

No. 861,074.

PATENTED JULY 23, 1907.

G. F. APPLGATE.  
EYEGLASSES OR SPECTACLES.  
APPLICATION FILED MAR. 15, 1900.

FIG. 1.

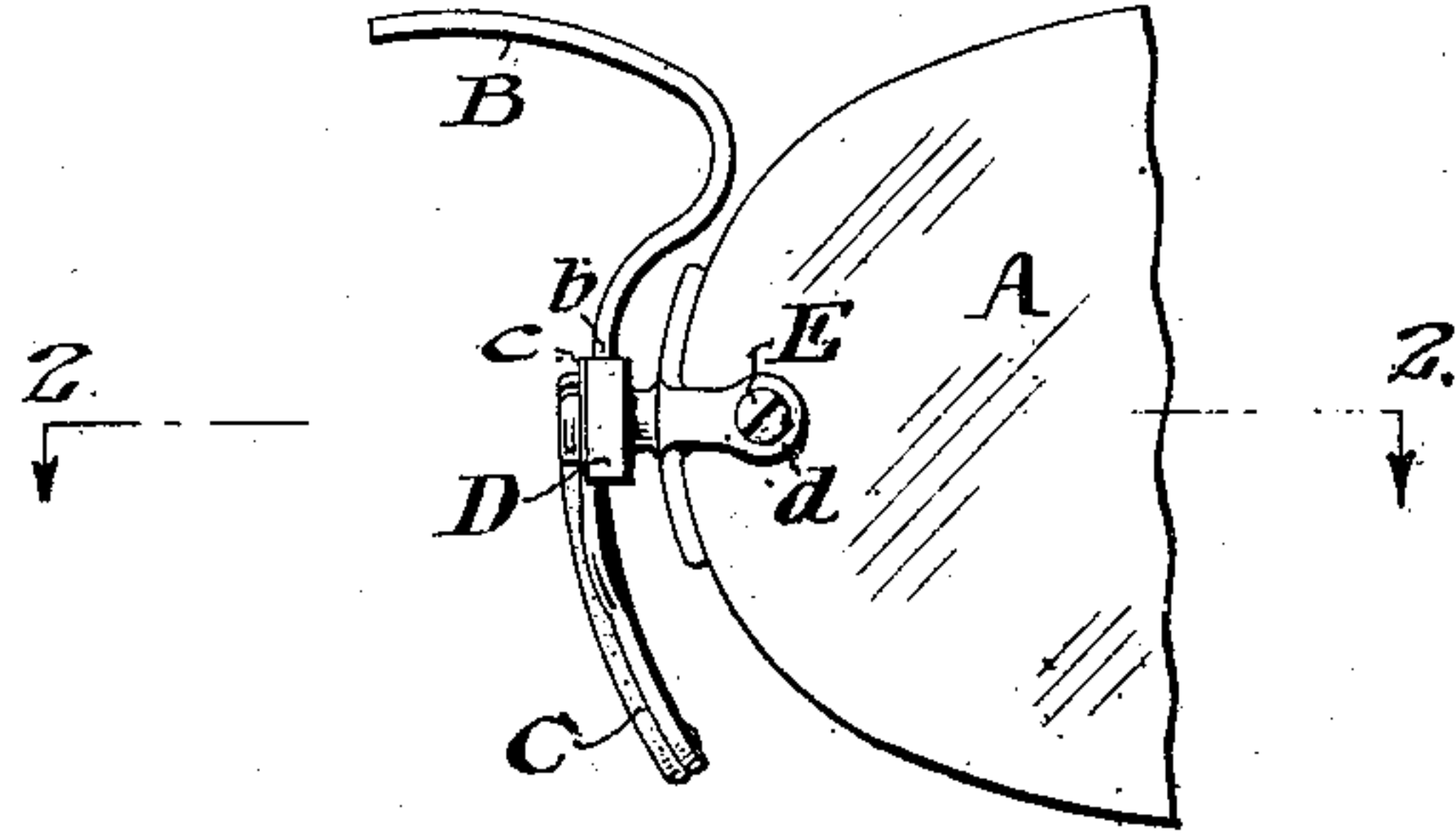


FIG. 2.

