

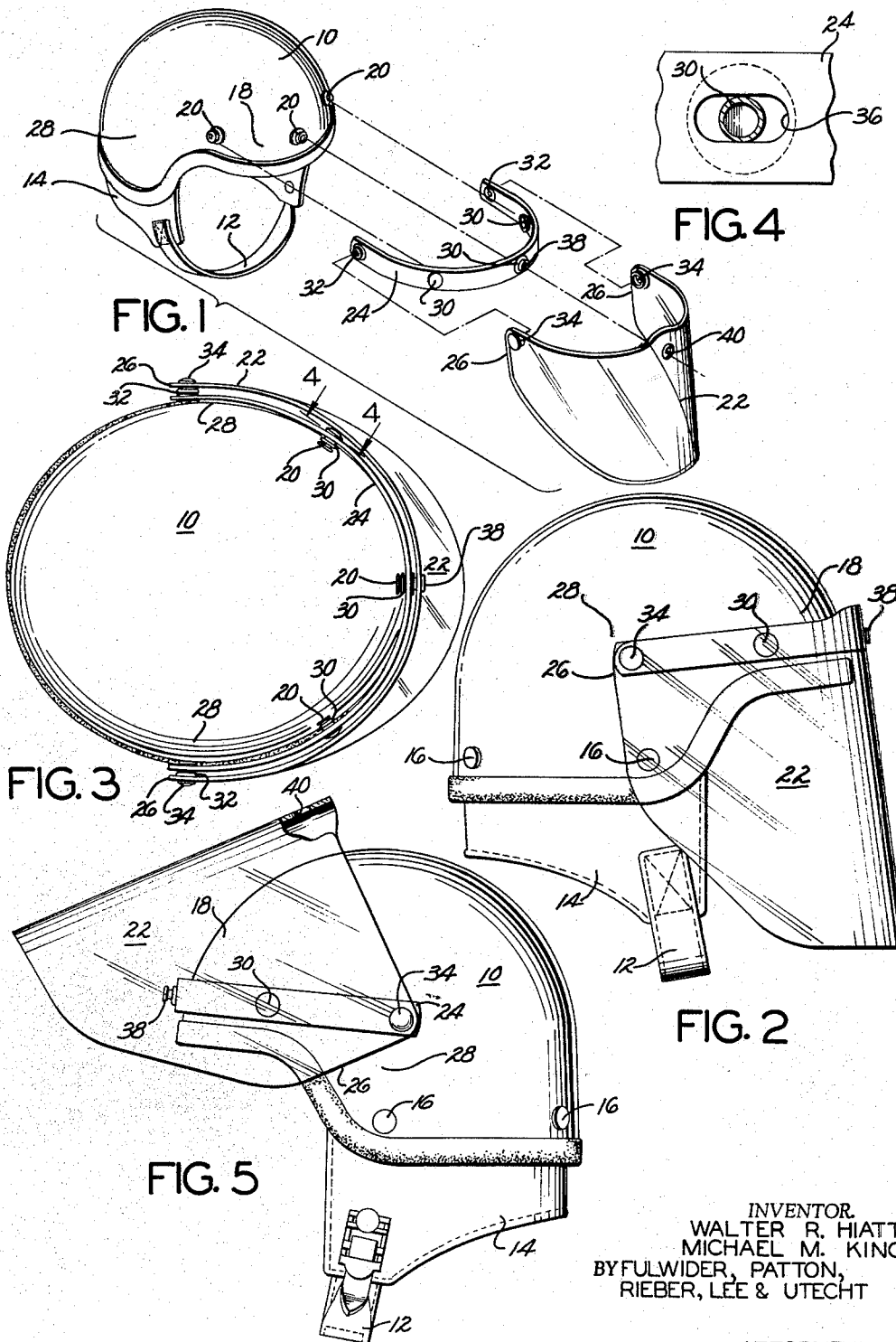
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VISOR HELMET

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VISOR HELMET

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The present invention relates to a visor helmet, and more particularly to a visor helmet in which the visor provides protection against wind, rain, and sun.

Operators of vehicles such as motorcycles, sports and racing cars, speed boats and the like, commonly wear protective crash helmets. Although such helmets are available in a variety of types, the most popular helmets are probably those made of resin-reinforced fiberglass. These are molded into helmet shape, provided on the exterior with a coat of paint or lacquer, provided on the interior with suitable padding, and generally include a chin strap at the sides or side portions thereof for securing the helmet in position upon the wearer.

