

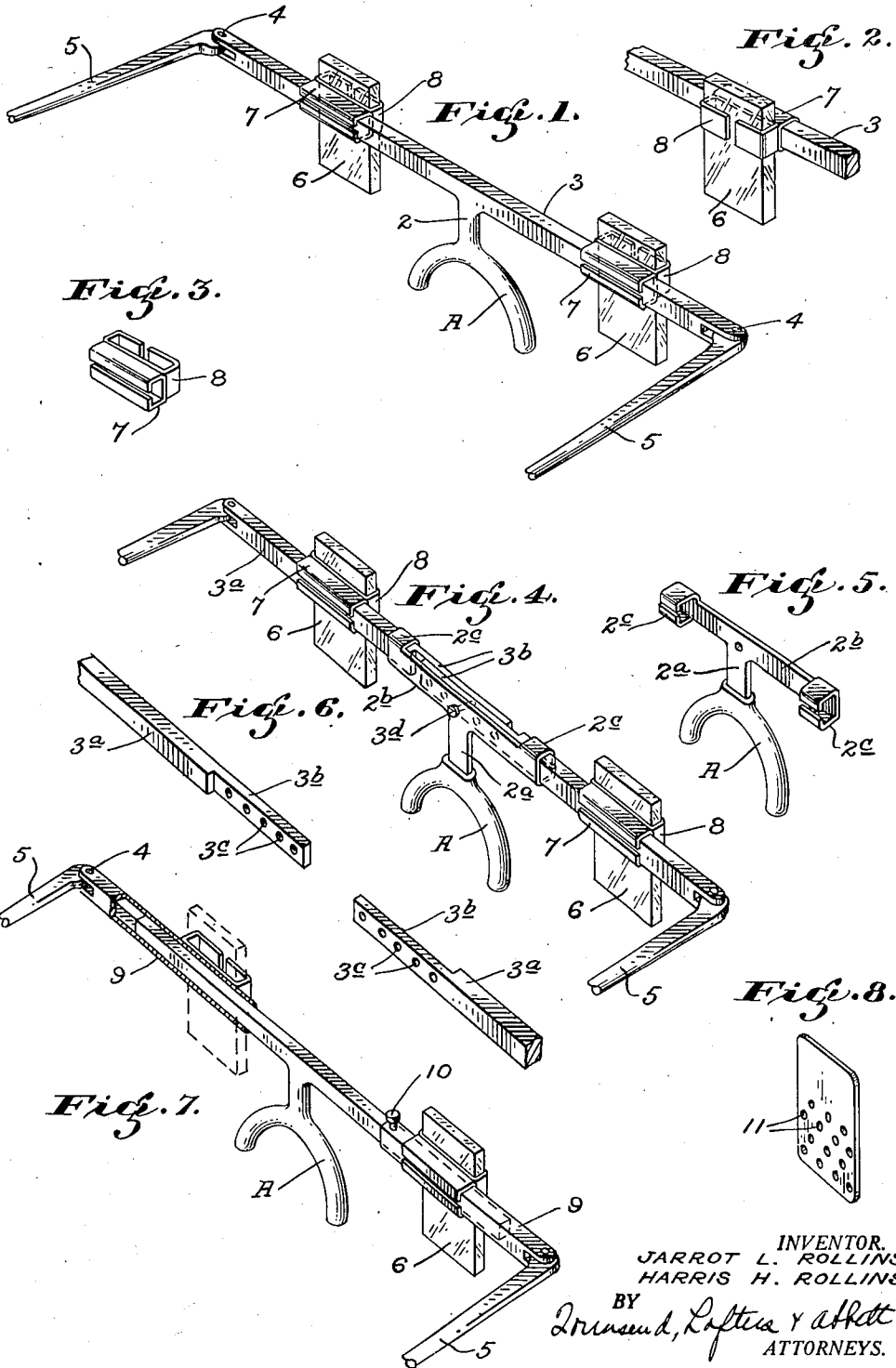
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DIMMER GLASSES

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DIMMER GLASSES

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This invention relates to dimmer glasses, and especially to a simplified form of the type of dimmer glasses shown in a co-pending application entitled "Dimmer glasses" filed December 28, 1925, Serial Number 78,023.

The dimmer glasses shown in the co-pending application comprise a nosepiece, a pair of spectacle frames connected therewith, a cross bar secured to the nosepiece and the outer end of the spectacle frames and vertically adjustable with relation to the nose piece and the spectacle frames, and a pair of dimmer members secured to the cross bar and laterally adjustable thereon.

