No. 849,710. PATENTED APR. 9, 1907.

L. F. ADT.

EYEGLASS MOUNTING.

APPLICATION FILED APR. 30, 1906.

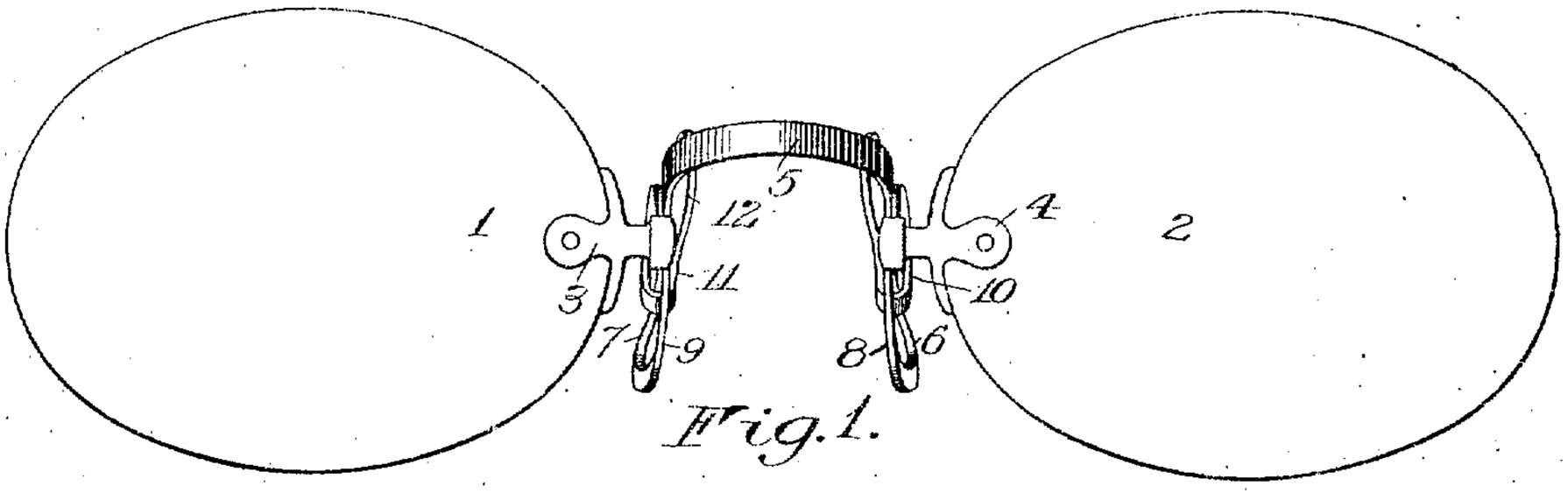

Fig. 1.

