

(No Model.)

J. E. BOYLE.  
EYEGLASSES.

No. 557,323.

Patented Mar. 31, 1896.

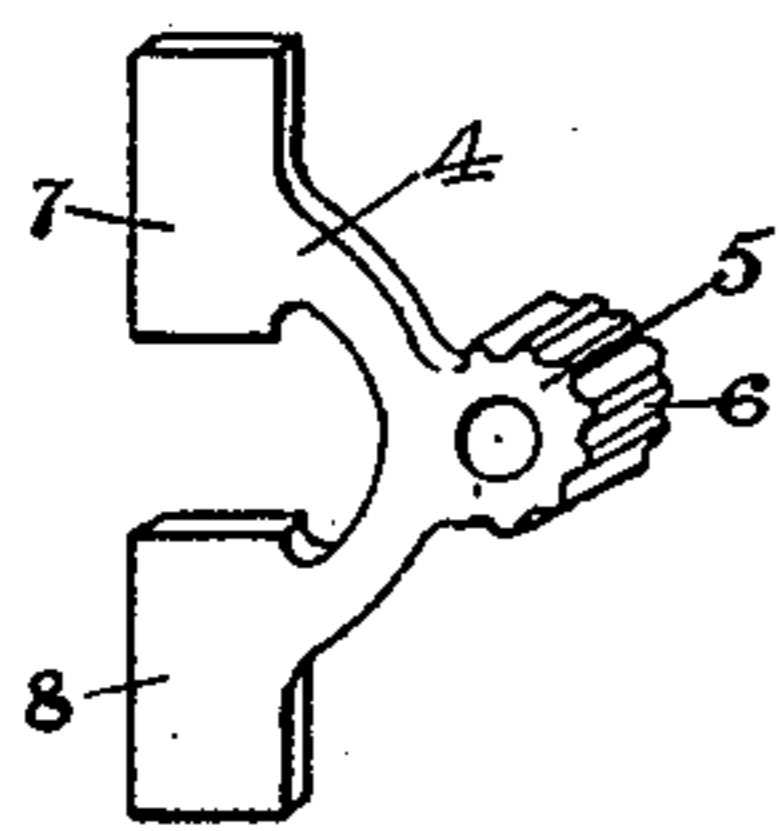


Fig. 4

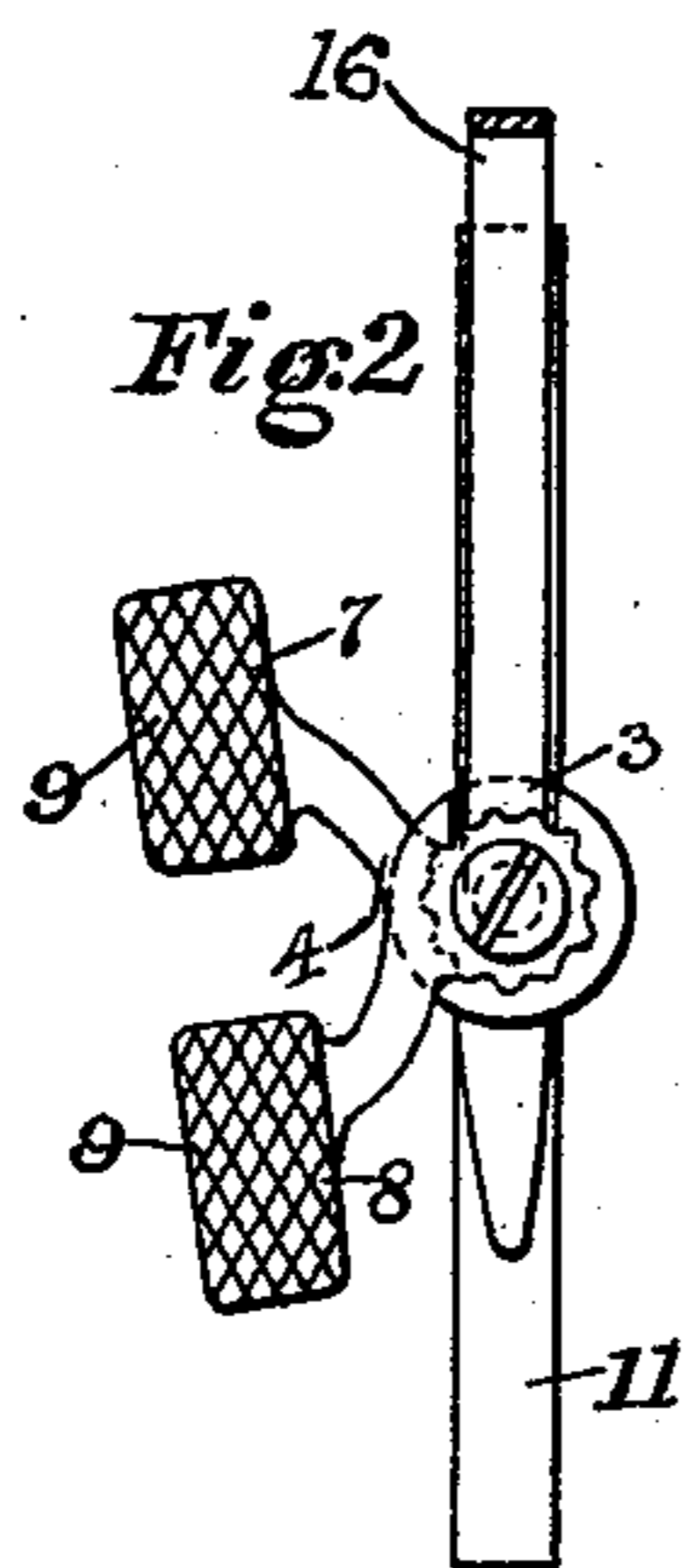


Fig. 2

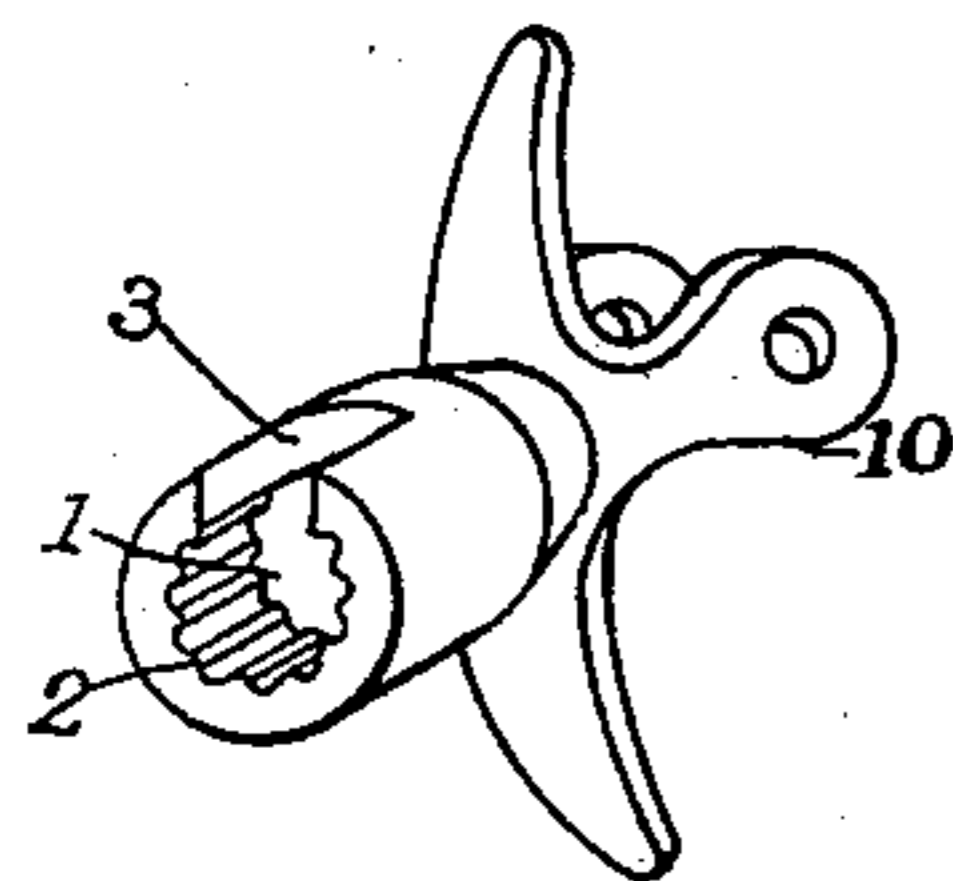


