April 11, 1939. L. B. FLEMING ET AL 2,153,714

HEAD MASK

Filed Jan. 6, 1938

Fig. 1.

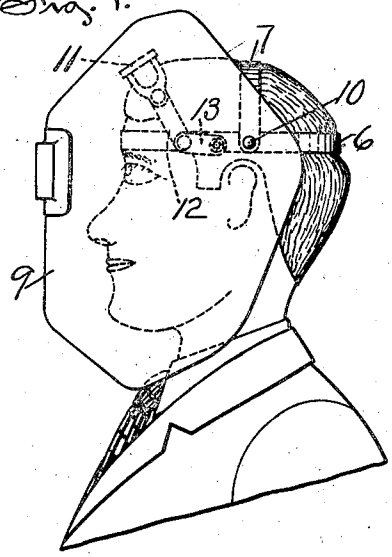


Fig. 2.

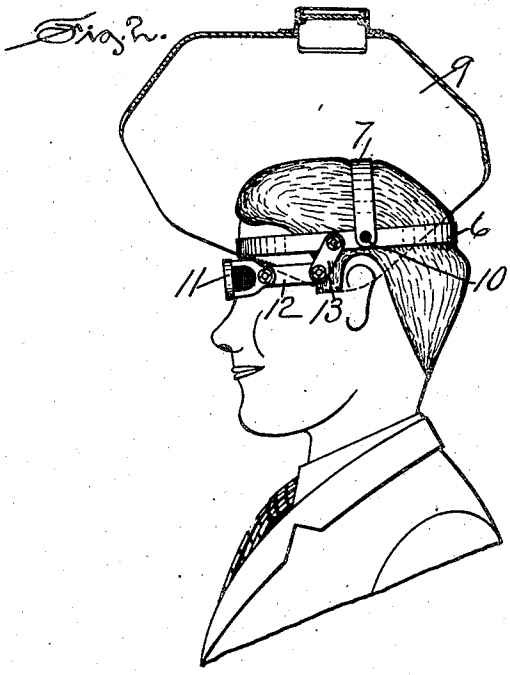


Fig. 3.



Fig. 4.

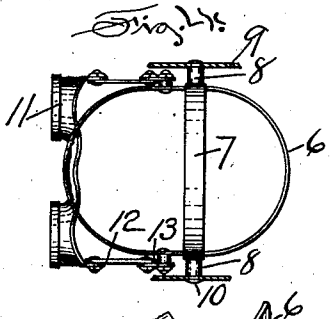
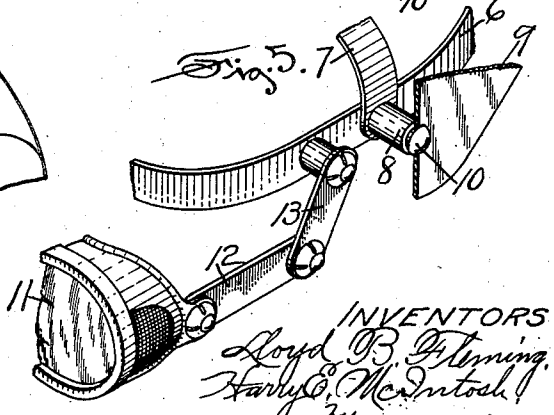


Fig. 5.



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HEAD MASK

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Application January 6, 1938, Serial No. 183,640

1 Claim. (Cl. 2—8)

Our invention relates to the class of devices which are employed by workers to protect their eyes and faces from the injurious effects of extremely bright light, sparks, etc. incurred in autogenous welding and similar operations, and an object of the invention, among others, is the provision of a hood or mask to protect the face, combined with shields for the eyes, which mask shall be particularly efficient to accomplish the purposes for which it is intended.

One form of a mask embodying our invention, and in the construction and use of which the objects herein set out, as well as others, may be attained is illustrated in the accompanying drawing in which—

Figure 1 is a side view of the head of an individual shown as wearing our improved device to protect the head and face.

Figure 2 is a similar view, but with the mask in a raised position and the goggles or glasses in place to shield the eyes.

Figure 3 is another similar view but showing both the mask and the goggles or glasses in raised positions.

Figure 4 is a top view of the device, but showing only fragments of the mask.

Figure 5 is an isometric perspective view on enlarged scale of portions of the device illustrating the connections for the parts.

In operations involving autogenous welding and similar occupations it is at times important to protect the face and eyes, at times protection of the eyes only being required and at other times it being essential that the entire face be protected. As these operations of shielding the eyes or face, or uncovering the latter, occur frequently and at short intervals and for comparatively brief periods, and as one hand of the operator is generally occupied in holding a torch or other implement, it becomes essential that means be provided whereby the hood or goggles employed for shielding the face and head may be conveniently and quickly operated with one hand and often in quick succession. The device forming the subject matter of this application is designed to satisfy all of these requirements with minimum inconvenience to the wearer, such device as illustrated in the drawing herein comprising a head band 6 of any suitable material made to fit the upper part of the head and passing around it at the forehead. A supporting band 7 secured at its opposite ends to the head band passes over the top of the head as shown in Figs. 2 and 3 of the drawing. In the preferred manner of securing the supporting band to the head band, mask supports 8 are employed, the inner ends of which project through said bands and may be riveted or otherwise secured in place. The mask 9 is pivotally attached at the outer ends of the mask supports, as shown in Figure 5, so that said mask may be swung into position to protect the face, as shown in Fig. 1, or may be supported in a raised position as shown in Figs. 2 and 3, the pivotal connection being tight enough to support the mask in either of the positions shown, and for this purpose screws 10 threaded into the supports may be employed.

A pair of goggles 11 are adjustably supported by the band 6 in such manner that they may be moved to and from the band to fit faces of different shapes as to the position of the eyes and as to the depth of the face from front to back. In the particular form of adjustment herein provided toggle joints are employed consisting of pairs of links 12 and 13, the former being pivotally attached at one end to the goggles and the latter each being pivotally attached at one end to the band 6, each member of each pair of links being pivotally attached to a member of the opposite pair and as shown in Fig. 5 of the drawing. In order that sufficient friction may be had to hold a joint from free swinging movement the pivots are provided with screws by means of which the proper friction may be obtained. It is preferred that the pivotal attachments for the goggles and those for the mask itself shall be separately formed, the goggles being attached to the band 6 in front of the pivotal attachment for the mask, but this arrangement may be departed from if desired.

It will be observed that, as hereinbefore described, either the goggles or the mask may alone be placed in front of the face to shield the latter or the eyes, and either or both may be swung to a position over the head when not required, and in whichever position they are placed they will maintain that position and they may be readily and quickly moved from one to the other of the positions.

In accordance with the provisions of the patent statutes we have described the principles of operation of our invention, together with the device which we now consider to represent the best embodiment thereof; but we desire to have it understood that the device shown is only illustrative and that the invention may be carried out by other means and applied to uses other than those above set out.

We claim:

A head protector including a support to be

attached to the head, a pair of goggles movably attached to said support by connections permitting the goggles to be positioned close to the eyes to cover them, said connections including a pair of link members pivotally connected together, the outer end of one link member being pivoted to the support and the outer end of the other link member being pivotally connected to said goggles by a horizontal pivot whereby the goggles may be swung upwardly and downwardly relative to the longitudinal axis of the link member to which they are attached, said goggles when in eye protecting position presenting one of the link members below and substantially parallel with said support whereby the protecting positions of the goggles to fit different faces is changed by movements of the goggles horizontally of the head.

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