One such helmet of the prior art is provided with fastening elements on the forehead portion thereof to permit the attachment of a sun visor characterized by a size and configuration similar to that of the brim or peak of the usual baseball cap. Because the sun visor is relatively small, it is only partially effective to shade the wearer's face, and is completely ineffective to provide protection against wind, rain, sea spray, and the like. Moreover, when the visor is in operative position, it is fixed and not adapted for ready movement out of the way when desired. Instead, it must be completely removed from the helmet.

Accordingly, it is an object of the present invention to provide a visor helmet which includes a tinted, transparent shield to substantially completely cover the wearer's face and protect the same against wind, rain, and sun. The shield extends from the forehead portion of the helmet rearwardly to the sides or side portions of the helmet, depends therefrom to a position adjacent the chin of the wearer, and consequently substantially completely covers the wearer's face.

It is another object of the invention to provide a visor means adapted to be associated with a helmet already provided with fastener elements on the forehead portion thereof to accept other forms of sun visors. That is, the present visor means is adapted to be associated with such helmets instead of the prior art forms of sun visors for which such helmets were originally designed. For this purpose, the present visor means includes an elongated, curvilinear band having fastener elements adapted to be secured to the fastener elements on the forehead portion of the helmet, and the extremities of the elongated band extend rearwardly to positions adjacent the sides of the helmet. These extremities include additional fastener elements adapted to pivotally mount a transparent shield or visor which normally substantially completely covers the face of the wearer. However, the pivotal arrangement permits the shield to be swung or pivoted upwardly to a position overlying the top of the helmet so that the visor is out of the way when, for example, the wearer wishes to smoke a cigarette.

A further object of the invention is to provide a visor means which is quickly mountable to and readily removable from a visor helmet, and which is also pivotable upon the helmet whereby the visor can be easily moved temporarily out of the way.

Another object of the invention is to provide a visor means of the aforementioned character which is relatively inexpensive to manufacture, simple to operate, and comparatively easy to mount and demount.

Other objects and features of the invention will become apparent from consideration of the following de-

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scription taken in connection with the accompanying drawings, in which:

FIG. 1 is a perspective, exploded view of a visor helmet associated with a visor means, according to the present invention;

FIG. 2 is a side elevational view of the helmet of FIG. 1, illustrating the transparent visor shield in lowered or operative position substantially completely covering the face of the wearer;

FIG. 3 is a top plan view of the helmet and visor means of FIG. 2;

FIG. 4 is an enlarged detail view taken along the line 4—4 of FIG. 3; and

FIG. 5 is an elevational view of the helmet and visor means of FIG. 2, taken from the side opposite that illustrated in FIG. 2, and illustrating the transparent visor shield in raised position.

Referring now to the drawings, there is illustrated a visor helmet 10 adapted to be worn as a crash helmet by motorcycle riders, sports car and racing car drivers, speed boat drivers, and the like, although it will be understood that these applications are merely exemplary and the invention is not to be limited thereto.

The visor helmet 10 does not itself form a part of the present invention and may therefore be constructed in any conventional manner, such as by molding the same out of resin-reinforced fiberglass material, which is subsequently painted or lacquered on the outside and then provided on the interior with suitable padding. The usual helmet 10 also includes a usual chin strap 12 which is carried by a depending, flexible skirt 14 attached by rivets 16 to the lower extremity of the helmet 10.

The helmet forehead portion, designated generally by the numeral 18, is provided with three conventional snap fasteners 20 of that type which is made in two parts, one part, such as the fastener 20, being closely received in a snap-like action within a mating fastener carried by the structure to be secured to the helmet 10. As previously indicated, the helmet 10 was originally provided with the plurality of fasteners 20 for mounting a relatively small brim or peak type of visor (not shown), but such fasteners are utilized in the present invention for mounting a larger, somewhat different visor or shield.

According to the present invention, these same fasteners 20 are utilized to mount a transparent, curvilinear shield of plastic material, generally designated by the numeral 22, which is tinted to reduce sun glare. As will be seen, an elongated adapter or band 24 adapts the shield 22 for connection to the helmet 10.

More particularly, the prior art sun visor normally associated with the fasteners 20 has been found to be largely ineffective to provide any substantial degree of shading for the wearer's face, and almost completely ineffective to provide protection against wind and rain. In contrast, the shield 22 is relatively large, being characterized by an upper margin extending across the forehead portion 18 of the helmet 10, side margins 26 located adjacent the side portions or sides 28 of the helmet 10, and a main body which normally depends or extends downwardly to substantially completely cover the face of the wearer. The bottom margin of the shield 22 terminates in the area of the wearer's chin and thence slopes diagonally upwardly and rearwardly toward the side margins 26.

