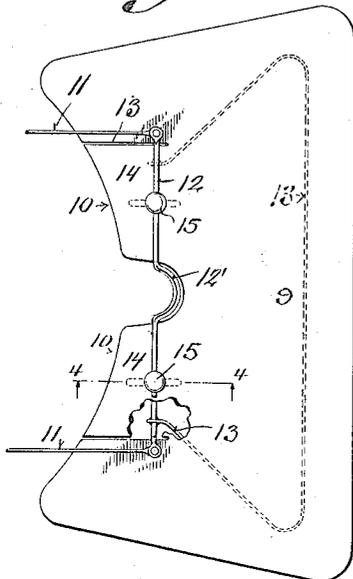


S. S. MULLEN,  
 EYE SHIELD.  
 APPLICATION FILED JULY 27, 1914.

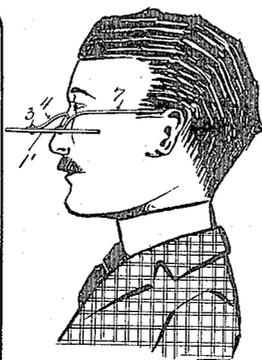
1,152,431.

Patented Sept. 7, 1915.

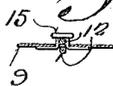
*Fig. 3.*



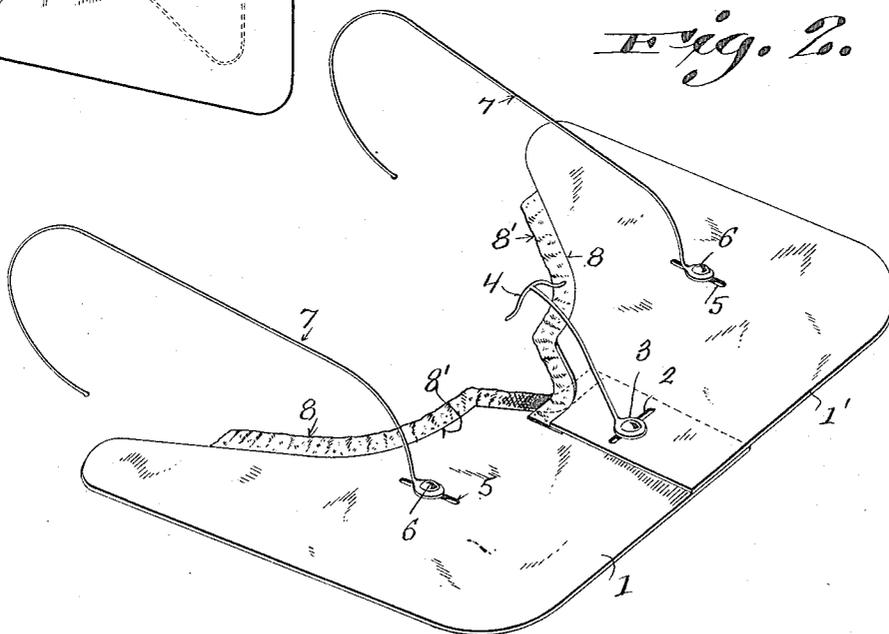
*Fig. 1.*



*Fig. 4.*



*Fig. 2.*



*Witnesses:*  
*Caswell & Young*  
*May Downey*

*Inventor:*  
*Simon S. Mullen*  
*By [Signature]*  
*Attorneys*

# UNITED STATES PATENT OFFICE.

SIMON S. MULLEN, OF WATERTOWN, WISCONSIN.

## EYE-SHIELD.

1,152,431.

Specification of Letters Patent.

Patented Sept. 7, 1915.

Application filed July 27, 1914. Serial No. 853,305.

*To all whom it may concern:*

Be it known that I, SIMON S. MULLEN, a citizen of the United States, and resident of Watertown, in the county of Jefferson and State of Wisconsin, have invented certain new and useful Improvements in Eye-Shields; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide a simple, economical and effective eye shield so arranged and constructed as to interrupt the line of vision in a downward direction when the head of the wearer is poised normally, the said shield being particularly designed for use in the instruction of students to familiarize them with the arbitrary arrangement of the keyboard of a musical instrument, typewriter or analogous finger actuated mechanism, whereby touch is relied upon in execution. Thus it will be seen that expensive and complicated blinds usually employed to cover the keyboards of such instruments are dispensed with, while, at the same time, the vision of the operator or student is only cut off from said keyboard.

With the above objects in view the invention consists in certain peculiarities of construction and combination of parts as hereinafter set forth with reference to the accompanying drawings and subsequently claimed.

