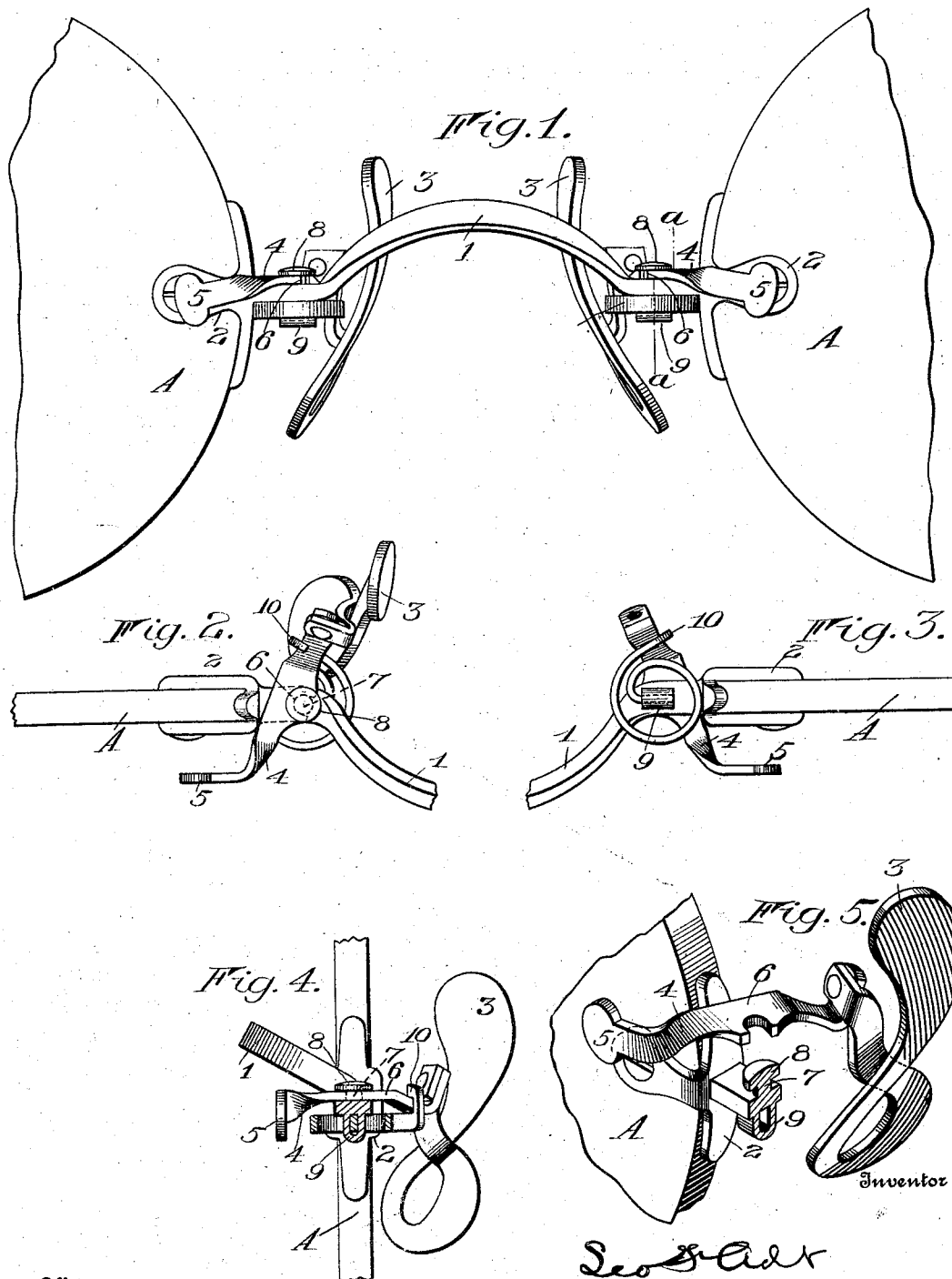


L. F. ADT.
EYEGLASSES.
APPLICATION FILED SEPT. 18, 1907.

1,019,116.

Patented Mar. 5, 1912.



Witnesses

Walter D. Payne.
H. H. Simms

By

Leo G. Adair
Chas. Rich
his Attorneys

UNITED STATES PATENT OFFICE.

LEO F. ADT, OF ALBANY, NEW YORK.

EYEGLASSES.

1,019,116.

Specification of Letters Patent.

Patented Mar. 5, 1912.

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To all whom it may concern:

Be it known that I, LEO F. ADT, of the city of Albany, 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 the specification, and to the reference-numerals marked thereon.

This invention relates to eyeglasses of the type in which the nose guards are mounted to swing on a suitable support toward the nose under the action of springs, and it has for an object to provide a construction in which the springs act as the sole means for retaining the guards on their support so that the connection and the disconnection of the parts may be facilitated.