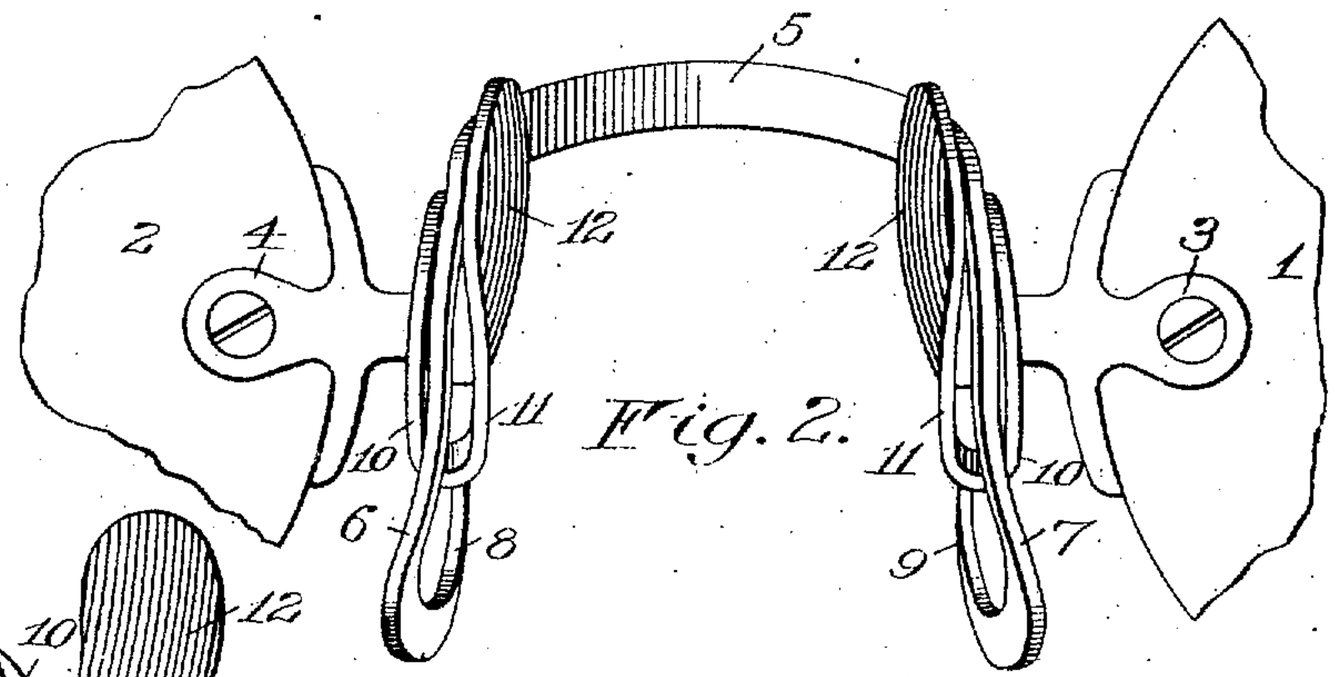

Fig. 2.

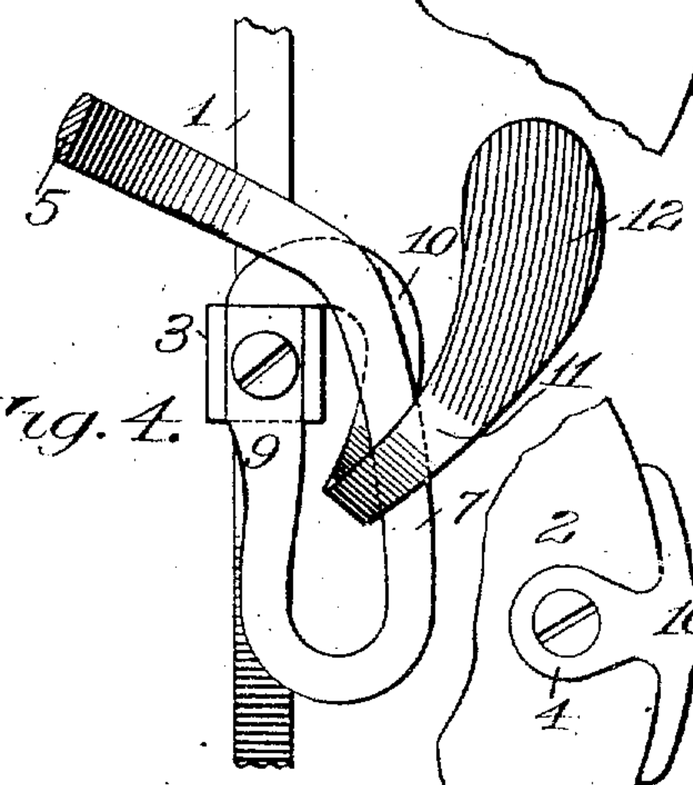

Fig. 4.

