

J. A. MAYNARD.
DETACHABLE EYE SHIELD.
APPLICATION FILED FEB. 9, 1916.

1,228,341.

Patented May 29, 1917.

Fig. 1.

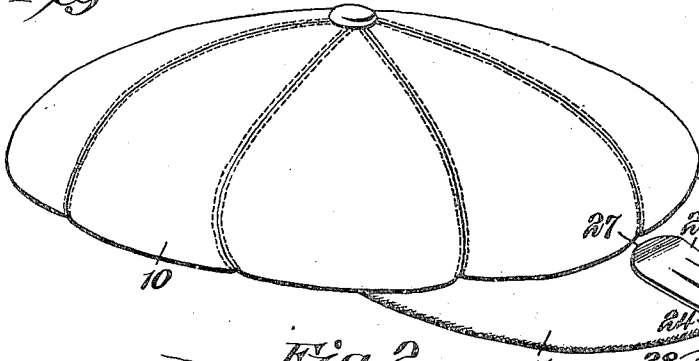


Fig. 2.

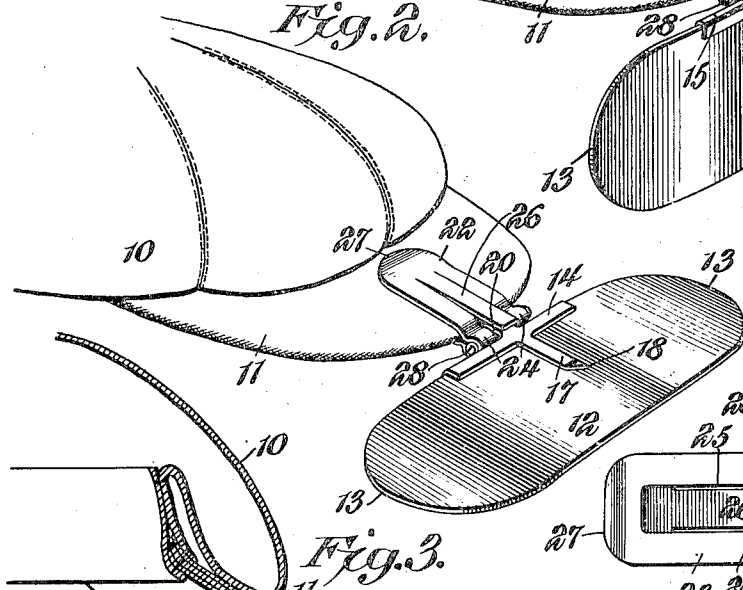


Fig. 3.

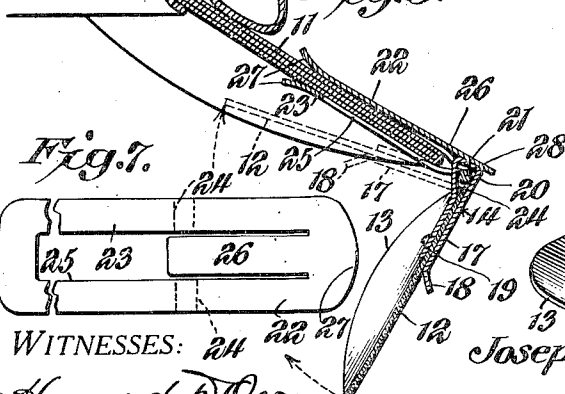
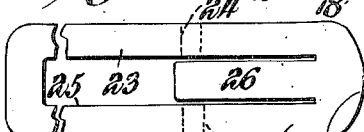


Fig. 7.



WITNESSES:
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Fig. 6.

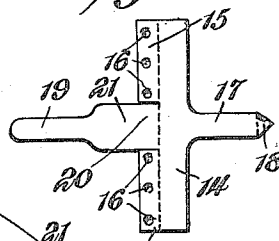


Fig. 4.

