No. 857,689. PATENTED JUNE 25, 1907.

H. M. TILESTON.

FLEXIBLE EYE GUARD.

APPLICATION FILED APR. 4, 1906.

Fig. 1.

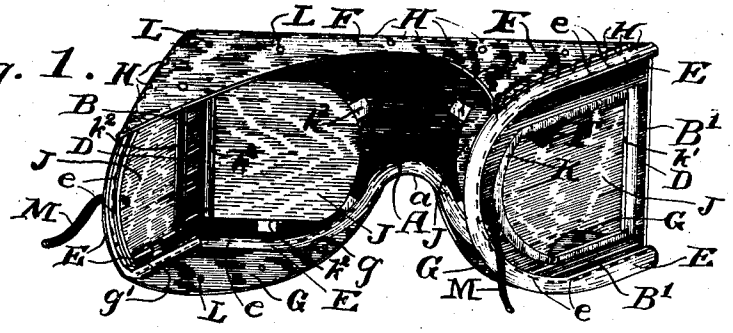


Fig. 2.

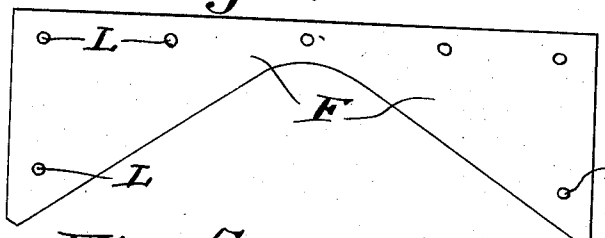


Fig. 3.

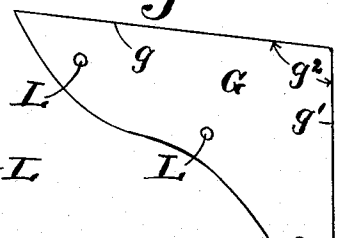


Fig. 5.

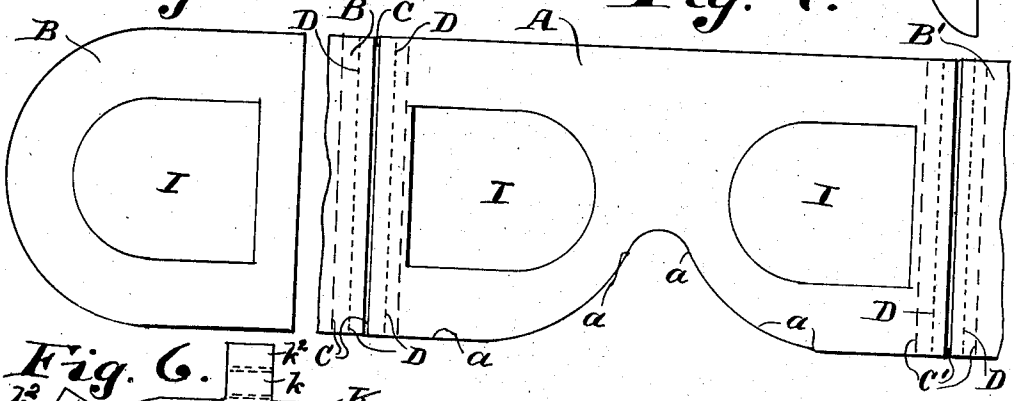


Fig. 4.

Fig. 6.

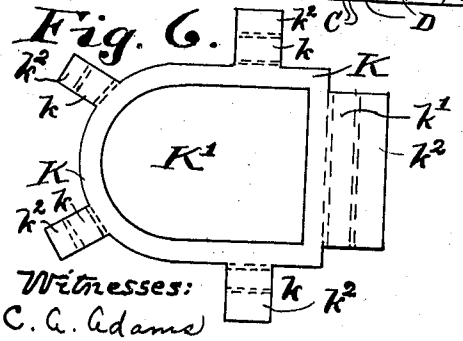
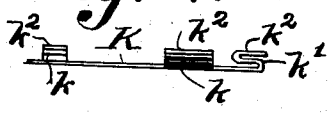


Fig. 7.



Witnesses:
C. A. Adams
R. Le Haas.

Inventor:
Henry M. Tileston,
By Charles Turner Brown,
Atty.

UNITED STATES PATENT OFFICE.

HENRY M. TILESTON, OF CHICAGO, ILLINOIS.

FLEXIBLE EYE-GUARD.

No. 857,689. Specification of Letters Patent. Patented June 25, 1907.

Application filed April 4, 1906. Serial No. 309,852.

To all whom it may concern:

Be it known that I, HENRY M. TILESTON, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Flexible Eye-Guards, of which the following, when taken in connection with the drawing accompanying and forming a part hereof, is a full and complete description, sufficient to enable those skilled in the art to which it pertains to understand, make, and use the same.

The object of the invention is to obtain an eye guard which may be worn without injury to the eyes or fatigue to the face of the wearer. To obtain an eye guard which will enable the wearer to obtain a wide angle of vision. To obtain an eye guard which can be worn without the removal by the wearer thereof of the ordinary eye glasses or spectacles. To obtain an eye guard so constructed that particles of dust, cinders and other articles or things which are injurious to the eyes will not be forced or find way through, when the wearer is moving rapidly along a railroad track, a road, street or highway; as in an engine or automobile. To obtain an eye guard which will conform to the features of the face of the wearer sufficiently close to properly protect the eyes of the wearer from dust, and the like, without being made particularly for such face, and without regard to whether such wearer has deep set or protruding eyes.

