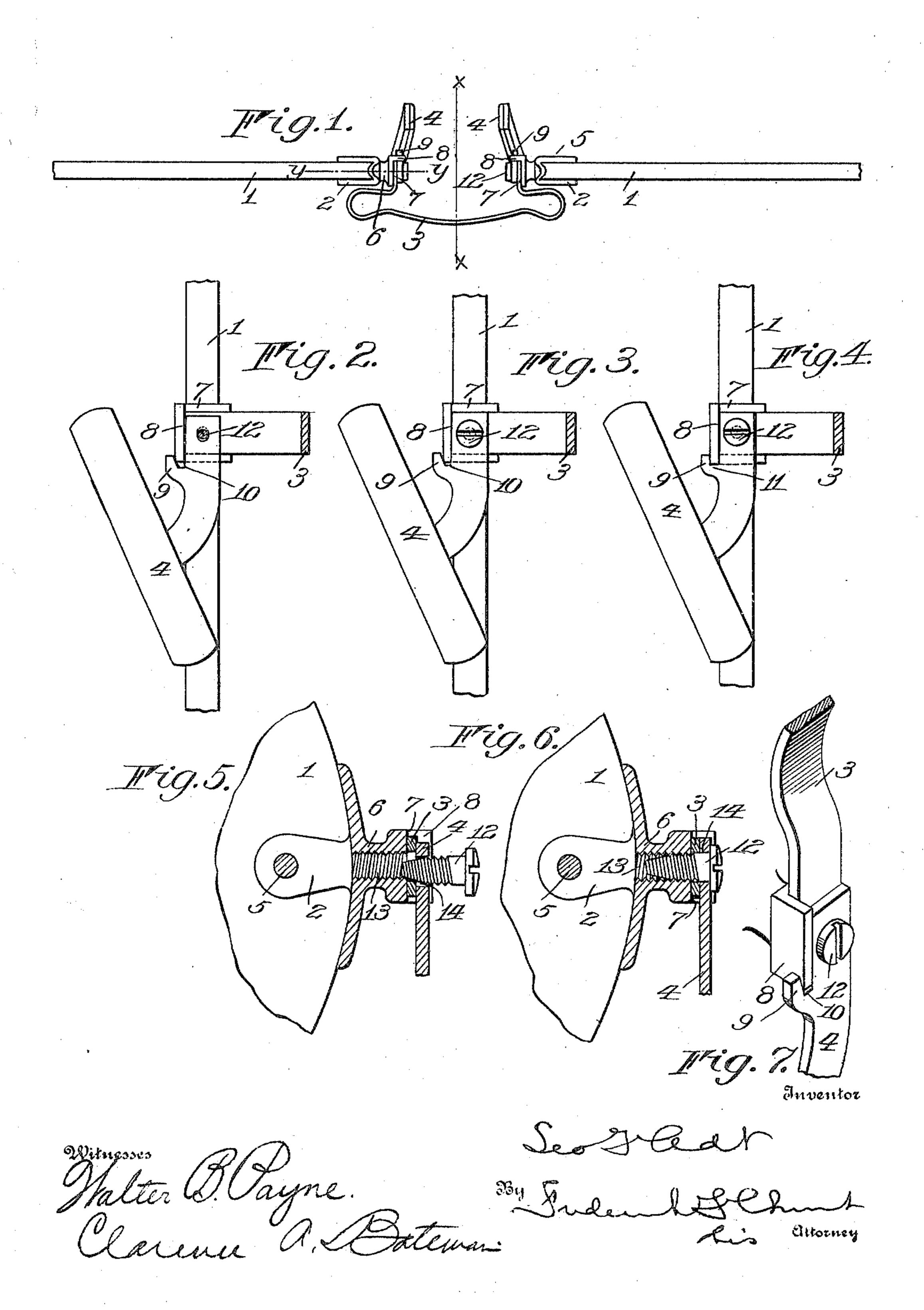
L. F. ADT.
EYEGLASSES.
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UNITED STATES PATENT OFFICE.

LEO F. ADT, OF TROY, NEW YORK.

EYEGLASSES.

No. 816,837

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Leo F. Add, of Troy, in the county of Rensselaer 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.

My present invention relates to improvements in connections by means of which the usual bridge-spring and guards are attached to the lenses of eyeglasses, particularly of the kind shown and described in my prior patent, No. 768,853, granted August 30, 1904; and the object of my invention is to provide a connection between the attaching-arms of the spring or guards and the lenses that will effectually secure the spring and guards from loosening, the lens-post embodying my improvements being adapted to receive springs and guards having either horizontally or vertically extending attaching portions.

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

30 specification. In the drawings, Figure 1 is a plan view of a pair of eyeglasses having my improvements applied thereto. Fig. 2 is a transverse sectional view on the line x x of Fig. 1, showing 35 the guard and spring applied to the lens-post before being secured, the securing-screw being indicated in section. Fig. 3 is a view similar to Fig. 2, showing the securing-screw fully inserted and the guard and spring in 40 locked position. Fig. 4 is a view similar to Fig. 3, showing another form of my invention. Figs. 5 and 6 represent sectional views on the line y y of Fig. 1, illustrating how the locking action is produced by the securing-45 screw; and Fig. 7 is a perspective view showing how springs and guards having vertically as well as horizontally extending attachingarms may be employed with a connection embodying my invention.

In the several views the same numerals of reference designate similar parts.