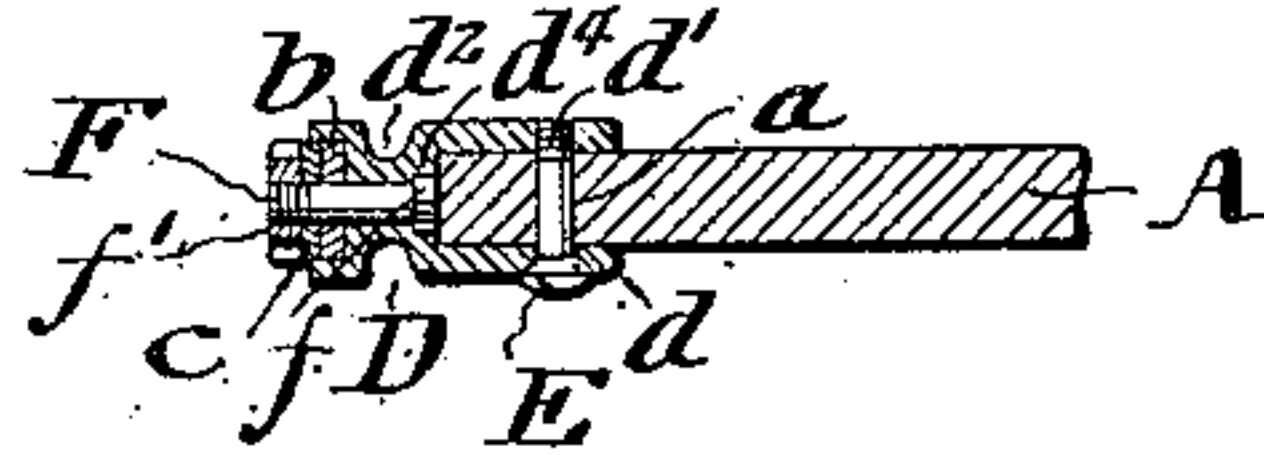


FIG. 3.

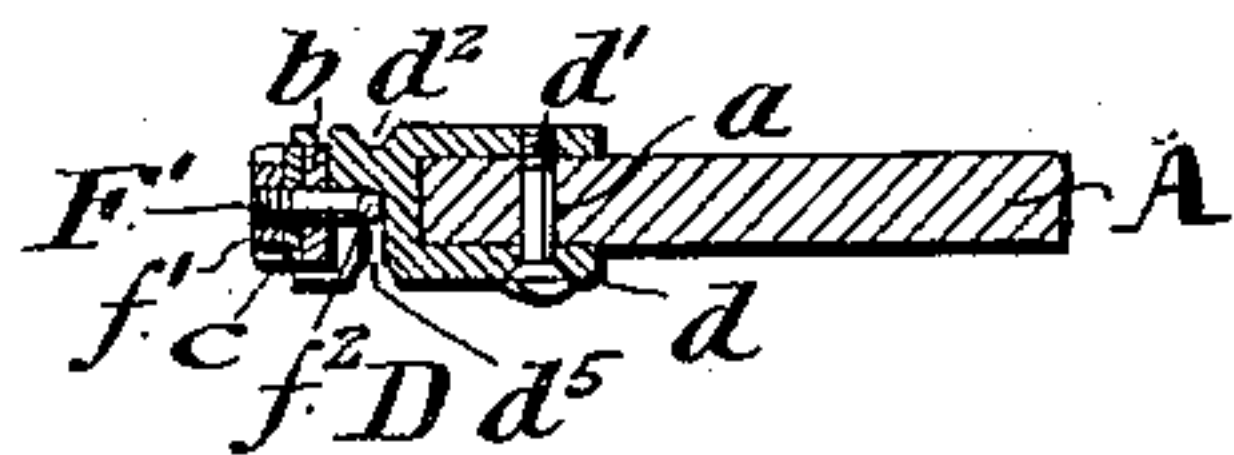


FIG. 4.

