

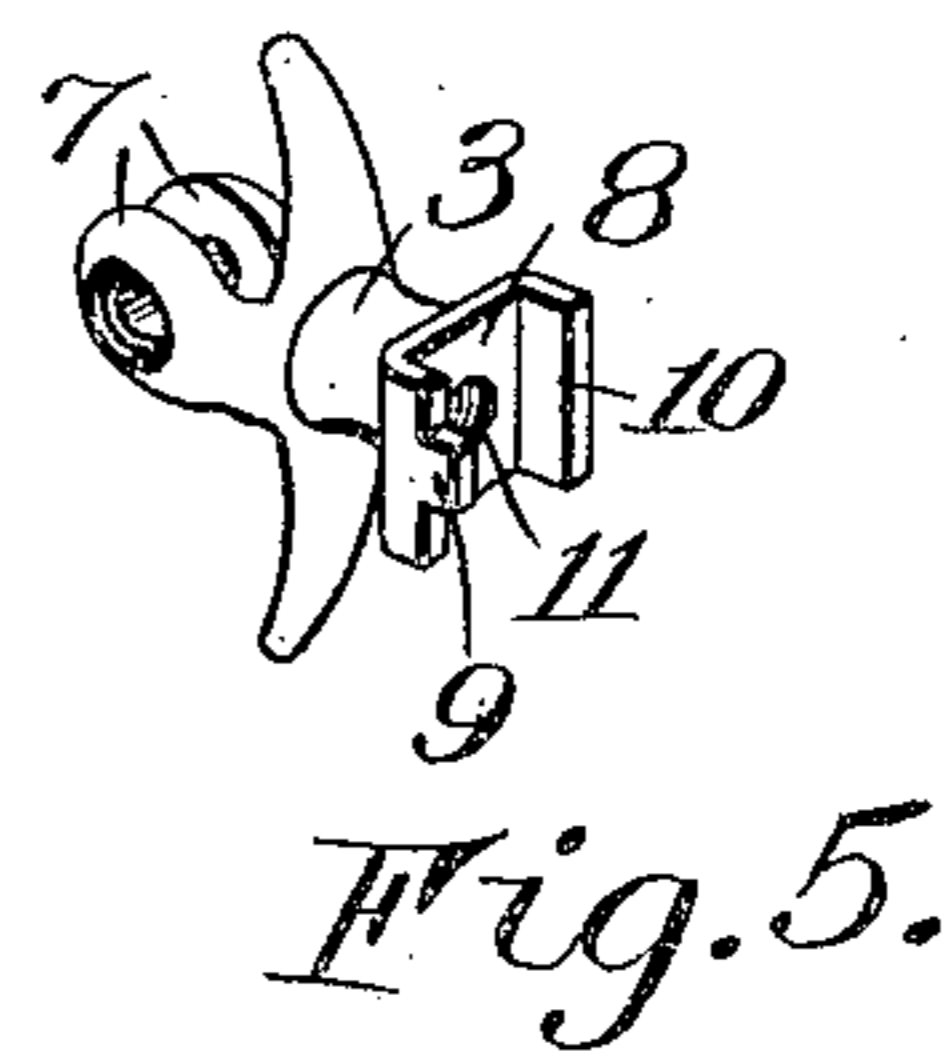