Fig. 3

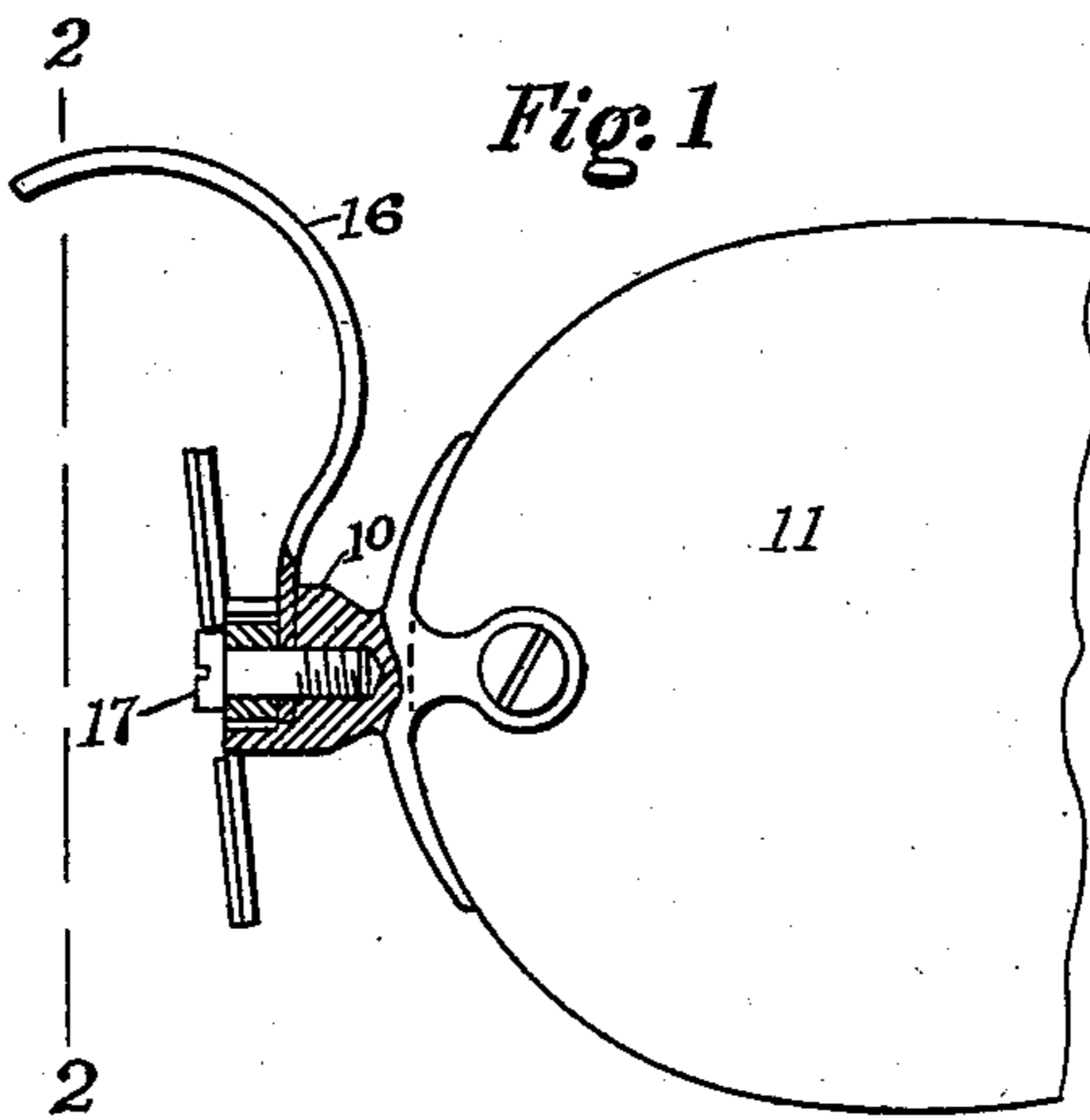


Fig. 1

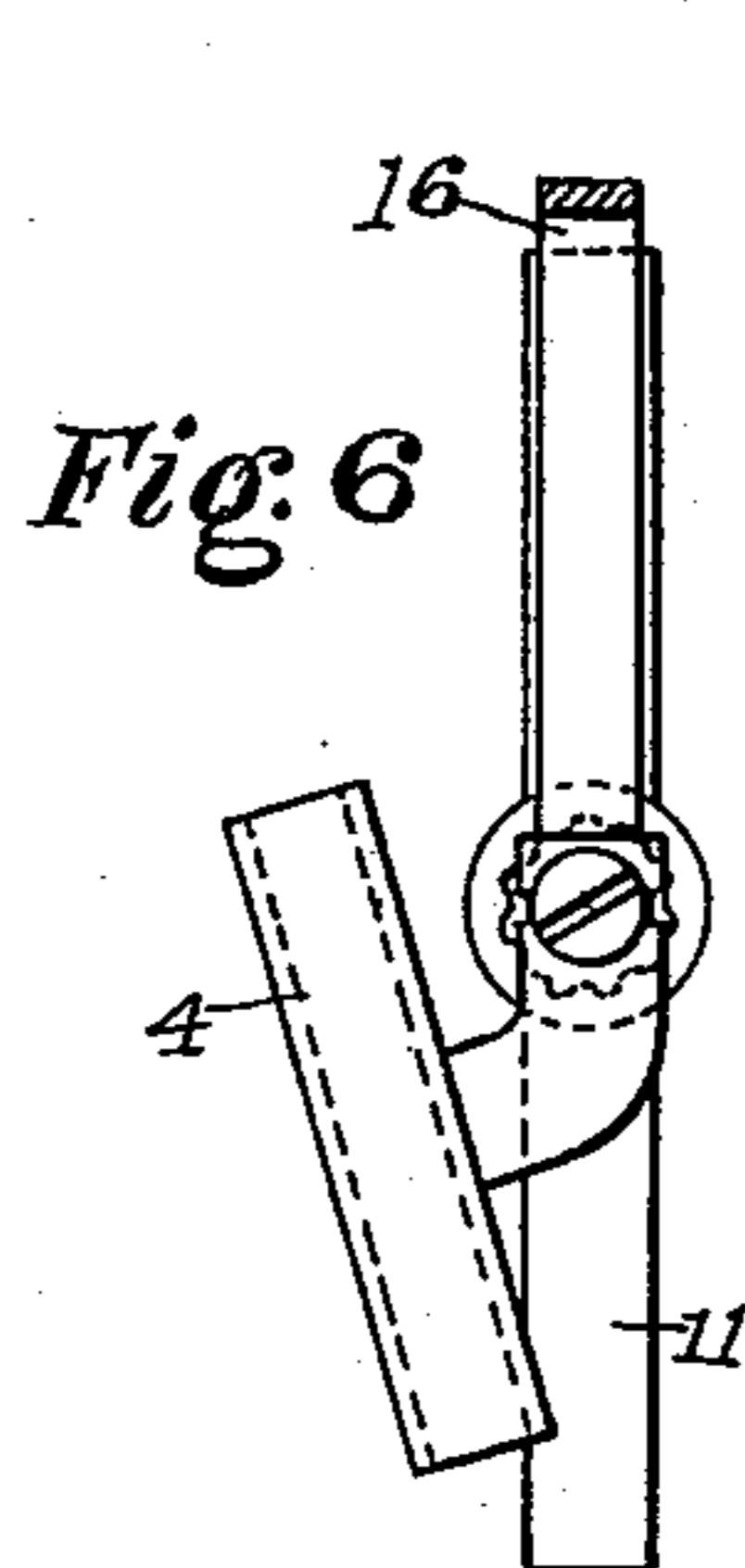


Fig. 6

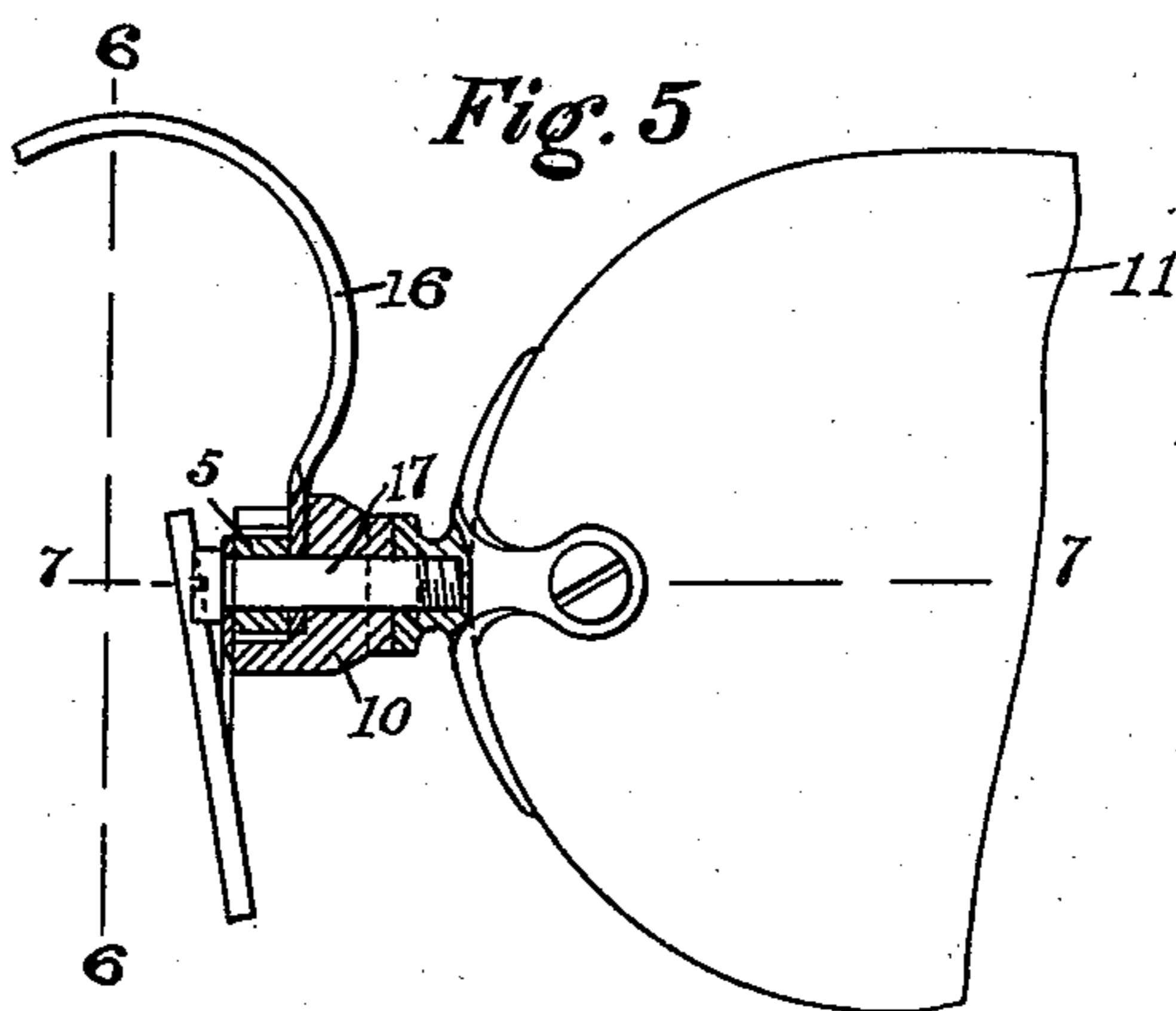


Fig. 5

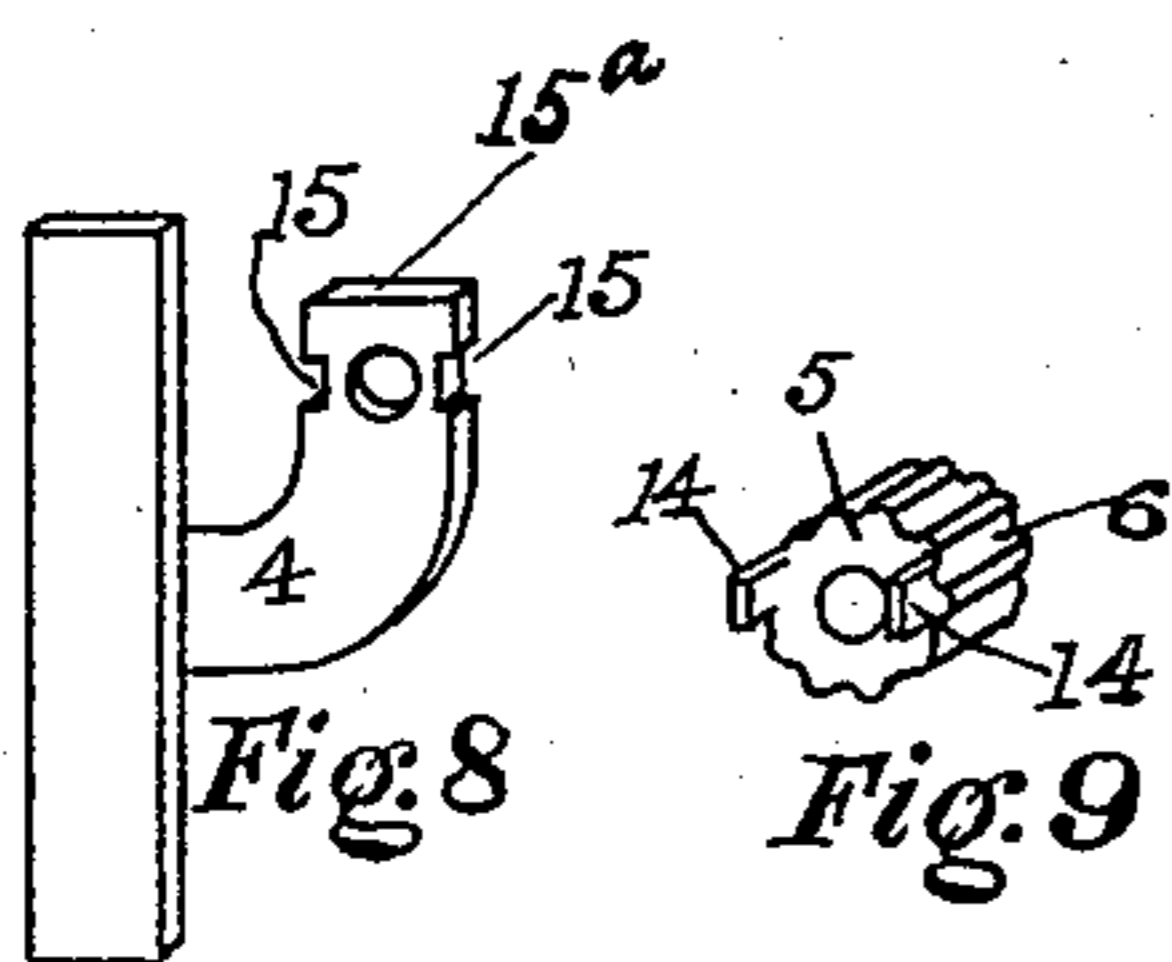