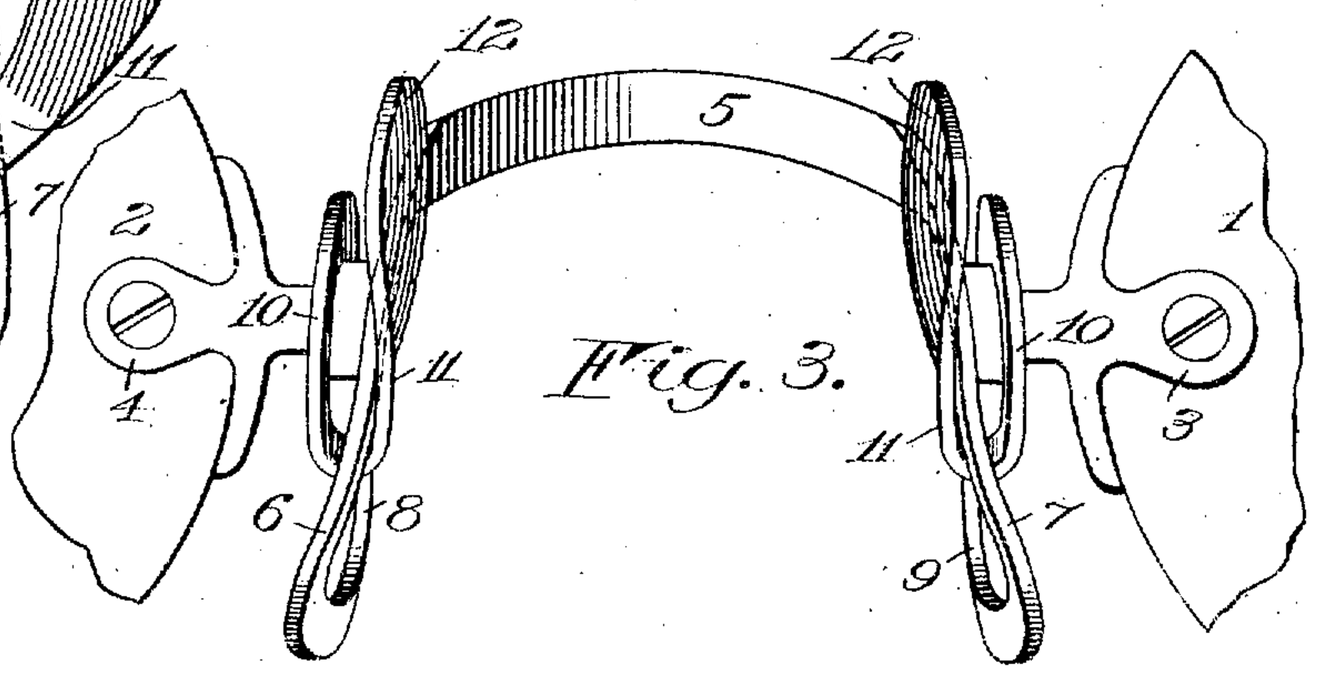

Fig. 3.

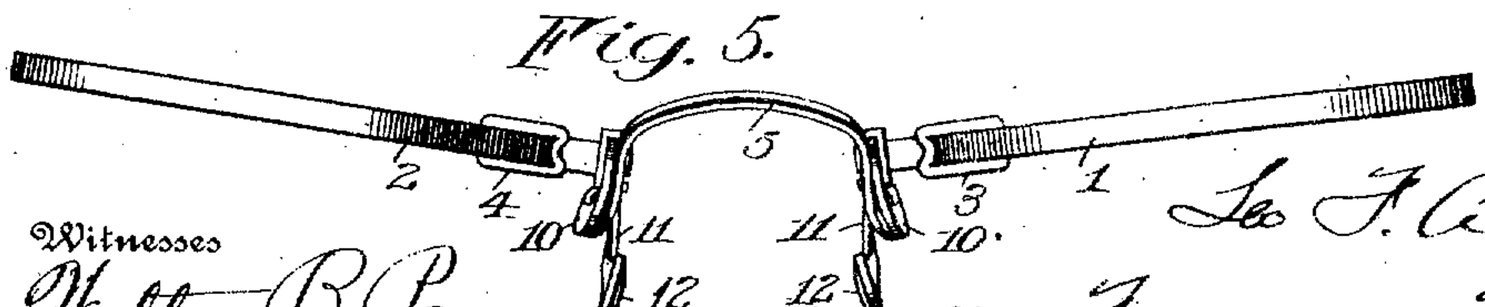

Fig. 5.

