R. N. DICKEY & E. E. RINGER.

EYE PROTECTOR.

APPLICATION FILED NOV. 22, 1915.

1,199,162. Patented Sept. 26, 1916.

Fig. 1.

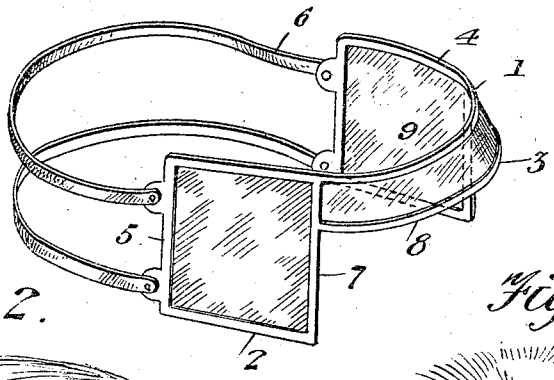


Fig. 2.

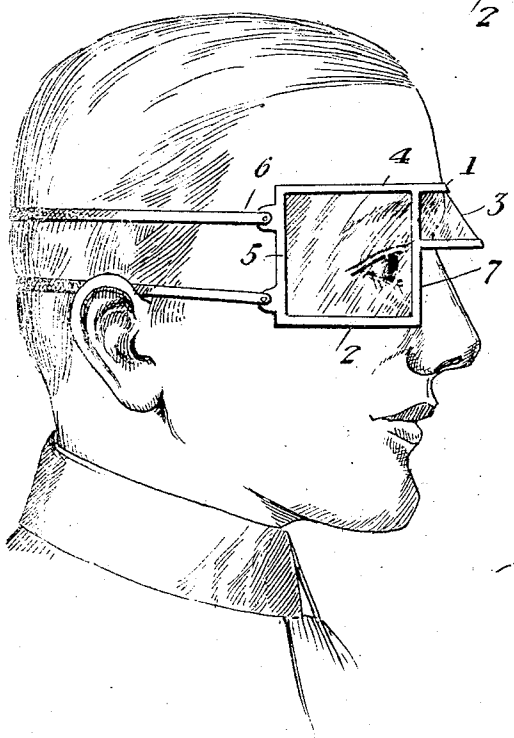
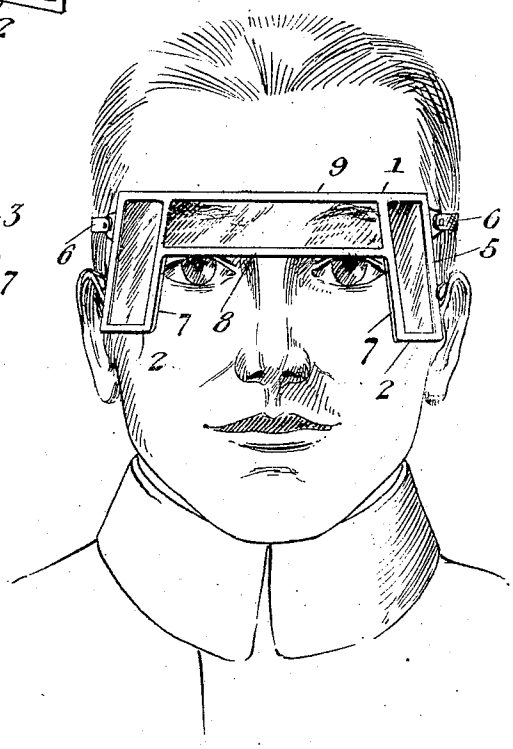


Fig. 3.



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ROY N. DICKEY AND EMERSON E. RINGER, OF SOUTH BEND, INDIANA, ASSIGNORS OF ONE-THIRD TO HARRY E. JOSEPHSON, OF SOUTH BEND, INDIANA.

EYE-PROTECTOR.

1,199,162. Specification of Letters Patent. Patented Sept. 26, 1916.

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To all whom it may concern:

Be it known that we, ROY N. DICKEY and EMERSON E. RINGER, citizens of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Eye-Protectors, of which the following is a specification.

The invention relates to an improvement in eye protectors constructed in goggle form and adapted to provide an effective protection for the eyes particularly against the wind pressure, without directly covering the eyes.

Eye protectors and goggles particularly those to be used to protect the eyes against wind pressure, interpose a transparent medium which protects, by reason of the fact that it covers the eye. It is of course appreciated that in such type of device there is of necessity more or less obstruction to a clear vision and hence the benefits of the device as a protector are to some extent at least offset by its disadvantage in interfering with a perfectly clear vision. Such disadvantage being particularly noticeable after some slight use of the goggles of such type by reason of the sweating of the interior of the goggles or the accumulation of dust, rain or the like on the exterior thereof.

