F. A. PERSOHN.

EYEGLASS MOUNTING.

APPLICATION FILED DEC. 30, 1911.

1,030,828.

Patented June 25, 1912.

Fig. 1.

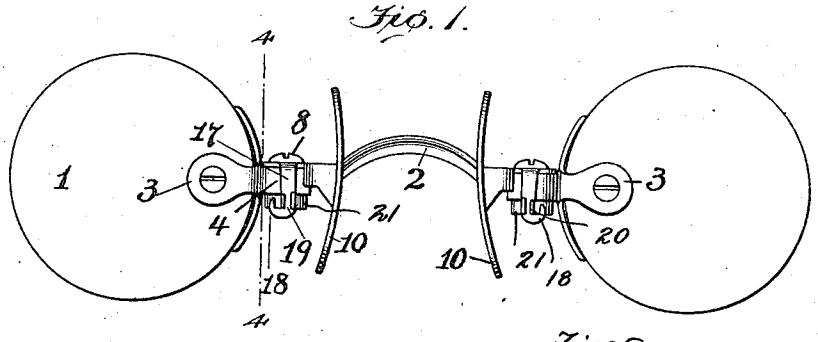


Fig. 8.

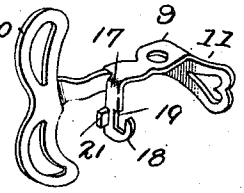


Fig. 2.

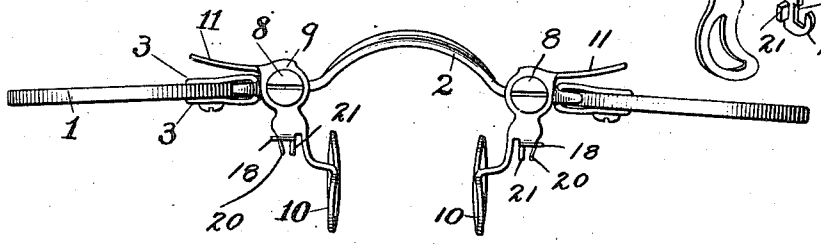


Fig. 3.

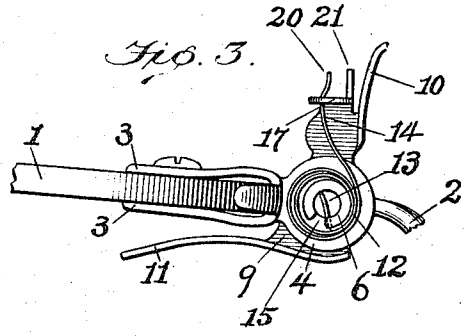


Fig. 4.

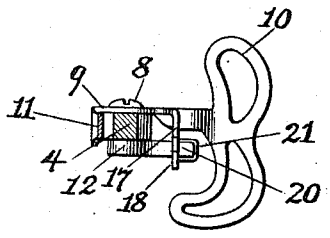


Fig. 5.

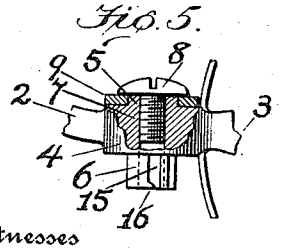


Fig. 6.

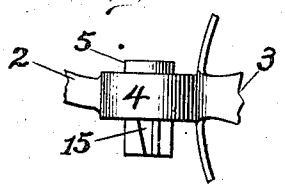
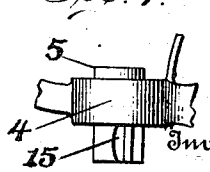


Fig. 7.



Witnesses

Edwin L. Bradford

G Ferd. Voigt.

Inventor

Frank A. Persohn

By Mann & Co.

Attorneys

UNITED STATES PATENT OFFICE.

FRANK A. PERSOHN, OF BALTIMORE, MARYLAND, ASSIGNOR TO BALTIMORE OPTICAL COMPANY, OF BALTIMORE, MARYLAND, A CORPORATION OF MARYLAND.