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EYEGLASS-MOUNTING.

No. 849,710. Specification of Letters Patent. Patented April 9, 1907.

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To all whom it may concern:

Be it known that I, LEO F. ADT, of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Eyeglass-Mountings; 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, and to the reference-numerals marked thereon.

My present invention relates to improvements in eyeglasses, and particularly to the type employing a spring-bridge wherein relative movement of the lenses serves to operate the guards in fitting and removing the eyeglasses; and the object of the present invention is to provide an improved mounting of this general type embodying certain improvements that will afford ample action to the bridge and provide means for limiting the relative movement of the lenses to avoid breakage of the bridge either through accident or carelessness.

To these and other ends it consists in the improvements hereinafter described, the novel features being pointed out in the claims.

In the drawings, Figure 1 is a front elevation of a pair of eyeglasses embodying my invention. Fig. 2 is an enlarged rear elevation of the mounting with the nose-engaging portions in normal position. Fig. 3 is a view similar to Fig. 2, showing the guards separated by a relative movement of the lenses substantially in line with their major axes. Fig. 4 represents a transverse section of the mounting as viewed from the left in Fig. 2; and Fig. 5 is a plan view of the mounting, showing the nose-engaging portions separated by a relatively forward tilting of the outer ends of the lenses.

The present embodiment of my invention comprises generally the lenses 1 and 2, provided at their proximate edges with lens-attaching devices 3 and 4, preferably of the usual construction and having boxes at their inner ends to receive the attaching portions of the spring and guards. The spring employed in the present embodiment comprises the central bowed portion 5, adapted to span the nose and having its extremities extended in a direction downwardly and rearwardly behind and in proximity to the attaching devices to form the rear arms 6 and 7, which are extended some distance below the attaching devices, then doubled preferably forwardly and upwardly to form the spring attaching-arms 8 and 9, the latter entering the boxes of their respective attaching devices from their under side and are secured in place by the usual fastening-screws.

The improved guard adapted to be employed in connection with a spring of the kind just described is preferably formed of flat material and comprises, in the present instance, an attaching portion 10, substantially the form of an inverted loop, one of the arms of the loop entering the top of the box and the other arm of the loop extending to the rear of the attaching device and then extending downwardly in rear of the attaching device to form an outer arm 10 at the outer side of the rear arm of the spring, and the lower end of this arm is doubled inwardly between the two arms of the spring and then extended, preferably rearwardly and upwardly, past the inner side of the adjacent rear arm of the spring to form an arm 11, provided with a nose-engaging pad or surface 12, the spaced arms 10 and 11 of each guard resting in substantially parallel planes and on opposite sides of the respective rear arm of the spring. The inverted loop portion of each guard rests at the outer side of the spring and is arranged to engage the latter as a fulcrum when the lenses are turned or deflected into the position shown in Fig. 5, while the spaced arms 10 and 11 of each guard serve to limit the movement of the corresponding arms 6 and 7 of the spring when the lenses are separated or drawn apart by a force applied substantially in line with their major axes.

