Dec. 6, 1955 S. FELDMAN 2,725,560

COMBINATION CAP AND EYESHIELD

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FIG. 1

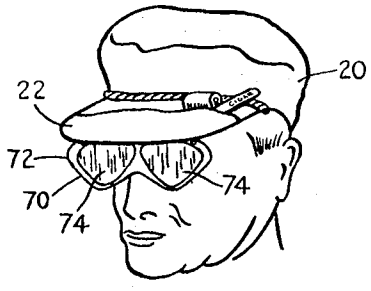


FIG. 3

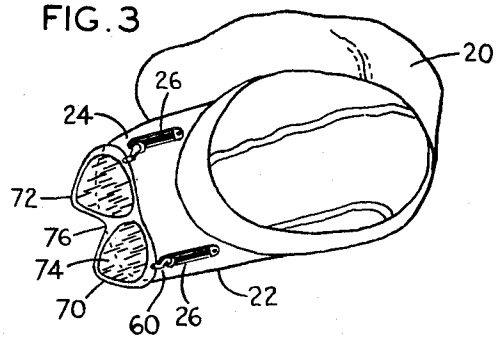


FIG. 2

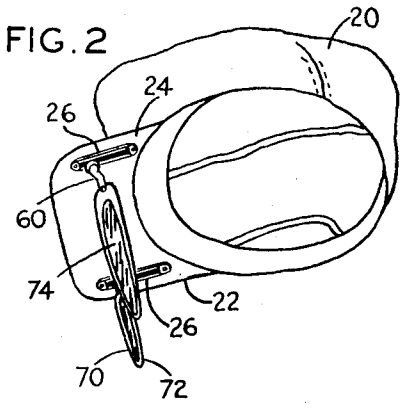


FIG. 4

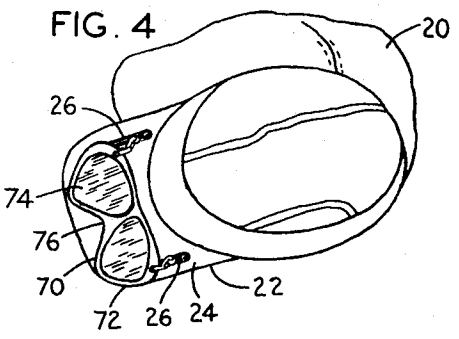


FIG. 6

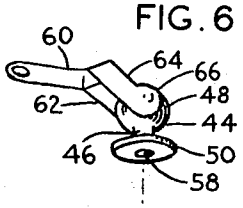


FIG. 7

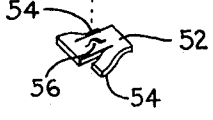
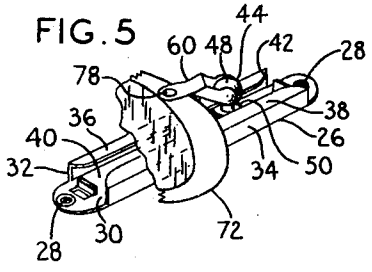


