

W. F. DINKUHN.
FACE SHIELD.
APPLICATION FILED JUNE 29, 1915.

1,191,773.

Patented July 18, 1916.

Fig. 1.

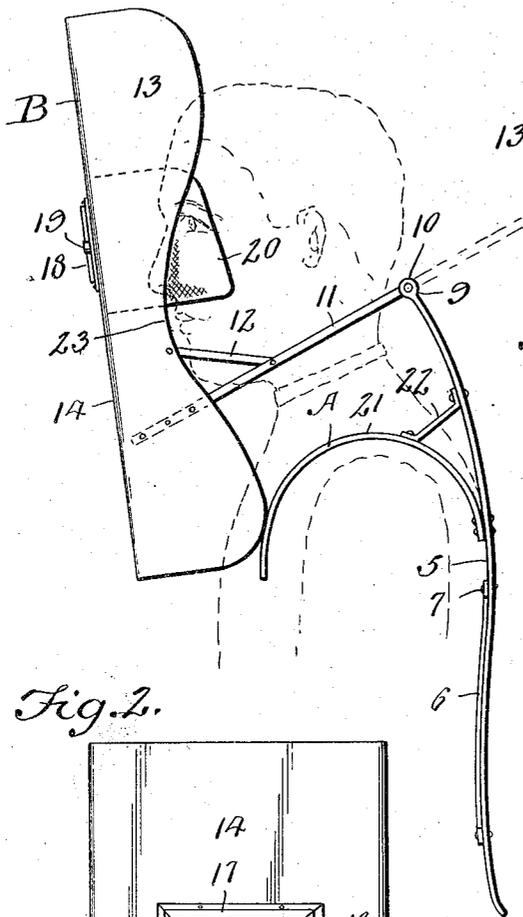


Fig. 4.

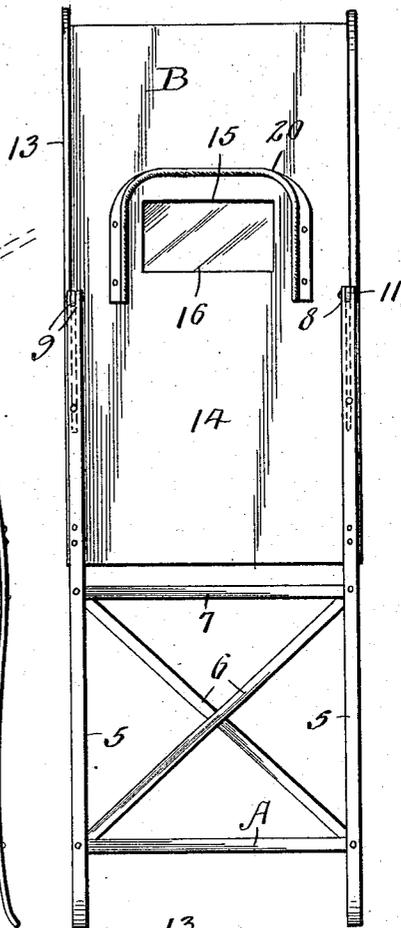


Fig. 2.

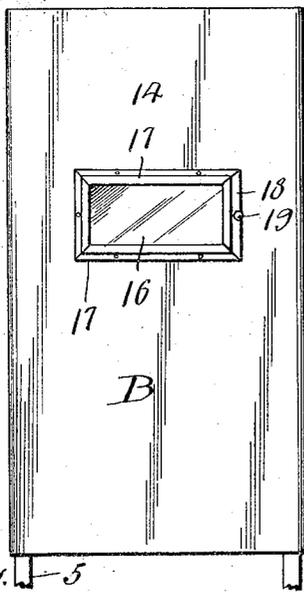
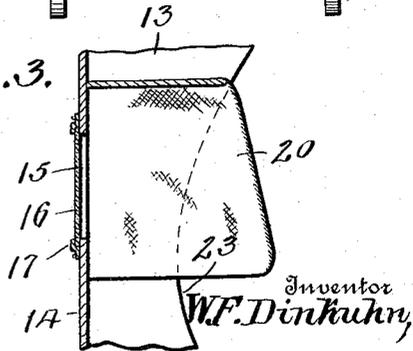


Fig. 3.



Witnesses

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FACE-SHIELD.

1,191,773.

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To all whom it may concern:

Be it known that I, WILLIAM F. DINKUHN, a citizen of the United States, residing at Tarentum, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Face-Shields, of which the following is a specification.

This invention comprehends the provision of a shield primarily intended to be worn by welders, to protect the eyes and face from the flame essential in welding operation.

The primary object of the invention resides in the provision of a device of this character, which is simple in construction, light, durable, and designed to afford maximum ventilation to the user.

Other objects will appear as the nature of the invention is better understood, the same residing in the construction and arrangement of parts hereinafter more fully described.