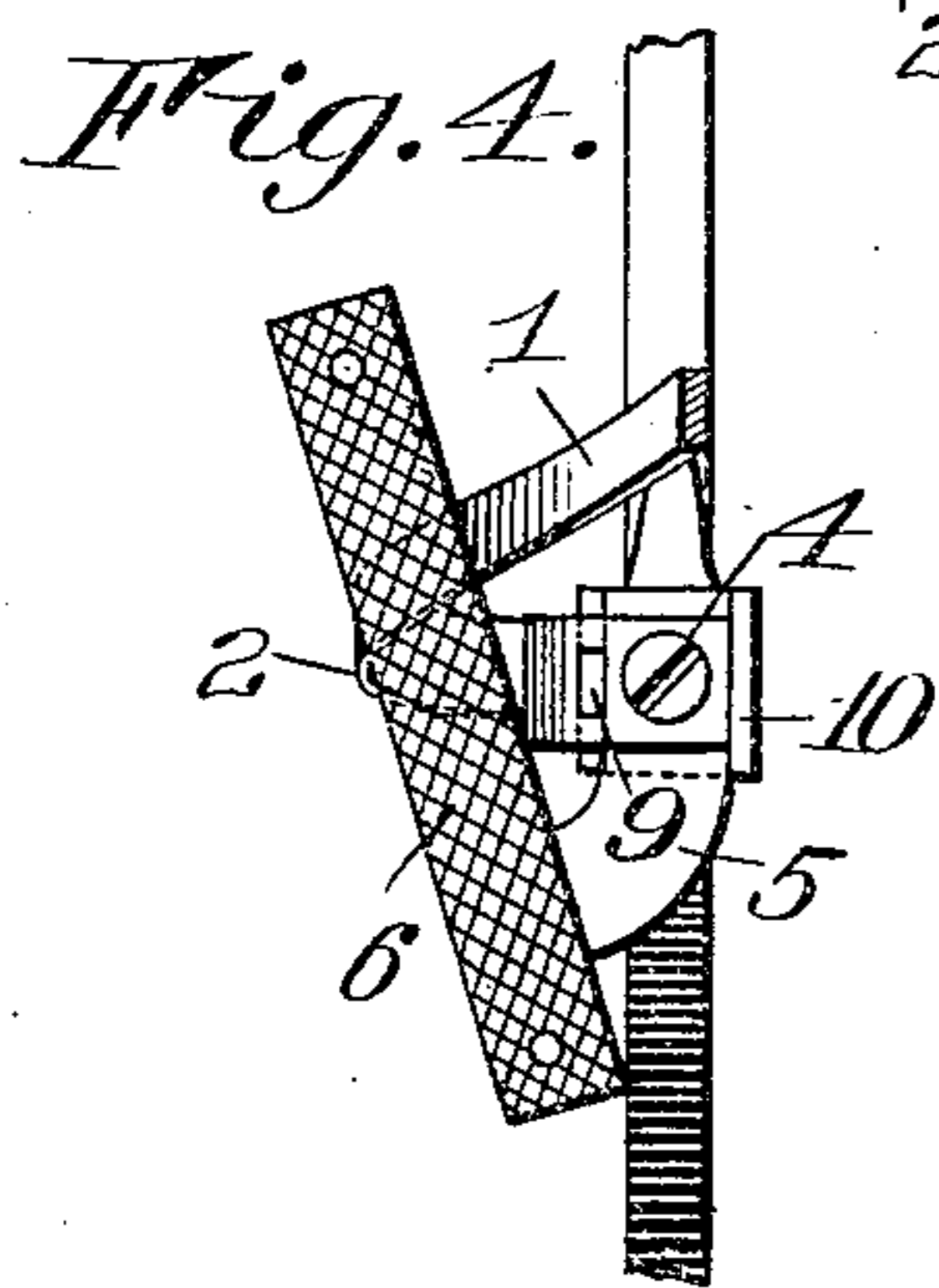
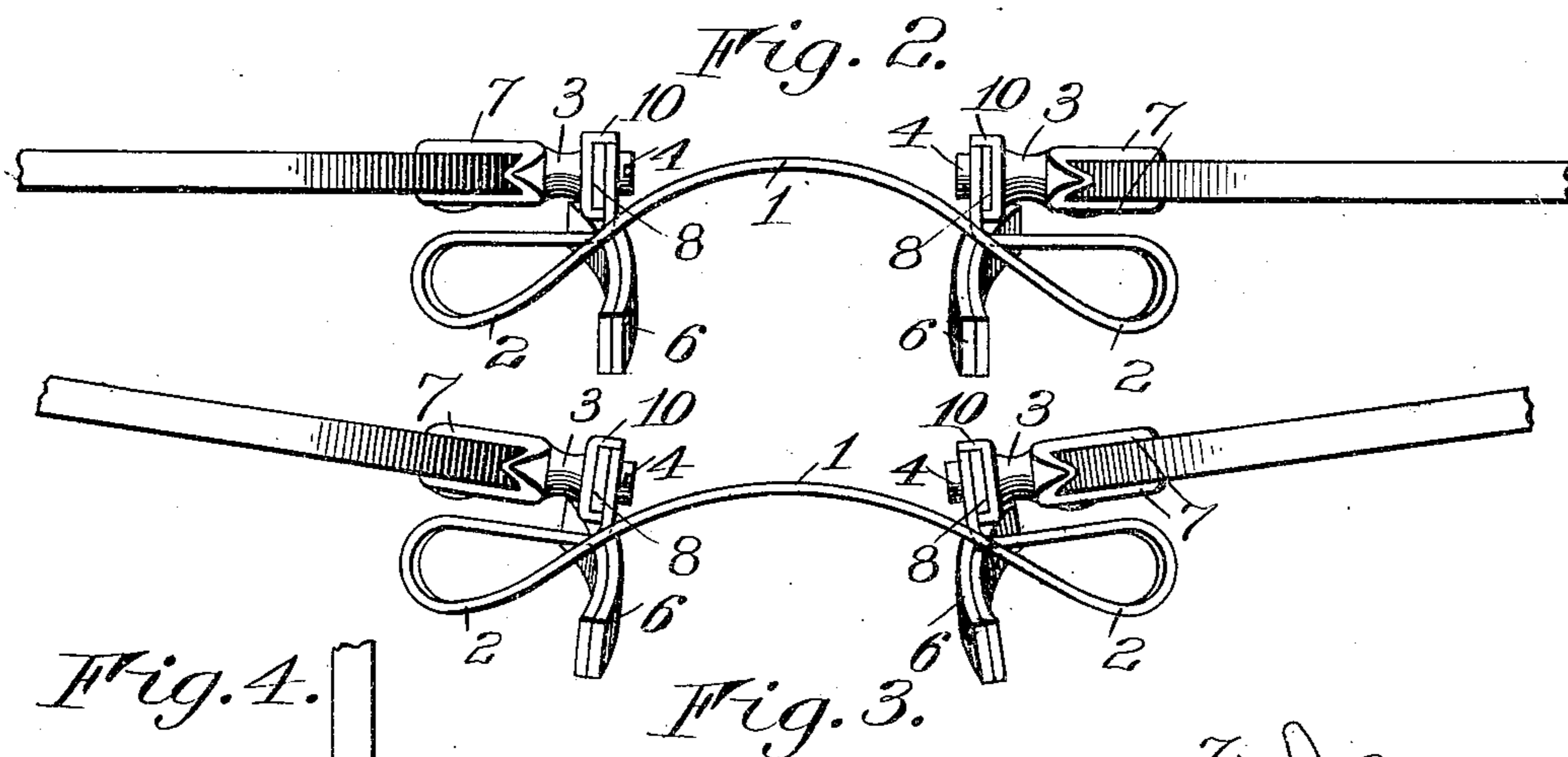