This structure permits vertical and lateral adjustment of the dimmer members with relation to the eyes of the wearer, but the structure is more or less complicated, and the range of adjustment is not sufficient for all individuals as the eyes are closely spaced in some individuals, and widely separated in others.

The object of the present invention is to generally improve and simplify the construction and operation of dimmer glasses of the character described, to provide a single cross bar which may be readily supported with relation to the eyes of any individual, to provide means for supporting the dimmer members with relation to the bar, and further to provide a vertical and lateral adjustment which permits a sufficiently wide range of adjustment to take care of practically any individual, whether the eyes are closely or widely spaced, or set high or low with relation to the ridge of the nose.

The dimmer glasses are shown by way of illustration in the accompanying drawings, in which:

Fig. 1 is a perspective view of the dimmer glasses,

Fig. 2 is an enlarged perspective view of one of the dimmer members and a holder in which it is secured,

Fig. 3 is a perspective view of the dimmer member holder,

Fig. 4 is a perspective view showing a modified form of the dimmer glasses,

Fig. 5 is a perspective view of the nosepiece used in the structure shown in Fig. 4

Fig. 6 is a perspective view of the inner ends of the cross bars employed in the structure shown in Fig. 4,

Fig. 7 is a perspective view showing another modified structure of the dimmer glasses,

Fig. 8 is a perspective view showing a modified form of one of the dimmer members.

Referring to the drawings in detail, and particularly Figs. 1, 2 and 3, A indicates a nosepiece provided with a vertical central extension 2, to which is secured a horizontally disposed cross bar, 3. Pivotaly secured as at 4 to the outer ends of the cross bar are bows 5, and carried by the cross bar are a pair of dimmer members generally indicated at 6. The dimmer members are rectangular in shape, as shown and are preferably constructed of a semi-transparent material, such as glass, celluloid, or the like. The dimmer members must, of necessity, be vertically and laterally adjustable with relation to the nosepiece A, as the eyes are closely spaced as far as some individuals go, and in other individuals the eyes may be widely separated. Again, the eyes may be set high or low, with relation to the ridge of the nose.

In the present instance a holder, such as shown in Fig. 3 is employed to secure the dimmer members 6 and to provide lateral and vertical adjustment. The holder is preferably constructed of thin spring metal or a like material. It consists of two sections, generally indicated at 7 and 8. The section 8 is bent to form a horizontally disposed rectangular split tube which frictionally engages the cross bar so that it may be moved laterally to or away from the nose piece. The section 7 is bent to form a vertically disposed rectangular shaped tube and it serves the function of frictionally securing the dimmer member 6, thereby permitting the dimmer member to be adjusted vertically.

Actual experience has shown that the spacing of the eyes in different individuals is not the only problem involved, as it has been found that some heads are exceedingly wide, and others exceedingly narrow. To take care of heads of varying shapes, the dimmer

glasses may be constructed as shown in Fig. 4. In this case, the nosepiece A is provided with a vertical extension 2^a, in the upper end of which is formed a cross arm 2^b, the outer ends of the arm terminating in friction clasps 2^c. The cross bar is, in this instance, made in two sections, as shown at 3^a, and the inner ends are made thinner, as indicated at 3^b, so they may overlap each other, as shown in Fig. 4 and they are furthermore perforated, as indicated at 3^c so the cross bars may be extended or adjusted and when adjusted, secured by passing a screw 3^d through the cross arm 2^b and the perforations 3^c, as clearly shown in Fig. 4. This adjustment permits lengthening of the cross bars where an exceedingly wide head is encountered and also shortening of the cross bars where narrow heads are encountered. The holders whereby the dimmer members 6 are supported are of course laterally adjustable on the cross bars proper, and the dimmer members are vertically adjustable in the holders. Practically any adjustment required may thus be taken.

In Fig. 7 another modification is disclosed which also provides a wide range of adjustment. In this instance the cross bar is made substantially identical to that shown in Fig. 1, but telescoping tubes 9 are fitted over the outer ends. These may be moved inwardly and outwardly with relation to the main cross bar, and they may be secured by small set screws, as indicated at 10, the holders securing the dimmer members 6 in this instance being mounted exterior of the telescoping tubes. They may thus be adjusted laterally thereon while the dimmer members may be adjusted vertically in the holders.

