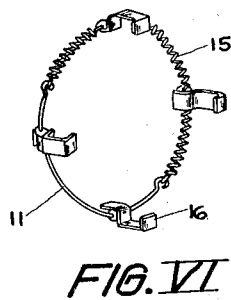
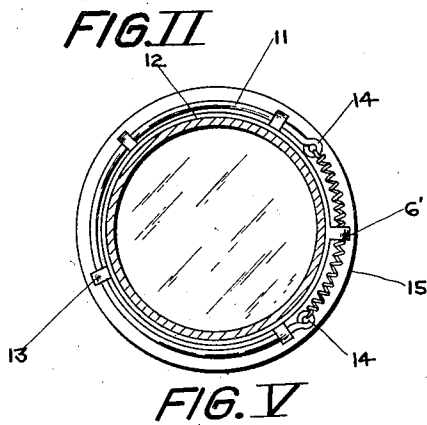
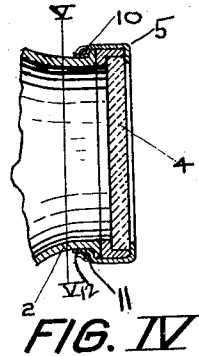
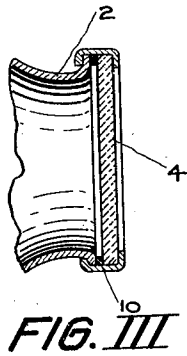
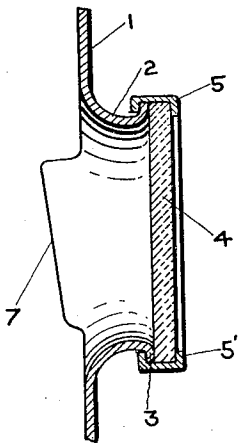
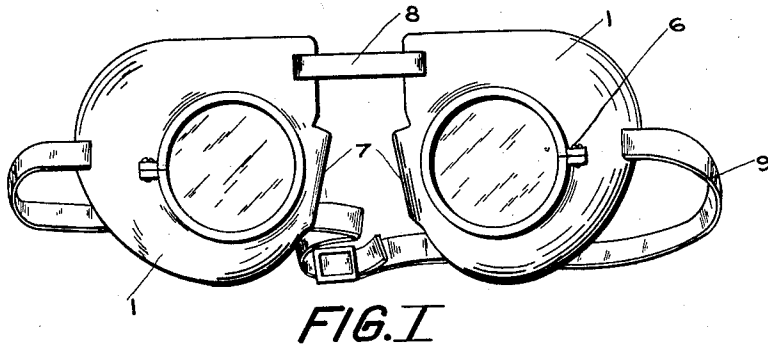


H. K. PARSONS.
EYE PROTECTOR.
APPLICATION FILED JUNE 25, 1918.

1,385,583.

Patented July 26, 1921.



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EYE-PROTECTOR.

1,385,583.

Specification of Letters Patent. Patented July 26, 1921.

Application filed June 25, 1918. Serial No. 241,774.

To all whom it may concern:

Be it known that I, HAROLD K. PARSONS, a citizen of the United States, residing at Southbridge, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Eye-Protectors, of which the following is a specification.

This invention relates to improvements in eye protectors.

One of the leading objects of the present invention is the provision of an improved protector especially adapted for use in the industries in those places where the user is subject to considerable heat, and in which the employment of metal shall be reduced to a minimum and all metallic parts to be disposed entirely on the outside of the protector.

A further object of the present invention is the provision of a construction of this character which shall be extremely simple in construction, shall employ a minimum number of parts, and shall permit of the ready removal and replacement of the lenses as desired.

Another object of the invention is the provision of an improved construction in which the lenses may be readily mounted after cutting and without the necessity of special edging or the like, thus facilitating the fitting of lenses to the protector and their replacement when damaged.

Other objects and advantages of my improved construction should be readily apparent by reference to the following specification taken in connection with the accompanying drawings, and it will be understood that I may make any modifications in the specific details of construction shown and described within the scope of the appended claims without departing from or exceeding the spirit of my invention.

Figure I represents a front view of my complete protector.

Fig. II represents a vertical sectional view thereof.

Fig. III represents a similar view of a slightly modified construction.

Fig. IV represents a corresponding view illustrating a different means for securing the lens in position.

Fig. V represents a sectional view as on the line V—V of Fig. IV.

Fig. VI represents a perspective view of a skeleton form of lens securing member.

