot.

7. An eye-shade comprising an elongated arcuate frame including an arcuate body portion having an elongated slot formed therein, a laterally extending arcuate flange formed adjacent one edge of said body portion and adapted to engage a groove on the inner side of an eye-glass bow, a plurality of bendable fingers on the flanged edge of said body member and adapted to engage the outer side of said bow, said body portion and slot formed therein extending a substantial distance beyond the adjacent end of said flange at one end of said frame, friction means in a portion of said slot, and a shade member adjustably mounted in said slot between one side thereof and said friction member.

8. An eye-shade comprising a frame adapted to be adjustably mounted in an eye-glass bow, said frame having a slot formed therein, and a shade member adjustably mounted in said slot, said shade member comprising a piece of translucent material adapted to cover a substantial portion of the two upper quadrants of said bow and having a portion at the left side of the eye pupil in a lower horizontal position than the portion to the right of the pupil when the eye-shade is in position for use.

9. An eye-shade comprising a plurality of frames adapted to be adjustably mounted, respectively, in eye-glass bows, said frames having slots formed therein, respectively, friction means on the respective frames extending through a portion of said slots, and shade members adjustably mounted, respectively, in said slots, each said shade member comprising a piece of translucent material adapted to cover a substantial portion of the two upper quadrants of the respective bows, and each shade member having a portion at the left side of the eye pupil in a lower horizontal position than the portion to the right of the pupil when the shade members are mounted in the eye-shade in position for use.

10. A shade member for an eye-shade comprising a single piece of translucent material adapted to cover a substantial portion of the two upper quadrants of an eye-glass bow and having a plurality of lower edge portions of different

elevations, the edge portion at the left of the eye pupil being in a lower horizontal plane than the edge portion straight forward of and to the right of the pupil when the eye-shade is in position for use, the end portions of the shade member being inclined upwardly away from the respective adjacent lower edge portions.

11. A shade member for an eye-shade comprising a single piece of translucent material adapted to cover a substantial portion of the two upper quadrants of an eye-glass bow and having a plurality of substantially straight horizontally disposed lower edge portions of different elevations, two of said lower edge portions being positioned at the left side of the eye pupil and being in lower horizontal planes than the edge portion straight forward of and to the right of the eye pupil when the eye-shade is in position for use.

12. An eye-shade comprising a pair of connected bows, a pair of frames adjustably mounted, respectively, in said bows, said frames having slots formed therein, respectively, friction means on the respective frames extending through a portion of said slots, shade members adjustably mounted, respectively, in said slots, each of said members comprising a piece of translucent material adapted to cover a substantial portion of the two upper quadrants of the respective bows, each shade member having a portion at the left side of the eye pupil in a lower horizontal position than the portion to the right of the pupil when the shade members are mounted in the respective frames and in position for use, and a pair of vertically spaced prong-like laterally and inwardly extending fingers adjacent the outer sides of the respective bows for engaging other bows or eye-glass lens.

13. An eye-shade comprising a frame having a slot formed therein, a shade member adjustably mounted in said slot and having oppositely disposed face portions, and friction means in said slot engageable with one of said face portions and said frame adjacent said slot for yieldingly retaining the shade member in various adjusted positions with respect to said frame.

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