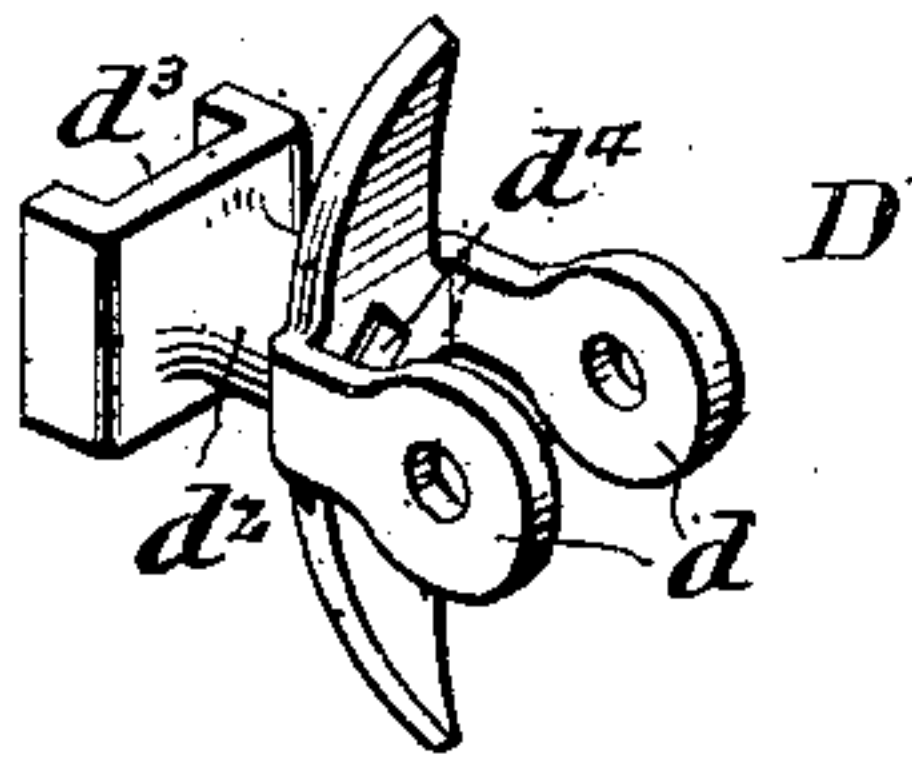
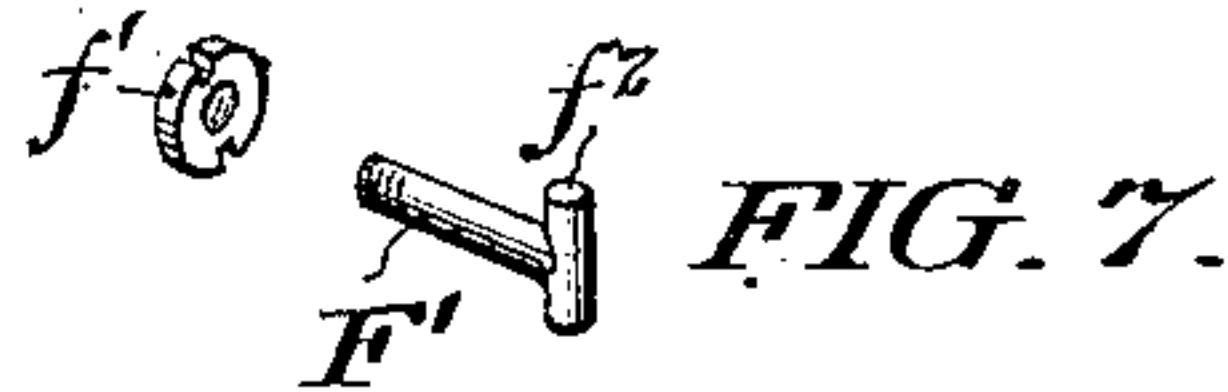
