

(No Model.)

J. L. BORSCH.
SPECTACLES OR EYEGLASSES.

No. 528,528.

Patented Nov. 6, 1894.

Fig. 1.

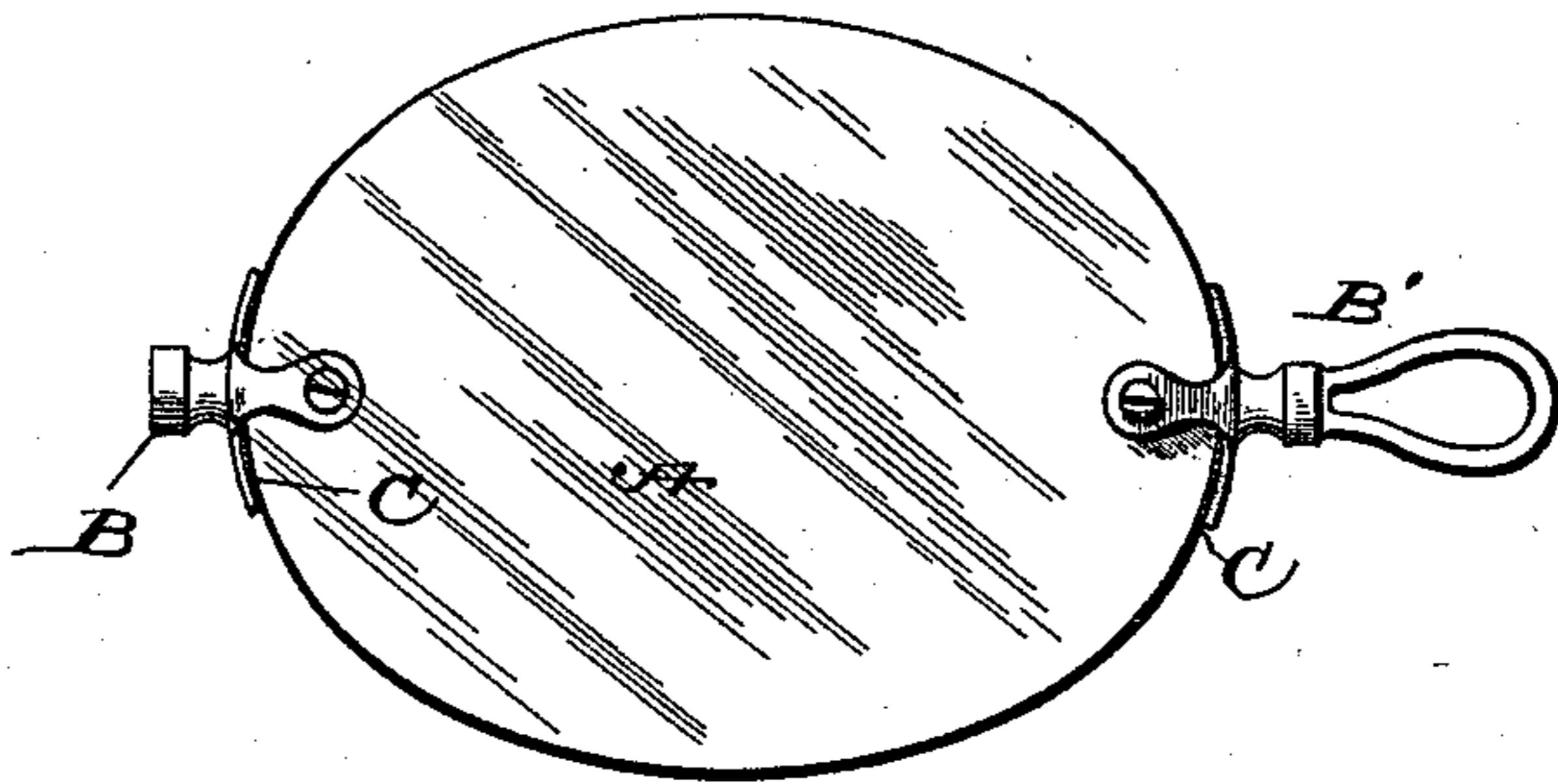


Fig. 2.