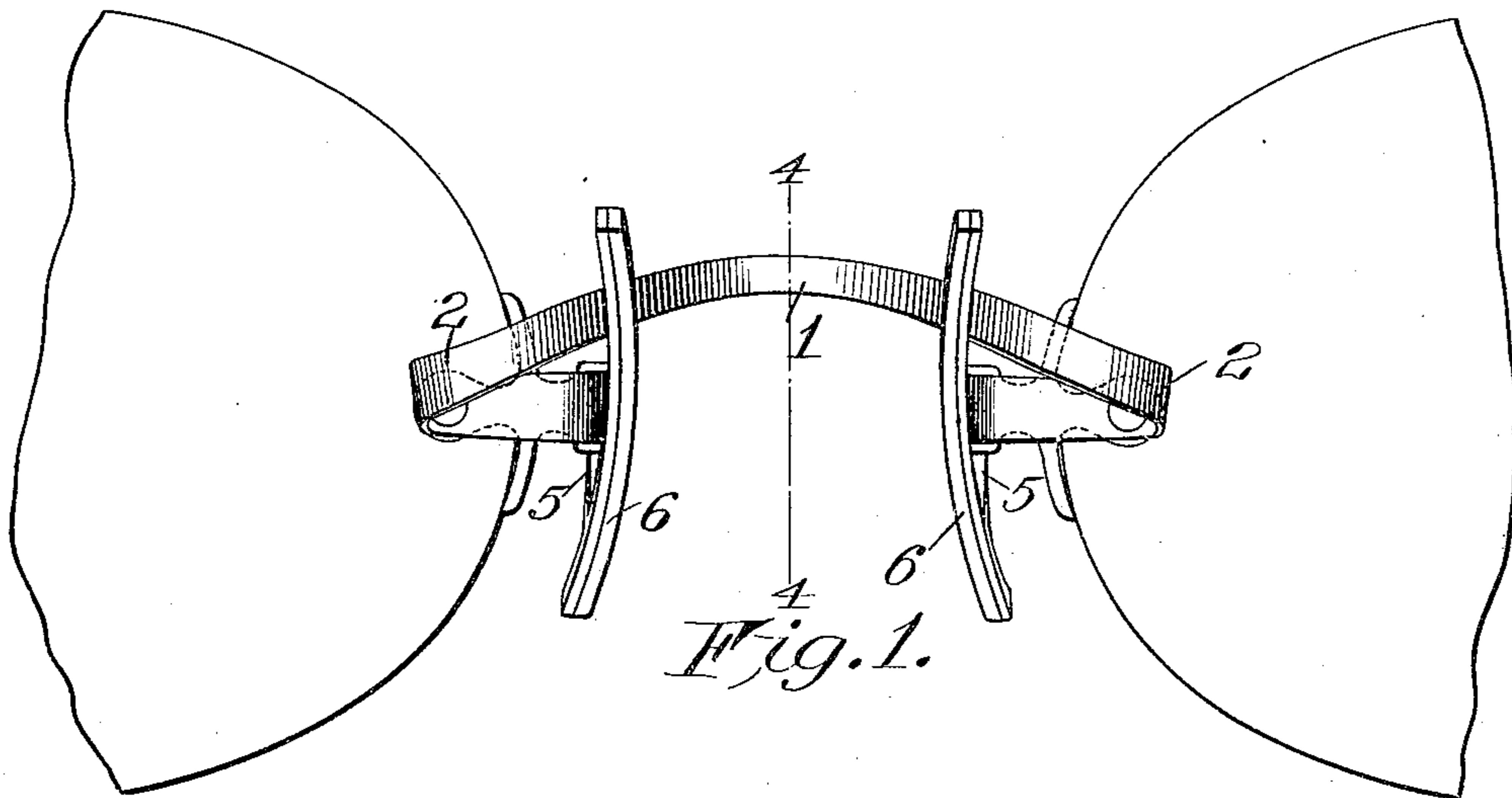
No. 768,838.