In the drawings, in which similar characters of reference are employed to denote corresponding parts throughout the several views, the numeral 1 designates the face engaging portion or mask of my improved protector, which is preferably in the form of a molded fiber or non-metallic and relatively non-conducting material, having pressed up therefrom the eye cups 2 terminating in the outwardly directed flanges 3 providing supports for the protecting lenses 4. My protectors may if desired be further formed with the molded reversely turned inward edges providing the nose bearing pads or guards 7 and may be connected by a suitable pliable bridge member 8, although it will be understood that different forms of bridge members may be employed if desired, or that the entire protector may be formed in one piece in place of two separate parts and various forms of base portion be utilized, in any event the protector being preferably provided with the head band 9 to retain it in position on the face of the wearer.

In the form of my invention illustrated in Fig. II of the drawing I have shown the lens 4 as resting directly against the flange 3, while the parts are circumferentially embraced by the channel member or securing rim 5 which fits around the edges of the flange and lens and has the inwardly deflected edge portions 5' fitting respectively against the front face of the lens and the rear face of the flange to securely hold the parts in position, the ends of the rim 5 being suitably united as by the end piece members and securing clip or other device located as at 6, shown in Fig. I.

Fig. III illustrates substantially the same form of invention as shown in Fig. II, with the exception that to make a tight fit between the lens and eye cup and at the same time permit of slight yielding of the lens under blow, jar or the like, I have shown interposed between the flange and lens a resilient ring, the parts being otherwise the same.

Figs. IV and V illustrate another modification of my invention to permit of instant removal and replacement of a lens as desired. In this form of the invention there is shown as fitting around the flange on the eye cup the retaining band or rim 10, which embraces the lens and the eye cup flange to retain the parts together, this rim being secured in position by the wire 11 fitting

around the rearwardly extending portion 12 of the rim. This wire preferably passes through the eyes 13 stamped up from the rim 10 and terminates in eye portions 14 which are connected by the spring 15 which spans the joint 6' of the rim. In this form of my invention it is merely necessary to open the joint stretching the spring 15, when the lens may be readily removed or applied in position, and releasing of the frame will allow the spring to draw it back into place to securely lock the parts.

A similar form of construction is illustrated in Fig. VI, in that I here utilize the locking ring 11 and tension spring 15, in this instance, however, in place of having a continuous rim surrounded by the locking ring 11 I secure to the ring and to the spring a plurality of clips 16, which for best results may be shaped as sections of the rim 5 with its annular portion 12, that is to say, with a portion which will embrace the flange of the eye cup and the lens and with an additional portion or finger which will rest against the eye cup and prevent tilting movement, stretching of the spring serving to disengage two of the fingers, when the lens may be readily removed and a new one applied.

From the foregoing description taken in connection with the accompanying drawings, the advantages of my improved protector should be apparent and it will be understood that I have provided an extremely simple and desirable construction in which all metal parts are reduced to a minimum and the metal parts employed are all disposed exteriorly of the protector and away from the face so that no disagreeable effects will occur from heating of the parts, while at the same time I am able to very simply assemble or connect the parts and to construct the goggle at a minimum expense, as I eliminate all expensive plating operations or the like and at the same time am able to removably retain in position the lenses and facilitate their replacement as desired.

I claim:

1. In a device of the character described, the combination with eye cup members hav-

ing outwardly deflected flanges, of lenses, and securing means for the lenses including a spring ring, and means controlled and retained in position by the ring for securing the lenses to the flanges.

2. In a device of the character described, the combination with a goggle eye cup, of a lens forming a closure for the cup, a resilient ring embracing the cup, and hook-like devices carried by the ring and engaging the lens for securing it in position on the cup.

3. In a device of the character described, the combination with an eye cup having a reduced neck portion, of a resilient ring surrounding the neck, a lens forming a closure for the cup exteriorly of the neck, and locking means carried by the ring and projecting around the cup to engage the edge of the lens and detachably secure the lens in position at the end of the cup.

4. In a device of the character described, the combination with an eye cup having an outwardly deflected terminal portion, of a resilient locking ring removably snapped over the flaring portion of the eye cup and lens securing members yieldingly held by said ring and projecting beyond the terminus of the eye cup for securing a lens in position.

5. A lens locking ring for a structure of the character described comprising a rigid arcuate portion, lens retaining fingers carried by said rigid arcuate portion, a resilient or yielding portion, and additional retaining members carried by said yielding portion.

6. In a device of the character described, a lens retaining device in the form of a resilient ring, said ring comprising an arcuate relatively rigid portion, retaining members carried by said rigid portion, and resilient means connecting the ends of the rigid portion for yieldingly holding the parts in place.

In testimony whereof I have affixed my signature, in presence of two witnesses.

HAROLD K. PARSONS.

Witnesses:

H. E. COLEMAN,
ARTHUR S. CANN.