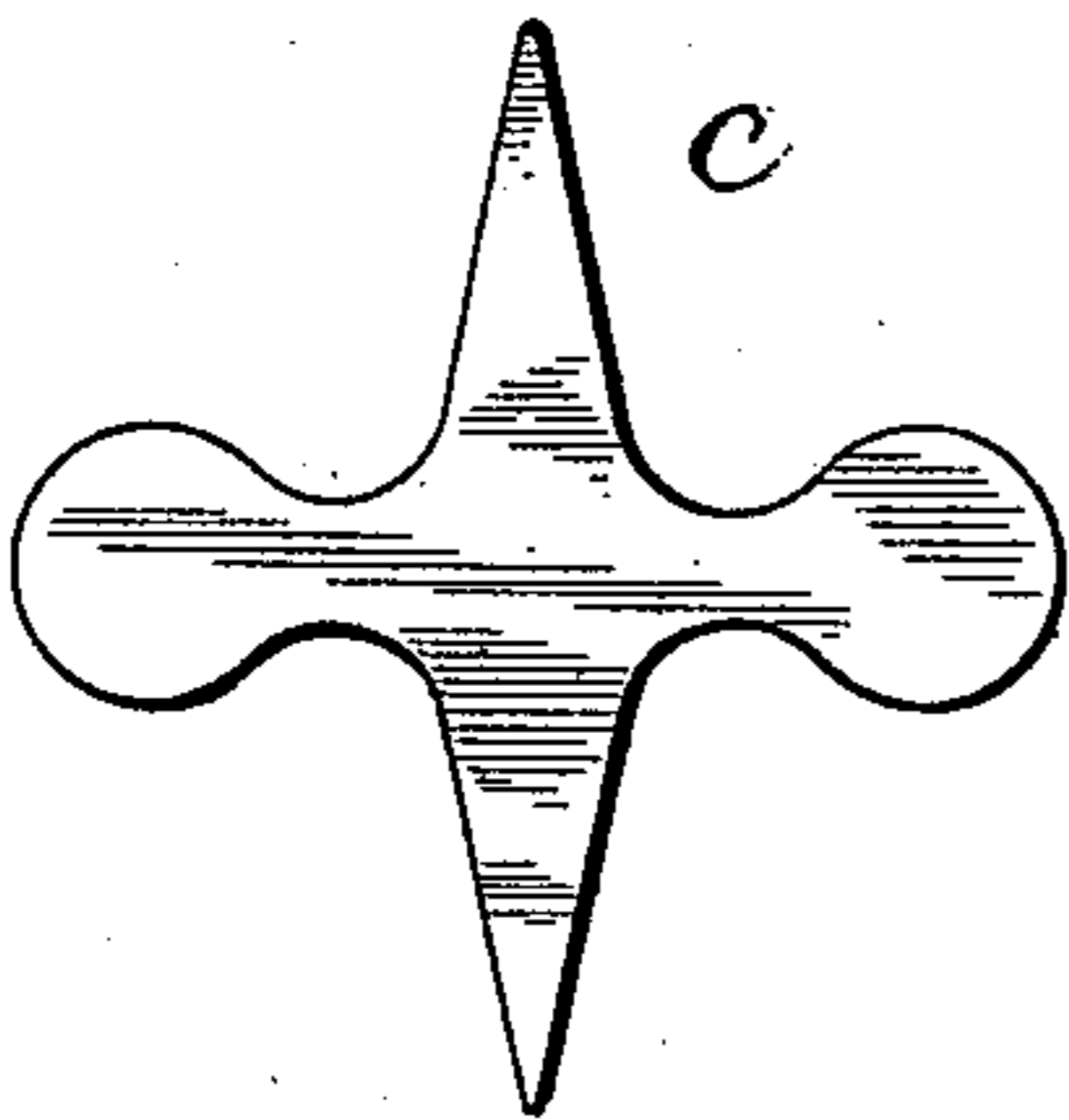


Fig. 3.