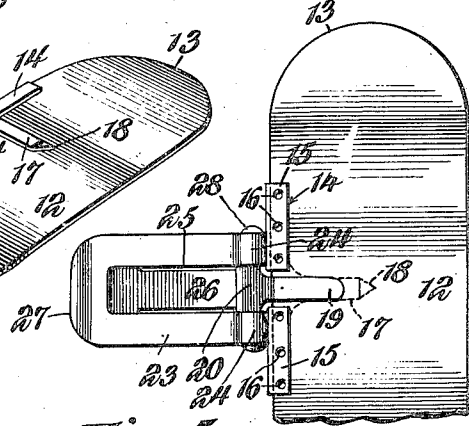
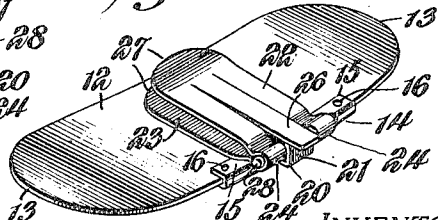


Fig. 5.



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UNITED STATES PATENT OFFICE.

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DETACHABLE EYE-SHIELD.

1,228,341.

Specification of Letters Patent.

Patented May 29, 1917.

Application filed February 9, 1916. Serial No. 77,204.

To all whom it may concern:

Be it known that I, JOSEPH A. MAYNARD, a citizen of the United States, residing at Ravena, in the county of Albany and State of New York, have invented a new and useful Detachable Eye-Shield, of which the following is a specification.

The present invention relates to an improvement in eye shields, and has for an object the provision of a device of this nature, which is readily attachable to hats and caps of various forms, and which, when applied to the hat or cap, may be quickly and easily adjusted into any one of three positions according to the demands required; and which may be detached and folded into compact form to fit in the pocket or other confined place.

It is another object of the invention to provide a shield which is attached to a clip for yielding engagement over the brim or vvisor of a hat, which shield is provided with a thumb piece in such position that it may be readily engaged by the hand, whether gloved, or otherwise, to swing the shield into the desired adjusted position, and to provide means for yieldingly holding the shield in any one of its adjusted positions.

A further object of this invention is to provide a device of this character which is comparatively simple in construction, which may be nearly entirely of sheet metal, and which is of such form that the parts may be readily cut or stamped and easily assembled.

It is the aim of this invention to provide a light, durable device which may be readily attached to caps or hats, and which is adjustable so that the device may be worn without discomfort by motorists, ball players, or by the public in general, to dim the glare of the sun, bright lights, or reflections, the shield being transparent, but of such a color as to filter out all yellow, or glaring light rays shining thereon.

Other objects and advantages of this invention will appear from the following specific description of the present preferred embodiment of the invention, the same being disclosed in the accompanying drawing, wherein—

Figure 1 is a perspective view of a shield, embodying the features of this invention, as applied to the vvisor of a cap, the shield being adjusted into operative position.

Fig. 2 is a similar view, disclosing the

shield swung outwardly beyond the vvisor, and out of the line of vision of the person wearing the cap.

Fig. 3 is a longitudinal central sectional view, taken through the shield of this invention, showing its application to the cap, the arrow indicating the direction in which the shield may be swung to place the same upwardly beneath the vvisor, and the dotted lines showing the shield in raised position.

Fig. 4 is an under side plan view of the device, the shield being partly broken away.

Fig. 5 is a bottom perspective view of the shield, showing the attaching clip folded over thereon to occupy but small space, the device being in position to be placed in the pocket.

Fig. 6 is a plan view of the blank from which the shield holder is formed.

Fig. 7 is a plan view of the blank of the attaching clip.

Referring to this drawing, wherein like parts are designated by similar numerals of reference throughout the several views, 10 designates a cap provided with a vvisor 11 to which the device of the present invention is here shown as applied, the cap being selected for the purposes of illustration only, as the device is applicable to hats, or other devices having outwardly projecting vvisors or shades.

