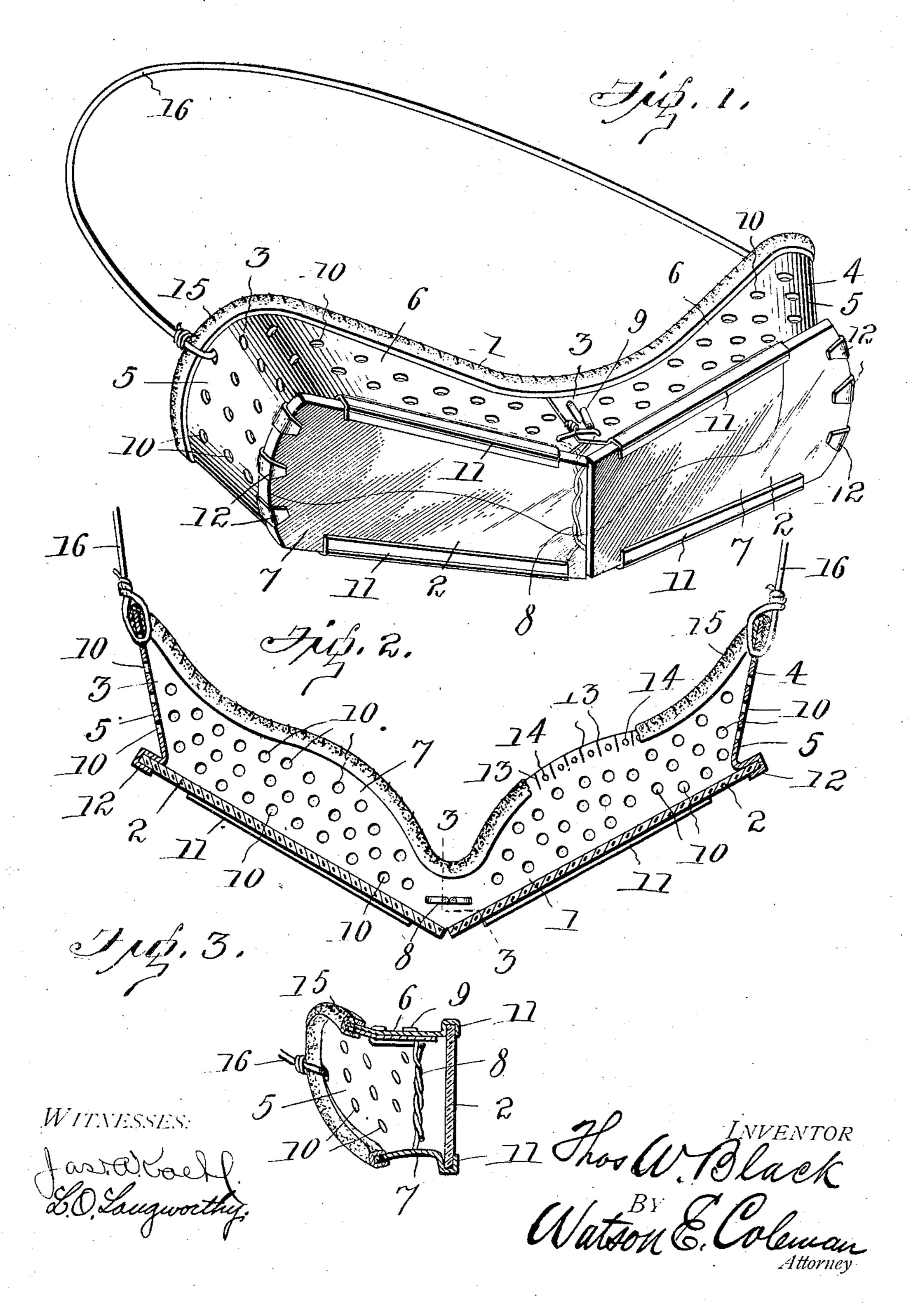
T. W. BLACK.

GOGGLES.

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## ITED STATES PATENT OFFICE.

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## GOGGLES.

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Specification of Letters Patent.

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To all whom it may concern.

Be it known that I, Thomas W. Black, a citizen of the United States, residing at 5 of Pennsylvania, have invented certain new and useful Improvements in Goggles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in goggles, and particularly to those worn by metal-workers for protecting the eyes from sparks, intense light and heat, dust, and the like.

One object of the invention is to provide a device of this character in which the glasses or transparent plates are removably mounted, so that they may be readily replaced when spotted or broken or changed accord-20 ing to the nature of the work the wearer is performing.

Another object of the invention is to provide a device of this character which may be readily bent and shaped to fit any wearer.

A still further object of the invention is to provide a device of this character which will be simple, durable, and comparatively inexpensive and at the same time very effective for the purpose intended and comfort-30 able to the wearer.

Other objects and advantages of my invention, as well as the structural features by means of which these objects are attained, will be made clear by an examination of the 35 specification, taken in connection with the accompanying drawings, in which the same reference-numerals denote corresponding parts throughout the several views, and in which—

Figure 1 is a perspective view of a pair of my improved goggles. Fig. 2 is a horizontal sectional view through the same, and Fig. 3 is a vertical transverse sectional view taken on the plane indicated by the line 3 3 in 45 Fig. 2.

Referring to the drawings by numeral, 1 denotes the frame or body of my improved goggles, which is of substantially V form and has its inner edge shaped to fit the face of the 50 wearer and its outer edge adapted to hold glasses or other sheets or plates 2, which may be plain or colored, transparent, or semitransparent. This frame 1 is preferably made of a single piece of light sheet metal---

such as tin, aluminium, or brass—and each of 5 its two similar parts or half-sections 3 and 4 is formed by shaping and bending the metal Burnham, in the county of Mifflin and State | to provide a rounded end 5 and upper and

lower converging portions 6 and 7.

