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MOUNTING FOR EYEGLASSES.

APPLICATION FILED JAN. 18, 1905.

972,980. **Patented Oct. 18, 1910.**

Fig. 1.

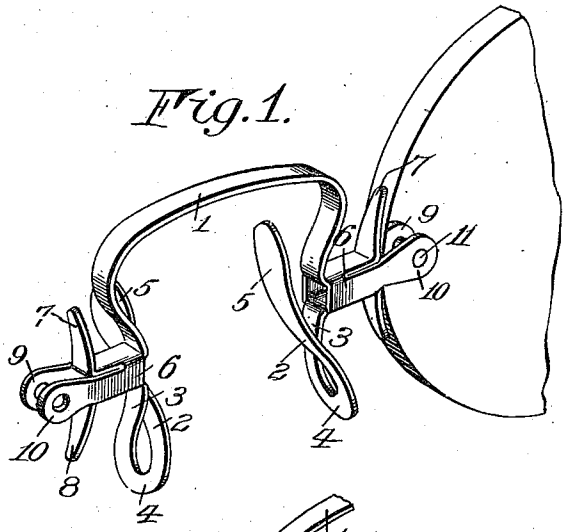

Fig. 2.

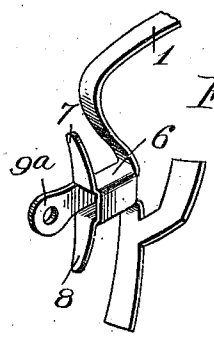

Fig. 3.

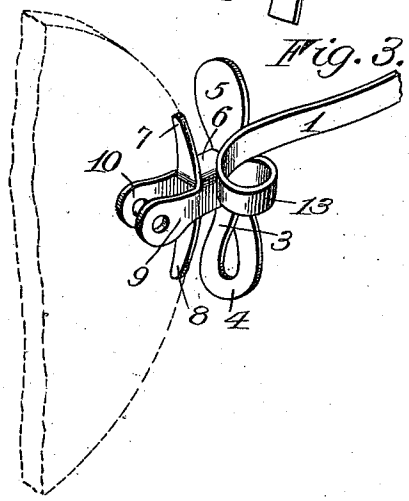

Fig. 4.

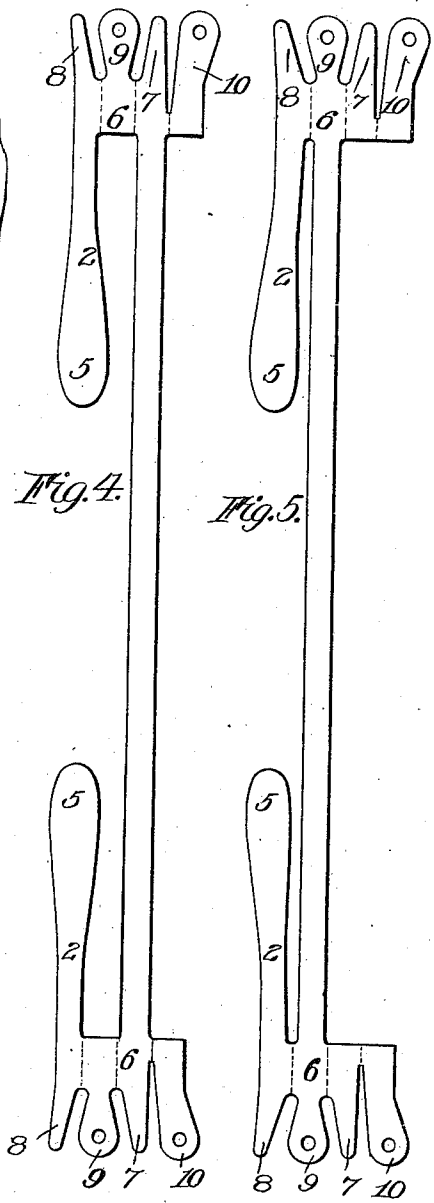

Fig. 5.

Witnesses

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MOUNTING FOR EYEGLASSES.

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To all whom it may concern:

Be it known that I, LEO F. ADT, of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Mountings for Eyeglasses; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

My present invention relates to improvements in mountings for eyeglasses, and the purpose of my invention is to provide improved devices for attaching the lenses to the mounting with ample strength and rigidity and which in use will present a neat appearance, and in order to expedite and cheapen the cost of manufacture it is preferable to form these attaching devices from a blank of sheet material either with or without the spring and guards formed integrally therewith, the peculiar formation and arrangement of the lens engaging ears and attaching lugs enabling the lens attaching devices to be readily formed and insuring an attractive appearance.

To these and other ends my invention consists in certain features of novelty and construction and arrangement of the parts that will be hereinafter described, the novel features being pointed out particularly in the claims hereunto annexed.