PATENTED AUG. 30, 1904.

L. F. ADT.
EYEGLASSES.

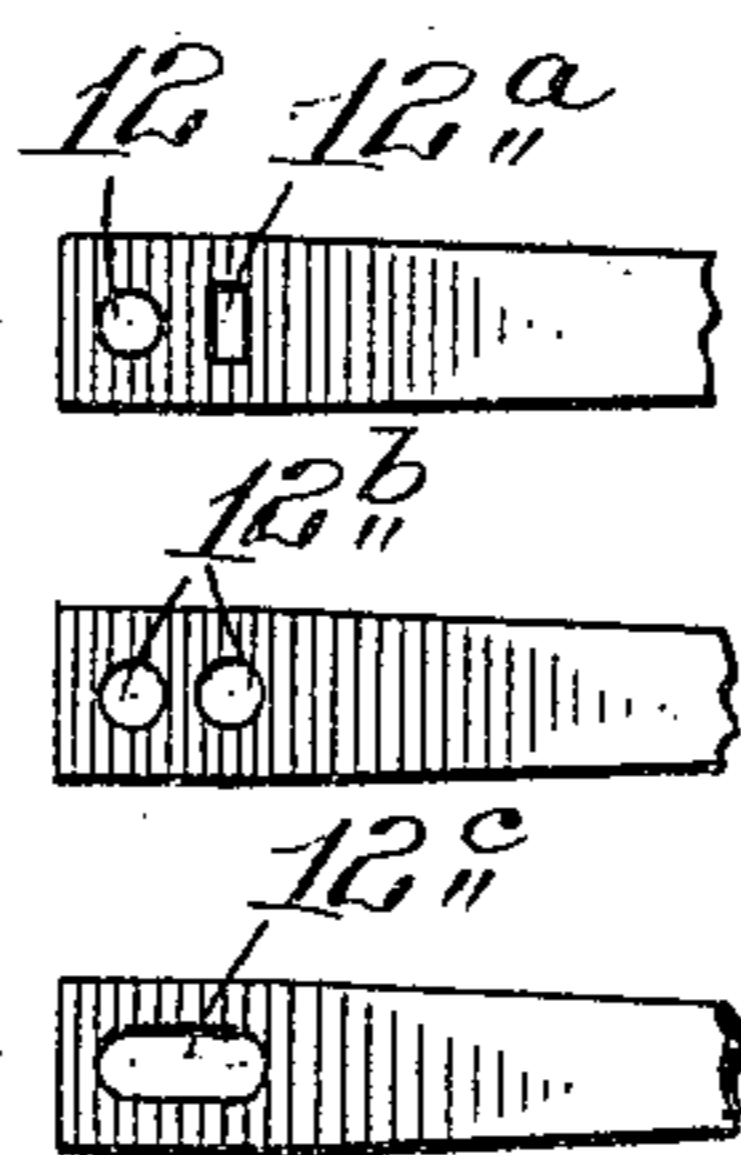
APPLICATION FILED JULY 22, 1903.

