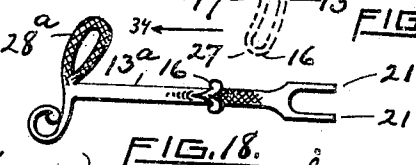
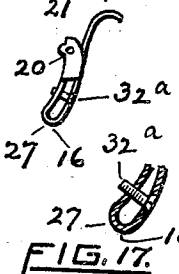
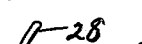
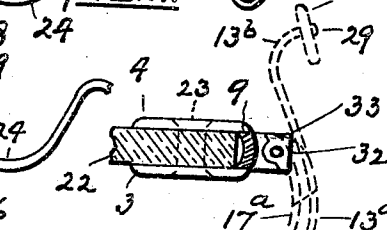
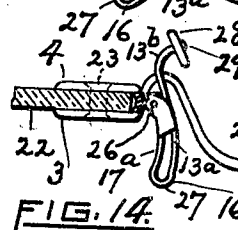
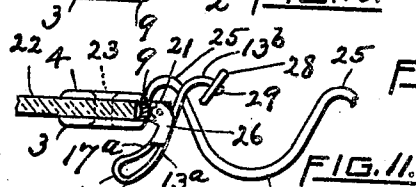
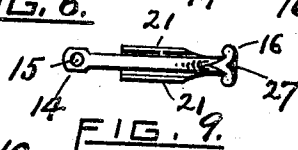
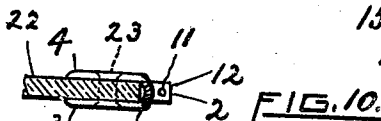
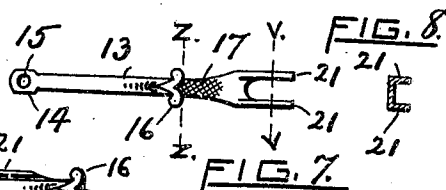
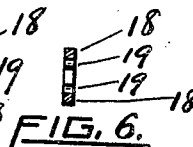
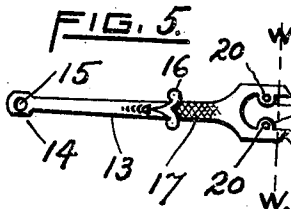
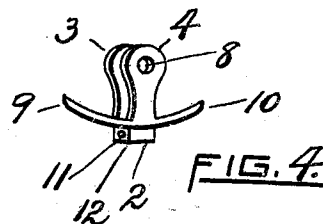
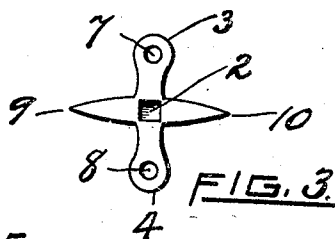
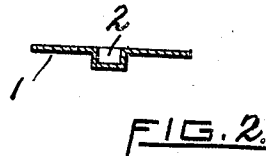
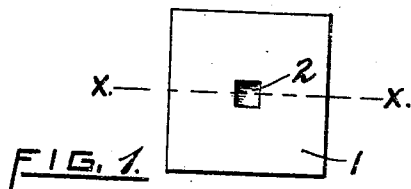


S. J. CLULEE.
EYEGGLASS MOUNTING.
APPLICATION FILED APR. 24, 1909.

938,744.

Patented Nov. 2, 1909.



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UNITED STATES PATENT OFFICE.

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EYEGLASS-MOUNTING.

938,744.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed April 24, 1909. Serial No. 491,959.

To all whom it may concern:

Be it known that I, STEPHEN J. CLULEE, a 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-Mountings, of which the following is a specification, reference being had therein to the accompanying drawings.

Like reference numerals indicate like parts.

