Dec. 3, 1946. C. E. MORLEY ET AL 2,411,933

GOGGLES

Filed May 27, 1943

FIG. 1.

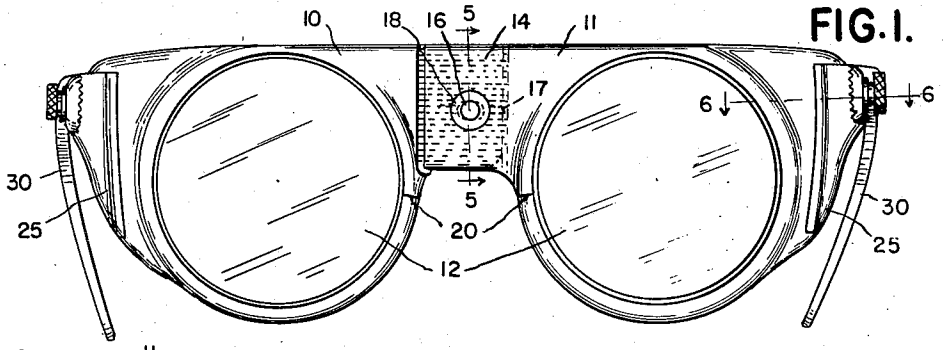

FIG. 2.

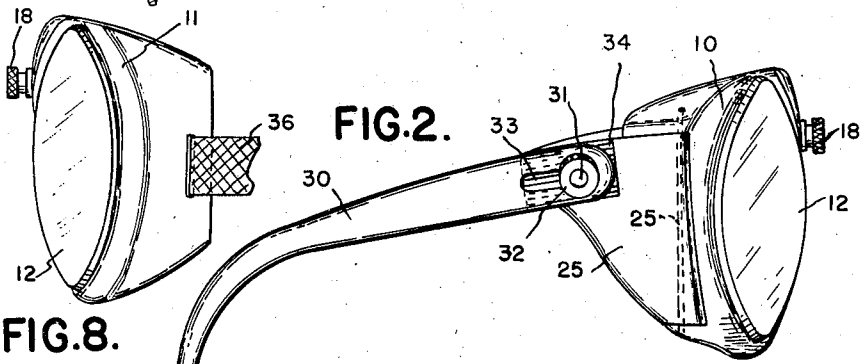

FIG. 8.

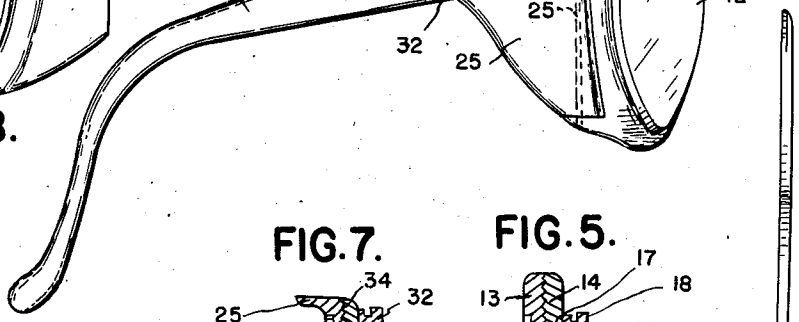

FIG. 7.

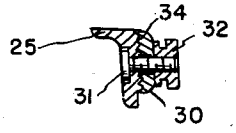

FIG. 5.

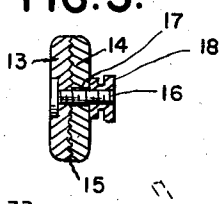

FIG. 6.

FIG. 4.

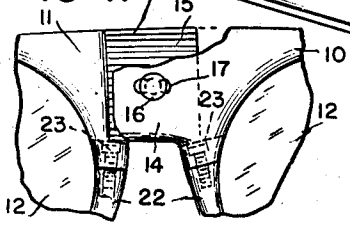

FIG. 3.

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Patented Dec. 3, 1946

2,411,933

UNITED STATES PATENT OFFICE

2,411,933

GOGGLES

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Detroit, Mich.

Application May 27, 1943, Serial No. 488,666

1 Claim. (Cl. 2—14)

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This invention relates to goggles, and is primarily concerned with the provision of an improved frame construction affording the wearer more complete protection and which is more comfortable when worn over long periods of time.

Another object is to provide an improved lens-holding and nose bridge construction.