Fig. 8

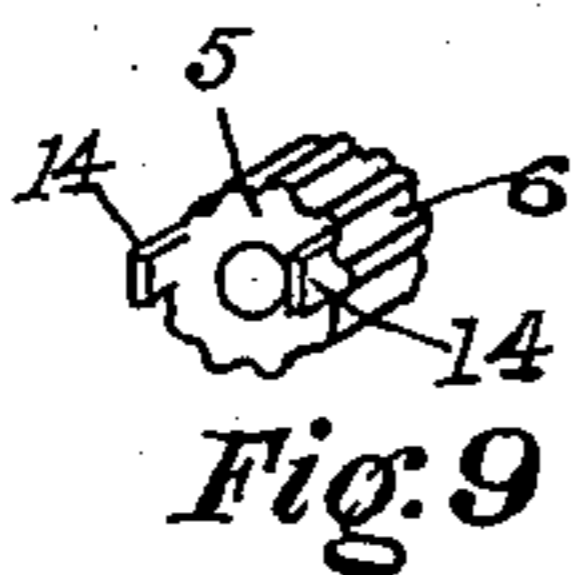


Fig. 9

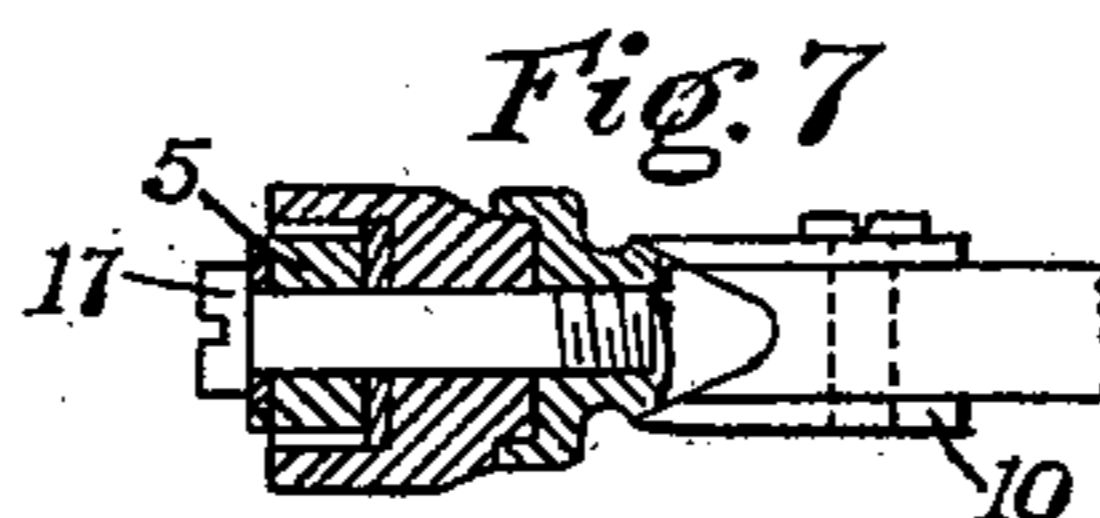


Fig. 7

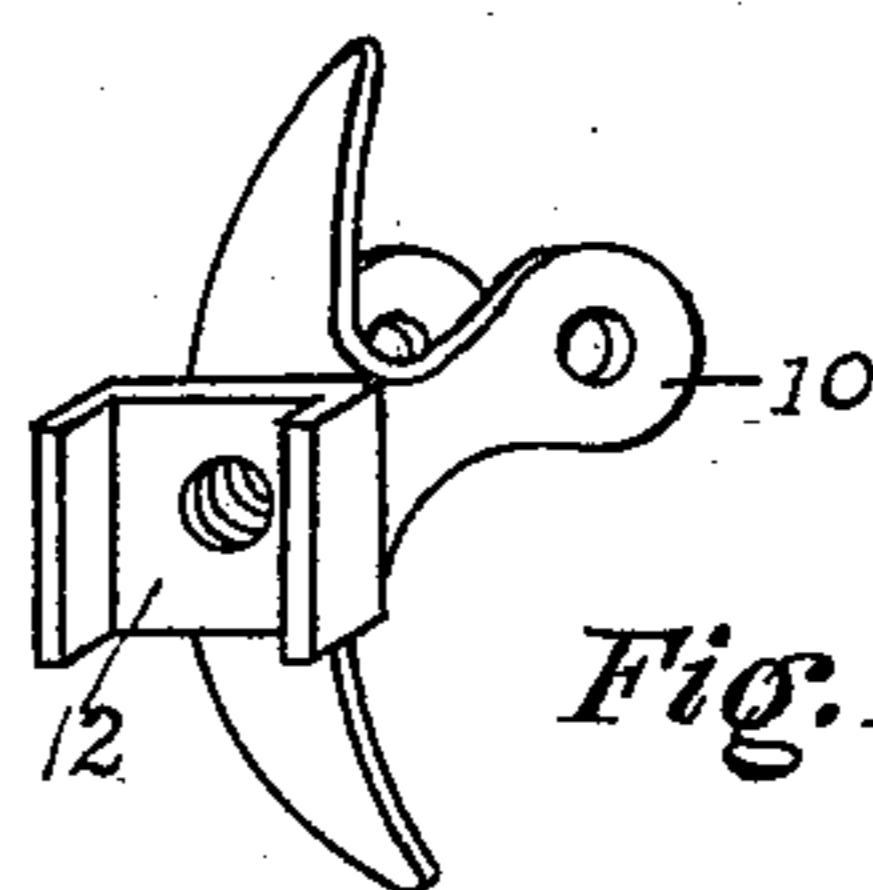


Fig. 11

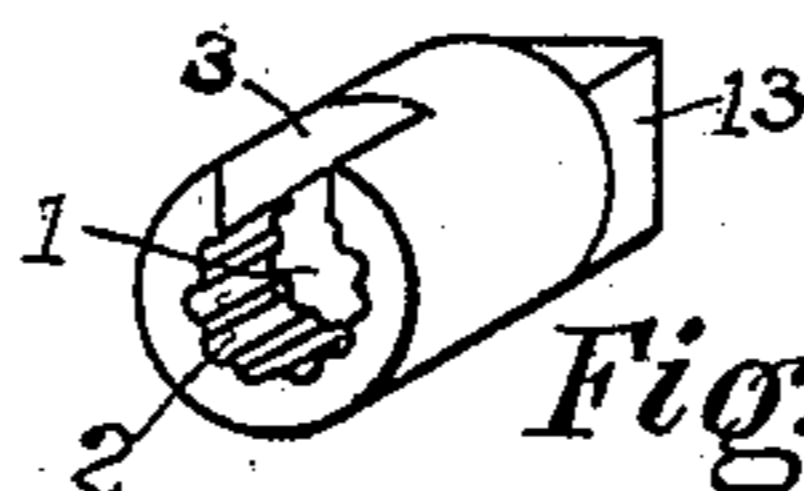


Fig. 10

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# UNITED STATES PATENT OFFICE.

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## EYEGLASSES.

SPECIFICATION forming part of Letters Patent No. 557,323, dated March 31, 1896.

Application filed April 30, 1895. Serial No. 547,606. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES E. BOYLE, a citizen of the United States, residing at the city of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Eyeglasses, of which the following is a specification.

My invention relates to frames for eyeglasses, and its object is to provide durable, efficient, and comparatively inexpensive means whereby the parts of the same may be accurately and readily adjusted as often as is necessary without injury to or breakage of the set-screw or of any of the parts.