In Fig. 8 a modified form of the dimmer member proper is shown. In this instance a metallic plate or the like is employed, in which is formed a plurality of small perforations such as indicated at 11. Actual experience has shown that a finely perforated plate excludes a great proportion of light and as such may be used as a substitute for a semi-transparent material.

In actual operation it will be noted that the dimmer glasses as a whole comprise a cross bar 3 which is supported with relation to the ridge of the nose by a nosepiece A, and a pair of side bows 5. It will further be noted that the dimmer members 6 are laterally and vertically adjustable on the bar. The purpose of the device as a whole is that of dimming out glaring headlights at the time when a car with blinding or glaring headlights is approaching. This is accomplished by tipping the head in a forward direction so as to interpose the dimmer members between the headlights and the eyes of the driver. When the head assumes a normal position the dimmer members are elevated and a clear field of vision is thus left, which is not obstructed in any manner whatsoever,

as the cross bar and the dimmer members are at that time elevated or positioned above the line of vision of the driver. The dimmer members are fairly small and substantially rectangular in shape, and they are so adjusted that they are not thrown into the line of vision except when the head is tilted in a forward direction. They are only required when blinding headlights are approached and are then interposed between the glaring headlights and the eyes of the wearer by tilting the head in a forward direction. The headlights are thus covered and dimmed but distinctly visible, as is the approaching vehicle and the wearer has a clear and unobstructed vision of both sides of the headlights and of the roadway in front thereof. In other words, there is normal vision of all areas not shaded by the dimming members. This is important, particularly when driving within the city limits or the like, where numerous street intersections are encountered, as it is then essential to have a clear vision covering both sides of a street intersection and the intervening street section. In practice the dimmer members are preferably so adjusted that they assume a substantial central position with relation to a forward line of vision, but it is preferable to adjust them slightly to the left of such a central position as practically all vehicles approach on the left hand side. In other words, practical experience has shown that it is most convenient to place the dimmer members slightly to the left of the pupil of each eye, so that they will readily cover approaching headlights by merely tilting the head in a forward direction. If glasses of this character are used in Canada or other countries where vehicles pass on the right hand side, they would be moved slightly to the right of a central position, the main feature however being that of providing a clear field of vision on both sides of the dimming medium and the foreground, and to reduce the frame which supports the dimmer members to such a size and shape that it will not afford any obstruction to a clear field of vision. This is certainly accomplished in the present instance, as the frame consists of nothing more or less than a bar which is elevated with relation to the field of vision, and as such cannot obstruct the same.

While certain features of the present invention are more or less specifically described, we wish it understood that various changes may be resorted to within the scope of the appended claims, similarly, that the materials and finishes of the several parts employed may be such as the manufacturer may decide, or varying conditions or uses may demand.

Having thus described our invention, what we claim and desire to secure by Letters Patent is:

1. Dimmer glasses of the character de-

scribed comprising a nosepiece, a horizontally disposed cross bar secured thereto, a pair of dimmer members supported by the cross bar one on each side of the nosepiece, and means permitting vertical and lateral adjustment of each dimmer member with relation to the cross bar.

2. Dimmer glasses of the character described comprising a nosepiece, a horizontally disposed cross bar secured thereto, a pair of dimmer members supported by the cross bar one on each side of the nosepiece, means permitting independent lateral adjustment of each dimmer member to and away from the nosepiece, and means permitting independent vertical adjustment of each dimmer member with relation to the cross bar.

3. Dimmer glasses of the character described comprising a nose piece, a horizontally disposed cross bar secured thereto, a pair of holders supported by the cross bar one on each side of the nosepiece, means permitting longitudinal sliding movement of each holder on the bar to and away from the nosepiece, and a dimmer member carried by each holder.

4. Dimmer glasses of the character described comprising a nosepiece, a horizontally disposed cross bar secured thereto, a pair of holders supported by the cross bar one on each side of the nosepiece, means permitting longitudinal sliding movement of each holder on the bar to and away from the nosepiece, a dimmer member carried by each holder, and means permitting vertical adjustment of each dimmer member with relation to its holder.

5. Dimmer glasses of the character described comprising a nosepiece, a horizontally disposed cross bar secured thereto, a pair of holders mounted on the cross bar, one on each side of the nosepiece, said holders frictionally engaging the cross bar and being longitudinally movable thereon, a dimmer member carried by each holder, and means frictionally securing each dimmer member with relation to its holder and permitting vertical adjustment of the dimmer members.

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