

1,040,103.

Patented Oct. 1, 1912.

2 SHEETS-SHEET 1.

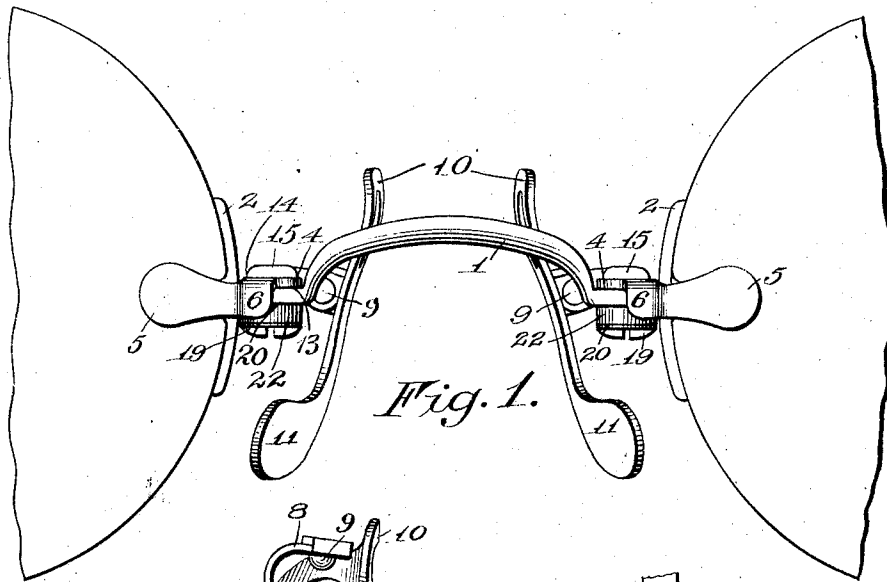


Fig. 1.

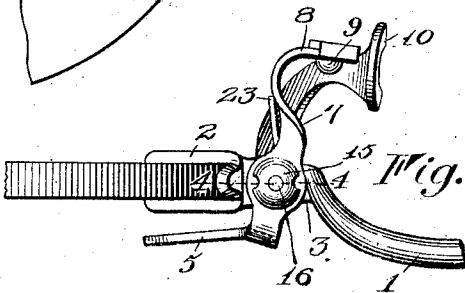


Fig. 2.

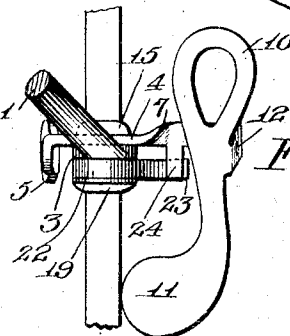


Fig. 3.

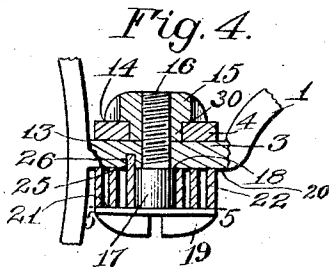


Fig. 4.

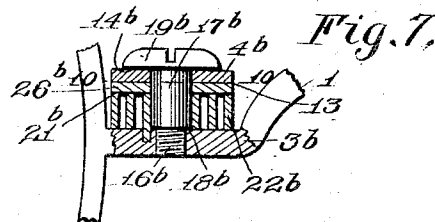


Fig. 7.

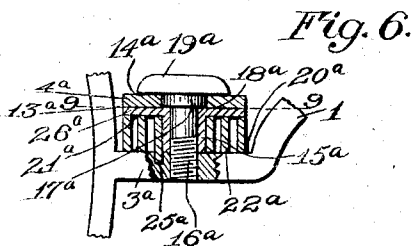


Fig. 6.

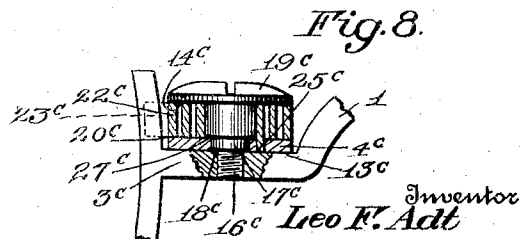


Fig. 8.