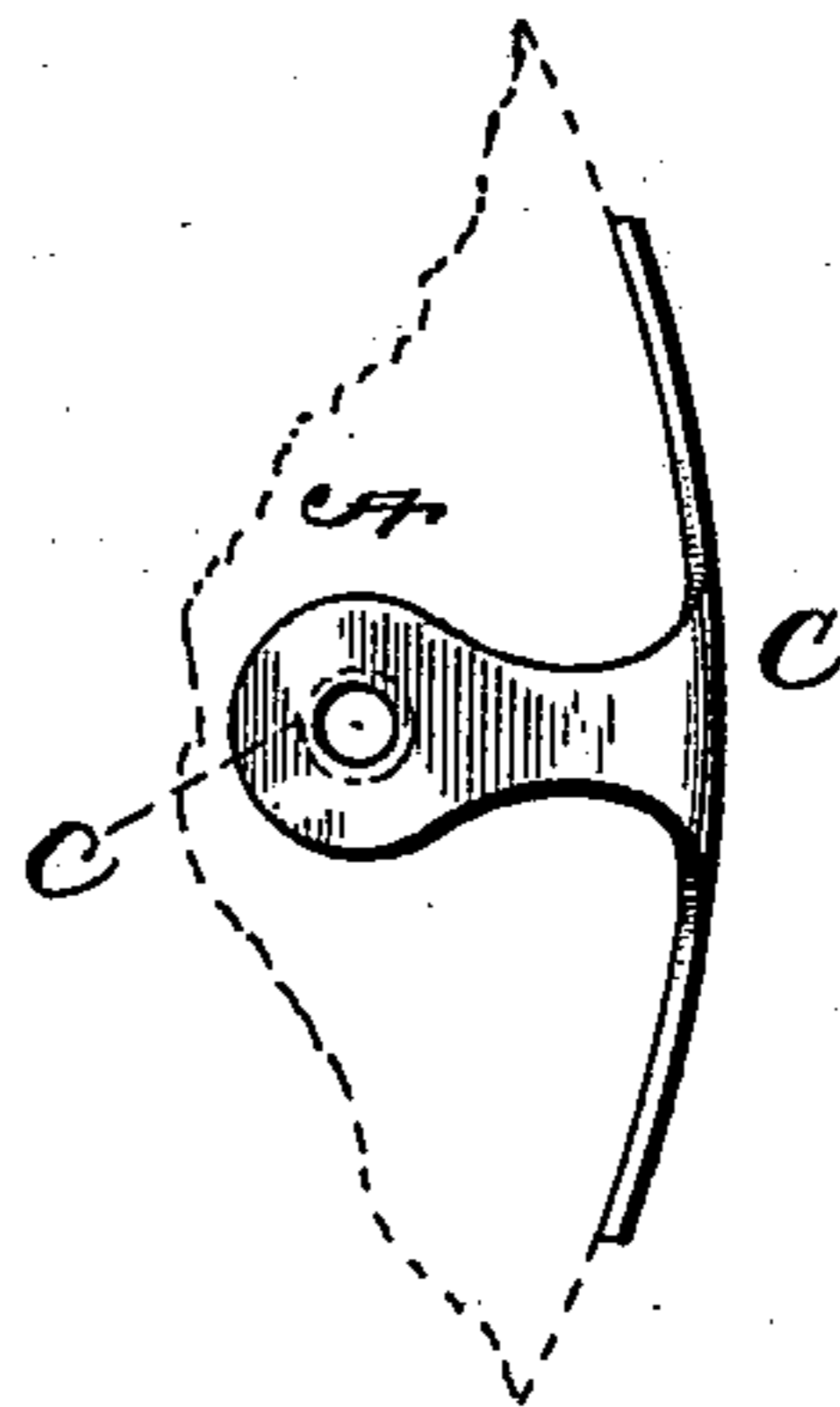
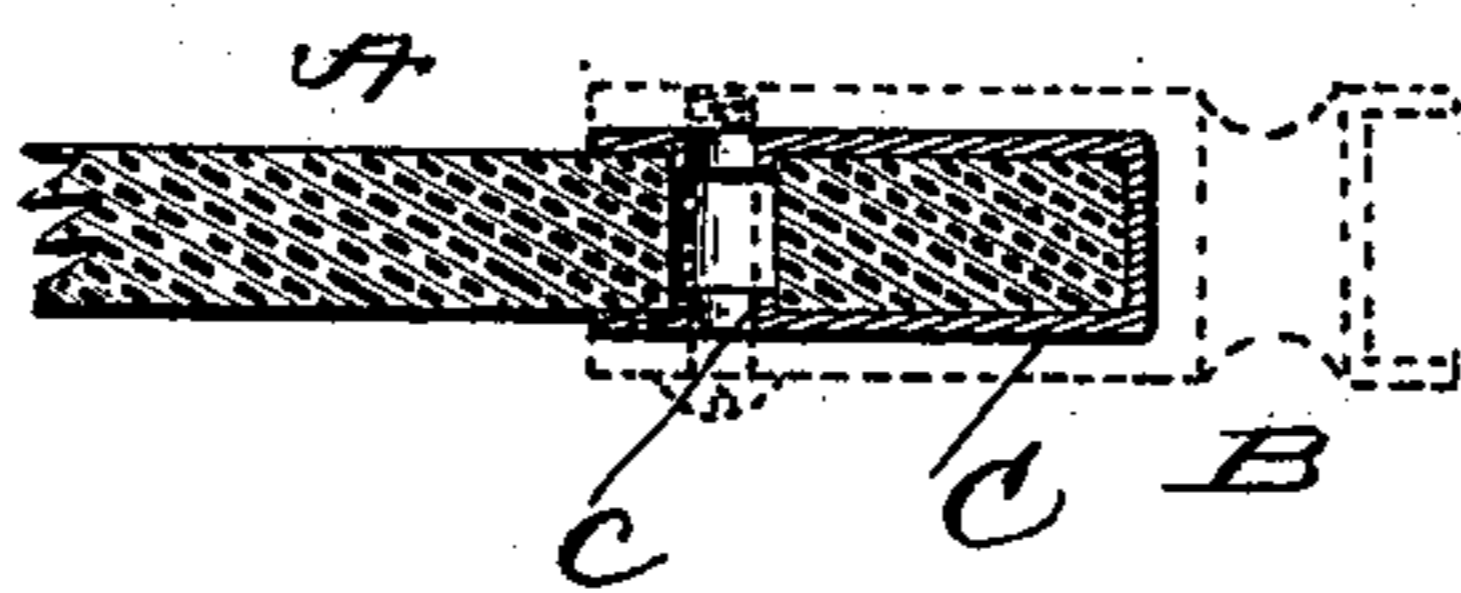