A further object of the invention is to provide a spring that is sightly and at the same time efficient and durable and one that may be connected to the parts upon which it operates in a simple and convenient manner.

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 drawing: Figure 1 represents a front view of a pair of eyeglasses constructed in accordance with this invention, the lenses being partly broken away. Fig. 2 represents a top view of one of the guards and adjacent parts of the eyeglasses. Fig. 3 represents a bottom view of one of the guards and adjacent parts, and Fig. 4 is a section on line *a-a* of Fig. 1. Fig. 5 is a detached detail perspective view.

Eyeglasses constructed in accordance with this invention comprise a support which preferably consists of a substantially rigid low bridge 1 and lens attaching devices 2 arranged at the ends of the bridge and secured to lenses A. Swingly mounted on the support are guards, each of which in the present embodiment consists of a lever having a nose bearing portion 3 at its rear end and a finger piece at its front end, the lever preferably being made from flat stock and mounted on the upper face of the support and the finger piece being formed by twisting the stock at 4 and bending it flat-

wise and outwardly at 5 in front of the proximate lens attaching device 2 so that it will not be conspicuous.

The swinging connection between each guard and the support comprises cooperating bearing members which detachably connect these parts, and in this instance consist of a laterally opening bearing formed by the walls of a recess 6 provided in the lever of the guard, and a rigid pivot 7 mounted on the support beyond the bridging portion and having a head 8 or other overhanging portion which prevents the vertical movement of the guard. These bearing members are retained in cooperative relation to retain a guard on the support by means of a spring which also serves to position the guard. This spring preferably is in the form of a flat-spiral comprised of a ribbon of flat material and is arranged on that side of the support opposite the guard, in the present instance on the under side. At one end, in this instance the inner end, it has detachable connection with the support as by a transverse opening in a stud 9 arranged on the under side of the support in vertical alinement with the axis of the nose guard, while at the other end, in this instance the outer, it is detachably connected to the guard as, for example, through the medium of an upwardly projecting hooked end 10 which overhangs the rearwardly projecting portion of the guard. In the present instance the hook is formed by bending the material of the spring upwardly and inwardly, edgewise, and I also find it preferable to bend the rearwardly extending arm or portion of the guard lever slightly downward, as shown, at the point at which it cooperates with the hook of the spring so that the said portion proceeds toward the latter and the material of the spring need not, therefore, be unduly extended. The opening in the stud 9 is also preferably of such a nature as to form a socket having parallel walls or walls that conform substantially to the contour of the end of the spring that it receives so that the fit will be reasonably tight.

In operation the eyeglasses are placed upon and removed from the nose by first separating the guards by means of the finger pieces, or operating arms, to compress the springs, and then releasing them. For the purpose of removing the springs or the guards it is only necessary to disengage the

hooked ends 10 of the springs from the guards and withdraw their other ends from the openings in studs 9. The guards may be removed as soon as released from the springs.

5 Eyeglasses constructed in accordance with this invention are inexpensive to manufacture, as they consist of a minimum number of parts, are less liable to get out of order, and, when broken, may be easily repaired. 10 Further, it is apparent that the mounting of the springs is adapted for use with eyeglasses in which the nose guards are not retained on the support by the springs.

15 I claim as my invention:

1. In an eyeglass mounting, the combination with a support, a nose guard, and co- 20 operating bearing members pivotally connecting the guard and the support, of a spring for positioning the guard mounted independently of the bearing members and held in detachable engagement with the guard and with the support by action of the spring in the direction necessary to turn the 25 guard on its pivot.

2. The combination with a support and a nose guard mounted to turn thereon, of a spring unsupported between its ends hav- 30 ing each end detachably held in interlocking engagement with one of said parts by the spring action.

3. In an eyeglass mounting, the combination with a support, of a guard mounted to 35 turn on one side of the support, and a coil spring arranged on the other side of the support and held in detachable engagement with the support and the guard by the action of the spring in the direction necessary to turn the guard.

4. In an eyeglass mounting, the combination with a support having an overhanging 40 portion thereon, of a swingingly mounted nose guard arranged beneath and in engagement with said overhanging portion and movable laterally from under the same, and a spring acting in a direction to retain 45 said guard beneath said overhanging portion, having its ends held in detachable interlocking connection with the guard and 50 with the support by such action of the said spring.

5. In an eyeglass mounting, the combination with a support and a nose guard, one 55 of the parts having a fixed pivot and the other having a laterally opening bearing receiving said pivot, of a spring supported independently of the pivot, acting in a direction to retain said bearing in engagement with the pivot and having its ends held in 60 detachable interlocking connection with the guard and the support by such action of the spring.