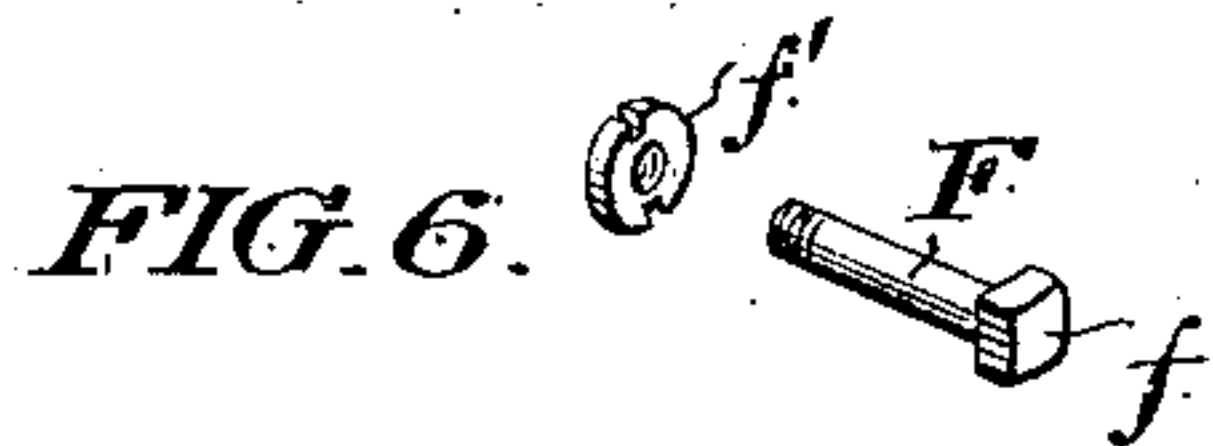
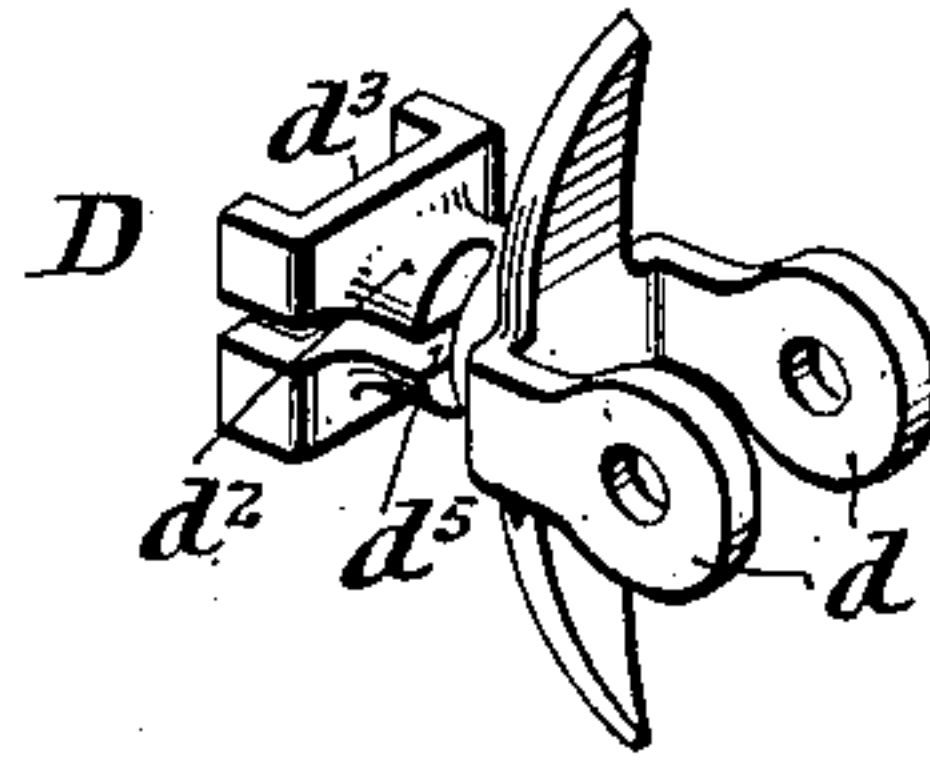