FIG. 5



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FIG. 8

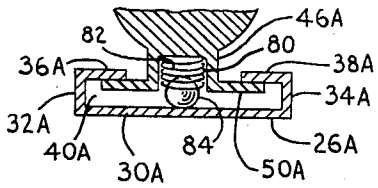


FIG. 10

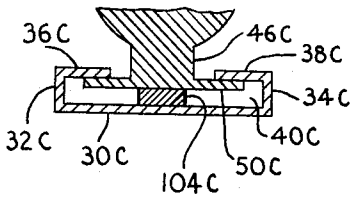


FIG. 11

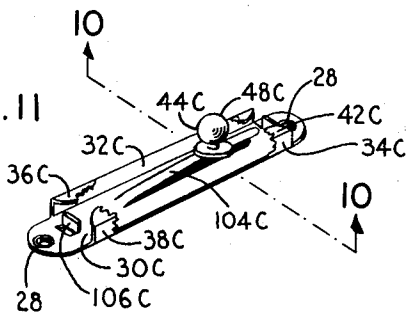


FIG. 9

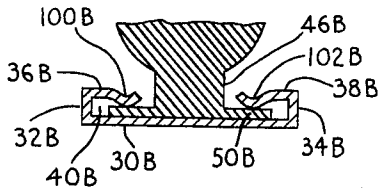


FIG. 12

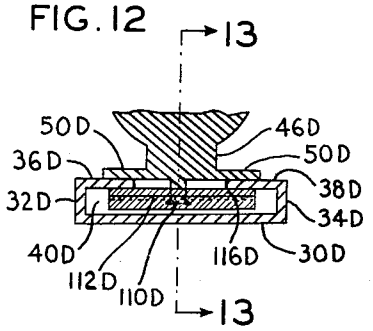
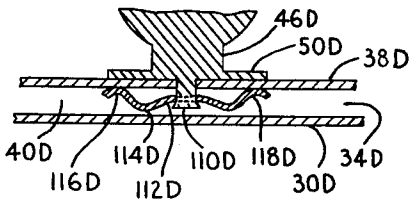


FIG. 13



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COMBINATION CAP AND EYESHIELD

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Original application July 28, 1948, Serial No. 41,053, now Patent No. 2,663,870, dated December 29, 1953. Divided and this application May 16, 1952, Serial No. 288,246

2 Claims. (Cl. 2—10)

This invention relates to the manufacture of peaked caps with eyeshields mounted thereon.

An object of the invention is to provide an improved peaked cap with eyeshield mounted thereon, the eyeshield being retractable out of the line of vision when not in use.

Another object of the invention is to provide an improved peaked cap with mounting brackets for an eyeshield secured thereto, the mounting means being characterized by adjustability for adaptation to variations in physiognomical details, such as size of the nose, and the like.

A further object of the invention is to provide, for use in mounting eyeshields and eyeshades upon peaked caps, improved mounting means the mating portions of which are carried jointly by the cap peaks and the eyeshields, and adapted for effecting engagement in a variety of effective ways, characterized by extreme convenience in use.

Still another object of the invention is to provide an improved peaked cap and eyeshield mounting of the type described, which is simple in design, inexpensive to manufacture, and effective in use.

Other objects and advantages of the invention will become apparent from the following description of a preferred embodiment thereof.

This application is a divisional application of my copending application Serial No. 41,053, filed July 28, 1948 for combination cap and eyeshield.

In the accompanying drawing,

Figure 1 is a perspective view of my improved combination eyeshield and cap with the eyeshield in extended operative position ready for use,

Figure 2 is a view in perspective of the underside of the combined eyeshield and cap as shown in Figure 1,

Figure 3 is a perspective view similar to that of Figure 2, but showing the eyeshield in retracted position, moved to its forwardmost position,

Figure 4 is a view similar to that of Figure 3, but showing the eyeshield in retracted position, moved to its rearwardmost position,

Figure 5 is a fragmentary elevational view of one of the elongated channel guide members with mating portions of the eyeshield engaged therewith,

Figure 6 is a perspective view of one of the ball members engaged by a bracket member,

Figure 7 is a perspective view of the spring member which is disposed between the underside of the flange of the ball member of Figure 6 and the floor of the guide channel of Figure 5,

Figure 8 is a sectional elevation showing a first modified form of guide channel member and ball member,

Figure 9 is a sectional elevation similar to Figure 8, but showing a second modified form of the invention,

Figure 10 is a sectional elevation similar to that of Figure 8, but showing a third modified form of the invention, and taken on line 10—10 of Figure 11,

Figure 11 is a perspective view of the third modified form shown in Figure 10,

Figure 12 is a transverse sectional elevation similar to Figure 8, but showing a fourth modified form of the invention, and,

Figure 13 is longitudinal sectional elevation taken at right angles to that of Figure 12, and showing the longitudinal aspect of the form shown in Figure 12.

In the manufacture of peaked caps incorporating peaks integral with the cap body, with eyeshields carried by the peak of the cap, it has been found that some adjustability is desirable in the disposition of the eyeshield so as to conform more readily to the physiognomy of the wearer. For example, if the nose of the wearer extends too far forward at its bridge, it is apparent that the eyeshield may not seat itself properly on the nose bridge, and hence the cap will not be wearable and usable by more than one wearer to whom it is specially fitted.

However, the present invention eliminates this difficulty, by making the location of the eyeshield conformable to the nose of the wearer without special fitting, and yet allowing the shield to be easily retracted under the cap peak when not in use, so as to wholly underlie the same.

In order to understand clearly the nature of the invention, and the best means for carrying it out, reference may now be had to the drawings, in which like numerals denote similar parts throughout the several views.

