

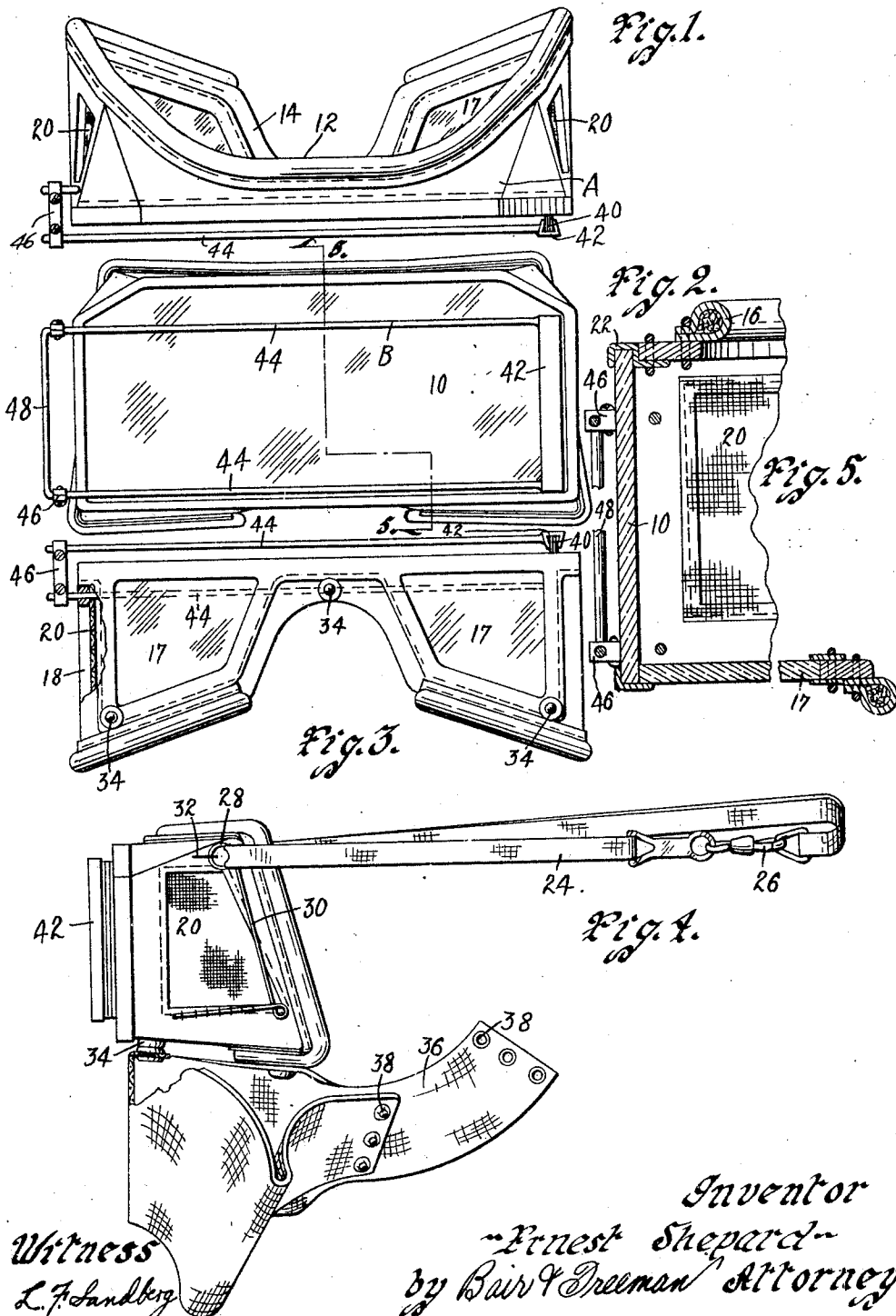
Feb. 5, 1929.

1,701,015

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FACE SHIELD

Filed Aug. 23, 1926



UNITED STATES PATENT OFFICE.

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FACE SHIELD.

Application filed August 23, 1926. Serial No. 130,933.

The object of my invention is to provide a face shield of simple, durable and comparatively inexpensive construction.

More particularly it is my object to provide a face shield adapted to completely encircle the eyes of the wearer for protection against flies, dirt and cinders and rain or snow. My device is especially adapted for use by railroad men where it is desired to have a full vision and yet have the face protected.

Still a further object is to provide a yielding connection between the face shield proper and the strap that supports it upon the head of the wearer so that the face shield may be swung outwardly for permitting the wearer to wipe his eyes or nose without removing the face shield.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my face shield, whereby the objects contemplated are attained, as herein-after more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which:

Figure 1, is a top plan view of my improved face shield.

Figure 2, is a front view of the same.

Figure 3, illustrates the bottom of my face shield and parts have been shown in section to illustrate the screens in the sides of the shield.

Figure 4, is an end view of the face shield with the face band attached thereto, and

Figure 5, is a sectional view taken on line 5-5 of Figure 2.

In the accompanying drawing I have used the reference character A to indicate generally a frame formed of any suitable material such as leather reinforced with metal bindings or any other stiff material that may be formed to fit the face of a person.

The frame A has mounted therein a front wall 10 of glass that is of sufficient length and height to extend in front of the eyes of the person wearing the device. The frame A has its upper side curved as at 12 so as to conform with the forehead and cheeks of a wearer.

The bottom of the frame is formed with a cut-out portion 14 which extends around the nose of the wearer. The edge of the frame in contact with the face of the person may be formed with a cushion bead 16

of any soft, pliable material for permitting the entire device to readily conform to the face of the wearer without injury thereto.