In the drawing accompanying this specification Figure 1 is a perspective view of an eye guard embodying the invention. Fig. 2 is a plan view of the flexible top to the eye guard. Fig. 3 is a plan view of one of the pieces forming the flexible bottom of the eye guard. Fig. 4 is a plan view of the front of the eye guard, showing a portion of the side wings of the guard attached thereto. Fig. 5 is a plan view of one of the side wings of the eye guard. Fig. 6 is a plan view of the blank of a flexible frame used to attach the lenses of the eye guard to the front and side wings thereof, respectively, and Fig. 7 is a side elevation of the blank illustrated in Fig. 6, with the prongs thereof bent up into shape to form a frame to secure the lenses of the eye guard in place.

A reference letter used to designate a given part is applied to indicate such part throughout the several figures of the drawing, wherever the same appears.

A, B and B′ are the front and side wings of the frame of the eye guard. Such front and side wings are preferably cut out in a single piece of flexible sheet metal, celluloid, card board or other suitable material, and the side wings severed from the front and then rejoined thereto by a hinge. Such hinge is preferably made of leather, cloth or other dust proof material, as C, C′, held and attached to such sides and front by the stitching D, D.

E, E, is the binding of the eye guard, preferably consisting of felt, cloth or leather held in place by stitches *e*, *e*.

The part F, (Fig. 2), and right and left ones of the part G (Fig. 3), preferably made of soft leather, as kid, are secured to the front A and side wings B, B′, as by stitches H, H, (Fig. 1,) to form hoods.

The wings B, B′, will stand at substantially a right angle to the front A, when the wings are opened to the full extent permitted by the top piece F, and at such time there will be a fullness to the parts G, G, due to the fact that the edges *g* of part G, G, are respectively attached to the curved edge *a* of front A and edges *g′*, *g′*, are attached to the bottom edges of wings B, B′, respectively, as at *g′*, *g′*, with the angle g^2 of such part G greater than a right angle. This fullness of the parts G, G, is sufficient so that the parts lie upon the face of the wearer of the eye guard.

I, I, are apertures in frames A, B, and B′ respectively.

J, J, are lenses attached to frames A, B, and B′ over the apertures I, I, respectively.

K, is a blank, preferably of tin, and provided with prolongations or fingers *k*, *k′*.

K′ is an aperture in blank K.

Prolongations *k*, *k′*, are respectively bent up into substantially the position shown in Fig. 7, and parts k^2 thereof are on the inside of the frame to which such part is attached while the remaining part thereof is on the outside of the frame with the lenses interposed between it and the frame. Parts K, K, thus form flexible rims by means of which the lenses are attached to the frame of the eye guard. Prolongation *k′* substantially covers the straight end edge of the aperture over which it is placed and thus prevents the driving of dust or other small particles of matter through between the lens and the frame to the eyes of the wearer.

When the eye guard is in position on the

face of the wearer good sight is obtained both to the front and to the side of such wearer; the edge of the upper hood comes in contact with the forehead above the eyes; the nose notch straddles the nose, and the lower hoods (parts G, G,), are in contact with the face below the eyes.

The frame A and side wings B, B, may be of perforate or imperforate material; but when made of imperforate material, as shown in the drawing, the parts F and G, G, are perforated as at L, L, for the purpose of admitting air to the eyes, for ventilation.

The lenses may be made of mica, or other flexible material or of glass.

M is an elastic cord, by means of which the eye guard is held in place on the face of the wearer.

The eye guard constructed as herein described is collapsible, that is, the wings may be folded down on the front and the device may thus be easily carried in a case or in the pocket.

The binding E protects the ends of the flexible hinges C, C', respectively, and also furnishes a foundation to which the parts or pieces F and G may, respectively, be stitched by stitches H, H.

Having thus described my invention what I claim is new and desire to secure by Letters Patent is;

1. In an eye guard the combination of a frame consisting of a front and side wings, flexible hinges to attach the side wings to the front, such wings and front respectively provided with apertures therein and lenses over the apertures, with hoods attached to the front and wings, the upper one of the hoods arranged to limit the opening of the wings from the front and the lower one of the hoods arranged to lie loosely on the face of the wearer of the device; and such hoods arranged to fit the face of the wearer to exclude dust and the like; substantially as described.

2. In an eye guard a flexible frame comprising a front, side wings each provided with apertures a hinge of flexible material connecting the wings and front and a flexible binding in combination with lenses over the apertures, and flexible ventilated hoods respectively connected to the front and wings of the upper and lower edges thereof; substantially as described.

3. In an eye guard, the combination of a flexible frame comprising a flexible front, flexible side wings hinged to the front and a flexible binding with a flexible ventilated web attached to the top edges of the frame to conform to the features of the wearer and to limit the relative movement of the side wings and front and ventilated webs attached to the lower edges of the front and side wings, respectively, to form curtains resting against the features of the wearer; substantially as described.

4. An eye guard consisting of front wings and hoods, the hoods constructed of flexible material, in combination with hinges of flexible material joining the wings and front to permit the wings to be folded down on the front, and a binding of flexible material, such binding covering the ends of the flexible hinges and arranged to form the foundation to which the hoods are attached; substantially as described.

5. In an eye guard, a flexible frame comprising a front provided with apertures and side wings provided with apertures, in combination with lenses to the apertures, rims of flexible sheet metal provided with prolongations to attach the lenses in place, the prolongation on the straight side of the rim extending the entire length of the straight side of the aperture in the wings, a hinge of flexible material connecting the wings to the front, a flexible hood connecting the wings to the front to limit their relative movement and to conform to the features above the eyes, additional hoods fitting loosely to the features below the eyes and means to hold the eye guard in place; substantially as described.

HENRY M. TILESTON.

Witnesses:

CHARLES TURNER BROWN,

CORA A. ADAMS.