Witnesses

Nelson Copp
Russell B. Little

By

Church & Rich

His Attorney

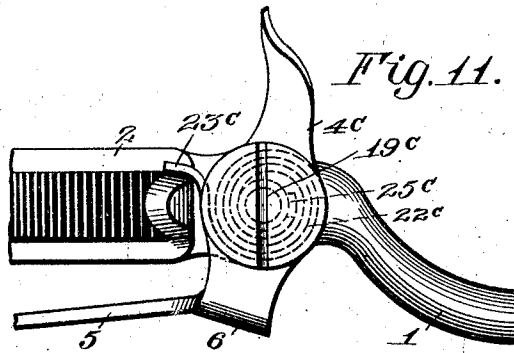
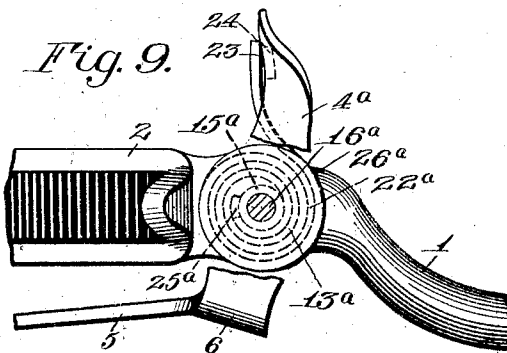
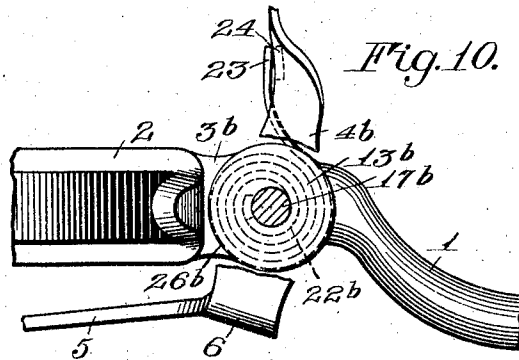
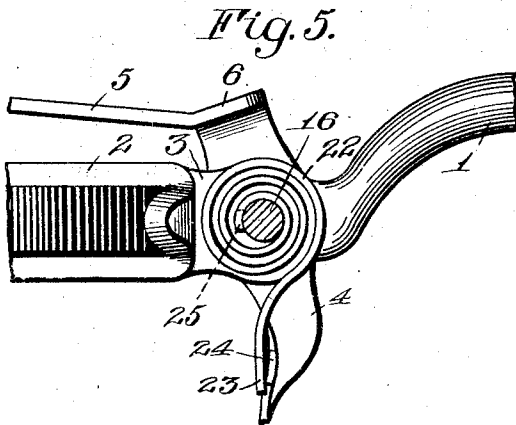
Inventor
Leo F. Adt

L. F. ADT.
EYEGLASSES.
APPLICATION FILED JAN. 7, 1911.

1,040,103.

Patented Oct. 1, 1912.

2 SHEETS—SHEET 2.



Witnesses

Nelson Opp
Russell B. Liffitts

Inventor

Leo F. Adt

By

Church + Rich

His Attorneys

UNITED STATES PATENT OFFICE.

LEO F. ADT, OF ALBANY, NEW YORK.

EYEGLASSES.

1,040,103.

Specification of Letters Patent.

Patented Oct. 1, 1912.

Application filed January 7, 1911. Serial No. 601,298.

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 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, and to the reference-numerals marked thereon.

My present invention relates to optics and more particularly to eyeglasses, and it has for its object to provide a simple and efficient eyeglass mounting of the finger piece type composed of parts convenient both as to manufacture and assembling.

A further object of the invention is to produce an inconspicuous mounting of neat appearance and one which will not collect dirt, the parts and particularly the spring for the guard being well protected though easily cleaned.

To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is a front elevation of an eyeglass embodying a mounting constructed in accordance with and illustrating one embodiment of my invention; Fig. 2 is a top plan view of half of the same mounting showing one unit of the guard mechanism; Fig. 3 is a central vertical section through the bridge showing the mechanism of Fig. 2 in side elevation; Fig. 4 is a vertical detail section, enlarged, taken substantially on the line 4-4 of Fig. 2; Fig. 5 is a detail section, taken substantially on the line 5-5 of Fig. 4; Figs. 6, 7 and 8 are respectively sectional views corresponding to Fig. 4 of the other embodiments of the invention; and Figs. 9, 10 and 11 are plan views of the same embodiments and corresponding to Fig. 5, Figs. 9 and 10 being partly in section on the lines 9-9 and 10-10 of Figs. 6 and 7, respectively.

Similar reference numerals in the several figures indicate the same parts.

