

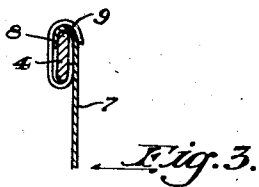
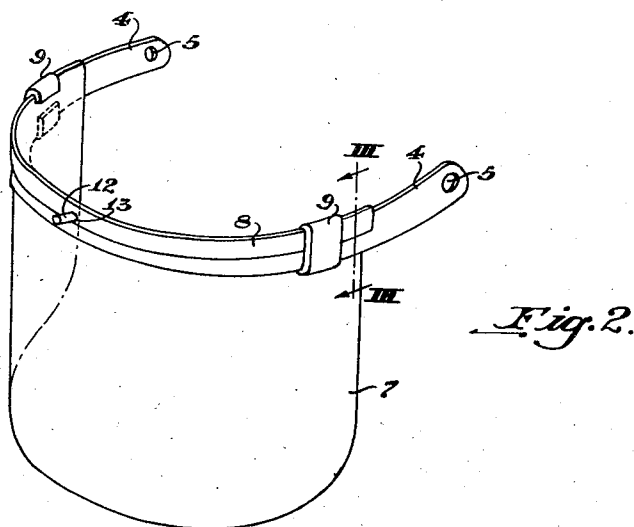
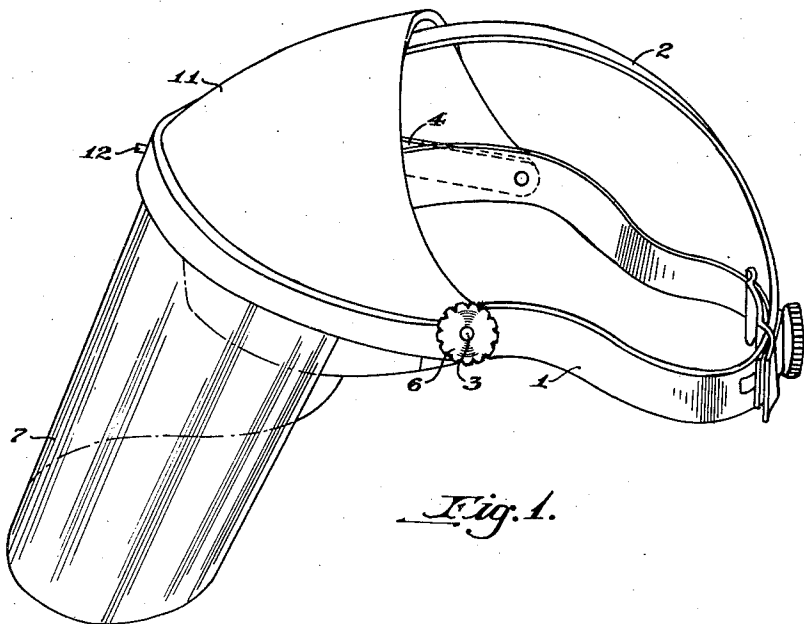
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FACE SHIELD

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FACE SHIELD

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4 Claims. (Cl. 2—8)

This invention relates to shields for protecting the eyes and faces of industrial workers from flying sparks, particles of metal, etc.

One type of shield for such purposes has been made from a sheet or visor of transparent material, generally frameless, connected at its top to headgear by which the visor is held in front of the face. As the life of the visor is quite short, it is the practice to make it detachable from the headgear so that it can readily be replaced. Until recently, metal snap fasteners or the like have been used for detachably connecting the two, but now that the war has made metal fasteners very difficult to obtain, other equally satisfactory means for the same purpose are desirable.

It is among the objects of this invention to provide a face shield in which non-metallic means are used for connecting the visor to its support, in which the visor is readily detachable from its support, in which the fastening means are inexpensive but durable and dependable, and in which the weight of the visor is carried entirely by itself and not from any fastening members that might pull out of it.

In accordance with this invention a visor, made from a transparent sheet of face-shielding material, is suspended in front of the face from a supporting band adapted to be worn on the head. The upper edge portion of the visor is folded over the top of the band and preferably extends part way down its outer surface. The visor thus is supported by merely being hooked over the top of the band. To fasten the visor to the band so they will be rigidly connected, one or more non-metallic C-clips are slidably mounted on the band. The ends of each clip hook over the top of the visor and under the bottom of the band, thereby fastening the two together. When the visor becomes worn or damaged, the C-clips may be slid along the band until they are free of the visor which then can be lifted from the band and replaced by a new visor. A spark guard may be mounted above the visor with its central lower portion supported by a pin projecting forward from the band.

The preferred embodiment of the invention is illustrated in the accompanying drawing in which Fig. 1 is a side view of my face shield; Fig. 2 is a perspective view of the visor and its supporting band; and Fig. 3 is an enlarged fragmentary vertical section taken on the line III—III of Fig. 2.