The frame A has its bottom wall on each side of the cut-out portion 14 formed with glasses 17 which are positioned just below the eyes of the wearer and permit ground vision of the wearer of the device.

The glasses 17 due to their size and position, enable the wearer of the device to walk freely and see the ground or path before him.

In order to prevent the front wall 10 from "steaming," the sides of the frame are formed with openings 18 having fine mesh screens 20 therein whereby air is permitted to circulate within the face shield and this in a measure tends to eliminate steaming of the front glass wall 10.

The glass wall 10 is mounted in a metal frame guide 22 as clearly shown in Figure 5 of the drawings. The face shield is supported upon the head of the wearer by a strap 24 having a snap connection 26.

The strap 24 is connected to a loop 28 of a spring wire 30. The spring wire 30 is stitched or otherwise fastened to the face shield proper. The point of fastening the wire 30 to the face shield is considerably below the loop 28 so that there is a possibility of the wire 30 swinging between the point of fastening to the face shield and the loop 28.

An elongated stitch 32 forms a limiting means for the swinging movement of the wire 30. The wire 30 is preferably of spring material. The loop 28 and strap 24 practically form a pivotal connection between the strap and face shield near its upper end so that when the device is mounted upon the head of the wearer, he may simply swing the lower portion of the face shield outwardly permitting him to use a handkerchief to wipe his eyes without the necessity of removing the entire face shield.

The bottom of the frame A of the face shield includes a number of snaps 34 to which may be fastened a face band 36. The face band 36 is formed of cloth preferably of the knitted type and may extend over the mouth and cheeks of the wearer and be snapped together in the back of the head by snap fasteners 38.

In the frame A and coacting with the glass 10 on each side thereof, I provide a wiping device B. The wiping device B in-

cludes an inner and outer rubber wiper element 40 mounted in the channel shaped holders 42.

The holders 42 have fixed thereto the ends of a U-shaped spring wire member 44. The spring wire member 44 is provided for each of the holders 42 and the inner spring wire 44 extends through a pair of openings formed in the frame A.

The wires 44 are connected together just outside of the frame by suitable clips 46. The clips 46 make the entire wiper structure, as a single unit. The wires 44 are under tension and tend to yieldingly hold the wiper element 40 in contact with the glass 10.

The portion 48 of the wires 44 may be engaged for drawing the wiper elements 40 over the glass and this keeps the glass 10 clean and also permits the user of the device to wipe any steam that may be upon the glass 10 therefrom by simply reciprocating the wiper device B.

It will be noted that the glass 10 may be wiped by the wiper device B without the necessity of removing the face shield.

The face shield is of sufficient size that the wearer thereof may use ordinary spectacles below the shield without any interference. Protecting the face as it does, my face shield prevents head cold usually caused by sweating and cooling off. It also serves to break up sound waves as of a locomotive or riveting hammer and make them less intense when they reach the ear drum.

Some changes may be made in the arrangement and construction of the various parts of my face shield, without departing from the essential features and purposes of my invention, and it is my intention to cover by my claims any modified forms of structure and use of mechanical equivalents, which may be reasonably included within their scope.

I claim as my invention:

1. A device of the class described, comprising a frame having one edge curved to conform to the forehead, cheeks and nose of a wearer and adapted to extend around the eyes, a front glass wall in said frame spaced from the face of the wearer, a bottom glass wall in said frame for spanning the space between the front glass wall and the face of the wearer, whereby his view downward will not be obstructed, said device having side walls, a top wall and a yieldingly mounted strap for securing the device upon the head of the wearer, said front, bottom, side and top walls forming an air chamber in front of the face of the wearer.

2. In a device of the class described, a frame adapted to conform to the forehead, cheeks and nose of a person and to extend around the eyes, a continuous front glass

wall in said frame, a slidable cleaner for said front wall mounted in said frame and adapted to clean the entire surface of both sides of said wall, a pair of spaced bottom glass walls in said frame, and means for securing said device upon the head of a person.

3. In a device of the class described, a frame having one edge curved to conform to the forehead, cheeks and nose of a person and adapted to extend around the eyes, a continuous front glass wall in said frame, a slidable cleaner for said front wall, said cleaner comprising a wire of spring material slidably mounted in said frame and extending along the inner surface of the front wall, a second wire extending along the outer surface of said wall and cleaner elements on said wires opposite each other for cleaning both sides of said wall, and a strap connected to said frame for securing said device upon the head of a person.

4. A face shield of the class described, comprising a frame, a glass wall in the front thereof and a wiper for both sides of said wall comprising a wiper element on each side thereof, a resilient frame for supporting each element, and means for connecting said frames whereby said elements are resiliently held against the glass, said means of connection being normally positioned at one end of the wall, whereby its movement away from the shield will actuate said wiper elements.

5. A face shield of the class described comprising a frame, a glass wall in the front thereof and a wiper for both sides of said wall comprising a wiper element on each side thereof, a resilient frame for supporting each element, means for connecting said frames whereby said elements are resiliently held against the glass, a yielding strap for retaining said shield against the face of the wearer, said strap being connected to the sides of the shield and near the top thereof whereby the lower end of the shield may be swung away from the face without appreciably increasing the tension of the strap.

6. A face shield of the class described comprising a frame conforming to the forehead, temples, cheeks and nose of a person, a glass wall in the front thereof and a wiper for both sides of said wall comprising a wiper element on each side thereof, a resilient frame for supporting each element, one of said frames being slidably mounted through the side of said shield, means for connecting said frames whereby said elements are resiliently held against the glass and can be slid along the surface thereof, and a flexible shield secured to the lower edge of said face shield and adapted to be secured across the mouth and about the head of the wearer.

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