As shown, there is a cap having a cap body or crown **20** adapted to receive the head of the wearer, with a cap peak or visor portion **22** formed in any suitable manner as is well known in the art, and extending generally horizontally forwardly from the cap body itself. The cap peak thus forms a shield from above for the eyes of the wearer. However, it is often desirable or necessary to also shield the eyes themselves, directly from the effects of the rays of the sun, or of other bright light sources incident thereupon.

In addition, it is often found that the general rays reflected from nearby objects, themselves have an irritating or otherwise harmful effect upon the eyes of some persons who are more than usually sensitive thereto. As a result, it is found that reliance merely upon the relatively small shielding effect of the cap peak **22** is not enough to avoid the effects aforementioned, on the eyes. And hence, supplementary eyeshields are employed, for disposition directly in front of the eyes themselves. These may be worn upon the face, just like eyeglasses, but this is not always feasible or even desirable.

Such eyeshields may, according to this invention, also be mounted directly upon the cap itself, preferably upon the cap peak, being suspended from the undersurface **24** thereof. Upon the undersurface **24** of the cap peak I secure a guide channel or track member **26**, by any suitable means, such as by rivets **28** extending through end extensions on the guide channels **26** and the material of the cap peak. Each guide channel or track **26** includes a channel web or floor **30** lying against the underside of the cap peak **24**, and interconnecting upstanding longitudinal side walls **32** to **34**. The latter walls **32** and **34** have integral with their upper edges, inturned top flanges **36** and **38** respectively, forming an upwardly open guide passageway **40** therebetween.

The ends of the top flanges **36** and **38** may, if desired, be rounded as shown, at **42** to permit easy entry of the mating parts as will be explained hereinbelow. A ball member **44** has a depending stud **46** integral with its ball **48** and spacing an integral circular flange **50** therefrom. As seen in Figures 5, 6 and 7, the stud **46** is adapted to enter between the inner edges of the top flanges **36** and **38**, with the integral circular flange **50** riding in the channel opening or passageway **40**. The spring **52** has resilient tongues **54** bent downwards as seen best in Figure 7, to bear against the floor of the

channel, and has an upstanding projection 56 adapted to enter the downwardly open aperture 58 formed in the underside of the integral flange 50 shown in Figure 6, to hold the spring and integral flange in registry for movement along the channel together. The spring thus underlies the flange 50 and rides upon the floor of the channel, exerting resilient bias of the flange upwards against the undersurfaces of the channel flanges 36 and 38, for maximum friction therebetween, to limit slippage therebetween.

There are two such channels 26 secured to the cap peak, and each thus has a projecting ball 48 which is movable longitudinally therealong, toward the face of the wearer, or away therefrom. Bracket clamps 60 which may be formed of light resilient material have resilient clamp fingers or ears 62 and 64 resiliently grasping between their outer cupped ends 66, the opposite sides of the balls 48, in the manner best shown in Figures 5 and 6, so as to form universal joints commonly known as ball and socket joints, the sockets being formed by the cooperating cupped or spherically indented outer ends of the bracket clamp fingers 62 and 64.

A vision member, illustratively shown as a pair of sunglasses or goggles 70, having rims 72 each encircling eyelenses 74 and interconnected by a bridge 76, are secured to the brackets 60 by means of rivets 78 extending through the brackets and the sunglass rims 72. The sunglasses 70 are thus universally and pivotally supported at each end portion upon the balls 48 by the universal joint clamp brackets 60, so that the sunglasses may be turned through an angle of 180 degrees with respect to the substantial plane of the undersurface of the cap peak.

They may be worn upon the head of the wearer, in the manner of Figures 1 and 2, with the plane of the sunglasses depending substantially at right angles from the plane of the undersurface of the cap peak, so as to lie directly in front of the eyes of the wearer to shield them. If the nose of the wearer so requires, that is, if it projects further forwardly from the face than normal, the sunglasses may be easily adjusted thereto by simply sliding the sunglasses forwardly as far as desired, the ball members 48 sliding in their respective channels 26 for this purpose, and held in any desired position by the springs 52.