The detachable shield of this invention comprises mainly four parts; a transparent shield of celluloid, or the like, a shield holder secured to the shield for supporting the same, an attaching clip for engagement over the vvisor or brim of a hat, or the like, and a pintle to hingedly connect the shield holder to the attaching clip and admit of the adjustment of the holder and the shield therein.

The shield, designated as 12 in the drawing, comprises an elongated relatively narrow strip of transparent substance, such as celluloid, or other transparent material or composition, which is rounded at its ends, as at 13, to present smooth corners to the shield, and which is curved longitudinally to conform to some extent to the curvature of the front of the hat or cap. The shield 12 is transparent, so that objects may be viewed therethrough, but the shield is preferably of a green color, so as to filter out all of the yellow or glaring light rays, and thus soften the light, so that the wearer may clearly and

steadily view the objects beyond the shield, without abnormal strain upon the eyes.

This shield 12 is secured in a holder 14, which is preferably stamped or cut from a sheet of material, such as spring metal, the blank of the holder being shown in Fig. 6. The body of the holder 14 is in the form of a relatively narrow strip which is overturned longitudinally upon itself to provide a substantially U-shaped channel member engaging over the upper edge of the shield 12, the rear overturned portion of the body providing a pair of flanges 15 adapted to bind against the inner side of the shield 12 adjacent its upper edge. These flanges 15 are preferably indented toward the forward body flange 14 of the holder to crimp or dent the material of the holder into the inner side of the shield 12, and thus securely hold the shield in the holder. By the indenting of the flanges 15, a plurality of offsets 16 are formed, as shown in Fig. 4, which engage the inner side of the shield 12 in a longitudinal row of spaced apart points. The body 14 of the holder has intermediate its ends and at its forward edge, an outwardly extending arm 17, which is preferably pointed at its outer end and slightly upturned to provide a thumb piece 18. The arm 17 is adapted to extend along the outer face of the shield 12, and transversely thereof. The arm 17 by its inherent resiliency binds against the shield 12 to brace the same. The thumb piece 18 is outturned from the shield to provide a relatively sharp point for engagement with the finger of a glove, or engagement with the finger, so as to provide for a firm hold of the finger on the device. The holder 14 is provided with a spring tongue 19. This tongue 19 has a looped eye portion 20 formed by carrying the tongue first upwardly from the forward body flange of the holder a distance equal substantially to the height of the rear flange 15 of the holder. At this height, the tongue is bent abruptly inward, as shown in Fig. 3, to provide an upper flat face 21, and from the inner edge of this flat face 21 the tongue is bent inwardly toward the inner face of the shield 12. The free end of the tongue 19 bears throughout a considerable length flat against the inner side of the shield directly opposite to the front arm 17, so as to firmly and yieldingly hold the shield 12 between the tongue and the arm, and to thus brace the shield. The provision of this flat face 21 forms an abrupt edge or shoulder at each end of the bearing face 21, and it will be noted from Fig. 3 that this bearing face 21 extends backwardly at substantially right angles to the outer body flange of the holder 14.

The attaching clip of the device comprises a single blank which is preferably cut or stamped from sheet material, such as spring

metal, the blank being preferably of the form shown in Fig. 7. The attaching clip comprises a metallic strip of substantially the same width from end to end, which is overturned, intermediate its ends, upon itself to provide upper and lower jaws 22 and 23, and which is preferably rolled at its bent portion to form eyes 24. The eyes 24 are spaced apart and are at the opposite sides of the clip by reason of the slotting longitudinally of the strip of metal to provide a recess 25 extending longitudinally in the upper and lower jaws 22 and 23 and intersecting the eyes 24. The upper jaw 22 has, in the slotted portion thereof, a longitudinally extending spring tongue 26 which terminates at a portion intermediate the ends of the strip. This tongue 26 is not curved or rounded to conform to the contour of the eyes 24, but is left straight, so that it normally lies down between the eyes 24. By the rounding of the eyes 24, the jaws 22 and 23 are offset inwardly toward each other as shown to advantage in Figs. 2 and 5, so that the eyes are substantially closed at their inner sides, and present cylindrical bearings. The outer ends of the jaws 22 and 23 are preferably rounded, and are rolled outwardly to a slight extent to provide lips 27 to receive therebetween the vizor 11, and to thus aid the vizor in spreading apart the jaws 22 and 23 to bind the latter against the respective upper and lower faces of the vizor. This clip is preferably of spring metal, so that the jaws are yieldingly held in closed position by pressure toward each other, and so that the spring tongue 26 is normally urged inwardly to position the free end of the tongue in line with the central axis of the eyes 24.