Figure 1 is a plan view of a sheet of metal with a central box-like square protuberance, from which metal sheet a lens-strap is to be formed. Fig. 2 is a sectional view of the same, as seen on line *xx* of Fig. 1. Fig. 3 is the lens-strap blank cut from said metallic sheet. Fig. 4 is a perspective view of the improved lens-strap, constituting one of the parts of my invention. Fig. 5 is a view in side elevation of my improved finger-piece, before the same is bent into its operative form. Fig. 6 is a cross sectional view of the same, as seen on line *ww* of Fig. 5. Fig. 7 is a side elevation of said finger-piece, after its bifurcated end has been bent at a right angle with the said finger piece, longitudinally thereof. Fig. 8 is a cross sectional view of the same, as seen on line *vv* of Fig. 7. Fig. 9 is a view in side elevation of the finger-piece when its bifurcated end has been doubled to lie back of and parallel to the opposite end of the finger-piece. Fig. 10 is a view of one eyeglass lens, as seen in section on its major axis, together with my improved lens-strap secured thereto, said strap being shown partly in elevation and partly in section. Fig. 11 is a view of my improved eye-glass mounting, as seen in top plan, in its wearing position, the lens-strap being shown in diametrical section and the other parts in elevation. Fig. 12 is a view of the nose pad, as seen in front elevation. Fig. 13 is a side elevation of the same. Fig. 14 is a view similar to Fig. 11, but showing the finger-piece in position when the eye-glasses are about to be mounted upon the nose. Fig. 15 is a view (on an enlarged scale) of the lens, lens-clamp and central box, as seen in top plan, together with the finger-piece (shown in dotted lines), mounted pivotally on said box, when in position to be under increased spring tension as in Fig. 14. Fig. 16 is a plan view of the bent finger-piece and a screw to adjust and regulate the spring tension thereof. Fig. 17 is a view of the bent end of said finger-piece as seen in

central longitudinal section and the adjusting screw shown in elevation. Fig. 18 is a view in side elevation of an integral finger-piece and nose pad.

My invention relates to eye-glass mountings, and especially to that kind in which the nose-grips are movably and pivotally mounted and are operated by finger-pieces, which project out in front of the lenses and in close proximity therewith, respectively; and the invention consists of the novel construction and combination of the several parts, as hereinafter described and claimed.

In the drawings, the reference numeral 1 designates a sheet of metal, in which a square, box-like protuberance 2 has been formed by a die and plunger, or in any other suitable manner. By die-action, the lens-strap is shaped and cut from the said metal sheet, and is represented in Fig. 3. It consists of said central box 2, and the four radial arms 3, 4, 5 and 6, all integral. The arms 3 and 4 are enlarged at their outer ends, as seen in Fig. 3, and are provided with screw holes 7 and 8, respectively. The screw hole 7 is countersunk and the screw hole 8 is threaded. The arms 9 and 10 are lens rims and are bent in a curvature adapting them to lie in contact with the edge of the lens, as represented in Fig. 4. The arms 3 and 4 are bent to extend parallel with each other, as seen in Fig. 4, and the box 2 has a pivot hole 11 through two opposite sides, as there illustrated. The lens-strap is new in this respect,—that it has the central box 2, provided with the square corners 12 and said pivot holes 11, as shown in Figs. 4 and 10.

In Fig. 6 is shown one of my improved finger pieces. It is made of a single piece of tempered sheet metal, so as to be capable of the resilient action hereinafter described. A body portion or central part is a strip 13, one end of which is slightly enlarged, as seen at 14, and is there provided with a pivot hole 15. It is preferably broadened at or near its center, as illustrated at 16, although such enlargement is not essential. The portion of the body or strip which extends beyond the enlargement 16 in line with the portion 13, is designated in the drawings as 17, and its outer extremity is bifurcated, as seen at 18. Each arm of the bifurcation has a slight inwardly directed projection 19, in which is a pivot hole 20. The enlargement 16 is shown as having the form of a scroll, or it may be

