April 12, 1938. T. E. BOSWORTH 2,114,174

REMOVABLE NOSE PAD

Filed Sept. 21, 1936

Fig. 1.

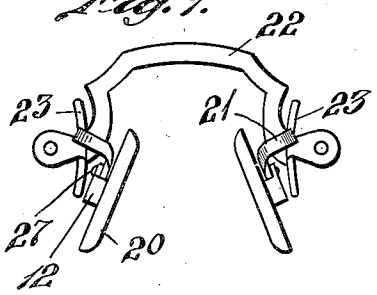


Fig. 2.

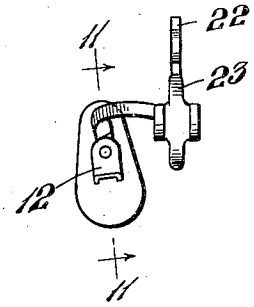


Fig. 3.

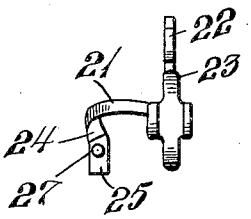


Fig. 5.

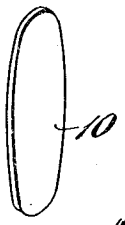
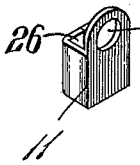


Fig. 6.



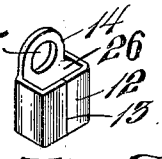


Fig. 7.

Fig. 4.

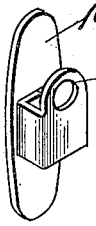
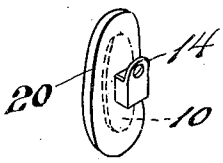


Fig. 10.



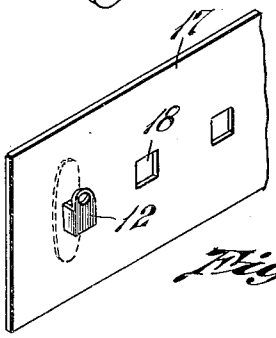


Fig. 8.

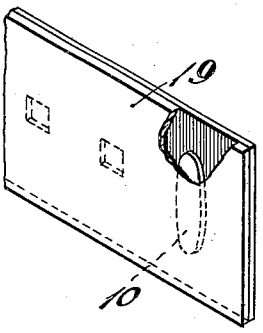


Fig. 9.

Fig. 11.

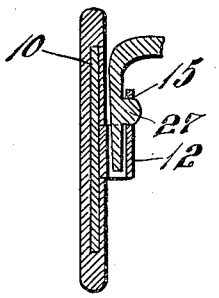
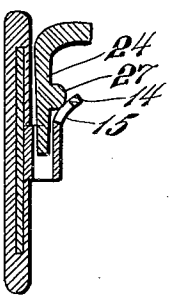


Fig. 12.



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UNITED STATES PATENT OFFICE

2,114,174

REMOVABLE NOSE PAD

Thomas E. Bosworth, Providence, R. I., assignor to Universal Optical Corporation, a corporation of Rhode Island

Application September 21, 1936, Serial No. 101,804

3 Claims. (Cl. 88—48)

This invention relates to an ophthalmic mounting, more particularly to the mounting of a nose pad; and has for one of its objects the provision of a nose pad which may be easily and quickly detached and replaced in its desired position adjacent the nasal edge of the lens.

Another object of the invention is the provision of a detachable pad which will permit some rocking action with reference to the arm which supports it and yet will retain the pad securely in position.

Another object of the invention is the provision of a nose pad which may be attached to and detached from a supporting arm by a bending movement of a portion carried by the pad so that should there be any weakening because of such bending it will be refreshed each time a new pad is mounted.

Another object of the invention is to provide a pad which may be attached by merely pressing a part on the pad to bend it somewhat.

Another object of the invention is the provision of a structure in which the metal parts of the arm will be entirely coated with a precious metal and the majority of the surface of the metal parts of the pad will be covered with a precious metal.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawing:

Fig. 1 is a rear view of the bridge portion of an ophthalmic mounting with pads mounted upon arms in accordance with my invention;

Fig. 2 is an edge view of the bridge and pad as shown in Fig. 1;

Fig. 3 is a view similar to Fig. 2 with the pad removed;

Fig. 4 is a perspective view of the metal plate within the non-metallic pad;

Fig. 5 is a perspective view of the pad alone;

Fig. 6 is a perspective view of the box-shaped socket which is attached to the plate which is in the pad;

Fig. 7 is a perspective view looking at the opposite side of this socket member;

Fig. 8 is a perspective view showing the socket and plate as positioned through an opening in the material from which the pad is formed;

Fig. 9 is a perspective view showing the assembly of the other sheet of material with the sheet shown in Fig. 8 prior to the cutting of the pad therefrom;

Fig. 10 shows the pad complete as cut from the assembly of Fig. 9;

Fig. 11 is a sectional view on line 11—11 of Fig. 2;

Fig. 12 is a view similar to Fig. 11 showing the insertion of the end of the arm into the socket carried by the pad.