NO MODEL.



Witnesses.
Walter B. Payne.
Russell B. Griffith

Fig. 6.



Inventor.
L. F. Adt
by Andrew B. Church
his Attorney.

UNITED STATES PATENT OFFICE.

LEO F. ADT, OF TROY, NEW YORK.

EYEGLASSES.

SPECIFICATION forming part of Letters Patent No. 768,838, dated August 30, 1904.

Application filed July 22, 1903. Serial No. 166,510. (No model.)

To all whom it may concern:

Be it known that I, LEO F. ADT, of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful
 5 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-
 10 numerals marked thereon.

My present invention relates to improvements in eyeglasses, and has for its object the production of a device of this character employing a spring-bridge having loops arranged
 15 in rear of the lenses and outwardly beyond the proximate edges thereof, forming approximate pivotal points so arranged relatively to the guards that when the outer ends of the lenses are moved forwardly to separate the
 20 guards or nose-clamps all parts of the latter will move in a path both outwardly and rearwardly to immediately release their grasp upon the nose of the wearer with a minimum adjustment of the device, the elasticity of the
 25 bridge being utilized to produce a pressure on said guards tending to move them forwardly and inwardly to firmly retain the device in position.

It also has for its object to produce an improved form of lens attachment whereby
 30 guards of an ordinary form may be employed with bridge-springs analogous to that herein described.

Other features of novelty and advantage
 35 will be hereinafter more fully described, and pointed out in the claims hereunto annexed.

In the drawings, Figure 1 is a rear elevation of a device embodying my invention. Figs. 2 and 3 are plan views showing the relative
 40 positions of the parts at different adjustments. Fig. 4 is a sectional view on the line 4 4, Fig. 1. Fig. 5 is a view of the stud. Fig. 6 shows different ways of forming the apertures in the ends of the spring in order to attach it to the
 45 studs.

The same numerals of reference designate similar parts in the several views.

In the present embodiment of my invention

1 designates the bridge-spring, to be formed of any suitable elastic material and having its
 50 ends extending rearwardly from the center thereof and diverging outwardly, thence bending forwardly and doubling inwardly to form the loops 2 2, disposed in a substantially horizontal plane in rear of the lenses and preferably
 55 in line with the attaching devices. In the form herein shown the extreme inner ends of the loops are attached to the inner ends of studs or clips 3 by screws 4, which also pass through the shank or attaching-arm 5 of a
 60 guard 6, which may be of any ordinary or desired form.

In Fig. 5 is illustrated a stud especially adapted to be used in attaching an ordinary guard and a spring having horizontally-dis-
 65 posed attaching ends similar to that above described to the lenses, said studs being attached to the lenses in any suitable manner and provided with the channeled portion 8 at the inner end thereof to receive the attaching-arm
 70 5 of the guard, a protection 9 and an abutment or shoulder 10 being also provided, between which is located the threaded aperture 11 to receive the fastening-screw 4. The ends
 75 of the spring to be attached to the stud are perforated to receive the projection 9 and the screw 4, as shown in Fig. 6, and, if preferred, an aperture 12 to receive the screw and the rectangular or squared aperture 12^a to receive
 80 the projection may be provided, or a pair of similar apertures 12^b 12^b may be employed, or, if desired, a slot 12^c to receive both the screw and projection may be adopted. In
 85 each case, however, the extreme outer limits of the perforations are of a distance less than the extreme distance of the projection 9 and the aperture 11. In other words, the relative distances between the aperture 11 and
 90 projections 9 and the perforations in the bridge-spring are such as to produce a locking action between the spring and stud projection when the screw 4 is tightened.

