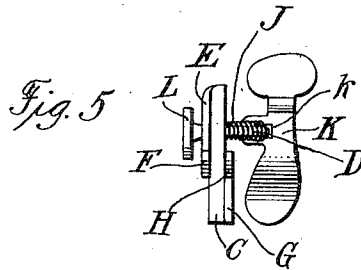
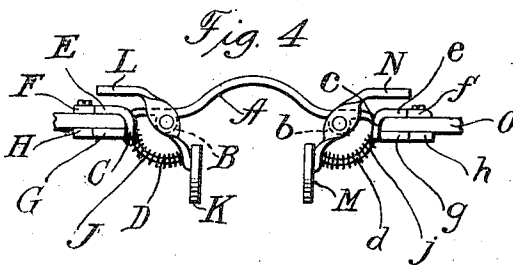
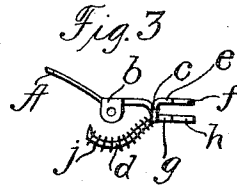
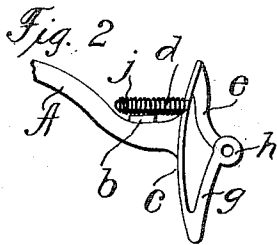
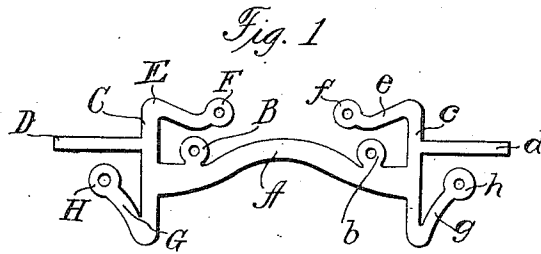


C. BILLINGTON.
EYEGLASS CONNECTION.
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971,348.

Patented Sept. 27, 1910.



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UNITED STATES PATENT OFFICE.

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EYEGLASS CONNECTION.

971,348.

Specification of Letters Patent. Patented Sept. 27, 1910.

Application filed January 23, 1909. Serial No. 473,869.

To all whom it may concern:

Be it known that I, CHARLES BILLINGTON, citizen of the United States, residing at Attleboro, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Eyeglass Connections, of which the following is a specification.

This invention relates to eyeglass connections, and its object is to produce of bendable sheet metal a one-piece form or yoke, having parts of special construction and arrangement for adjustably supporting the two lenses of an eyeglass, parts of the sheet-metal form being also provided to pivotally carry hand-operated nose-grips and the coiled springs which act thereupon.

The stated object is accomplished by fashioning a flat piece of metal into substantially the contour illustrated in the accompanying drawings, of which—

Figure 1 is a plan view of the form before any portion has been bent. Fig. 2 represents a side view of one end portion of the form after the parts at that end have been bent to receive the lens. The coiled spring is shown upon the curved arm constructed to carry it. Fig. 3 is a view from above the same end of the form as shown in Fig. 2. Fig. 4 is a view from above of an eyeglass showing the two lenses connected by this invention, and exhibiting also the pivoted nose-grips. Fig. 5 is an end view of the invention in the shape illustrated in Fig. 4, but omitting the lens.

The same letter refers to the same part throughout the drawings and specification.

Fig. 1 sets forth the form as it appears before any of its projecting parts have been bent. The bow or curved middle portion is marked A, and two eyes B and b are near the ends of the curved portion A.

Extending transversely at the ends of the middle portion A are straight parts C and c, and at right angles with those transverse parts the arms D and d project outwardly. At the top of the portion C there is formed the double curved arm E having an end eye F. At the lower end of the portion C there is formed a single curved arm G having the end eye H. The portion c is provided with like extensions designated by letters e, f, g, and h.

Let it be assumed that the portion c is turned up at the line of its juncture with the middle A, until the surface of portion c

is perpendicular with the surface of the middle portion A. Then, suppose the portion c to be curved as illustrated in Fig. 2 until it coincides with the curvature of the lens at the end of the lens, and the arms e and g arranged on opposite sides of the lens, with eyes f and h opposite each other, as best shown in Fig. 4. It is believed to be now clear that if the hole in the lens be located a slightly greater or less distance from the edge of the lens than the prescribed distance, the arms e and g may be adjusted to allow for such variation, bringing the eyes f and g to register exactly with the hole through the lens.

In Fig. 3 it will be observed that the originally straight projecting arm d is curved, approximately upon the arc of a circle, and that the coiled spring j is arranged about the arm d, the outer tip of the arm being bent slightly to retain the spring. In Fig. 3 it will be further observed that the eye b previously mentioned is bent into a position perpendicular to the surface of the middle A. It will be noted also that the parts referred to by letters D, E, F, G, H, and J, corresponding to the parts illustrated in Figs. 2 and 3 and described above, are arranged correspondingly on the other side of the middle A, as shown in Fig. 4.

To the eyes B and b are pivotally secured the nose-grips K having the finger piece L and M having a similar finger piece N. This arrangement of the parts is best shown in Fig. 4.

In the operation of this invention, the finger pieces L and N upon one side of the middle or bow A are caused to approach each other, thus separating the nose grips K and M upon the other side of the middle A. At the same time, the springs J and j are compressed.

As shown in Fig. 5, the arm D passes through a slot k in the nose grip K, but the slot is not large enough for the spring to pass also. The slots permitting the passage of arms D and d occupy the same positions with respect to the nose grips K and M. The slot k only is shown, but there is a corresponding slot through the nose grips M. The result is that the spring is compressed, and its reaction forces the nose-grip toward its original position and grasps the nose of the wearer yieldingly.

As previously stated, the arms D and d

are bent into the arc of a circle. They both have the same curvature. The pivotal points of the nose-grips are the centers of the circles, and the slot h and its fellow, not shown, need be, therefore, only slightly larger than the cross-section of the arms to permit the movements of the nose-grips as explained and the compression of the springs J and j as set forth. While it is true that the ends of the arms D and d project through the nose-grips when the nose-grips are caused to approach each other, the distance between those ends is intentionally made a little greater than the width of the nose of the wearer, by bending bow A . The ends of the arms do not touch the skin. Considering Figs. 3 and 4, it will be noted that the full extension of springs J and j press the nose-grips K and M toward each other for a small distance beyond the ends of the arms D and d . This distance is amply sufficient to effect an adequate yet gentle clasp of the nose by the nose-grips.

Having now described this invention and explained the mode of its operation, what I claim and desire to secure by Letters Patent of the United States is—

1. In an eyeglass connection, a one-piece sheet metal form having a middle curved portion and transverse portions located at the ends of said middle portion, means borne

by said transverse portions and constructed and arranged to engage a lens, the said transverse portions having arms extending toward each other, coil springs encircling the said arms, and nose-grips pivotally supported adjacent to said arms and having portions arranged in contact with said springs whereby the springs are compressed when the nose-grips are separated.

2. In an eyeglass connection, a one-piece sheet metal form having a middle curved portion and transverse portions located at the ends of said middle portion, means borne by said transverse portions and constructed and arranged to engage a lens, the said transverse portions having curved arms extending toward each other, coil springs encircling said arms, and nose-grips pivotally supported adjacent to said arms and having portions provided with slots and arranged in contact with said springs, the said arms passing through the said slots, whereby the springs are compressed when the nose-grips are separated.

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

CHARLES BILLINGTON.

Witnesses:

RALPH C. ESTES,
FRANK C. ESTES.