In employing a spring substantially of the kind shown and described a comparatively long resilient loop is formed by the doubled arms of the spring that will insure the greatest separating movement of the guards when the lenses are either drawn apart in the line of their major axes in the manner shown in Fig. 3 or by turning or deflecting them, as shown in Fig. 5, without unduly straining the bridge, as the guards serve as stops to limit the movement of the rear arms of the spring-loops beyond a predetermined point when the lenses are drawn apart in the line of their major axes, and when the outer ends of the lenses are bent forward the upper looped portions of the guards will engage the outer sides of the spring as fulcrums, and consequently the movement of the guards will be insured about these fulcrums as cen-

ters, and this will prevent inward movement of the attaching devices when the lenses are tilted in this manner, as this would be objectionable in that the effective separating movement of the guards would be decreased by an inward movement of their attached ends. In a spring of this form the extensive surface afforded by the loops may be utilized as nose-engaging surfaces, especially when the spring is formed of flat material, as is preferable, and as the pads 12 when in operative position on the wearer's nose lie substantially in the same plane with the looped portions of the spring they may obtain effective hold on the nose, as the looped portion of the spring and the pad of the guard form substantially a continuous nose-engaging surface.

I claim as my invention—

1. In eyeglasses, the combination with the lenses, and a bridge connecting them having resilient portions adapted to yield when the lenses are operated, of guards movable with the lenses and having parts arranged to coöperate with the resilient portions of the bridge to limit the relative movement of the lenses when the latter are operated to proximate and separate the guards.

2. In eyeglasses, the combination with the lenses, and a bridge connecting them having intermediate resilient loops formed therein, of nose-guards each having portions arranged on opposite sides of one of the loop-arms and serving to limit the relative movement of the lenses both in separating and proximating the nose-engaging surfaces of the guards.

3. In eyeglasses, the combination with the lenses, and a bridge attached thereto embodying a central portion, and downwardly-extending loops arranged intermediate of the points of attachment and arranged to permit relative movement of the lenses in line with their major geometrical axes, of nose-guards operated by the lenses each having parts arranged on opposite sides of one of the loop-arms to limit the relative movement thereof in both directions.

4. In eyeglasses, the combination with the lenses, and a bridge of resilient material embodying a central portion, and substantially vertical loops each having a forward arm attached to a lens and a rear arm connected to the central portion of the spring, of nose-guards operated by the lenses each having a part arranged at the outer side of said rear loop-arm to limit the relative inward movement of the lenses, and a part at the inner side of said loop-arm to limit the relative outward movement of the lenses.

5. In eyeglasses, the combination with the lenses, and a resilient bridge connecting them having intermediate loops for permitting relative tilting movement of the lenses, of nose-guards attached to the lenses and having portions arranged to coöperate with the bridge as fulcrums when the lenses are operated.

6. In eyeglasses, the combination with the lenses, attaching devices thereon, and a bridge-spring connecting the lenses and having intermediate portions thereof extending past the attaching devices, of nose-guards secured to the attaching devices each having a part arranged at the outer side of its respective intermediate portion of the spring and adapted to coöperate therewith as a fulcrum when a relative tilting movement is given the lenses to separate the guards.

7. In eyeglasses, the combination with the lenses, and a bridge-spring connecting them embodying a central portion, substantially vertical loops arranged between the inner edges of the lenses, one arm of each loop being attached to its respective lens, and a relatively movable arm connected to the central portion and extending into proximity to the points of attachment for the spring, of nose-guards secured to the lenses each embodying an arm arranged at the outer side of the relatively movable arm of the spring, and a nose-engaging portion arranged at the inner side of the movable arm of the spring.

8. In eyeglasses, the combination with the lenses having attaching devices thereon, and a bridge connecting them, of nose-guards connected to the attaching devices and having arms arranged in rear of the latter, and yielding nose-engaging portions doubled inwardly from said arms, said arms and nose-engaging portions extending on opposite sides of the bridge ends.

9. In eyeglasses, the combination with the lenses, and a bridge connecting them, of nose-guards attached to the lenses, each composed of flat material and embodying an arm arranged in rear of the point of attachment and extending from above the latter, the lower end of said arm being doubled inwardly thence extended upwardly to form a yielding nose-engaging portion, said arms and nose-engaging portions being located on opposite sides of the bridge ends.

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