My improved connection in its present forms is shown applied to eyeglasses of the customary form employing the lenses 1 and their attaching devices 2, bridge-spring 3, and guards 4. These lens-attaching devices

may be of any desired form, preferably those usually employed with rimless eyeglasses and having the lens-fastening screws 5, the inner ends of these devices according to my 60 invention being provided with the posts or studs 6, and the inner ends of these posts are provided with the bearing-surfaces 7 to receive the flat sides of the attaching-arms of the spring and guards. These bearing-sur- 65 faces of the posts may be each provided at one or more sides with a projecting flange or shoulder 8, which may extend in a direction either parallel with or transversely to the plane of the lenses—that is, vertically or hori- 70 zontally; but I prefer to employ a single vertically-extending flange at one side of the post, as this leaves the top and bottom and one of the sides of the post open, and this will admit both horizontally and vertically ex- 75 tending attaching-arms for the spring and guards.

On one of the attaching-arms, preferably that of the guard, I provide a laterally-offset finger 9, a portion of which is spaced from 80 the said arm to form a seat to receive the flange or projection 8 of the post in such a way that the arm will be arranged at one side of the flange or projection and the finger 9 will be arranged at the opposite side thereof. 85 This seat formed between the finger and arm is preferably formed with a taper or incline at the finger side thereof for the purpose of producing a wedging action as the flange or shoulder is forced into the seat, as shown at 90 10 in Figs. 2 and 3, or, if desired, the sides of this seat may be formed substantially straight, but somewhat shallower than that of the seat 10, as shown at 11 in Fig. 4. In either form of connection described it is de- 95 sirable to employ a suitable device for drifting the attaching-arm carrying the finger into position to sufficiently force a portion of the flange or shoulder of the post into the seat to produce a firm locking action between these 100 parts, and it is preferable to employ the wellknown securing - screw 12, which passes through the apertured attaching-arms of the spring and guard and into the threaded aperture 13 of the post, the aperture 14 of the 105 arm carrying the finger 9 being located near to the latter, so that when the screw 12 is inserted in the threaded aperture 13 of the post it will cause the said arm to be drifted into position, and in doing so it will cause the 110 flange or shoulder 9 of the post to be forced firmly into the seat 10 or 11, as the case may

be. When the tapered seat 10 is employed, a wedging and binding action will be produced between the cooperating portion of the flange or shoulder and the adjacent walls 5 of the seat that will take up all spaces or looseness between these parts, and when the substantially straight-sided seat or recess 11 is employed the coöperating portion of the flange or shoulder usually engages the bottom of the seat before the securing-screw 12 has fully drawn the corresponding attachingarm into its ultimate position, and therefore the drifting action of the attaching-arm will cause the metal of the said flange or shoulder 15 and the seat to be compressed and forced into such shape as to take up any looseness or play between these parts.

By providing the finger 9, which bears upon the opposite side of the flange or projection 20 from the main portion of the attaching-arm, lateral motion of the latter in either direction or about the securing-screw is effectually prevented, and I am therefore enabled to omit the flange or projection at one side of the 25 post, one flange or projection being ordinarily sufficient, although it will be observed that an attaching-arm constructed in accordance with my invention may be applied directly to posts having the customary double parallel 30 flanges; but an advantage is obtained by omitting one of the flanges and employing only one of them, for it enables springs and guards having either horizontal or vertical attaching-arms to be employed interchange-

35 ably on the same post.

I claim as my invention—

1. In eyeglasses, the combination with the lenses having a post attached thereto, and an arm adapted to be secured to the post, of a shoulder on one of the parts and a seat on the other part having walls for engaging on opposite sides of the shoulder, and a device for moving the arm transversely of the post to force the shoulder of one part into the seat of the other.

2. In eyeglasses, the combination with the lenses having a post attached thereto, and an arm adapted to be secured to the post, of a shoulder on one of the parts and a seat on the other part having walls for engaging on opposide sides of the shoulder and of a smaller size than that of the shoulder, and a device for forcing the shoulder of one part into the seat of the other.

3. In eyeglasses, the combination with the lenses, and a post or stud attached thereto having a shoulder thereon, of an arm adapted to be secured to the post at one side of the

shoulder and having a finger to engage the opposite side thereof, and a device for mov- 60 ing the arm transversely of the post to force the shoulder thereof between the finger and

body portion of the arm.

4. In eyeglasses, the combination with the lenses, and a post attached thereto having a 65 shoulder thereon, of an arm adapted to be secured to the post having a body portion arranged to engage at one side of the shoulder and a finger to engage at the opposite side thereof, a seat being formed between the finger and body of the arm of a size smaller than the coöperating portion of the shoulder, and a device for forcing the shoulder of the post into the seat of the arm.

5. In eyeglasses, the combination with the 75 lenses, and posts attached thereto each having a shoulder thereon, of an arm adapted to be secured to the post having a body portion arranged at one side of the shoulder and an additional portion arranged at the opposite 80 side thereof, the walls formed between the body and additional portions of the arm being arranged to form a contracted seat, and a device for drawing the shoulder into the seat to lock the post and arm.

6. In eyeglasses, the combination with a lens, a post attached thereto, and an attaching-arm adapted to be secured to the post, of a projection on one of the parts, and a tapered seat on the other adapted to receive and bind 90

on opposite sides of said projection.

7. In eyeglasses, the combination with a lens, of a post attached thereto having a bearing-surface and a shoulder at one side only of the bearing portion, the side of the 95 bearing-surface opposite to said shoulder being open or unobstructed to enable the bearing-surface to receive either horizontally or vertically extending attaching-arms for the spring and guard, one of said arms having a 100 recess formed therein with walls to engage both the inner and outer sides of said projection.

8. In eyeglasses, the combination with a lens, a post attached thereto, and an arm 105 adapted to be secured to the post, of a projection on one of the parts, and a locking device on the other part having wedging engagement with the inner and outer sides of said projection, and a device for securing the 110 arm to the post.

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Witnesses:

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