With the spring formed in the manner above described it will be observed that the loops 2
 95 extend outwardly beyond the inner or proximate edges of the lenses, the latter being at-

tached to the inner extremities of the inwardly-extending arms of the loops, and as the guards are attached to the lenses and are disposed intermediately or in a position inwardly between said loops when in their normal position they will move in arcs about the outer portions of said loops as approximate centers to produce a rearward and outward motion when the outer extremities of the lenses are moved forwardly. As the loops extend beyond the inner edges of the lenses and are located in proximity to the posterior surfaces of the lenses, the approximate center of motion of the guards will be such as to move substantially all parts of the guards both rearwardly and outwardly, the radii of the arcs through which said guards move being preferably of such a length as to reduce the inward motion to an inappreciable degree when guards are employed the lower ends of which extend forwardly of the lenses. The spring 1 in proximity to the loops will also be somewhat flexed, the action of which will be to allow the loops 2 2 to move forwardly and outwardly to supplement the outward motion of the guards.

Instead of forming the loops 2 2 in the manner shown one or more coils may be provided, as will be obvious, the forwardly-disposed arm thereof being located immediately adjacent and overlapping somewhat the posterior surface of the lens, so that the guard and other parts will move in an arc having a predetermined point as an approximate center to cause a rearward and outward separating motion of the entire guards when the lenses occupy the position shown in Fig. 3 and a forward and inward motion tending to bring said guards together with a minimum motion of the lenses in assuming the position shown in Fig. 2.

The facility of adjusting and removing a device from the nose constructed in accordance with the above invention will be readily apparent to those skilled in the art.

I claim as my invention—

1. In eyeglasses, the combination with the lenses, of an elastic bridge having looped portions arranged in rear of, and extending outwardly beyond the inner edges of the lenses, to the inner ends of which looped portions said lenses are attached, and nose-guards attached to said lenses, and arranged between the looped portions of said bridge.

2. The combination with the lenses of an eyeglass, of an elastic bridge having horizontally-disposed loops disposed in proximity to the posterior faces of the lenses, and extending outwardly beyond the inner edges thereof, and guards attached to said lenses and adapted to move about the outer portions of said loops as approximate centers.

3. In eyeglasses, the combination with the lenses, of an elastic bridge having its ends

diverging outwardly beyond the inner edges of the lenses, thence doubling back to form looped portions in rear of the lenses, and guards attached to said lenses and moving about said looped portions as approximate centers.

4. In eyeglasses, the combination with the lenses, of an elastic portion having its ends diverging outwardly beyond the proximate edges of the lenses, thence bending forwardly and doubling inwardly to form loops to the forward arms of which said lenses are attached, and guards attached to said lenses and arranged to move rearwardly and outwardly, when said elastic portion is flexed.

5. The combination with the lenses of an eyeglass, of an elastic bridge interposed between said lenses, and extending outwardly and doubling forwardly and inwardly to form horizontally-disposed loops in rear of the lenses, studs for attaching the inner ends of said loops to said lenses, and guards also attached to said lenses and adapted to move about points beyond the proximate edges of said lenses as approximate centers.

6. A stud adapted to be attached to a lens, having a vertically-disposed portion to receive the shank of a nose-guard, a projection arranged at one side thereof, and a bridge-spring having an apertured portion to fit upon said stud at an angle to said shank, and to receive said projection, and means for securing said spring to said stud.

7. A stud adapted to be attached to a lens, having vertically-disposed flanges to form a seat for the shank of a guard, a projection located at one side of said seat, and a bridge-spring having a horizontally-disposed apertured portion to fit said stud and to receive said projection, and means for securing said spring to said stud.

8. A stud adapted to be attached to a lens, having a vertically-disposed flange and shoulder to form a seat for the shank of a guard, a projection extending beyond said flange, a bridge-spring having an apertured portion to receive said projection and having its extremity abut said shoulder, and means for fastening said spring and stud together.

9. A stud adapted to be attached to a lens, having vertically-disposed portions to form a seat to receive the shank of a guard, a projection located at one side of said seat, a bridge-spring having a horizontally-disposed apertured portion to receive said projection, and apertures in said stud and spring offset to produce a locking action between the stud and spring when the fastening-screw is tightened.

10. A stud adapted to be attached to a lens, having vertically-disposed flanges forming a seat to receive the shank of a guard, a stud projection located at one side of said seat and

a shoulder at the opposite side thereof, a
bridge-spring having an apertured end to
abut said shoulder and receive said stud pro-
jection, and apertures in said stud and spring
5 for receiving the fastening-screw, the dis-
tance between the apertures of the spring
being less than the distance between the aper-

ture and projection of said stud to produce a
locking action between the spring and stud
when the fastening-screw is tightened.

LEO F. ADT.

Witnesses:

WM. SHAW,

GEO. B. HARRISON.