The nature, characteristic features, and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is a front view, partly in section, showing my improvements drawn to a large scale and in application to eyeglasses. Fig. 2 is a sectional view taken on the line 2 2 of Fig. 1. Fig. 3 is a detached perspective view of the post of Fig. 1, showing the same provided with a socket having an internally-toothed or serrated rim and with a slot or opening for the accommodation of the end of the spring. Fig. 4 is a similar view illustrating a nose-guard having an offset and peripherally-toothed or serrated head adapted to the socket of Fig. 3 and having branched arms to which the nose-pads are applied. Fig. 5 is a front view illustrating a modification of my invention in which the same is adapted for application to the ordinary and well-known types of post and nose-guard. Fig. 6 is a sectional view taken on the line 6 6 of Fig. 5. Fig. 7 is a sectional view taken on the line 7 7 of Fig. 5; and Figs. 8, 9, 10, and 11 are detached perspective views of the parts shown in Fig. 5.

In the drawings, 1 is a cavity or socket having a flat bottom wall in which there is a centrally-disposed threaded opening or bore and having its inner curved walls toothed or serrated, as shown at 2, and cut away or slotted, as shown at 3, for purposes to be presently described. The nose-guard arm 4 is provided with a circular offset head 5, having a milled, toothed, or serrated edge 6 and

having a flat face or end wall, for purposes to be presently described. One end of this arm 4 may be bifurcated, and each branch 7 and 8 may be provided with a suitable pad 9. The socket 1 may be cut or otherwise formed in the post 10, as shown in Fig. 1, and this post 10 is secured to the lens 11, either as shown in Fig. 1 or in any preferred manner—for example, by means of a loop or bow encircling it. However, the posts of eyeglasses are often constructed with a slot 12, as shown in Fig. 11, and where it is intended to apply my invention to such posts the socket 1 and its central opening are cut or otherwise formed in a block having a squared head 13, Fig. 10, adapted to the slotted portion 12 of the post shown in Fig. 11. The offset head 5 may be struck up from the arm 4, as shown in Fig. 4, or soldered to this arm. However, nose-guards are frequently constructed as shown in Fig. 8, and in cases where it is desired to use my invention in connection with such nose-guards the head 5 may be provided with one or more fingers, as 14, Fig. 9, adapted to pass on opposite sides of the nose-guard, and the latter may be recessed, as at 15, Fig. 8, for the accommodation of these fingers. Moreover, these notches 15 may be omitted and replaced by a single notch adapted for coöperation with a single finger.

In use the perforated end of the spring 16 is fitted into the socket 1, and the edges of the slot 3, when present, serve to prevent its accidental displacement. However, if the slot 3 is not present in the construction shown in Fig. 10 the end of the spring 16 may be inserted in the slotted portion 12. The head 5 is then inserted in the socket 1, and the set-screw 17 is passed through the openings in the nose-guard 4 and in the spring 16 and is screwed into the post 10.

Among the many advantages of the above-described improvements the following may be mentioned:

The intermeshing serrated faces lie parallel with the axis of the set-screw and retain the various parts against accidental movements or displacements, so that the set-screw is relieved from strain, whereby the complete structure is materially improved.

The nose-guard 4 may be rotated into posi-

tion at any required angle with the plane of the lenses and accurately adjusted at such angle by withdrawing the head 5 from the socket 1, turning the nose-guard into the required position, and then replacing it in its socket. The milled, serrated, or roughened faces 2 and 6 by their mutual engagement prevent accidental movement of the nose-guard arm after it has been adjusted, and the screw 17 simply holds them in position so that they may perform this function. In this connection it may be remarked that since the roughened, milled, or serrated faces are formed at the peripheries of the respective parts, they may be cut so as to present a great number of teeth, thus giving rise to a wide range of adjustment. Moreover, their position at the peripheries of the respective parts protects them from injury when the set-screws 17 are turned home or tightened, and all the pressure exerted by these set-screws is communicated to the respective flat faces or walls of the milled head 5 and of the socket.

It will be obvious to those skilled in the art to which my invention relates that modifications may be made in details without departing from the spirit thereof. For example, the socket may be applied to the nose-guard arm

and the flat-faced milled head to the post. Hence I do not limit myself to the precise construction and arrangement of parts hereinabove set forth, and illustrated in the accompanying drawings; but,

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

In eyeglasses the combination with a lens-post, a spring, a nose-guard arm and a set-screw penetrating said spring and arm and engaging said post; of the within-described adjustment comprising a nested cylindrical socket and a cylindrical head of different diameters and having their meeting curved walls roughened, toothed or milled parallel with the axis of the set-screw, whereby accidental movement of the parts is prevented by the axially-disposed roughened, toothed or milled curved walls and the set-screw is relieved from strain, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of two witnesses.

JAMES E. BOYLE.

Witnesses:

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A. H. FRITCHEY.