otherwise ornamented as desired. I prefer to nurl the portion 17 of said strip adjacent to the enlargement 16, but such detail of finish is immaterial, except as it tends to enhance the beauty of the finger-piece and especially to so diversify the exposed surface that it will not reflect light sufficiently to become conspicuous, because such part of the finger-piece, should be as little conspicuous as possible. The two arms 18, 18, of the bifurcation are then bent up to extend parallel with each other, but at a right angle to the plane of the strip 17, as represented at 21, 21, in Figs. 7 and 8. The finger-piece, when in the shape illustrated in Fig. 7, is bent transversely on the line indicated by $z z$, and consequently assumes the shape shown in Fig. 9, and thus the bent flanges 21, 21, extend parallel with the body or strip 13 of the finger-piece. The portion 17 of the strip of the finger-piece is bent as shown at 17^a in Fig. 11 and the portion 13 of the finger-strip is bent into the S-shape illustrated at 13^a and 13^b in the same figure.

The lens 22 is inserted between the arms 3 and 4 of the lens-strap, as seen in Fig. 10, which are clamped together by the screw 23, passing through a hole in the lens made for that purpose, and thus the lens is supported in position. The nose bridge 24 has its ends bent into a U-shape, as illustrated at 25, and is there secured to the lens-clamp, adjacent to the box 2. The bent flanges 21, 21, of the bifurcated end of the finger-piece abut and cover the upper and lower sides of the box 2, and a pivot 26 passes through the pivot holes 20, 20, of said flanges 21, 21 and also through the pivot hole 11 of the box 2. At or near the center, the strip of the finger-piece has the U-shaped bend 27, seen in Figs. 9 and 11. At the outer extremity of the strip 13, adjacent to the bend 13^b thereof, it has a nose pad 28, mounted thereon by a pivot 29. The nose pad 28 is shown in elevation in Fig. 12. It has an ear piece 30, which is provided with a pivot hole 31 and extends from the nose pad at right angles thereto. The end 14 of the strip 13 of the finger piece is mounted on the ear piece 30 by the pivot 29. Thus the nose pad 28 has a limited oscillatory movement, which adapts it to a comfortable fit upon the nose. In Fig. 11 the finger-piece and nose pad are shown in their wearing position. In Fig. 14 these parts are shown in their position when the eye-glasses are about to be mounted upon the nose. When the finger-piece is in the wearing position, represented in Fig. 11, the S-shaped part 13 lies in contact with the side of the box 2 designated as 32 in the enlarged Fig. 15; but when the finger-piece is in said mounting position, the part 13, about midway its ends, presses against the square corner 33 of the box 2, as illustrated by the dotted lines in Fig. 15, as long as the finger

pressure is exerted against the bent end 27 and enlargement 16 of the finger-piece, thus putting the finger-piece under increasing spring tension. When this finger-pressure ceases, the resilience of the finger-piece returns it to the wearing position, shown in Fig. 11. Thus, the box 2, by its corner 33, acts as a fixed cam, while the finger-piece is moved in the direction of the arrow 34, and said corner 33 has a prying function to spread apart the two portions 13 and 17 of the finger-piece. It is to be understood, of course, that another lens, lens-clamp and finger-piece are mounted on the other end 25 of the bridge 24, as is well known in similar devices in this art, but the drawing illustrates only one of these attachments. The two ends 16, 27, of the two finger-pieces are seized by the thumb and forefinger, and by a pinching movement are oscillated toward each other, thus causing the two nose pads 28 and the opposite (or inner) ends of the finger-pieces to spread apart. When this pressure of the thumb and forefinger ceases, the finger-pieces resume automatically their wearing positions by the resilience of the tempered metal, of which they are made. The supplemental springs, heretofore common in many of the devices of this class, are dispensed with, and the resilience is obtained from the inherent temper of the metal, resulting from the rolling process to which the stock has been subjected in its preliminary treatment. The eye-glasses are securely held in wearing position upon the nose, without liability to accidental movement or displacement, and the exact pupillary alignment of the lenses with each other and the exact pupillary distance thereof are insured and maintained.