6. In an eyeglass mounting, the combination with a support having a permanently 65 carried bearing, of a nose guard turning in

engagement with the upper side of the sup- port and having a permanent bearing co- operating with the bearing of said support, and a flat spiral spring arranged beneath 70 the guard detachably connected at its inner end to the support and having its outer end detachably secured to the guard to retain the latter in engagement with the bearing on the support.

7. In an eyeglass mounting, the combina- 75 tion with a support and a guard mounted to turn on one side thereof, of laterally separable bearings on the guard and the sup- port, and a coil spring for positioning the guard acting on the latter in a direction to 80 retain the bearings in engagement and arranged on the opposite side of the support.

8. In an eyeglass mounting, the combina- 85 tion with a support, a nose guard and co- operating bearing members detachably connecting the support and the guard, of a flat spiral spring arranged on the opposite side 90 of the support and detachably connected to the guard to retain the bearing members in cooperative relation.

9. In an eyeglass mounting, the combina- 95 tion with a support embodying lens attaching devices and a bridging portion having horizontal seats at its ends connected to the lens attaching devices, or nose guards engag- 100 ing the seats, separable bearings permanently carried by the guards and the support, springs detachably interlocked with the guards and acting thereon in directions to retain the bearing members in engage- 105 ment, and devices for detachably securing the springs to the support.

10. In an eyeglass mounting, the combina- 110 tion with a support and a nose guard mounted to swing on one side thereof, of a stud arranged on the opposite side in align- 115 ment with the turning axis of the guard, and a flat spiral spring detachably secured at its inner end to the stud and at its outer end to the guard.

11. In an eyeglass mounting, the combina- 120 tion with a support and a nose guard mounted to swing on the upper side thereof, of a flat spiral spring arranged on the under side of the support and connected at its inner 125 end to the support and at its outer end to the guard.

12. In an eyeglass mounting, the combina- 130 tion with a support, a nose guard, and co- operating bearing members detachably connecting the guard to the upper face of the support, of a flat spiral spring having its inner end detachably secured to the under 135 face of the support at a point in alinement with the turning axis of the guard, and its outer end detachably secured to the guard.

13. In an eyeglass mounting, a support 140 having a headed pivot arranged on its upper side and a stud arranged on the lower side in alinement with the pivot and provided 145

with a transverse opening, a nose guard having a recess in which the headed pivot fits, and a flat spiral spring having its inner end projecting through the opening in the stud, and the outer end detachably connected to the guard.

14. The combination with a support for the lenses carrying a socket and a nose guard mounted to swing thereon, of a spring having one end fitting in the socket and the other end held interlocked with the guard by the action of the spring.

15. The combination with a support for the lenses and a nose guard mounted to turn thereon, one of said parts being provided with a socket, of a spring having an end fitted in the socket and having a hook at the other end engaging the other part.

16. In an eyeglass mounting, the combination with a support for the lenses and a swinging guard lever mounted thereon, of a coil spring for positioning the guard formed of a strip of flat material wound flatwise about the axis of the guard to form a flat spiral, one end of said spring being arranged to act against the support and the other end being formed with an integral hook curved edgewise of the material of the spring to engage the guard.

17. In an eyeglass mounting, the combination with a support for the lenses and a swinging guard lever mounted thereon, of a coil spring for positioning the guard, wound in a flat spiral about the axis of the latter, the inner end of the spring being arranged to act against the support and the outer end being arranged to act upon the guard.

18. In an eyeglass mounting, the combination with a support and a nose guard pivotally mounted on one side thereof to extend

from front to rear, of a spring arranged on the opposite side of the support and having a portion adapted for coöperation with the guard, a portion of the guard in rear of the support being formed to proceed toward the spring for engagement with the above mentioned portion thereof.

19. The combination with a support for the lenses and a nose guard mounted to turn thereon, of a flat spiral spring for positioning the guard and a pair of parallel parts on the support forming a slot shaped socket between them arranged within the center of the coil to receive the inner end of the spring, the outer end of the latter being arranged to act against the guard.

20. The combination with a support having a bearing thereon, of a guard embodying a lever having a bearing opening laterally at the inner side of the lever and coöperating with the support bearing, and a spring for positioning the guard, supported independently of the support bearing and embodying an arm extending rearwardly from a point in front of the turning axis of the guard and coöperating with the guard in rear of said axis to maintain the bearings in engagement.

21. In an eyeglass mounting, the combination with a support having two integral projections extending from opposite sides thereof, respectively, of a guard lever pivoted on one of said projections and a coil spring for positioning the guard mounted on the other.

LEO F. ADT.

Witnesses:

JAMES F. BRUN,
JAS. B. EGAN.