In the use of ophthalmic mountings it frequently occurs, particularly in cases where the nose pad is designed to rock with reference to its mounting, that the pad must be replaced for one reason or another, one of such reasons being a corrosion of the metallic part used for mounting the pad in position; and in order that a pad may be detachably mounted in an easy manner and yet one which will provide a construction which will permit of a coating of precious metal about its contacting parts to prevent corrosion, I have provided a pad having a socket into which the end of the arm may be positioned with a detent on the arm to be engaged by a bendable ear on the socket which will hold the pad in position on the arm; and the following is a more detailed description of the present embodiment of this invention, illustrating the preferred means by which these advantageous results may be accomplished:

With reference to the drawing, 10 designates a metallic plate upon which a box-like socket 11 is secured such as by solder. This socket consists of a piece of sheet metal folded into generally rectangular shape with a joint 13 at the meeting edges of the sheet stock member along an inner wall 12. This wall 12 is soldered to the middle portion of the plate 10 so as to leave the ear 14 with an opening 15 therein extending in a plane substantially parallel with the plate 10 and spaced therefrom.

A sheet of Celluloid or zylonite 17 is provided with a plurality of square openings 18 of a size and shape to fit the socket member 11. A plurality of these socket members so mounted are then poked through these openings so that the plate lies snugly up against one surface such as shown in Fig. 8. Another sheet of Celluloid 19 is then cemented to the sheet 17 with the plate between them, and suitable pads 20 are cut from the assembly; one of such is shown in Fig. 10. These pads are thus formed in gangs or a multiplicity at a time.

The ear portion 14 of the pad is bent outwardly slightly from a position parallel with the back surface of the pad, as shown in Figs. 10 and 12, and is now ready for assembly upon its supporting arm such as shown at 21 in Fig. 3. This sup-

porting arm 21 is suitably soldered to a bridge 22 at a point adjacent the lens strap 23 which mounts the lens in position. The arm extends rearwardly, inwardly and downwardly as at 24 providing an end 25 of a size to loosely fit within the opening 26 in the socket of the pad. There is raised from the end portion of this arm a detent 27 by suitably striking the stock, which detent is of a size to be received within the opening 15 in the ear 14. To assemble, I will position the arm into the socket, as shown in Fig. 12, and then bend the ear 14 by pressing it toward the pad so that the opening 15 will embrace the detent 27 to hold the parts in assembled position.

The stock of the arm will be a rolled gold plate so that when it is struck to raise the detent thereon the detent will be covered with a precious material plating to prevent corrosion. The stock of the socket will be also rolled gold plate except the edge portions which are cut from the sheet. However, these edge portions will be cut in such a manner as to draw the gold plate from the opposite surfaces of the stock closely together so as to present a minimum of exposed base metal. Also, the opening 15 will be cut in such a manner as to expose the minimum base metal. However, such base metal as is exposed is all carried by the pad unit so that when pads are changed a fresh pad which carries a fresh socket is presented and the arm which is completely enveloped with the precious metal is undisturbed.

The foregoing description is directed solely towards the construction illustrated, but I desire it to be understood that I reserve the privilege of resorting to all the mechanical changes to which the device is susceptible, the invention being defined and limited only by the terms of the appended claims.

I claim:

1. In an ophthalmic mounting, a nose pad, an arm for supporting said pad, a socket provided on said pad comprising a generally box-shaped member to receive the end portion of said supporting arm, a detent on said arm, and a bendable ear extending from said box-shaped member in a plane generally parallel to said pad and spaced therefrom, said ear being provided with an opening to receive said detent and hold the parts assembled.

2. A nose pad unit comprising a portion having a face to engage the nose and a socket on the rear portion to receive the end portion of the supporting arm, and a bendable ear on said socket extending in a plane parallel to said pad and spaced from the rear surface thereof, said ear being provided with an opening therein for receiving a detent when bent into position for locking the pad on the arm.

3. A nose pad unit comprising a portion having a face to engage the nose and a socket on the rear portion to receive the end portion of the supporting arm, and a bendable ear on said socket extending upwardly from said socket and beyond the adjacent edges thereof in a plane parallel to said pad and spaced from the rear surface thereof, said ear being provided with an opening therein for receiving a detent when bent into such parallel position for locking the pad on the arm.

THOMAS E. BOSWORTH.