March 8, 1955 P. F. REEL 2,703,403

GOGGLES

Filed Sept. 15, 1951

Fig. 1

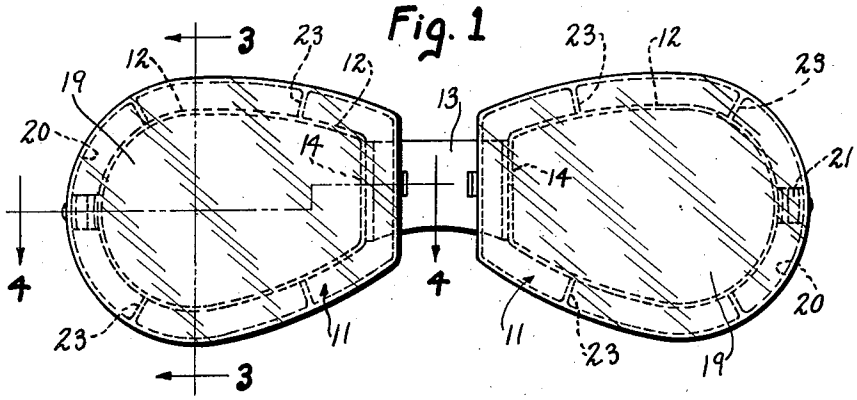


Fig. 2

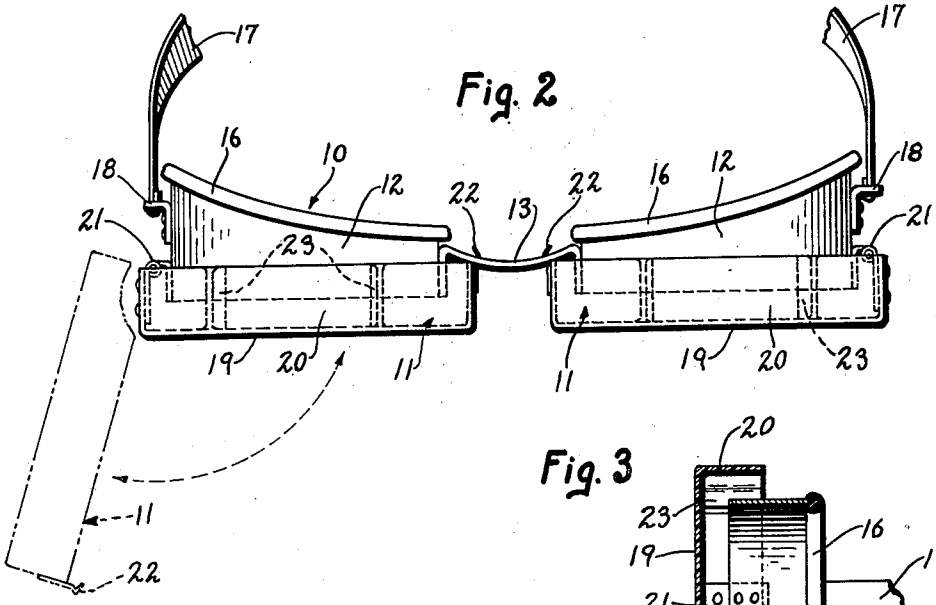


Fig. 3

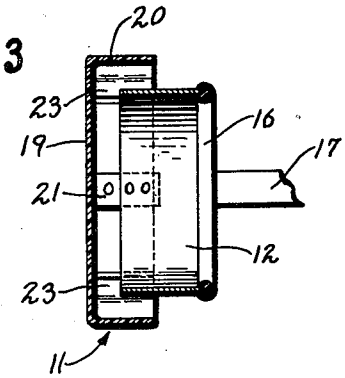
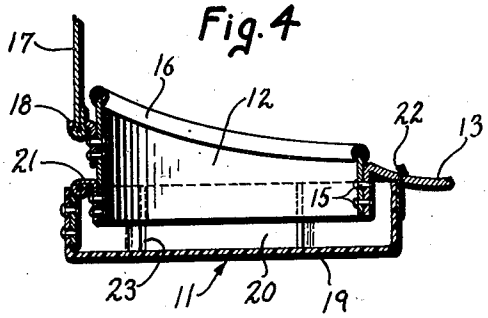


Fig. 4



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GOGGLES

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3 Claims. (Cl. 2—14)

My invention relates to goggles or the like and the principal object of my invention is to provide new and improved devices of the character herein disclosed.

My improved goggles are particularly well adapted for use by workers in industry; such as by welders, grinders, chippers or the like. However, it will be obvious that goggles constructed according to my invention may also find wide utility in other fields. It is to be considered therefore, that the embodiment disclosed in the following specification is illustrative only and that the invention is not limited to such specific uses.

Heretofore, one of the undesirable features of goggles has been the tendency for the lenses to fog. Some devices in the prior art have attempted to alleviate this condition by providing one or more air vents to provide for circulation of air behind the lenses. These vents have not been entirely successful since they generally provided insufficient circulation to prevent fogging and additionally they often created a hazard by permitting foreign matter to enter behind the lens. The means for successfully solving these and other problems will become apparent from the description which follows.

