Jan. 16, 1951 H. VACA 2,538,607

EYESHIELD FOR HEADGEAR

Filed April 19, 1948

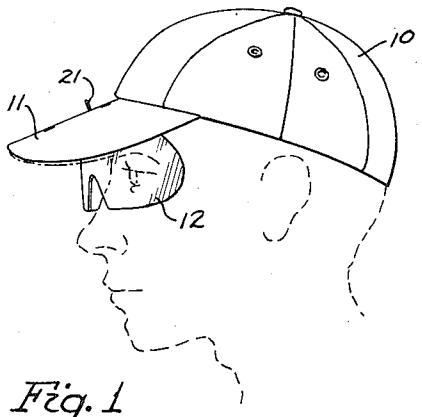


Fig. 1

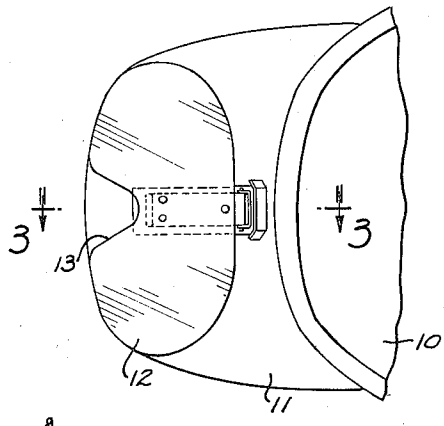


Fig. 2.

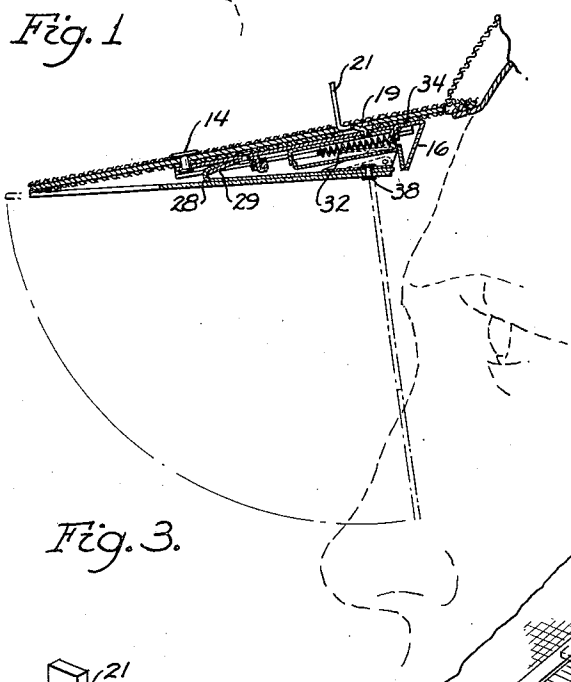


Fig. 3.

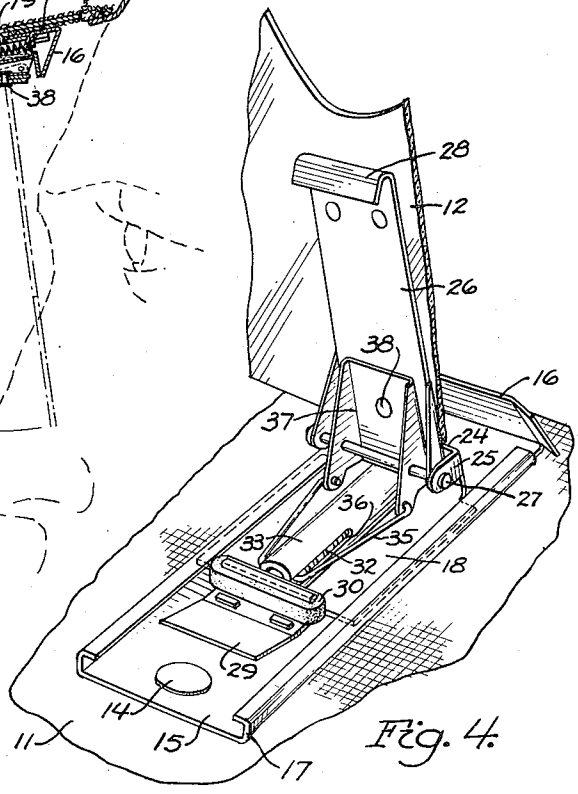


Fig. 4.

