Nov. 11, 1941. J. BUEGELEISEN 2,262,449

HEAD WINDSHIELD

Filed Oct. 23, 1939

FIG.1.

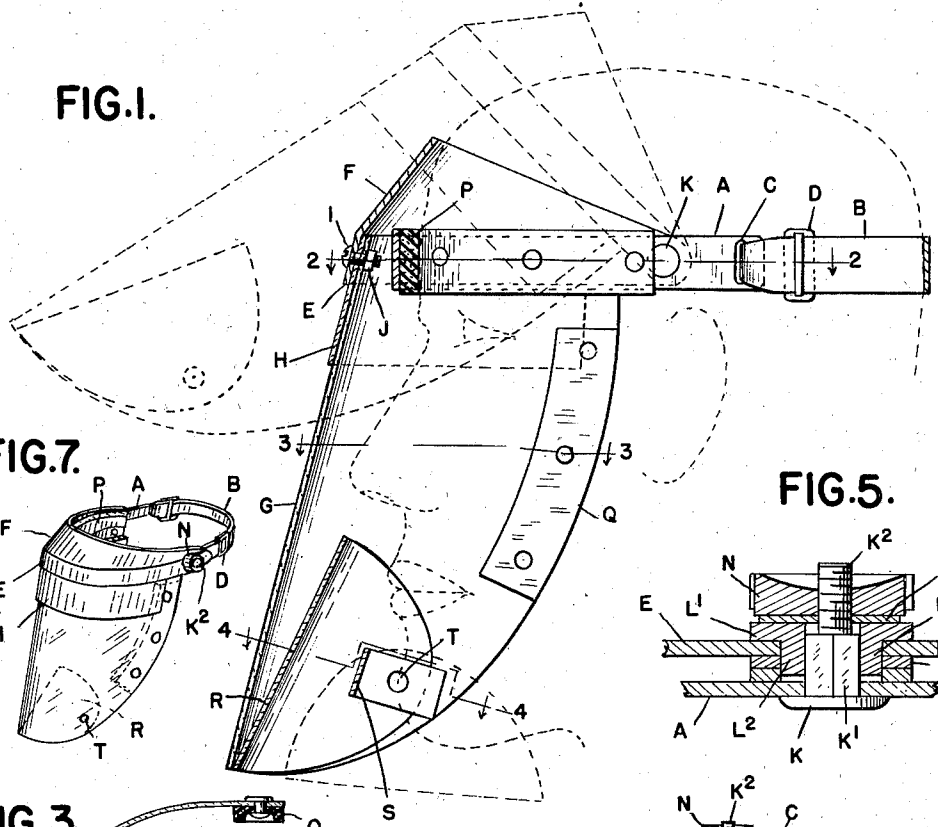


FIG.7.

FIG.5.

FIG.3.

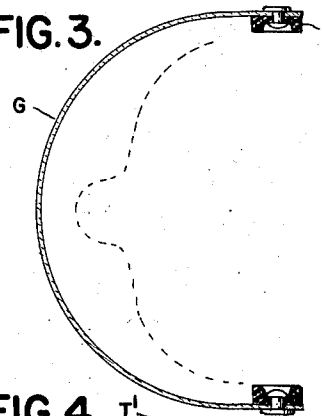


FIG.2.

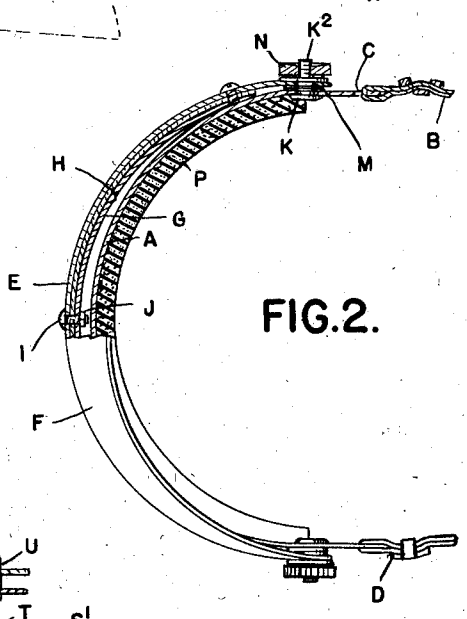
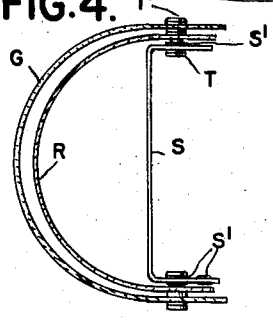


FIG.4.