The half-sections 3 and 4 of the frame are 60 disposed angularly with respect to each other, and their upper portions 6 6 overlap and are united by a fastener 9 in the form of a staple and by a vertical brace 8, which connects the upper and lower portions of the frame. As 6 shown, this combined brace and fastener 8 is formed from a single piece of wire, which is passed through apertures in said parts and has its ends and central portions twisted together. The top, bottom, and sides or ends 70 of the frame are formed with perforations or apertures 10 for ventilation; but, if desired, the frame may be made of any foraminous or reticulate material.

The angularly-disposed outer edges of the 75 half-sections of the frame are provided with guides 11 to receive the upper and lower edges of the glasses 2, said guides being preferably formed by bending said edges to form grooves or channels, in which the glasses are 8c adapted to be slid from the outer ends of the frame until the inner ends of the glasses engage each other. The glasses are removably or detachably secured in said guides, preferably by forming the outer edges of the round- 85 ed ends 5 of the half-sections of the frame with one or more integral tongues 12, which are adapted to be bent around the outer ends of the glasses, as shown. When these tongues are bent back, the glasses may be readily re- 90 moved to permit them to be replaced by glasses of a different kind or color or to permit a new glass to take the place of a broken or damaged one. The inner edge of the upper portion of the frame is arc-shaped or of 95 substantially semicircular shape to fit the forehead of the wearer above the eyebrows, while the inner edge of the lower portion of the frame is curved and shaped to fit the nose and cheeks a little below the eyes. These ro inner edges of the upper and lower portions and also of the end portions of the frame are slit or notched at intervals, as shown at 13, so that said edges may be readily bent to fit the contour of the face of any wearer. Each ic of the tongues formed by the slits 13 is apertured, as at 14, to permit a binding 15 to be sewed or otherwise secured to said edges of

the frame. This binding, which serves as a cushion to protect the wearer's face, preferably consists of a strip of velvet or other fabric folded over the inner edge of the frame, as 5 clearly shown in Fig. 3 of the drawings. The goggles may be retained upon the wearer by an elastic band 16, secured at its ends to the rounded ends 5 of the frame and adapted to pass around the wearer's head, or by any to other suitable means.

The construction, use, and advantages of the invention will be readily understood from the foregoing detail description, taken in connection with the accompanying drawings. It 15 will be noted that by removably mounting the glasses in the frame or holder, as shown, they may be quickly and easily removed and replaced and that by slitting the inner edge of the frame the latter may be bent or shaped

20 to fit the face of any wearer.

The device is of very simple, strong, and durable construction, so that it may be manufactured at a comparatively small cost, and it is well adapted to the use of any persons 25 who must protect their eyes from sparks, dust, light, heat, and the like. The angular disposition of the glasses permit the wearer to see to both sides as well as to the front.

While I have shown and described the pre-3c ferred embodiment of the invention, it will be understood that I do not wish to be limited to the precise showing herein set forth, since various changes in the form, proportion, and minor details of construction may be made 35 without departing from the spirit or sacrificing any of the advantages of the invention as defiened by the appended claims.

Having thus described my said invention, what I claim as new, and desire to secure by 40 Letters Patent of the United States, is-

1. A pair of goggles comprising a perforated sheet-metal frame consisting of two similar half-sections disposed angularly with respect to each other and having their 45 upper inner ends overlapping, a fastening for said ends, transparent plates upon the front of said frame, and a binding upon the rear edge of said frame.

2. A pair of goggles comprising a perfo-50 rated sheet-metal frame consisting of two similar half-sections disposed angularly with respect to each other and having their upper inner ends overlapping, each of said sections having their outer edges bent to form guide 55 grooves or channels, a fastening connecting the sections at their overlapping ends, transparent plates slidably mounted within the grooves, and integral tongues upon the frame bent to engage the plates and retain them in position within the guides.

3. A pair of goggles comprising a perforated sheet-metal frame consisting of two similar half-sections disposed angularly with respect to each other and having their upper inner ends overlapping, each of said sections 65 having their outer edges bent to form guidegrooves or channels, a fastening connecting the sections at their overlapping ends, transparent plates slidably mounted within the grooves, integral tongues upon the frame 70 beht to engage the plates and retain them in position within the guides, and a binding

upon the rear edge of said frame.

4. A pair of goggles comprising a perforated sheet-metal frame having its inner 75 edge slitted to permit it to be bent to fit the face of the wearer, said frame consisting of two similar half-sections disposed angularly with respect to each other and having their upper inner ends overlapping, each of said 80 sections having their outer edges bent to form guide grooves or channels, a fastener connecting the sections at their overlapping ends, transparent plates slidably mounted within the grooves, integral tongues upon 85 the frame bent to engage the plates and retain them in position within the guides, and a binding upon the rear edge of said frame.

5. A pair of goggles comprising a perforated sheet-metal frame having its inner 90 edge slitted to permit it to be bent to conform to the face of the wearer, said frame consisting of two similar half-sections disposed angularly with respect to each other and having their upper inner ends overlap- 95 ping, each of said sections having its outer edges bent to form guide grooves or channels, a fastener connecting the sections at their overlapping ends, transparent plates slidably mounted within the grooves, inte- 100 gral tongues upon the frame bent to engage the plates and retain them in position within the guides, and a binding of fabric folded over the inner edge of the frame and sewed thereto, the stitches passing through perfo- ros rations in the frame adjacent to its inner edge.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

THOMAS W. BLACK.

Witnesses:

H. C. BURKETT. H. L. MARTIN.