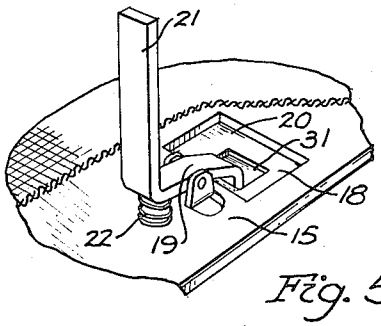


Fig. 5.

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Patented Jan. 16, 1951 2,538,607

UNITED STATES PATENT OFFICE

2,538,607

EYESHIELD FOR HEADGEAR

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Application April 19, 1948, Serial No. 21,962

6 Claims. (Cl. 2—10)

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This invention relates to head gear and particularly to a hat or cap which is provided with a shield for protecting the wearer's eyes from the glare of the sun.

More specifically, the invention is directed to a shield in the form of a transparent filter which is pivotally and slidably mounted on the visor or brim of a cap or the like, so as to be readily operable to a depending position before the wearer's eyes and to an inoperative position underlying the brim or visor of the cap. The invention is particularly useful to motorists and participants in athletic events whose movements are such that their eyes are sometimes exposed directly to the glare of the sun. The shield of this invention is mounted so that under such conditions the wearer need only release a conveniently positioned finger catch to automatically shift the shield to the operative position before the wearer's eyes.

The object of this invention is to provide a mounting for a shield of this type which is compact, positive in its action, and which lends itself to economical manufacture. At the same time, the mounting is not complicated with numerous parts and it is constructed in a manner which assures long use without becoming defective.

Other objects in the way of construction and the ease of operation will become apparent from the following description taken in conjunction with the drawings in which

Figure 1 is a view showing the cap on the head of the wearer with the shield in the depending or operative position.

Figure 2 is a fragmentary view of the underside of the cap with the shield in the folded or inoperative position.

Figure 3 is a sectional view taken substantially along the lines 3—3 of Figure 2 showing the general arrangement of the shield mounting with the shield in the inoperative position.

Figure 4 is a perspective view on an enlarged scale of a portion of the underside of the visor illustrating the general arrangement of the parts with the shield in the operative position.

Figure 5 is a perspective view on an enlarged scale of the upper side of the visor showing the details of the pivotal catch.

In the drawings I have shown the invention as applied to a baseball cap, but it will be appreciated that the shield may be mounted on or used with most any type of cap or hat. As is shown, the cap includes a body portion 10 which fits on the wearer's head and a visor 11 which is attached to the lower edge of the cap at the front thereof for shading the wearer's eyes from the

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direct rays of the sun. The shield 12 is suspended from the underside of visor 11 and is made from a transparent colored material such as plastic or the like, which serves as a filter or it may even be made of a material for polarizing light rays. Preferably the shield is of contoured cross section, so as to conform in shape to and snugly underlie the visor when it is folded to the inoperative position. Along its lower edge the shield is provided with a centrally disposed notched out portion 13 which is adapted to accommodate the wearer's nose when the shield is pivoted to the depending operative position.

On the underside of visor 11 there is mounted as by rivets 14 a track member 15 which extends forwardly from adjacent the rear edge of the visor. Track 15 is preferably formed as a stamping with a depending guard portion 16 at its rear end and with channel shaped edges 17 along each side which serve as guides for a slide member 18 as is best shown in Figure 4. On the upper face of track 15 there is pivoted a catch 19 which is adapted to project at its lower end through an aperture 20 in track 15 and which is provided with a finger piece 21 at its upper end which projects upwardly through visor 11. Catch 19 is biased by a compression spring 22 into opening 20.