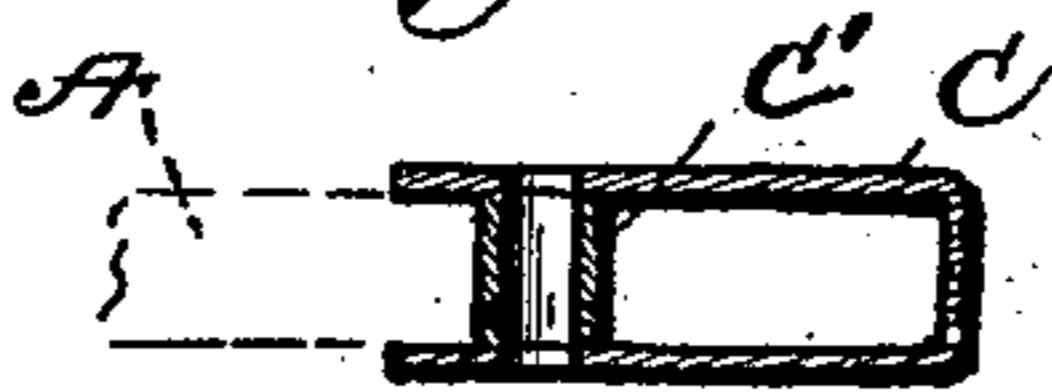