The present invention is designed to combine all the advantages of the previously noted type of goggles, while at the same time eliminating their disadvantages, and to this end the improved goggles of this invention entirely avoid obstructing the vision to the slightest degree, being formed to avoid covering the eyes, and at the same time constructed to insure a comparatively thin dead air space which will act effectively as an eye protector against wind pressure.

Specifically the improved goggles constructed throughout their face engaging area of transparent material, have such material arranged to avoid covering the eyes in direct vision, the arrangement of the transparent parts closely fitting the face above, at the sides, and below the eye area, and projecting beyond the surface of the face forwardly of such close fitting outline. The goggles form in effect a pocket having the face portion surrounding the eye area as a base and projected forwardly beyond such face portion and the plane of the eyes so that the air in such pocket is without outlet against wind pressure and hence remains dead, to act as an effective protector for the eyes.

The invention in the preferred form of details will be described in the following specification, reference being had particularly to the accompanying drawings, in which:

Figure 1 is a perspective view of the improved goggles; Fig. 2 is a view in side elevation illustrating the application of the goggles; Fig. 3 is a front view of the same.

The improved goggles are made up to present a main section 1, including what may be termed side sections 2, preferably approximately rectangular in plan, and a connecting section 3 of narrow, elongated form. The respective sections 2 and 3 are each made up of transparent material, such as glass, mica or celluloid, with the latter preferred, and are united in the particular form described and shown by any flexible frame strip 4, which will afford the desired outline.

The rear edges 5 of the sections 2 are connected by one or more bands 6 constructed with a view to being passed over the head of the wearer and to rest about the same to hold the goggles in applied position, this detail of the invention being immaterial so far as the main essential is concerned. The upper edge of the sections 2 and section 3 are in the same line, and the lower edge of the section 3 is connected to the forward edges 7 of the sections 2 at a point somewhat below the upper edge of the section 3. The lower edge of the section 3, as 8, is of greater linear dimension than the upper edge 9 of the said section, so that in side view the material forming the transparent portion of the section 3 inclines downwardly and outwardly from the upper edge of the said section as clearly shown in Fig. 2.

In the application of the goggles, they are of such size that when applied, as illustrated the upper edge of said goggles, that is, from the rear end of one section 2 to the rear end of the opposing section 2 will snugly fit the forehead above the eyes, while the rear edges 5 of the sections 2, and a portion of the lower edges of said sections 2 will also snugly fit the face in rear of and below the eyes. In this arrangement, which is the contemplated disposition of the goggles, it will be noted that the lower edge of section 3 and the relatively forward portions

of each of sections 2 will project beyond the surfaces of the face, and that in this arrangement the goggles will occupy such a position with relation to the eyes that the eyes have clear vision through the space included between the forward edges of the sections 2 and the lower edge of section 3.

By the described arrangement of the goggles it will be apparent that in their forward portion they project beyond the surface of the face above the eyes and on each side thereof, forming inwardly of the sections and rearwardly of the forward edge of the projected portions, what may be termed a pocket. As there is no outlet for the air within this pocket except through the forward opening, which may be termed the eye space, it is obvious that the air coming therein will not easily be displaced, thereby forming an air film covering the eyes under a pressure obviously equal to the pressure of the wind being faced, and thus prevent the wind from reaching the eyes under velocity. In other words the dead air contained within the goggles will act as an effective envelop or film to cover and protect the eyes against the wind striking same under any considerable velocity while at the same time there will be absolutely no interference to direct vision and hence none of the disadvantages heretofore enumerated resultant from goggles or similar devices which cover the eyes. The salient feature of the present construction therefore resides in providing goggles which permit clear unobstructed normal vision and yet bank the air over the eyes so as to protect them against injurious effect of wind pressure or the like.

The inclination of the section 3, as hereinbefore referred to, together with its disposition immediately above the eyes, permits the use of this particular section as a kill glare or light protector when desired, as the user by simply inclining his head forwardly may so lower the section 3 with relation to the light and line of vision as to cause him to look through said section 3, thereby providing an effective means whereby the advantages of the transparent and light influencing section 3 may be utilized at will. The transparent sections 2 of course permit the user to glance sidewise when desired, without vision obstructions thereof, of course, the sight is then through the transparent material and not direct.

The details of the frame arrangement and material, the connecting strips of the transparent material are not important as it is contemplated to construct the goggles of any appropriate material and of course in any desired size.

What is claimed is:

An eye protector comprising a center portion and relatively larger side portions, the upper edges thereof forming a continuous curved rim and the side portions extending below the center portion, said rim and the rear and bottom edges of the side portions being adapted to fit against the face, and the forward edges thereof projecting forwardly of the face, whereby to form an air pocket including the face portion surrounding the eye area.

In testimony whereof we affix our signatures in presence of two witnesses.

ROY N. DICKEY.
EMERSON E. RINGER.

Witnesses:
VERONICA C. SWEENEY,
JAS. E. SCHOEK.