FIG. 5.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

GEORGE F. APPLGATE, OF TRENTON, NEW JERSEY.

## EYEGLASSES OR SPECTACLES.

No. 861,074.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed March 15, 1900. Serial No. 8,721.

*To all whom it may concern:*

Be it known that I, GEORGE F. APPLGATE, of Trenton, in the State of New Jersey, have invented certain new and useful Improvements in Eyeglasses or Spectacles, whereof the following is a specification, reference being had to the accompanying drawings.

My invention relates to a lens clamp, for eye-glasses or spectacles of the so called frameless or rimless type, which serves to maintain the lens in proper relation with the nose bridge and guard, or other frame members. Such clamps comprise a strap arranged for direct attachment to the lens, and a stud or shank provided with a seat for the respective overlapping ends of the nose bridge and guard.

Hitherto clamps of the class aforesaid, have been constructed of two general types; the first comprising as means for securing the nose bridge and guard, a screw which is not only separable from the clamp but must be removed and replaced with respect thereto whenever it is desired to remove or replace the bridge or guard. Such an arrangement is objectionable in that considerable difficulty is experienced in assembling the various parts in proper alinement to receive said screw, the latter being so small as not to be readily manipulated. The second, of the types aforesaid, comprises as means for securing the nose bridge and guard, a screw which is separable from the clamp and entered through the latter from the lens side thereof, in threaded engagement with a nut which is prevented from rotating, at the opposite end of the clamp. The last named device is objectionable in that the clamp must be removed from the lens in order to remove or replace the nose bridge or guard, by rotating the screw in the clamp with respect to the aforesaid nonrotatable nut.

My present invention relates particularly to the means by which the nose bridge and guard or other frame members may be secured with respect to a clamp of the class aforesaid; it being the object of my invention to provide such a clamp with a screw threaded member for the purpose described, which although separable from the clamp is normally maintained in fixed relation therewith; means being especially provided to prevent the rotation of said screw threaded member with respect to the clamp.

My improvements are advantageous in that the bridge and guard may, at the will of the operator, be removed and replaced, with respect to the clamp without removing the screw threaded member from the clamp or detaching the clamp from the lens.

In the accompanying drawings, Figure 1, is a fragmentary front view of an eyeglass embodying my invention. Fig. 2, is a sectional view taken on the line 2, 2, of Fig. 1. Fig. 3, is a sectional view similar to that of Fig. 2, but showing a modified form of clamp. Fig. 4, is a perspective view of the form of clamp shown in Figs. 1, and 2. Fig. 5, is a perspective view of the form

of clamp shown in Fig. 3. Fig. 6, is a perspective view of the screw threaded members used in connection with the clamp shown in Figs. 1, 2, and 4. Fig. 7, is a perspective view of the screw threaded members used in connection with the form of clamp shown in Figs. 3, and 5.

In said Figs., A, is the lens, and B, C, are the nose bridge and guard, of ordinary construction. The clamp D, which serves to connect said nose bridge, lens and guard in proper relation, comprises a strap end  $d$ , which bears against the opposite faces of the lens A, as shown in Fig. 2, and is secured thereon by means of the ordinary screw E, which extends through the lens aperture  $a$ , in threaded engagement with the clamp strap at  $d'$ . The clamp shank or stud  $d^2$ , is provided with a seat  $d^3$ , for the respective overlapped ends  $b$ ,  $c$ , of the nose bridge B, and guard C, and said parts are secured in proper relation with said seat by means of screw threaded members which, in the form of my invention shown in Fig. 2, consist of a bolt F, having a squared head  $f$ , seated in a similarly shaped recess  $d^4$ , in the clamp, adjoining the lens; and a nut  $f'$ , fitted to the free end of said bolt. Said bolt F, is maintained in nonrotatable relation with the clamp D, when the latter is secured upon the lens A, as shown in Fig. 2, by the engagement of the bolt head  $f$ , in said socket  $d^4$ .

The arrangement of the parts above described is such that the bolt F, may be entered in fixed relation with the clamp from the lens side of the latter, and said clamp may be permanently secured upon the lens A, by any means such as the screw E, or other convenient device. The nose bridge or guard may thereafter be detached or attached with respect to the seat  $d^3$ , and bolt F, without removing the clamp from the lens, or disturbing said bolt from its fixed position. It is to be noted that the extension of the bolt F, in fixed relation with the seat  $d^3$ , of the clamp, facilitates the assembling of the parts aforesaid, in proper relation thereon; as distinguished from the ordinary construction aforesaid, wherein the respective apertures of the bridge, guard and clamp must be first alined before the insertion of the separate screw.