Referring first to Figs. 1 to 5, inclusive, 1 indicates the bridging portion of the mounting (usually of the rigid or saddle variety in this type of eyeglass), 2 the lens attaching portions and 3 the intermediate

connecting portions or tables by which the guard mechanisms are usually, and, in the present instance, preferably, carried and as these mechanisms are practically duplicates of each other a description of one will suffice for both. In the practice of my invention as contained in the embodiment mentioned, the guard lever 4 is composed of flat stock, the forward end being turned downwardly at 5 to constitute a finger piece preferably having an extension 6 which serves as a screen for the actuating devices hereinafter described and in other capacities, and the rear end of which is twisted to a vertical plane at 7 and turned inwardly at 8 at which point there is pivoted thereto by a rivet 9, or otherwise, the upper and lower nose engaging pads 10 and 11 through the medium of an arm 12 on the latter. The guard turns between two rigid, parallel bearing surfaces 13 and 14, the former of which is offered by the upper side of the table or connecting portion 3 and the latter by the under side of the head or shoulder of a nut or cap 15 which is threaded down upon the upper projecting end of a post 16 extending through the table. The cylindrical body 30 of the nut forms the pivot about which the guard turns and the lower end, abutting against the table, spaces the head 15 definitely from the latter to give the guard just sufficient room to turn freely but at the same time to support it firmly against movement of any other nature.

The post 16 is, in the present instance, formed by the reduced end of a screw 17 provided with a shoulder 18 that spaces the head 19 a fixed distance from the under surface 20 of the table 3, said surface and the proximate side 21 of the head constituting opposite parallel bearing surfaces between which the guard spring 22 is retained. The latter is preferably composed of a strip of sheet material wound flatwise in a flat spiral coil to encompass the screw 17 and cooperates with the guard, in the present instance, at its outer end 23 through the medium of a depending arm 24 on the guard that is loosely engaged thereby. The inner end of the spring is locked to the table 3 by a projection 25 thereon cooperating with an abutment on the table formed by a recess 26 therein. This arrangement of the spring has several great advantages, one of which is that the convolutions of the coil, while not so engaged as to impair the freedom of their

flexing movements, are all maintained in their proper plane and caused to exert their entire energies in the right manner. The nut 15, aside from providing a smooth surface and steady bearing in which the guard works easily and accurately, also acts as a lock nut for the screw 16. Attention is further called to the fact that such a construction as is provided is very easy to assemble, the spring, for instance, being first lodged upon the screw to rest against its head, the screw being next thrust through the table 3, the guard lever placed upon its upper projecting end and the nut 16 being finally threaded down upon the screw and centered within the bearing of the guard. The assembling of mountings of the present type, as heretofore constructed, has, in most cases, been a tiresome and difficult operation requiring much skill and patience, and the improvement I offer in this direction is therefore considered important.

In the embodiment of the invention shown in Figs. 6 and 9, the spring 22^a is placed on top of the table 3 instead of beneath it, its inner end is similarly secured by a projection 25^a thereon and while one of the bearing surfaces 20^a therefor is furnished by the table, the other is constituted by the inner side 21^a of a flange 26^a on a washer 15^a which is clamped against the table by the engagement of a shoulder 18^a on a screw 16^a which may or may not be threaded into the washer as well as the table. The body 17^a of the screw forms the pivot about which the guard lever 4^a turns and it is held between the top face 13^a of the washer flange 26^a and the under side 14^a of the head 19^a of the screw.

In the embodiment of Figs. 7 and 10 the spring 22^b is arranged practically the same as in the embodiment of Figs. 6 and 9, but the upper bearing face 21^b is formed by the under face of a flange 26^b that has no spacing or body portion 15^a but rests directly upon the convolutions of the spring. The screw 16^b has its shoulder 18^b cooperating with the table 3^b and the body portion 17^b passes through the flange 26^b and forms the pivotal bearing for the guard lever 4^b which turns between the under face 14^b of the screw head 19^b and the upper face 13^b of the flange.

Figs. 8 and 11 illustrate still another construction in which the guard lever 4^c turns between the upper face 13^c of the table 3^c and a shoulder 27^c on the screw 16^c, a second shoulder 18^c cooperating with the table to space the bearing, and the lever turns about the reduced body portion 17^c, as before. The spring 22^c, however, is arranged above the lever and is held between the upper face 20^c thereof and the under side 14^c of the head 19^c of the screw. In this embodiment the lug 25^c on the inner end of the spring co-

operates with the guard lever 4^c, while the outer end cooperates with a stationary portion of the support, as shown at 23^c in Fig. 11, the action of the spring being thus reversed from that of the other embodiments.

I claim as my invention:

1. In an eyeglass mounting, the combination with a support, of a pair of rigid bearing surfaces, a coiled guard positioning spring wound in a flat spiral and retained between the bearing surfaces to prevent its convolutions from being displaced from the plane of the coil, a second pair of rigid bearing surfaces and a guard arranged to turn between them on an axis coincident with the axis of the spiral coil.