The shield holder 14 is adapted for hinged connection to the clip. This assemblage is had by engaging the loop 20 of the holder in between the eyes 24, introducing the loop 20 upwardly through the recess 25 against the free end of the tongue 26 to flex the tongue 26 upwardly to a sufficient extent to bring the loop 20 into transverse registry with the eyes 24. A pintle 28 is now introduced laterally through the eyes 24, and the loop 20, to hingedly connect the loop to the eyes and thus secure the shield holder to the clip. When the shield 12 is swung into horizontal position, as shown in Fig. 2, the free end of the tongue 26 lies flat against the outer face of the loop 20 at the upper end of the body of the shield holder 14. This flat surface in contact with the free end of the tongue 26 yieldingly holds the shield 12 in its horizontal position and prevents the same from swinging by its own weight down about the pintle 28. The shield 12 may be forced down into the position shown in Figs. 1 and 3, by merely pressing downwardly upon the thumb piece 18, the pressure being

preferably exerted on the thumb piece 18, or arm 17 in order to prevent bending, and injury to or soiling of the shield 12. When thus swung down, the forward abrupt edge 5 of the flat bearing face 21 rides against the under side of the spring tongue 26 and raises the same sufficiently to admit of the swinging of the holder down into vertical position. When the shield is swung down, the 10 lower flat face of the tongue 26 lies flat upon the flat bearing face 21 of the tongue to thus yieldingly hold the shield 12 from swinging either forwardly or backwardly. If it is desired to fold the shield up out of the way, 15 the thumb piece 18 may be engaged to press the shield backwardly and up against the under side of the vizor 11, or in the direction indicated by the arrow in Fig. 3. Such swinging of the shield and its holder brings 20 the inner straight edge of the bearing face 21 against the spring 26 and flexes the same upwardly. As soon, however, as the shield 12 is raised to its fullest extent, the spring tongue 26 bears at its free end against the 25 inner side of the tongue 19, as shown to advantage in Fig. 5, so as to yieldingly hold the shield and its holder in raised position. When in this position, the thumb piece 18 projects downwardly and may be quickly 30 and easily engaged by the hand, gloved, or otherwise, to draw the shield 12 down into the line of vision to thus protect the person wearing the device.

In order to prevent injury to the device, 35 the user may grasp the holder 14 and draw it forwardly from the vizor of the cap, and then snap the clip down against the rear side of the shield 12 into the position shown in Fig. 5. The device is thus folded into 40 compact form and may be slipped into the pocket, or into any other small space for convenience in carrying, or storing away the device when not in use. This detachable feature of the invention also admits of the 45 manufacture and sale of the devices independently of caps, and also admits of the application of the device to caps and hats of all forms, which are provided with any kind of an edged part over which the clip 50 may be sprung.

It is, of course, understood that various changes and modifications may be made in the design, structure, and proportion of the above specifically described embodiment of 55 this invention, without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims.

What is claimed is:—

60 1. A detachable eye shield comprising a member having means for attachment to the vizor of a cap or the brim of a hat and extended beyond the edge of the vizor or brim, a shield, a second member having means for 65 attachment to the shield, and a horizontal

pivot connecting the second to the first member at the point where the latter extends beyond the vizor or brim, whereby the shield may stand out from and in alinement with the vizor or brim, or may be swung down- 70 wardly at an angle thereto, or inwardly beneath the same out of the line of vision.