When the wearer does not desire to have the sunglasses before his eyes, he may then tilt the plane of the glasses forwardly upward against the undersurface of the cap peak, as shown in Figure 3, and then, to avoid the projection of the sunglasses beyond the forward edge of the cap peak which appears in Figure 3, he may then slide the entire assembly rearwardly to the position shown in Figure 4, so the sunglasses do not extend beyond the cap peak, the balls 44 sliding in their channels 26 for this purpose.

It will be seen that Figures 5, 6 and 7 do not illustrate the only way to provide frictional engagement between the ball members and the channels so as to retain the glasses at any desired position relative to the longitudinally extending channels. Figure 8 shows a modified form of the invention, in which the channel 26A has its floor 30A interconnecting upstanding side walls 32A and 34A with inturned upper flanges 36A and 38A to form a passageway 40A. The ball member 44A has a ball 48A with a depending lug 46A connecting with a circular flange 50A, a recess being formed at 80 to receive a spring 82 which exerts downward bias upon a ball 84 riding upon the channel floor 30A, and thus exerting upward bias of the flange 50 against the undersurfaces of the channel flanges 36A and 38A, for frictional effect therebetween.

In Figure 9, another modified form is shown, which is similar to that of Figure 8 in its correspondingly numbered parts, which bear the suffix "B" for clarity, the difference being that the circular flange 50B of the ball

member 44B rides directly upon the floor 30B of the channel, and the inner edges of the channel flanges 36B and 38B are bent downward as at 100B and 102B to form resilient fingers or pressure feet which bear downwards upon the upper surface of the circular ball flange 50B, to bias it resiliently against the channel floor. This provides frictional engagement to hold it against accidental displacement.

In Figures 10 and 11, another modified form is shown, for providing frictional engagement between the channel and the ball member circular flange. In this case, as before, the channel flanges 36C and 38C are substantially plane, with the ball member circular flange 50C being biased upwardly against the undersurfaces of the channel flanges 36C and 38C by means of an upwardly resilient tongue 104C which is upformed out of the channel floor 30C thereunder. The tongue 104C is sufficiently long to exert upward bias for substantially the entire length of the channel itself. Upstanding end walls 106C may also be tongued out of the channel floor as in Figure 11, to limit the motion of the ball members 44C to the length of the channel.

Figures 12 and 13 show a further modification of the invention, in which there is the channel with its floor 30D interconnecting the upstanding side walls 32D and 34D, which have inturned top flanges 36D and 38D, forming a longitudinal passageway 40D. The ball member 44D has a stud 46D interconnecting the ball 48D and the ball bottom flange 50D, the flange thus riding upon the upper surfaces of the two channel flanges 36D and 38D. A screw 110D is threaded at its upper end into the undersurface of the ball member circular flange 50D, and has its shank extending through the web 112D of a spring member 114D.

As seen best in Figure 13, the spring member 114D has upturned rounded edges 116D and 118D which bear upwards resiliently against the undersurfaces of the channel top flanges 36D and 38D, so as to draw the ball member circular flange 50D downwards, enhancing its frictional engagement with the upper surfaces of the same channel flanges.

Although I have described my invention in specific terms, it will be understood that variations may be made in size, shape, materials and arrangement without departing from the spirit and scope of the invention as claimed.

I claim:

1. Mounting means comprising interengaged ball and socket members, and a track member, said track member comprising a pair of side walls and an interconnecting top wall, said top wall having a longitudinal slot therein, one of said interengaged members comprising a lower flange portion slidably movable over the outer surface of said top wall and having a stud portion extending downwardly from said lower flange through said longitudinal slot of said top wall, and a spring member attached to said stud portion and frictionally engaging said track member to oppose the slidable movement of said lower flange portion over said outer surface of said top wall.

2. Cap construction comprising a flexible cap peak, a plurality of channel members secured to said cap peak, and extending substantially in a forward direction thereon, said channel members having upstanding side walls and a top wall, with a longitudinal passageway therein, a ball member including a ball and a ball flange interconnected by a stud, said ball flange engaging frictionally said channel member and being movable therealong with uniform friction, resilient means acting upon said ball member to enhance said frictional engagement, socket means comprising a pair of ears formed of light weight resilient material, engaging said ball, and flexible eye shield means carried by said socket means; said ball flange riding upon the outer surface of said channel members, and said resilient means including a spring connected

to the ball flange and disposed in said longitudinal passageway and secured to said ball flange, said spring bearing against the undersurface of said channel members, and adapted to bias said ball flange against the outer surfaces thereof.

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