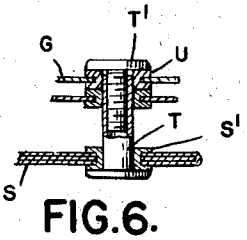


FIG.6.

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HEAD WINDSHIELD

Joseph Buegeleisen, Detroit, Mich.

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4 Claims. (Cl. 2—12)

The invention relates to head windshields more particularly designed for use by motorcyclists and forming a protection for the face against wind, rain, dust, etc. It is the object of the invention to obtain a construction which is adapted to fit and substantially seal about the head and face without discomfort to the wearer and also present a substantially streamlined external form. It is a further object to provide for lifting the shield without detaching from the head so as to clear the face. Still further, it is an object to avoid breath condensation on the shield and to provide for internal ventilation when desired. With these and other objects in view, the invention consists in the construction as hereinafter set forth.

In the drawing:

Figure 1 is a vertical central section showing the shield as applied to the head of the wearer and indicating in dotted lines the raised position to clear the face;

Figure 2 is a section on line 2—2 of Figure 1;

Figures 3 and 4 are sections respectively on lines 3—3 and 4—4 of Figure 1;

Figures 5 and 6 are enlarged sections respectively of the swivel connection between the head band and shield and the tie connection for holding the shield in close contact with the face and chin of the wearer;

Figure 7 is a perspective view.

My improved head shield comprises a semi-circular head band A, preferably formed of fiber or similar material and provided with a flexible elastic strap B secured to and extending between its opposite ends passing through eyelets C and having buckles D for adjustment. E is a second semi-circular band of larger radius than the band A and having formed integral therewith a hood portion F extending obliquely in an upward and an inward direction. To the band E is detachably secured a transparent face shield G formed of Celluloid or other transparent material. If desired, a tinted screen H may be used adjacent to the upper portion of the shield in line with the eyes of the wearer. Both of these members are secured to the band E by screws I and nuts J. The bands A and E have a swivel engagement with each other, preferably formed as specifically illustrated in Figure 5, in which K is a headed pin having a polygonal portion K′ and a threaded shank K^2 of smaller diameter. L is a sleeve slidably but non-rotatively engaging the polygonal portion K′ and having a rounded portion L^2 and a radially outwardly extending flange L′. The band A is apertured to non-rotatively engage the polygonal portion K′ and the band E is apertured to rotatively engage the rounded portion L^2. Spacer washers M are placed between the bands A and E; a thumb nut engages the threaded shank K^2 and a spring washer O is arranged intermediate the flange L′ and nut N. Thus, by adjusting the nut N any desired degree of frictional engagement may be obtained between the bands A and E, while permitting a relative rotational movement thereof.

The band A has secured to its inner side a cushion P, preferably formed of sponge rubber, this directly engaging and fitting about the forehead of the wearer. The shield G is semi-circular in cross section to extend over the face and about the cheeks of the wearer. Cushions Q preferably of sponge rubber, extend vertically along the marginal portions of the shield to rest upon and to conform to the cheeks of the wearer. Pivotally mounted within the lower end portion of the shield G is a ventilator shield R which also functions to prevent condensation of breath on the shield G. The shield R normally extends obliquely inwardly and upwardly from the lower end of the shield G to a point adjacent to the nostrils and covering the mouth of the user. However, by turning the shield R upon its pivots it may be arranged in the position shown in dotted lines in Figure 1, where it will direct a ventilating air current within the shield G. To hold the shields R and G so as to conform to the cheeks and chin of the user, a tie band S extends across the same. This band is preferably attached to the pivotal connections, each of which as shown in Figure 6, comprises a headed hollow pin T, and a headed screw T′ threadedly engaging internal threads in the hollow pin. The pin T is inserted through eyelets U in the shields G and R and also through one of a plurality of eyelets S′ in the tie S, the screw T′ being then engaged to hold these parts together. Thus, the length of the tie S may be adjusted to suit the individual wearer and to hold the shield G against the cheeks. The tie band also imparts to the shield a downwardly tapering substantially conical form.