2. A detachable eye shield comprising an elongated strip bent transversely intermediate its ends to provide a clasp for engage- 75 ment over the vizor of a cap or the brim of a hat, said strip being slotted to provide a longitudinally disposed spring tongue which is extended at its free end beyond the bend of said strip, a shield, a member secured to 80 the shield and projecting from the same, said member and said strip having an eye on one part fitted between spaced bearings of the other part, means for pivotally connecting said eye to said bearings, said eye 85 having its outer wall engaged by the free end of said spring to retain the shield in its adjusted position.

3. A detachable eye shield comprising a longitudinally slotted strip overturned inter- 90 mediate its ends to provide a clasp for engagement over the vizor of a cap or the brim of a hat, and having spaced apart bearings at the bend, and a spring tongue arranged in the slot and extending at its free end be- 95 yond said bearings, a shield, a member secured to the shield and having an eye for engagement between said bearings and against one side of the tongue, and a pin en- 100 gaging through said bearings and said eye for pivotally connecting the shield to the strip.

4. A detachable eye shield comprising a member for attachment to the vizor of a cap or the brim of a hat and having spaced bear- 105 ings extending beyond the edge of the vizor or brim, a shield, a strip overturned longitudinally to provide a clasp engaging over one edge of the shield, and having a pair of 110 arms extending oppositely from a point intermediate the ends of the strip, and bearing at their ends against the opposite sides of the shield, one of said arms being looped to provide an eye engaging between said 115 spaced bearings of the member, and a pin extending through the bearings and the eye to pivotally connect the shield to the member.

5. A detachable eye shield comprising a longitudinally slotted strip overturned inter- 120 mediate its ends to provide a clasp for engagement over the vizor of a cap or the brim of a hat, and having spaced apart bearings at the bend and a spring tongue integral with one end and extending at its free end in the slot beyond said bearings, a shield, a second 125 strip overturned longitudinally to provide a clasp engaging over the edge of the shield and having an arm extending from a point intermediate the ends of the second strip and being looped to provide an eye engaging be- 130

tween said bearings and beneath the tongue of the first strip, and a pin extending through the bearings and the eye to pivotally connect the strips together.

- 5 6. A detachable eye shield comprising a strip of metal returned upon itself to provide spaced apart spring jaws for engagement over the vizor of a cap or the brim of a hat, said strip of metal having an integral
10 tongue stamped from one end thereof and extending to the bent portion of the strip, a second strip of metal overturned longitudinally to provide a U-shaped channel and having a pair of arms yieldingly urged toward one another, one of said arms being
15 looped to provide an eye portion having a flat front and a flat bearing face, said eye portion being adapted for engagement beneath said tongue of the first strip and between the overturned end thereof, a pintle
20 passing through the overturned end of the first strip and through said eye portion to hingedly connect the two strips together, said spring tongue being adapted to bear
25 against said flat face to yieldingly hold the strips at right angles to each other, and to bear against the flat front of the loop to yieldingly hold the strips in overturned re-

lation, and a shield arranged between the opposed spring members and engaging at its upper edge in said channeled strip. 30

7. A detachable eye shield comprising a pair of spring metal blanks, one of said blanks being overturned and stamped to provide a pair of spring jaws and an integral
35 spring tongue in one of the jaws, the second blank being overturned upon itself to provide a holder and a thumb piece at the outer side of the holder, means for hingedly connecting said blanks together to pivotally
40 mount the holder on the spring jaws and in engagement with said spring tongue whereby to yieldingly maintain the holder in various angular positions about the spring jaws, and a transparent colored shield mounted in
45 said holder, said thumb piece being adapted for engagement to swing the holder and the shield into various adjusted positions.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses. 50

JOSEPH ALPHONSE MAYNARD.

Witnesses:

VICTOR WALTZ,
E. R. THOMPSON.