The slide member 18 is formed at its rear end with a pair of downwardly projecting portions 24 which are fashioned into a pair of forwardly extending ears 25. Shield 12 is fixed to a hinge member 26 which is pivoted on a pin 27 between ears 25. At its lower or forward end hinge member 26 is fashioned into a hook portion 28 which is arranged to engage with a catch member 29 on track 15 to hold the shield in a folded position beneath the visor. The rear portion of catch 29 is fashioned into a bumper 30 for limiting the forward movement of slide member 18. Catch 29 is arranged on track 15 such that when the forward end of slide 18 abuts against bumper 30 and the shield is pivoted upwardly to a position underlying the visor, hook member 28 clears the catch 29 and can be engaged therewith only by sliding the shield rearwardly while in the folded condition. Slide 18 is provided with a hole 31 which aligns with hole 20 in track 15 when hook 28 is engaged with catch 29 so that finger catch 19 interlocks slide 18 with track 15 as is best shown in Figure 3.

The pivotal and sliding movements of the shield are controlled by a spring 32 which is retained within a tubular casing 33. Casing 33 is attached by suitable means on slide 18 and has both its

ends opened. At its rear end spring 32 projects between the downwardly bent portions 24 and is backed against an abutment 34 struck downwardly from track member 15. The spring is controlled at its forward end by a bail 35 which is guided within a pair of slots 36 at each side of casing 33. The bail 35 is connected at its ends to an offset hinge bracket 37 which is attached, as by a rivet 38, to hinge member 26 and pivoted together with hinge member 26 on pin 27. As is best shown in Figure 4, bail 35 acts to compress spring 32 whenever the shield is pivoted to the folded position or when slide 18 is shifted rearwardly on track 15.

In the inoperative position the shield is retained in the position indicated by solid lines in Figure 3. In this position the shield is prevented from pivoting downwardly by the engagement of hook 28 with catch 29 and finger catch 19 engages in hole 31 to hold the shield in its rearward position. It will be noted that when the shield is in this position spring 32 is under maximum compression. If the wearer now desires to shift the shield to the operative position, he merely actuates finger piece 21 forwardly so as to release slide 18 from engagement with catch 19 and the shield automatically snaps downwardly and forwardly to the operative position shown in Figure 1. When slide 18 is released from the restraining action of catch 19 it is shifted forwardly under the influence of spring 32. The forward movement of slide 18 effects a disengagement of members 28 and 29 and spring 32 is free to further expand, which, in so doing, acts upon bail 35 to snap the shield downwardly to the operative position in an abrupt manner.

The shield may be shifted from the operative to the inoperative position with equal facility. To accomplish this the wearer simply pivots the shield upwardly so that it lies substantially flush with the underside of visor 11 and then shifts it rearwardly. In so doing hook 28 engages with catch 29 and catch 19 drops into hole 31 in slide 18 to hold the slide in its locked rearward position until it is again released by actuating finger piece 21.

What I claim is:

1. An eye shield attachment for a cap or the like of the type having a visor for shading the wearer's eyes comprising a track attached to the underside of the visor and extending forwardly and rearwardly of the visor, a slide member movable to and from rearward and forward positions in said track, a shield pivoted on said slide member for movement to and from an operative position depending before the wearer's eyes and an elevated inoperative position substantially underlying the visor, a spring operatively connected at one end to said track and at the other end to said shield at a point spaced from the pivotal connection between said shield and said slide member, said spring normally tending to pivot said shield downwardly to the operative position and to shift said slide member forwardly in said track, hook means engageable when said slide is shifted rearwardly for holding said shield in the elevated position, said hook means being released when said slide is shifted forwardly, and means for releasably holding said slide in a rearward position whereby when said shield is in the inoperative position and said holding means are released said spring shifts said slide member forwardly to disengage said hook means and snaps said shield downwardly to the operative position.