EYEGLASS-MOUNTING.

1,030,828. Specification of Letters Patent. Patented June 25, 1912.

Application filed December 30, 1911. Serial No. 668,709.

To all whom it may concern:

Be it known that I, FRANK A. PERSOHN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Eyeglass-Mountings, of which the following is a specification.

This invention relates to improvements in the mountings of eye-glasses or spectacles.

The invention provides improved means on the stud for automatically locking thereto the fixed end of the spring that actuates the nose-clamping device, and also provides improved means on the nose-clamp for automatically locking thereto the free end of the same spring; by the improvements also the spring may readily be attached or detached by the fingers of one's hand and without pliers or any other tool.

In the accompanying drawings which form a part of this specification, Figure 1 is a rear elevation of a pair of eyeglasses having mountings that embody my invention. Fig. 2 is a top plan view of the same. Fig. 3 is a bottom plan view, on a larger scale, of the improved mounting applied to the lens for the left eye. Fig. 4 is a view partly in section on the line 4—4 of Fig. 1, looking from the left toward the right, and showing how the free end of the spring engages its special locking device on the nose clamp. Fig. 5 is an elevation, and partly a vertical section through the screw-portion that connects between the bridge and the straps that clip the lens of the right eye, and shows the improved locking device for the fixed end of the spring. Figs. 6 and 7 show two modifications of the locking device for the fixed end of the spring. Fig. 8 is a perspective view of one nose-clamp and the vertical arm, hook and undercut recess.

The numeral, 1, designates a lens; 2, the nose-bridge; 3, the two straps that clip the lens; and, 4, the two circular flattened portions connecting between the nose bridge and the two pair of said straps.

The finger-pieces, nose-guards and the devices of my improvement which together comprise the spring-actuated nose-clamping devices, are of course in duplicate, and therefore a description of one set only will suffice for this specification.

The circular portion, 4, that connects between the nose-bridge, 2, and the lens straps, 3, has on top an upward-projecting hollow stud, 5, and on the bottom a downward-projecting stud, 6; the upper stud, 5, has an internal screw-thread that receives the shank, 7, of the screw whose head, 8, confines the arm, 9, that connects the nose-clamping guard, 10, and the finger piece, 11. In the present instance the said arm, 9, rests on top of the circular portion, 4, and has a round hole that gives a swiveling fit around the upper stud, 5, but my improvements in the spring-locking devices would operate the same whether said arm, 9, is on top or on the bottom. In the structure here shown the nose guard, 10, finger-piece, 11, and connecting arm, 9, are all made of one piece of material, but this is immaterial to my improvement for locking the fixed end of the spring to the stud.

The spring, 12, that actuates the nose-guard, 10, is shown plainly in Figs. 3 and 4. This spring may be a wire or a strip of flat sheet-metal coiled; the innermost coil of the spring is bent short as at, 13, see Fig. 3, to project hook-fashion or crosswise of the said coil: this becomes the fixed end of the spring. The outermost coil of the spring terminates in the form of a tangential finger, 14, that is the free end.

In practice the hollow stud, 6, for an eyeglass must be very thin metal; this necessity arises from the fact that to insure a neat appearance the size of the stud is very small. For these reasons unsatisfactory results follow if the very thin metal of the hollow stud should be slit in two places, that is, if a slit be made entirely across the stud at two opposite sides. Thus two slits in a very thin tube would so weaken the structure as to cause it to collapse when subjected to usage. I provide the stud, 6, at one side only with an end slot, 15; the slot is plainly seen in Figs. 3 and 5. The side of the slot nearest the lens, 1, is a straight edge to its lowest extremity; but the side of the slot nearest the nose-bridge has at its extremity a short lateral prong, 16, that points or projects in a direction crosswise of the slot, and constitutes a locking device to hold and confine the fixed end, 13, of the coiled spring. In operation the innermost coil of the spring surrounds the stud, 6, and the bent end, 13, of this coil enters the slot, 15, and engages the edge adjacent the short lateral prong, 16. This end, 13, of the spring is the fixed or stationary end, and it is automatically

kept in locking engagement with the stud by the lateral prong, 16, because the tension of the spring itself continually presses said end, 13, against that side of the slot from which the said lateral prong, 16, projects.