In the drawing forming part of this application like numerals of reference indicate similar parts in the several views and wherein:—

Figure 1 is a side elevation showing the manner of supporting the same upon the body of the user. Fig. 2 is a front elevation. Fig. 3 is an enlarged detail longitudinal sectional view. Fig. 4 is a rear elevation.

Referring more particularly to the drawing A designates generally a body supporting frame, for supporting the hood or shield B in the manner shown. The frame may be constructed from any suitable material, preferably steel, and consists of the spaced parallel flat strips 5, connected by means of the cross pieces 6 and braces 7. The upper end of each of the strips 5 is bifurcated as at 8, the separated portions 9 being formed to provide the eyes 10, between which the spaced parallel arms 11 are pivotally mounted in any suitable manner, the forward ends of said arms being secured to the hood B, which latter is rigidly supported by the brace strips 12.

The hood or shield B may be constructed from any suitable material, preferably aluminum and is substantially U-shaped in cross section, the parallel side members 13 of which are adapted to be arranged at the opposite sides of the head of the user when in operative position as shown in Fig. 1, while the body portion 14 thereof is provided with a sight opening 15, which is closed by the transparent element 16, such as

dark glass or other suitable material which will modify the rays of light from the flame essential in welding operations, with a view of protecting the eyes of the operator. The transparent panel is slidably mounted between the guide strips 17 secured to the marginal edges of the sight opening, the guide strip 18 being removably secured by means of the set screw 19 to permit the glass to be removed from the guides when desired.

Secured to the rear face of the body portion 13 of the shield, is a pad 20 which consists of a strip of suitable material arranged about the top and opposite side edges of the sight opening, and against which the head of the operator is adapted to rest, the pad further serving in the capacity of a shield for the eyes to exclude the light from the back of the shield, which latter is open for ventilating purposes.

Secured to each of the strips 5 is a shoulder hook 21 rigidly supported by means of the brace strips 22 terminally connected to the hook 21 and strap 5 as shown. It will be noted that the entire device is supported upon the operator by means of the shoulder hooks 21 and frame A, and when the shield B is operatively positioned in the manner shown in Fig. 1, the parallel side members 12 have their intermediate edge portions curved outwardly as at 23 at a point adjacent the nose and mouth of the user to afford a maximum ventilation, thereby permitting the user to work in comfort. When use of the hood is not desired, the arms 11 carrying the hood B may be swung upon their pivotal connection with the strips 5 to a position rearwardly of the operator or user as shown by dotted lines in Fig. 1. The device in its entirety is very simple in construction, durable and light whereby the device may be worn by the operator an indefinite period without tiring or being otherwise affected by the weight of the device.

It is believed that from the foregoing description the nature and advantages of the invention will be thoroughly understood without requiring a more extended explanation and therefore the same has been omitted.

What is claimed is:—

1. In a device of the class described, a body frame adapted to engage the back of the user, shoulder hooks carried thereby, arms pivotally connected with the upper end

of said frame for vertical swinging movement, said arms normally extending forwardly at right angles to said frame, and a shield carried by the free end of said arms
5 for the purpose described.

2. In a device of the class described, a body frame adapted to bear against the back of the user, shoulder hooks carried thereby at a point an appreciable distance below the
10 upper end of said frame, a shield pivotally supported upon said upper end of the frame and having a sight opening therein, a transparent element covering said opening, and a pad secured to the inner face of said hood
15 about three edges of the opening and adapted to shield the eyes from light entering from the back of the shield.

3. In a device of the class described comprising a body frame adapted to be supported upon the back of the user, shoulder hooks projecting forwardly from said frame at a point in its length, a shield pivotally supported upon the upper end of said frame
20 and having a sight opening therein, a pad secured to said shield and surrounding said opening to protect the eyes and to exclude the entrance of light from the back of the shield, guide strips secured to the opposite
25 side of the shield about the edges of said opening, and a transparent panel slidably fitted between said guides.
30

4. In a device of the class described, a body frame adapted to be supported upon
35 the back of the user, shoulder hooks projecting forwardly therefrom at a point in its

length, spaced parallel arms pivotally connected with the upper end of the frame and normally projecting forwardly at right angles to said frame, a substantially U-shaped shield carried by the free ends of
40 said arms, and provided with a sight opening, a transparent element covering said opening, and a pad secured to the inner face of said shield and disposed about said opening to protect the eyes from light entering
45 from the back of the shield.

5. A device of the class described comprising a body frame adapted to be supported upon the back of the user, shoulder hooks carried thereby at a point in its length,
50 spaced parallel arms pivotally connected with the upper end of the frame above said shoulder hooks, and normally projecting forwardly at right angles to the frame, a substantially U-shaped shield carried by the
55 free ends of said arms, the parallel members of said shield having their free longitudinal edges oppositely curved throughout their length, said shield having a sight opening,
60 a transparent element covering said opening, and a pad secured to the rear face of the shield and arranged about the opening to protect the eyes from light entering from
the back of the shield.

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

WILLIAM F. DINKUHN.

Witnesses:

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