To increase or diminish the tension of the spring finger-pieces, pliers may be used to close tighter the bend at 27, or a blade or any suitable tool or implement be inserted within the bend 27 to pry open and so to spread the said bend, as may be required in each case for the comfort of the wearer. But I prefer to use the adjusting screw illustrated in Figs. 16 and 17. In Fig. 17 the bow end of the finger-piece is shown (on an enlarged scale in central longitudinal section) as tapped in two places for the reception of a screw 32^a, one hole being threaded and the other countersunk. By turning this screw the tension of the finger piece as a spring can be regulated and adjusted.

In Fig. 18 is shown an integral finger piece and stationary nose pad. This nose pad is designated as 28^a and the strip 13^a can be bent so that the nose pad 28^a will extend at the requisite wearing position and angle.

I claim as a novel and useful invention and desire to secure by Letters Patent:—

1. In an eye-glass mounting, the combina-

tion of a lens-strap having a fixed box thereon, one of whose edges constitutes a cam surface; a tempered finger-piece doubled on itself intermediate its ends and having a pivot hole near one end; a nose pad mounted loosely on the opposite end of the finger-piece; and a pivot passing through the pivot hole into the box in the front of the cam surface, the said cam surface lying between the arms of the loop formed by the doubling of the finger-piece upon itself.

2. In an eye-glass mounting, the combination of a lens-strap having a box projecting centrally therefrom and provided with a cam surface; a tempered finger-piece, doubled upon itself into a U-bend and having at one end two parallel, bent flanges, extending, respectively, in contact with the upper and lower sides of the box; a nose pad loosely mounted on the free end of the finger-piece; and a pivot passing through both said flanges and box, one portion of the finger-piece normally extending in contact with one side of the box, but engageable with the cam surface of the box when the U-bend of the finger-piece is moved on the pivot in a direction away from the lens-strap.

3. In an eye-glass mounting, the combination of a lens strap, comprising two clamping arms and two rim pieces with a protruding cubical-shaped box at the convergence of said arms and rim pieces, which box has a cam surface at one corner thereof; a resilient finger-piece having a U-bend with one arm thereof longer than the other, the longer arm being S-shaped and normally in contact at its center with the central outer side of the box, and the shorter arm being bent conformably with the longer arm and terminating in two parallel bent flanges, which overlie the top and bottom sides of said box; a nose pad supported on the tip of the longer arm of the finger-piece; and a pivot mounting said

flanges upon the box in the front of the cam surface of the box, whereby the longer arm of the bent finger-piece is operatively engageable with said cam surface when said finger-piece is oscillated to its mounting position.

4. In an eye-glass mounting, the combination of a nose bridge; a box having a cam surface supported adjacent to the end of said bridge; and a resilient finger-piece pivotally mounted on the box eccentrically to the cam surface.

5. In an eye-glass, the combination of a lens; a lens-clamp in which the lens is mounted; a nose bridge; a box upon the lens-clamp contiguous to the bridge and provided with a cam surface; a resilient finger-piece mounted upon the box and in operative contact with said cam surface when oscillated to and from its mounting position; and a nose pad mounted on the finger piece.

6. In an eye-glass, the combination of a lens; a lens-clamp in which the lens is supported; a box on the lens-clamp provided with a cam surface; a nose bridge adjacent to the lens-clamp; a resilient finger piece doubled upon itself to form a U-bend and pivoted near one end to the box at the front of said cam surface, with the bent end extending to the front of the lens and with its free end extending to the rear of the nose bridge; and a nose pad upon the rear end of the finger piece, the portion of said finger-piece which is in the rear of the bridge being operatively engageable with said cam surface when its bent end is oscillated toward the nose bridge.

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

STEPHEN J. CLULEE.

Witnesses:

PETER NEMBY,
FLORENCE A. WAITT.