2. An eye shield attachment for a cap or the like of the type having a visor for shading the wearer's eyes comprising a track attached to the underside of the visor and extending forwardly and rearwardly of the visor, a slide member movable to and from rearward and forward positions in said track, a shield pivoted on said slide member for movement to and from an operative position depending before the wearer's eyes and an elevated inoperative position substantially underlying the visor, a spring operatively connected at one end with said track and at the other end to said shield at a point spaced from the pivotal connection between said shield and slide, said spring normally tending to pivot said shield downwardly to the operative position and to shift said slide member forwardly in said track, hook means engageable when said slide is shifted rearwardly for holding said shield in the elevated position, said hook means being released when said slide is shifted forwardly, said track and slide member having openings therethrough which register when said slide is shifted to said rearward position, and a spring biased catch pivoted on said track and having a finger piece projecting upwardly through said visor, said catch being engageable in the registering openings in said track and slide member to interlock said slide and track whereby when said shield is disposed in the inoperative position and said finger piece is actuated to release said slide, said spring shifts said slide forwardly in said track to release said hook means and snaps said shield downwardly to the operative position.

3. An eye shield attachment for a cap or the like of the type having a visor for shading the wearer's eyes comprising a track attached to the underside of the visor and extending forwardly and rearwardly of the visor, a slide member movable to and from rearward and forward positions in said track, a hinge member pivoted on said slide member and shiftable therewith, a shield fixed on said hinge member, said shield and hinge member being arranged to pivot as a unit to and from an operative position depending from the visor before the wearer's eyes and an elevated inoperative position substantially underlying the visor, a spring anchored at one end on said track and having its other end operatively connected with said hinge member at a point offset from the pivotal connection between said hinge member and slide, said spring normally tending to shift said slide forwardly and to pivot said shield downwardly to the operative position, a stop on said track for limiting the forward movement of said slide, hook means engageable when said slide is shifted rearwardly for holding said shield in the elevated position, said hook means being released when said slide is shifted forwardly, and means for releasably holding said slide in a rearward position whereby when said shield is in the inoperative position and said holding means are released said spring shifts said slide member forwardly to disengage said hook means and snaps said shield downwardly to the operative position.

4. The combination as set forth in claim 3 wherein said spring comprises a coiled compression spring and including a spring casing on said slide member surrounding said spring, an abutment on said track for backing one end of said spring, and a bail on said hinge member extending around the other end of said spring.

5. An eye shield attachment for a cap or the like of the type having a visor for shading the wearer's eyes comprising a track attached to the underside of the visor and extending forwardly

and rearwardly of the visor, a slide member movable to and from rearward and forward positions in said track, a hinge member pivoted on said slide member and shiftable therewith, a shield fixed on said hinge member, said shield and hinge member being arranged to pivot to and from an operative position depending from the visor before the wearer's eyes and an elevated inoperative position substantially underlying the visor, a spring operatively connected at one end to said track and at the other end to said hinge member at a point spaced from the pivotal connection between said hinge and slide members and tending to shift said slide forwardly and to pivot said shield downwardly to the operative position, a stop on said track for limiting the forward movement of said slide, hook means engageable when said slide is shifted rearwardly for holding said shield in the elevated position, said hook means being released when said slide is shifted forwardly, said track and slide member having openings therethrough which register when said slide is shifted to said rearward position, and a spring biased catch pivoted on said track and having a finger piece projecting upwardly through said visor, said catch being engageable in the registering openings in said track and slide member to interlock said slide and track whereby when said shield is disposed in the inoperative position and said finger piece is actuated to release said slide, said spring shifts said slide forwardly in said track to release said hook means and snaps said shield downwardly to the operative position.

6. An eye shield attachment for a cap or the like of the type having a visor for shading the wearer's eyes comprising a track mounted on the underside of the visor and extending in a direction forwardly and rearwardly of the visor, a slide member movable along said track, a shield pivoted on said slide member for movement to an operative position depending before the wearer's eyes and to an elevated inoperative position substantially underlying the visor, a spring acting at one end against said track and operatively connected at its other end to said shield at a point spaced from the pivotal connection between said shield and said slide, said spring normally tending to pivot said shield downwardly to said operative position and to shift said slide member forwardly in said track, and means for holding said slide in a rearward position on said track and for holding said shield in said inoperative position.

HUMBERTO VACA.

REFERENCES CITED

The following references are of record in the file of this patent:

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