In the drawing accompanying this specification and forming a part of this application, there is shown, for purposes of illustration, an embodiment which my invention may assume, and in this drawing:

Figure 1 is a front elevational view of my improved goggles,

Figure 2 is a plan view of the embodiment,

Figure 3 is a sectional view generally corresponding to the line 3—3 of Figure 1, and

Figure 4 is a fragmentary sectional view generally corresponding to the line 4—4 of Figure 1.

As shown in the drawing, my improved goggles are preferably formed to provide a frame portion **10** which is adapted to be worn by the user in the conventional manner, and eye protective lens portions **11** through which the wearer may see. The frame portion **10** is herein shown to comprise a pair of generally tubular members **12** (which may be formed of any suitable material such as plastic or metal), joined together by means of a bridge piece **13**, connection being effected in any suitable manner, such as by rivets **15**.

As best seen in Figure 1, the members **12** herein disclosed are somewhat oval-shaped, but are flattened at **14** to provide a plane surface for attaching the bridge piece **13**. The portions of the members **12** which rest against the wearer's face are shaped to conform to the face, and for comfort the edges may be padded with a cushioning material **16**, such as rubber. Any convenient means may be used to hold the goggles in place during use, and such means are herein shown to comprise a head-encircling strap **17** which may have its opposite ends secured to the frame **10** by means of brackets **18**.

The lens portions **11** are generally cup or tray-shaped and as herein shown comprise a plane surface **19** with the desired physical and optical characteristics, the surface **19** having its defining edge turned to provide a circumscribing, laterally-extending wall **20**. As shown in Figure 1, the lens portions conform to the oval-shape of the members **12**, and as best seen in Figures 3 and 4, the wall **20** over-laps the member **12** but is spaced therefrom.

The lens portions **11** are presently mounted so as to space the plane surfaces **19** from the members **12**, and the means for mounting each lens to a respective member **12** is shown to be a hinge **21**. As best shown in Figure 4, the hinge **21** may be riveted to the lens **11** and to the

member **12**, and as shown in Figure 2, the lens portions **11** may be swung about the pivots formed by the hinges **21** to the position shown in dot-dash lines.

A latch is provided to secure each lens in its eye-protecting position, and this latch is herein shown to comprise a metal tongue **22** which is secured to the lens **11** and which may pass through an aperture formed in the bridge piece **13**. As shown in Figure 4, the tongue **22** may be formed to frictionally engage the bridge member **13** in manner common to this type of latch. It will now be apparent that the lens may be easily unlatched and moved to the dot-dash position whenever desired. When the lens is returned once more to its normal position, the tongue **22** will again frictionally engage the bridge piece **13** to hold the lens securely in place.

As shown in the various views, means has been provided to steady the lens portions **11** and to insure that the lens portions remain securely in place with respect to the members **12**, even though the hinge **21** may become worn. Such means are presently provided by ribs **23** (herein shown to be four in number) which may be formed integral with the wall **20** and extend inwardly into contact with the member **12**.

It will now be obvious that my invention provides for an improved goggle construction. Because of the spacing between the lenses and the members **12**, air may circulate freely behind the lenses and thus not only prevent fogging thereof, but provide adequate circulation for keeping the wearer's face cool. This circulation is provided for without the attendant possibility of foreign matter endangering the eyes of the wearer becasue of the circuitous path any entering foreign matter would have to follow. Another important feature is the ease with which the lenses may be moved aside to provide unobstructed vision whenever desired.

In view of the foregoing it will be apparent to those skilled in the art that I have accomplished at least the principal object of my invention and it will also be apparent to those skilled in the art that the embodiment herein described may be variously changed and modified, without departing from the spirit of the invention, and that the invention is capable of uses and has advantages not herein specifically described, hence it will be appreciated that the herein disclosed embodiment is illustrative only, and that my invention is not limited thereto.

I claim:

1. A goggle construction, comprising frame means adapted to be positioned with respect to the eyes of a user, lens means for said frame means, said lens means being constructed to provide a circumscribing wall extending laterally therefrom in overlapping relation with said frame means, and rib means extending between said circumscribing wall and said frame means for spacing said lens means from said frame means to provide for circulation of air therebetween.

2. A goggle construction, comprising frame means adapted to be positioned with respect to the eyes of a user, said frame means comprising two eye-encircling members of generally tubular shape secured together by means of a bridge piece, lens means for each of said eye-encircling members, said lens means being constructed to provide a circumscribing wall extending laterally therefrom in overlapping relation with respective eye-encircling members, and a plurality of ribs extending inwardly from each circumscribing wall of respective lens means for spacing said lens means from respective eye-encircling members to provide for circulation of air therebetween.

3. A goggle construction, comprising frame means adapted to be positioned with respect to the eyes of a user, said frame means comprising two eye-encircling members of generally tubular shape secured together by means of a bridge piece, lens means for each of said eye-encircling members, said lens means being constructed to provide a circumscribing wall extending laterally therefrom in overlapping relation with respective said eye-encircling members, a plurality of ribs extending inwardly from each circumscribing wall of respective lens means for spacing said lens means from respective eye-encircling members to provide for circulation of air therebetween, hinge means for pivotally se-

curing each of said lens means to a respective member, said hinge means being arranged so that said lens means may be positioned in or out of a user's normal line of vision, and latch means for releasably securing said lens means in one pre-selected position.

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