In the form of my invention shown in Figs. 3, 5, and 7, the bolt  $F'$ , is provided with a T-head  $f^2$ , and the clamp shank  $d^2$ , is provided with a corresponding recess  $d^5$ , wherein said bolt may be seated as shown in Fig. 3. In the latter form of my invention, the bolt is retained in position by the respective bridge and guard ends  $b$ ,  $c$ , and the bolt is prevented from rotating by the contact of its T-head  $f^2$ , with the wall of said recess  $d^5$ .

It is to be noted that in both forms of my invention above described, the bolts F,  $F'$ , are prevented from rotating with respect to the clamp in which they are seated, and that the engagement and disengagement of the nose bridge and guard, with respect thereto is effected solely by manipulation of the nuts  $f'$ .



I do not desire to broadly claim a screw threaded member which may be inserted from the lens side of a lens clamp to secure the nose bridge and guard upon the latter, as I am aware that such devices are known in the art, I believe it to be new however, to provide a screw threaded member for the purpose described, of the character herein set forth, in such relation with the clamp as to be prevented from rotating with respect to the latter, and, therefore, I do not desire to limit myself to the precise proportions or details of construction of the parts which I have illustrated as it is obvious that various modifications may be made therein without departing from the spirit of my invention.

I claim:—

1. A lens clamp comprising a tubular shank; a lens strap projecting from said shank in inseparable relation therewith; a nose bridge seat on said shank; and, a screw threaded member detachably fitted in said shank; said shank being provided with means arranged to continuously prevent rotation of said threaded member, substantially as set forth.
2. A lens clamp comprising a tubular shank; two opposed parallel straps projecting from said shank in inseparable relation therewith; a nose bridge seat on said shank; and, a bolt mounted in said shank and extending from said seat; said shank being provided with means arranged to continuously prevent rotation of said bolt, substantially as set forth.
3. A lens clamp comprising a tubular shank; a strap projecting from said shank in inseparable relation therewith; a nose bridge seat on said shank, provided with opposed parallel side flanges; and, a bolt extending through an aperture in said seat between said flanges; said shank being provided with means arranged to continuously prevent rotation of said bolt, substantially as set forth.
4. A lens clamp comprising two straps arranged to engage respectively opposite faces of the lens; two wings arranged to engage the edge of the lens; a tubular shank

integrally uniting said straps and wings; a nose bridge seat on said shank; and, a bolt extending through an aperture in said seat; said shank being provided with means arranged to continuously prevent rotation of said bolt, substantially as set forth.

5. A lens clamp, comprising opposed straps  $d$ ; a tubular shank  $d^2$ , integrally uniting said straps and comprising an angular recess; a nose bridge seat  $d^3$ , provided with opposed side flanges; and a bolt extending through said shank, projecting from said seat between said flanges, and comprising a head engaging said shank recess and arranged to continuously prevent rotation of said bolt, substantially as set forth.

6. A lens clamp, comprising a tubular shank; a lens strap projecting from said shank; a nose bridge seat on said shank; said tubular shank having an aperture there-through communicating at one end thereof with an angular recess; a bolt in said tubular shank having a head adapted to fit in said recess and arranged to continuously prevent its rotation; and, a rotatable nut on the outer end of said bolt arranged to clamp the nose bridge to its seat, substantially as set forth.

7. A lens clamp, comprising a strap, bridge seat and hollow tubular shank in one piece; means to attach the lens to said strap; means to clamp the nose bridge in said seat, comprising a bolt in said hollow shank; said shank being provided with means arranged to continuously prevent the rotation of said bolt; and, rotatable means on the outer end of said bolt arranged to clamp the bridge to its seat, substantially as set forth.

8. A lens clamp, comprising a tubular shank provided with a lens strap; a nose bridge seat on said shank; and, a screw threaded member fitted in said shank; said shank being provided with an angular recess engaging a complementary portion of said screw threaded member and adapted to prevent rotation of the latter, substantially as set forth.

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Witnesses:

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F. C. LEAMING.