2. In an eyeglass mounting, the combination with a support, of a pair of rigid bearing surfaces, one of which is removable, a coiled guard positioning spring wound in a flat spiral and retained between the bearing surfaces to prevent its convolutions from being displaced from the plane of the coil, a second pair of rigid bearing surfaces and a finger piece guard lever arranged to turn between them on an axis coincident with the axis of the spiral coil.

3. In an eyeglass mounting, the combination with a support, of a pair of rigid bearing surfaces, a coiled guard positioning spring wound in a flat spiral and retained between the bearing surfaces to prevent its convolutions from being displaced from the general plane of the coil, a second pair of rigid bearing surfaces, one of which is removable, and a finger piece guard lever arranged to turn between them on an axis coincident with the axis of the spiral coil.

4. In an eyeglass mounting, the combination with a support, of a pair of rigid bearing surfaces, one of which is removable, a coiled guard positioning spring wound in a flat spiral and retained between the bearing surfaces to prevent its convolutions from being displaced from the plane of the coil, a second pair of rigid bearing surfaces, one of which is removable, and a guard arranged to turn between them on an axis coincident with the axis of the spiral coil.

5. In an eyeglass mounting, the combination with a support, a pair of flat parallel bearing surfaces, and a finger piece guard lever mounted to turn between the latter, of a second pair of flat parallel bearing surfaces, a coil spring for positioning the guard wound in a flat spiral between the bearing surfaces and having its convolutions held by the latter against displacement from the general plane of the coil and a removable pivot fastener for the lever having a headed portion constituting one of the bearing surfaces.

6. In an eyeglass mounting, the combination with a support, a removable headed fastener mounted thereon and a flange surrounding the fastener in spaced relation to

the head and the support and forming with each respectively a pair of parallel flat bearing surfaces, of a finger piece guard lever arranged to turn about the fastener between one pair of surfaces and a spring for positioning the guard coiled in a flat spiral between the other pair of flat bearing surfaces with its convolutions held by the latter against displacement from the general plane of the coil.

7. In an eyeglass mounting, the combination with a support, a removable headed fastener mounted thereon and provided with a shoulder and a flanged tube surrounding the fastener and held between the shoulder of the latter and the support with its flange in spaced relation to the latter and the head of the fastener to form with each, respectively, a pair of parallel flat bearing surfaces, of a finger piece guard lever arranged to turn about the fastener between one pair of surfaces and a spring for positioning the guard coiled in a flat spiral between the other pair of flat surfaces with its convolutions held by the latter against displacement from the general plane of the coil.

8. In an eyeglass mounting, the combination with a support, a removable headed fastener mounted thereon and provided with a shoulder and a flanged tube surrounding the fastener and held between the shoulder of the latter and the support, of a finger piece guard lever arranged to turn about the fastener between the head thereof and the flange of the tube and a spring for positioning the guard coiled in a flat spiral about the tube and having its convolutions held between the flange and support against displacement from the general plane of the coil, the inner end of the spring being engaged with the support at a point within the circumference of the spring coil.

9. In an eyeglass mounting, the combina-

tion with a support, a pivot fastener and a finger piece guard lever mounted to turn thereon, of a coil spring for positioning the guard wound in a flat spiral about the axis thereof, and a detachable member separate from the pivot fastener embodying a flat flange or plate disposed against the outer flat side of the spring coil and extending to the circumference thereof to cover its convolutions, the guard lever being arranged between the spring and the support.

10. In an eyeglass mounting, the combination with a support, a pivot fastener thereon and a finger piece guard lever mounted to turn on the fastener, of a coil spring for positioning the guard wound in a flat spiral about the axis thereof, and a member comprising a tubular portion surrounding the fastener and a flange or plate connected to the tube and disposed against the outer flat side of the spring coil and extending to the circumference thereof to cover its convolutions.

11. In an eyeglass mounting, the combination with a support, and a finger piece guard lever mounted to turn thereon, of a coil spring for positioning the guard wound in a flat spiral about the axis thereof, a member comprising a tubular portion within the spring coil and a flange or plate connected to the tube and disposed against the outer flat side of the spring coil and extending to the circumference thereof to cover its convolutions and a pivot fastener for the guard extending through the latter and the sleeve and having a shoulder coöperating with the end of the sleeve to hold it against the support.

LEO F. ADT.

Witnesses:

EDWARD MURPHY, 2d,
JOHN H. BRODERICK.