It will be seen the stud to which the spring is fixed has on itself no exterior means of any kind to keep the fixed end of the spring engaged with it. The novel feature in this stud consists of having the spring-end locking device (the lateral prong, 16,) located within or internally of the circumference of the stud. It is immaterial to the operation of this spring-end locking device on the stud whether the said stud projects downward or upward.

The horizontal arm, 9, that connects the nose-guard, 10, and finger piece, 11, is provided with means for holding and locking the free end, 14, of the spring. This means is shown in Figs. 1, 3 and 4, and consists of a vertical arm, 17, which in the present instance is bent down and pendant from the horizontal arm, 9. The vertical arm, 17, has a hook, 18, whose point projects upward, and a recess or undercut, 19, is formed in the edge of the said arm and immediately back of the said hook-point, 18. The free end, 14, of the spring, 12, projects laterally from the coils around the stud, 6, (see Figs. 3 and 4), enters the hook, 18, and seats in the recess or undercut, 19, where it is kept seated by its own tension. To prevent the extremity, 20, of the free end of this spring from catching in something that might disengage it from the undercut, 19, and from the hook, 18, a rigid tang, 21, is provided; this tang is formed on the vertical arm, 17, and extends parallel with said extremity, 20, of the free end of the spring and serves as a shield. The spring, 12, can be removed by the fingers of a person's hand, by first releasing the extremity, 20, of the free end from the undercut, 19, and then lifting it out of the hook, 18, and finally allowing the coils to relax until the fixed end, 13, releases from the slot, 15, in the stud. By a reverse manipulation of the fingers from that just described, the spring may be inserted to its position without recourse to tools of any kind.

Two modifications in the form of the spring-locking device on the stud, 6, are shown in Figs. 6 and 7 respectively. In Fig. 6, instead of a distinct prong projecting or pointing in a direction across the slot, 15, the slot-edge itself has an incline, and the lowermost part of said slot-edge points across the slot; the bent end, 13, of the spring will rest on said inclined edge. In Fig. 7 the slot-edge is curved and the hollow curve forms at the lowermost part a point that extends in a direction across the slot; in this device the bent end, 13, of the spring will rest in the hollow curved edge.

I am aware and have hereinbefore indicated that some changes may be made in the detailed construction of the several parts as well as in the various arrangements and relations of parts and the appended claims have been drawn with due regard thereto.

Having thus described my invention what I claim and desire to secure by Letters Patent is,—

1. An eye-glass mounting having in combination a nose-bridge; a lens-strap; a hollow stud between said two parts and provided at one side only with a slot whose end is open—one edge of which slot is straight to its extremity the other edge having at its extremity a lateral prong that points in a direction crosswise of the slot; a pivoted nose-clamp; and a spring surrounding said hollow stud and having a bent end entered in said slot and engaging the slot-edge that has the prong—the tension of the spring itself continually pressing said bent end against that edge, and said prong locking said spring-end in position, and said spring having a free end that actuates the said nose-clamp.

2. An eye-glass mounting having in combination a nose-bridge; lens straps; a nose-clamp pivoted between said two parts and having a vertical arm provided with a hook and an undercut recess in the arm immediately back of said hook; and a spring having one end fixed and a free end that seats in the said undercut recess back of the hook and said free end kept seated by its own tension and locked or prevented from accidental disengagement by said hook.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK A. PERSOHN.

Witnesses:
SAMUEL J. FISHER,
JAMES K. P. WILKINSON.