In the drawing: Figure 1 is a perspective view of a mounting for eyeglasses which embodies my invention, one of the lenses being omitted; Fig. 2 is a view similar to Fig. 1, showing a mounting wherein one of the attaching lugs or clips is omitted and a different form of guard is employed, the lenses and a portion of the mounting being omitted; Fig. 3 is a perspective view of a different form of mounting embodying my improvements which employs a horizontal bridge spring; Figs. 4 and 5 are diagrams of the blanks such as are employed for forming the mountings shown respectively in Fig. 1, and in Fig. 3.

It is desirable in manufacturing mountings of this character to punch and form them from sheet material which is sufficiently resilient should the spring and guards be formed integrally with the attaching devices to afford ample action in manipulating and adjusting the mounting to the wearer's nose, and I have shown the several embodiments of my invention as constructed in this manner, although it will be understood that the spring and guards could be formed separately if desired.

Referring particularly to that embodiment shown in Figs. 1 and 4, 1 designates the bridge which in this instance is of the vertical or bow-spring type, and 2 designates the nose guard which preferably embodies a downwardly extending arm 3 which is looped or doubled edgewise of the material at 4 and provided with the upwardly extending resilient nose engaging portion 5. The attaching ends of the spring and the guards are formed integrally or otherwise connected to the shanks or posts 6 for each lens, and to the outer end of each post are attached the vertically disposed ears 7 and 8 respectively which extend diametrically from opposite sides of the post and are adapted to engage the peripheral edge of the adjacent lens, and extending outwardly substantially as a continuation of the forward and rear sides of the post are the attaching lugs 9 and 10 which are arranged to bear upon opposite faces of the corresponding lens and are provided with the usual perforations to receive the securing screw 11.

A mounting similar to that shown in Fig. 1 may be made from a blank substantially like that shown in Fig. 4 wherein the connecting portion 1 extends between the portions 6—6, the latter extending in a direction transversely of the said connecting portion and being provided with the alternately-arranged ears 7 and 8 and the attaching lugs 9 and 10 which extend in a direction opposite to that of the spring and the arm 2, the latter extending from the portion 6 substantially parallel and adjacent to the spring 1. The attaching lugs 9 and 10 are enlarged toward their ends to give them ample strength after being perforated, while the least amount of material is employed to present a neat appearance, and the ears 7 and 8 which are arranged at each side of the attaching lug 9 are arranged divergent so that the edges or walls thereof which are adjacent to the lug 9 will extend substantially parallel to the corresponding opposite walls of the lug 9 and are spaced equidistantly at all points therefrom. This manner of spacing the ears 7 and 8 from the lug 9 permits the use of a small post 6 while the attaching lugs need not be reduced in width, and facilitates the manufacture, as the spacing of these parts in this way leaves a strip of ma-

terial which is to be removed, and this enables the punching operation by which the blank is formed from the sheet material, to be performed more satisfactorily and permits the blank to be formed directly into the mounting without the necessity of subsequent finishing.

In making a mounting similar to that shown in Fig. 2 wherein only one attaching lug 9^a is employed instead of two as in that form just described, the lug 10 is omitted and the portion 6 is preferably cut off, the forming and shaping operation being substantially unaltered. However, when it is desirable to employ the double attaching lugs 9 and 10, the dividing cut between the lug 10 and the adjacent ear 7 is preferably extended further into the portion 6 than those forming lug 9 to render the lug 10 adjustable, as will presently appear.

In forming or bending a blank such as that shown in Fig. 4 into shape, the portion 6 is rolled or bent up longitudinally until its opposite ends meet to form substantially a hollow cylinder or tube, and the ears 7 and 8 occupy diametrically opposite positions at the top and bottom of the post or shank thus formed, while the attaching lugs 9 and 10 form continuations of the front and rear faces of the post. The connecting portion 1 may now be formed into the bridge spring and the portion 2 may be bent preferably downwardly and thence doubled upwardly to form the nose guard. The mounting thus formed is fitted to the lenses by inserting the inner edge of each lens which has been previously perforated as usual, between the attaching lugs 9 and 10 so that the latter bear respectively upon the front and rear faces of the lens, the parts being secured by the screw 11. The attaching lug 10 is adjustably secured to the shank 6 by so extending the dividing line between it and the lug that there is a comparatively narrow strip of material connecting them, and therefore the mounting can be readily applied to lenses of different thicknesses by adjusting the position of the attaching lug 10 laterally relatively to the shank 6. Of course this additional attaching lug 10 may be omitted as shown in Fig. 3 and a mounting of this kind is capable of being applied to lenses of varying thicknesses without the necessity of adjustment, but it is preferable to employ the double attaching lugs as such a construction affords additional strength for the lens connection.

In constructing a mounting of the kind shown in Fig. 3 which employs a horizontal spring, a blank similar to that shown in Fig. 5 is preferably employed, wherein the connecting portion which forms the spring is connected to the portion 6 at a point opposite to the attaching lug 9, the portion 6 being bent or rolled in a manner similar to that described in connection with the blank shown in Fig. 4, the attaching lugs 9 and 10 of the blank of Fig. 5 being then arranged at the front and rear sides respectively of the shank thus formed, and the lens engaging ears 7 and 8 are bent diametrically from the upper and lower sides respectively of the shank. In this case, the attaching arm of the guard will extend downwardly and the spring 2 will extend forwardly from the inner end of the stud or shank. The spring in this instance is provided with the yieldable coils 13 which are located between its central portion and the attaching devices to afford sufficient action to the spring to enable the eyeglasses to be readily applied and removed from the wearer's nose; and in employing a horizontal spring it is preferable to provide the double attaching lugs, for they will effectually resist forces to bend the attaching device laterally relatively to the lenses when the horizontal spring is being flexed.