The elongated band 24 is curvilinear to conform to the curve of the helmet forehead portion 18, and includes three snap fasteners 30 adapted to mate with and secure to the helmet fasteners 20 to thereby rigidly mount the band 24 in position across the forehead portion 18 of the helmet 10. The band 24 extends rearwardly with its end extremities located adjacent the sides 28 of the helmet 10, each of such extremities including an additional fastener 32 adapted to mate with and secure to a com-

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plementary pair of fasteners 34 mounted to the shield 22 adjacent the side margins 26 thereof.

The band fasteners 32 and shield fasteners 34 are annular in conformation and thus are adapted for pivotal movement relative to each other so that the shield 22 can be pivoted upwardly into overlying relationship to the top of the helmet 10, this position being approached by the shield 22 in the showing in FIG. 5.

The outer of the three fasteners 30 are slidably mounted in lateral slots 36 provided in the band 24, one such slot 36 being illustrated in FIG. 4, whereby the associated fasteners 30 can accommodate themselves to the locations of the corresponding helmet fasteners 20, which locations sometimes vary somewhat from one helmet to the next.

On the side of the band 24 opposite the centrally located one of the three fasteners 30 is located a forwardly projecting element or stop 38 adapted to fit within an opening 40 provided in the central upper portion of the shield 22. The stop 38 fits within the opening 40 for the purpose of properly locating the shield 22 in position to substantially completely overlie the wearer's face. However, the plastic material of which the shield 22 is made is sufficiently resilient that it is deformable to permit the stop 38 to slide past the margins of the opening 40 when it is desired to move the shield 22 into the position illustrated in FIG. 5. Normally, the stop 38 is effective to prevent such upward movement of the shield 22, maintaining it in the shielding position illustrated in FIG. 2.

From the above description it will be apparent that the present visor means is adapted to provide substantially complete shielding and protection for the wearer's face against wind, rain, and sun. Although the visor means can be permanently mounted to the helmet 10, it can be and preferably is removably mounted on the conventional helmet 10. Moreover, the shield 22 is pivotable upon its band 24 for quickly moving the shield 22 upwardly out of its normal, overlying relationship with respect to the face of the wearer.

It has also been demonstrated that the band 24 can be quickly snapped into position upon the helmet 10 to facilitate rapid mounting of the shield 22 thereon. In addition, the greater length of the band 24, compared to the distance between the existing helmet outer fasteners 20, provides a means for mounting the shield 22 farther to the rear for increased protection of the helmet wearer. Thus, the shield 22 is arranged in substantially complete, overlying relationship with the wearer's face to provide optimum protection against the elements.

Various modifications and changes may be made with regard to the foregoing detailed description without departing from the spirit of the invention or the scope of the following claims.

We claim:

1. A visor helmet assembly, comprising:

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- (a) a helmet having a plurality of projecting fastener elements on the forehead portion thereof;
- (b) an elongated, flexible, curved strip adapter band which extends across the forehead portion of said helmet and around the sides thereof;
- (c) said adapter band having a plurality of lateral slots and cooperating fastener elements slidably mounted in said slots and into which said projecting fastener elements are detachably mounted, said lateral slots making it possible for the adapter band to fit different helmets where the spacing of said projecting fastener elements may vary;
- (d) additional fastener elements mounted to the extremities of said band;
- (e) a curved elongated visor which extends to the sides of said helmet and has an extent sufficient to substantially cover the face of the wearer of said helmet;
- (f) said visor having a plurality of complementary fastener elements adjacent the upper edges of its side margins which detachably and pivotally engage said additional fastener elements; and
- (g) stop means on said adapter band which is engageable with said visor to hold it in position over the face of the wearer of said helmet.

2. The visor helmet as set forth in claim 1, wherein

- (a) there are three of said projecting fastener elements on said helmet, one of said projecting fastener elements being located at the center of said forehead portion of said helmet; and
- (b) said adapter band includes a central cooperating snap fastener element fixedly secured thereto and into which said one center projecting fastener of the helmet is detachably received, said cooperating fastener elements in said lateral slots on said adapter band detachably receiving the other projecting fastener elements on said helmet.

3. The visor helmet assembly as set forth in claim 1, wherein

- (a) said stop means is a central projecting stop element; and
- (b) said visor has an opening adjacent the top edge thereof adapted to receive said projecting stop element to thereby hold said visor in position over the face of the wearer of the helmet.

References Cited by the Examiner

UNITED STATES PATENTS

2,421,427	6/47	Mamlin et al.	2-10 X
2,610,323	9/52	Johnson	2-8
2,763,006	9/56	Amundsen	2-8
3,039,108	6/62	Lohrenz	2-3

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