A further object is to provide cooperating fixed and movable parts so arranged that the frame as a whole may be adjusted to closely follow the contours of the wearer's face, affording a complete and unbroken shield entirely around the wearer's eyes, and extending into contact with the face in such manner that it is impossible for dust particles or rays against which shielding is desired to enter the eyes through space between the lens and wearer's face.

Still another object is to provide improved means for adjusting the various components of the spectacle.

Another object is to provide such a spectacle which in addition to its other advantages may be folded when not in use.

Other objects and advantages will be apparent to those skilled in the art upon reference to the following description and the accompanying drawing in which

Figure 1 is a front elevational view of a spectacle embodying my present invention.

Figure 2 is an elevational view thereof.

Figure 3 is a top elevational view of the same, partly broken away.

Figure 4 is a detail fragmentary elevation of the adjustable nose bridge portion, also partly broken away.

Figures 5 and 6 are detail sectional views taken substantially on the lines 5—5 and 6—6 of Figure 1, looking in the direction of the arrows.

Figure 7 is a sectional detail view taken substantially on the line 7—7 of Figure 6, and looking in the direction of the arrows.

Figure 8 is a fragmentary perspective view bringing out the possibility of use of our improved construction in connection with an head-encircling metal or flexible fabric band, instead of by the use of temple members.

Referring now to the drawing, reference characters 10 and 11 designate the two lens-supporting sections of our improved goggle frame. These sections may be formed of plastic or the like, being cupped and apertured to receive the lenses 12. The two sections are joined by adjustably mating bridge sections 13—14, which overlap one another, and are provided with longitudinal serrations generally designated 15. A threaded stem

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16 projects from the rear section 13 through a longitudinal slot 17 in the front section, the stem being fitted with a clamping nut 18, which when loosened permits the sections, and consequently the lenses, to be moved to and from one another.

The cupped contouring of the lens frame is rounded or drop-ovaled in a horizontal plane over the lens, as shown in Figure 3, the inwardly projecting flange thus provided being adapted to follow the contour of the wearer's forehead, while the lower portions of the flange, projecting to a lesser extent, are shaped to rest upon the cheeks.

The lens frames are split as indicated at 20, the lenses being beveled and the interiors of the lens openings being grooved, so that the lenses may be inserted and removed by springing the lens frames to open or close the slot openings, the plastic material or metal frame being sufficiently flexible to permit this.

Integral nose pads 22 are provided, shaped and positioned to rest upon the sides of the nose, the split openings 20 extending through the nose pads, and clamping screws as 23 being provided to draw and hold the lens frames tightly closed upon the lenses, or permit freeing thereof at will.

Side shields 25 are provided, which also may be formed of plastic or metal as desired, these being hinged on substantially vertical pins and shaped as continuations of the lens frames, the frames at the top and bottom of the shields forming continuations of those carried by the lens frames.

Temples 30 are attached to the shields by means of clamping bolts 31, and thumb nut 32, the bolts extending through a longitudinal slot 33, and longitudinal serrations 34 are provided upon the adjacent faces of the shield and temple to permit longitudinal movement of the latter while preventing disalignment due to rotation of the temple with respect to the bolt.

An auxiliary though desirable feature which is embodied in our preferred construction is shown at 35 in Figure 6. It comprises the contouring of the adjacent portions 25 and of the shield 10 (or 11) so that when the parts are in the relative positions shown, there is this channel or space 35 which permits sufficient air to pass from without to the space between the goggle structure and the user's cheek and eyelid surface, while preventing the direct access of light or dust particles behind the lenses and from the sides. This counteracts any tendency to steaming, as from face perspiration, which would blur or fog the lenses. In some instances, perforations or equivalent wire-screened apertures, in the wall or shell 25 might be

sufficient to effect this; in other cases the desired channel **35** would be preferable.

As brought out in Figure 8, it will be obvious that in place of the temple pieces for holding the lens frame in position upon the user's face, a head-encircling band **36** might be attached at its ends to either outer end of the lens frame of this type as assembled; thus, with the frame, constituting a head-encircling unit, partly lens frame and partly fabric, elastic, or metal.

We are aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and we therefore desire the present embodiments to be considered in all respects as illustrative and not restrictive; reference being had to the appended claim rather than to the foregoing description to indicate the scope of the invention.

We claim:

In an eye protecting shield, a pair of cup-shaped lens holding frames, projections extending laterally from adjacent sides of the frames in overlapping relationship and having horizontally elongated intermeshing serrations enabling relative adjustment of the frames toward and away from each other, and means for clamping the overlapping projections in any one of several adjusted positions.

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