Each of the various forms of mounting embodying my invention is capable of being readily formed from a comparatively narrow strip of sheet material in such a way that a mounting of neat and finished appearance possessing ample strength and rigidity is secured directly from the blank as punched which involves only the operation of bending the parts into the requisite shape.

While it is preferable to form the lens attaching devices of the kind herein described integrally with the spring and guard when a resilient or spring bridge is employed, it will be understood that these parts could be formed separately and suitably connected, and as my invention is also applicable to spectacles and in fact to all kinds of rimless eyeglasses, it will be obvious that these lens attaching devices could equally well be formed separately; and the bridge, guards, temple pieces and other devices which are to be used in connection therewith could readily be soldered or otherwise suitably attached thereto.

I claim as my invention:

1. A lens attaching device embodying a shank or post formed from a blank bent longitudinally of the shank to provide a front, a rear, a top and a bottom wall, and a pair of attaching lugs extending outwardly from the outer edges of the blank, one of said lugs being adjustably attached to enable lenses of different thicknesses to be accommodated between the attaching lugs.

2. A lens attaching device embodying a hollow tubular shank formed from a strip of sheet material rolled longitudinally of the shank to form a front, a rear, a top and a bottom wall, and a pair of attaching lugs extending in the same direction from the outer edge of the strip of sheet material for engaging opposite surfaces of the lens, the

strip of material being slitted longitudinally of the shank on one side of one of said lugs in order that the lug may be adjusted to lenses of different thicknesses.

3. A lens attaching device embodying a hollow tubular shank composed of a strip of sheet material having a pair of attaching lugs proceeding from one edge of the sheet material for engaging the opposite faces of a lens, one of said lugs lying in proximity to one end of the strip and the latter being slitted on the other side of the lug and longitudinally of the shank to permit lenses of different thicknesses to be accommodated between the attaching lugs.

4. A lens attaching device formed from a blank of sheet material which embodies a body portion adapted to be bent up transversely to form the shank, a lens attaching lug extending longitudinally of the body portion and enlarged toward its end, and a pair of ears extending longitudinally of the body portion at opposite sides of the lug and arranged divergently relatively to the latter.

5. A blank for making lens attaching devices embodying a body portion adapted to be bent up to form the shank or post, a lens attaching lug extending laterally from the body portion having its edges diverging to form an enlargement toward the end of the lug, and ears extending from the body portion at opposite sides of the lug having their adjacent edges arranged substantially parallel to the divergent edges of the lug.

6. A lens mounting composed of a single piece of sheet material embodying the closed tubular posts or shanks rolled from sheet material, and having at their outer ends the lens attaching lugs for engaging the opposite faces of the lenses and the ears for engaging the edges thereof, said lugs and ears forming extensions all proceeding directly from the same edge of the material which when rolled into tubular form will properly arrange the lugs and ears upon the outer ends of the shanks or posts.

7. In eyeglasses, the combination with the lenses, of a mounting formed of a single piece of sheet material embodying the bridge arranged substantially horizontally between the lenses, the lens attaching devices each comprising a tubular shank having its forward inner edge connected to the bridge, and provided upon its outer ends with the paired lens attaching lugs and ears all proceeding directly to the lens from the same edge of the material, and guards connected to the inner ends of the shanks and adapted to engage the nose of the wearer.

8. A blank for eyeglass mountings composed of sheet material embodying the connecting portion, the body portion extending transversely at the ends thereof, the guards connected to the body portions, an attaching lug extending outwardly from the outer edge of each body portion and enlarged toward its end, and ears proceeding directly to the lens from the same respective edge of the material and arranged at opposite sides of the attaching lug and diverging from the latter.

9. A blank for eyeglass mountings composed of sheet material embodying the connecting portion, the body portion extending transversely at the ends thereof, and the alternately arranged pairs of attaching lugs and ears each extending outwardly from the outer edges of the body portions.

10. A blank for making lens attaching devices embodying a body portion adapted to be bent or rolled up longitudinally to form the shank, a lens-attaching lug extending outwardly from one of the lateral edges of the body portion, and a pair of ears extending outwardly from the same edge of the material at either side of the attaching lug, said ears being separated from the lug by spaces which are formed by the removal of the material.

11. A blank for lens mountings comprising a body portion for forming a shank, having portions adapted when the body portion is bent longitudinally of the shank, to form a front wall, a rear wall, a wall connecting the two, and a pair of attaching lugs extending in the same direction directly from one edge of the body portion and a lens bearing ear proceeding from the same edge between the attaching lugs.

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