In the drawings Figure 1 represents an elevation of a shield embodying the features of my invention shown correctly positioned upon the face of the wearer; Fig. 2, an enlarged perspective view of a form of my invention wherein the shield is capable of adjustment to conform to the contour and size of the face of the wearer; Fig. 3, a plan view of still another exemplification of my invention with parts broken away to more clearly illustrate certain details of construction, and Fig. 4, a detailed cross-section showing means of attaching the bridle or ear bows.

Referring by characters to the drawings, Figs. 1 and 2 illustrate a form of horizontally disposed shield that is divided centrally into sections 1, 1', their overlapped edges being formed with slots 2 for the reception of a confining pin or rivet 3, which rivet carries a bridge-piece 4 that is adapted to be bent to rest upon the nose of the wearer. The shield sections 1, 1', are also provided with transverse slots 5 for the reception of retaining clips 6 for ear bows 7. Thus the

bows may be adjusted back and forth to accommodate the portions of the face of the wearer whereby the shield is held in its proper position and confined by the bows engaging the ears in a manner similar to that employed for the support of spectacles.

The inner edges 8 of the shield sections 1 and 1' are cut out to approximately conform to the contour of the cheeks and nose of the wearer upon a line below the eyes. These edges, as shown in Fig. 2, may be also provided with some delicate fabric valance 8', which valance can readily be cut to conform to any peculiarities of contour of the face of the wearer, or the valance may be of such delicate tissue as to contact with the face and form a soft cushion or shield to cut out vision between the shield and the face of the wearer effectually.

The shield, as shown, or in any type of my invention, is arranged to be worn in the position upon the face as indicated in Fig. 1 of the drawings, whereby downward vision is obstructed between the eyes and the hands of the wearer when the head is poised in its approximately normal position. Thus the student can manipulate the keyboard of a musical instrument or typewriter with his vision obstructed in such manner that familiarity with the keyboard is effected and the student becomes efficient in operating the instrument by touch.

Figs. 3 and 4 of the drawings illustrate an exemplification of my invention wherein the shield 9 is formed from a single piece and the base edge 10, which is cut approximately to conform to the face and nose of the wearer, may be recut to exactly fit the face of the student to which it is to be applied.

In order to secure the shield in the correct horizontal position, in this exemplification of my invention, I provide bows 11, which bows are hingedly secured to a slotted bridge bar 12 having a centrally disposed nose loop 12'. The lower stretch of the slotted bridge bar has rigidly secured thereto a supporting bail 13, which bail is arranged to engage the under face of the shield and sustain the same in its correct horizontal position, it being understood that the shield proper may be made of any material such as thin celluloid, cardboard, or other light substance, to produce the desired result.

The base edge 10 of the shield 9 is formed with outwardly extended slits 13, which slits divide the edge of the shield between its nose seat into tongues 14. In assembling the shield these tongues are slipped through the slotted bridge piece 12, as shown in Fig. 3, and thereafter the shield is confined in position by clips 15, legs of which straddle the upper section of the bridge piece and pass through the tongues 14, being clenched in their position as shown in Fig. 4.

While I have shown and described two forms of my invention with specific details of construction embodying the bridle mechanism, it is obvious that such details of construction may be varied indefinitely within the knowledge of skilled mechanics without departing from the spirit of my invention as the essential feature of said invention is the means for sustaining the shield below the eyes of the wearer to interrupt the view of the keyboard of an instrument, whereby the wearer is obliged to manipulate the keys by touch when the head is normally poised.

It is also manifest that, in order to prevent the wearer from tilting the head so as to observe the keyboard, the shield, in some instances, may have its outer edge curled or flared up slightly.

I claim:

1. As a new article of manufacture, a shield for the purpose described formed of opaque material, and arranged to fit the face below the eyes to entirely obstruct the line of

downward vision between the eyes and hands of the wearer. 35

2. An eye shield comprising a body portion opaque in its entirety, said body portion being provided with a nose-engaging portion, and ear-engaging portions adjustably connected to the body transversely to the length thereof. 40

3. An eye shield for students of touch systems in keyboard manipulation comprising a pair of adjustably connected opaque sections forming a continuous flat vision interrupting surface that is opaque in its entirety, and means for attaching the body to the face of the user to interrupt the vision between the eyes and hands. 45 50

4. An eye shield for use in teaching the touch system of keyboard manipulation comprising a body formed of two complementary slotted sections having their slotted portions arranged in overlapped relation with their slots in alinement, the sections being entirely opaque, a nose bridge having an engaging portion that engages the slots of the two sections, and ear-engaging means carried by the sections. 55 60

In testimony that I claim the foregoing I have hereunto set my hand, at Watertown, in the county of Jefferson and State of Wisconsin, in the presence of two witnesses.

SIMON S. MULLEN.

Witnesses:

MARY E. BURKE,  
J. F. PRENTISS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."