With the construction as described, the band A is fitted to the head of the wearer by adjusting the length of the elastic strap B through the buckles D. When properly adjusted the band and strap are drawn over the head of the wearer with the cushion P bearing against the forehead. This will normally hold the shield G in the position shown in full lines in Figure 1, where it extends in front of the face and with the cushions

Q bearing against the cheeks. The tie S having first been properly adjusted in length by selection of a particular eyelet S' for the pin T, this will hold the ventilator shield R in contact with the chin of the wearer, and will also assist in conforming the sides of the shield and cushions Q to the cheeks. Thus, the shield forms an effective protection against wind, dust, rain, etc., and presents an external substantially streamlined form. Whenever desired, the shield may be thrown upward to the position indicated in dotted lines, this being permitted by the larger radius of the band E. The obliquely extending hood F maintains close contact with the head of the wearer in each position of adjustment.

For normal use the ventilator shield R is in the position shown in full lines in Figure 1, in which position it directs the breath of the user downward and prevents condensation of the same on the shield G. However, on occasions it may be desirable to shift the shield R into the position shown in dotted lines where it extends beneath the chin of the user with its forward end slightly below the lower end of the shield G. Thus arranged, air will be deflected into the shield G to ventilate the same.

The transparent shields G and R are frequently injured and must be renewed. Such renewal is facilitated by the attachment of said shields to the band E and hood F through the medium of the screws I and nuts J. Thus, whenever necessary one shield may be removed and another substituted therefor.

What I claim as my invention is:

1. A head shield comprising a head band, a semi-circular band of larger radius swiveled to said head band on opposite sides thereof, a hood extending obliquely upward and inward from said second band into proximity to the head, a face shield secured to said second band to extend around adjacent to the cheeks of the wearer, resilient cushions secured to the inner side of said head band and the marginal portions of said shield for contacting respectively with the forehead and cheeks of the wearer, and an adjustable tie connection between the opposite sides of said face shield for drawing said cushions against and in conformity to said cheeks.

2. A head shield comprising a head band, a semi-circular band of larger radius swiveled to said head band on opposite sides thereof, a hood extending obliquely upward and inward from said second band into proximity to the head, a face shield secured to said second band to extend around adjacent to the cheeks of the wearer, resilient cushions secured to the inner side of said head band at the marginal portions of said shield for contacting respectively with the forehead and cheeks of the wearer, an adjustable tie connection between the opposite sides of said face shield for drawing said cushions against and in conformity to said cheeks, and a breath shield secured to the lower end of said face shield and extending diagonally upward therefrom above the mouth and in front of the nostrils of the wearer.

3. A head shield comprising a head band, a semi-circular band of larger radius, a hood extending obliquely upward and inward from said second band, a face shield secured to said second band and extending about the cheeks of the wearer, and swivel connections between said second band and the opposite sides of said head band each comprising a headed pin non-rotatively connected with the one band, a flanged sleeve non-rotatively axially slidably engaging said pin, said sleeve rotatively engaging the other band, and a nut having a threaded engagement with said pin at the outer end thereof for conveniently adjusting said flanged sleeve into clamping engagement with said bands whereby said shield may be alternatively clamped in positions respectively to shield the face and to clear the same.

4. A head shield comprising a head band having a cushioned lining of sponge rubber for bearing against the forehead of the user, a transparent face shield of substantially semi-circular cross section mounted on said head band and provided with cushions of sponge rubber on its marginal portions for contacting with the face of the user, and a substantially rectilinear adjustable tie connection between the sides of the lower portion of said shield for conforming the same to the cheeks of the user and for imparting to the shield an external downwardly and forwardly tapering substantially streamlined form.

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