Referring to the drawing, the shield is adapted to be used with any suitable headgear by which it can be supported in front of the face. For example, the headgear may be a helmet, or it may

consist of a strap 1 that extends entirely around the head and that is held in position by a top strap 2 extending over the top of the head and connected to the front and back of the circular strap. Mounted in the circular strap at opposite sides of the head are outwardly projecting threaded studs 3. A curved band 4 of fibre or other suitable non-metallic material extends around the front of the head and has openings 5 in its opposite ends for receiving the threaded studs on which the band can be pivoted. This band is held on the studs by knurled nuts 6 that also hold it at any desired inclination when they are tightened.

The purpose of the band is to support a protective visor 7 in front of the face. The visor is made of a sheet of any suitable transparent material, such as a synthetic resin, and is curved transversely to fit the band and give protection to the sides of the face. It is a feature of this invention that the visor is suspended from band 4 by hooking the top of the visor over the upper edge of the band. Accordingly, the upper edge portion of the visor is folded outwardly and downwardly to form a flange 8 spaced a slight distance from the body of the visor to provide a recess for reception of the band. The flange preferably extends only part way down the outer surface of the band.

Although the visor thus supports itself from the band, it is necessary to provide something to keep the two from accidentally becoming disconnected and to fasten them together rigidly so that when the band is swung upwardly the visor will move with it and project forward from it. For this purpose a pair of C-shaped clips 9, made of fibre or any other suitable non-metallic material, are slidably mounted on the band. The body of each clip is adjacent the outer surface of the band, while the reversely bent end portions are hooked over and under the top and bottom of the band. These clips are slid inwardly along the band until their upper ends slide onto the portion of the visor folded over the top of the band and thereby fasten the visor to the band as shown in Fig. 3. The visor can be quickly removed from the band by merely sliding the clips towards the ends of the band until they are out of engagement with the visor, and then lifting the visor.

It is customary to provide face shields with what is known as a "spark guard" which covers the front portion of the head above the shield and thereby protects the hair from flying sparks. The spark guard 11 disclosed herein conforms to the front part of the head and is mounted on the

threaded studs 3 in the same manner as band 4. The lower edge of the guard overlaps the visor flange and its supporting band. The front of the guard is supported by a pin 12 which projects forward from the center of the band and through an opening in the guard. The visor flange 8 may be provided with a notch 13 for receiving the pin.

A face shield made in accordance with this invention has the advantage of conserving metal without the loss of any of the desirable characteristics of such a shield. Thus, the shield is inexpensive, but still the visor is securely fastened to its supporting band. The fastening means used for this purpose permit the visor to be quickly disconnected from the band, and they can be used over and over again. By using a folded-over portion of the visor itself to suspend it from the band, there is no danger of the visor pulling loose and falling away from the band.

According to the provisions of the patent statutes, I have explained the principle and construction of my invention and have illustrated and described what I now consider to represent its best embodiment. However, I desire to have it understood that, within the scope of the appended claims, the invention may be practiced otherwise than as specifically illustrated and described.

I claim:

1. A face shield comprising a supporting band adapted to extend around the front of the head, a transparent sheet of face-shielding material extending downwardly from the band and having its upper edge portion folded over the top of said band, and a C-clip slidably mounted on said band and movable to a position in which its ends are hooked over the top of the sheet and under the bottom of the band in engagement therewith.

2. A face shield comprising a supporting band

adapted to extend around the front of the head, a transparent visor of face-shielding material having its upper edge portion folded downwardly and hooked over the top of said band, and a plurality of C-clips each of which is slidably mounted on said band and movable to a position in which its ends are hooked over said folded portion of the visor and under the bottom of the band in engagement therewith.

3. A face shield comprising a curved supporting band adapted to extend around the front of the head, a transversely curved sheet of face-shielding material engaging the inner surface of the band and having its upper edge portion folded outwardly over the top of said band and extending down the outside of the band, and a C-clip slidably mounted on said band with its body portion adjacent the outside of the band and movable to a position in which its ends are hooked over the folded top of the sheet and under the bottom of the band, whereby the clip can be slid along the band until free of the sheet which then can be removed from the band.

4. A face shield comprising a supporting band adapted to extend around the front of the head, a transparent sheet of face-shielding material engaging the inner surface of the band and having its upper edge portion folded outwardly over the top of said band, a pin projecting from the front of the band, a spark guard for fitting over the front of the head and provided in its lower central portion with an opening for said pin, and a C-clip slidably mounted on said band and movable to a position in which its ends are hooked over the top of the sheet and under the bottom of the band, the ends of said band and guard being adapted to be connected to supporting headgear.

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