Fig. 4.



Witnesses
John L. Borsch
Thos. E. Robertson

Fig. 5.



Inventor
John L. Borsch
By *T. J. W. Robertson*
Attorney

UNITED STATES PATENT OFFICE.

JOHN L. BORSCH, OF PHILADELPHIA, PENNSYLVANIA.

SPECTACLES OR EYEGLASSES.

SPECIFICATION forming part of Letters Patent No. 528,528, dated November 6, 1894.

Application filed June 2, 1894. Serial No. 513,289. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. BORSCH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia, Pennsylvania, have invented certain new and useful Improvements in Spectacles or Eyeglasses, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This improvement is designed to provide for the attachment of the metal parts to the lenses of frameless spectacles and eye glasses in such a manner as will prevent the frequent breaking of the lenses, which is a great cause
15 of complaint with the users of such spectacles and eye glasses.

Heretofore it has been the usual practice to attach the metal parts directly to the lenses, so that not only the clasp but the screw passing through it frequently comes in contact with the glass. The screw has to be tolerably tight or it is apt to get loose and work out, and when screwed in tightly the changes in temperature make the glass and metal expand and contract unequally, thereby breaking the glass. Sometimes this breakage may be due to the clasp being held too tightly by the screw, and sometimes by the glass being bound between the curved part of the clasp
25 and the screw. To overcome these difficulties is the object of my present invention, which consists in the improvements herein-after more particularly described and then definitely claimed.

35 In the accompanying drawings—Figure 1 is a front elevation on an enlarged scale of a single lens with the attached metal parts. Fig. 2 is a plan on a still larger scale than Fig. 1 of a blank to be used as a cushion between the clasp and the lens. Fig. 3 is a front elevation on a similar scale showing the blank in position as a cushion. Fig. 4 shows a horizontal section through the center of the lens and cushion and with the clasp
40 in dotted lines, on the same scale as Figs. 2 and 3. Fig. 5 is a horizontal section of a modification.

Referring now to the details of the drawings by letter—A represents the lens and B B' the metal attachments or clasps, B being the part carrying the spring or bridge as the case may be, and B' the handle.

C is the blank or cushion which I prefer to make of celluloid, zylonite or similar material, but it may be of any slightly yielding substance, as vulcanized fiber, paper, leather, rubber, &c. The cushion may be applied in at least three different ways. In one way a blank may be cut as in Fig. 2, and then applied as a cushion, as shown in Fig. 3, to the lens, when the holes may be made by any suitable tool which will force that part of the blank which is over the hole into the hole in the lens as shown in Fig. 4, making two short tubes or annular ridges
50 which fit inside the hole in the lens. Another way, and probably the preferable, will be to make the ridges in the cushion at the time the blank is formed, in which case the ridges will readily slip into the hole in the lens, and when the clasp B is set over the cushion as shown in dotted lines in Fig. 4, and the screw E screwed in, the clasp is firmly secured to the lens, without either the clasp or screw touching the glass so that the lens is not in contact with the metal at all, for the body of the cushion prevents contact between the clasp and lens while the ridges prevent the screw touching the lens.

In the modification shown in Fig. 5, instead of the annular ridges or tubes being formed on the cushions, short tubes C' may be set in the holes in the lenses and the cushions with the holes already formed in them are set on the lenses over the tubes, and the clasps then fastened over the cushions by screws as before.

By these means perfect security is obtained against the most frequent cause of breakage of frameless eye glasses and spectacles, and the wearers of such can now be assured against such breakage.

What I claim as new is—

1. The combination with a spectacle or eye-

glass lens, of a clasp B, secured by a screw to the same, and a four-armed cushion C, set between the lens frame and the glass, so as to embrace and protect both the edge and the
5 faces of the lens, substantially as described.

2. As an improved article of manufacture, an eye-glass, comprising a lens A, a clasp B, secured by a screw to the same, and a four-armed cushion C of celluloid or similar ma-
10 terial, having ridges c formed on two of its

arms to enter the hole in the lens, all substantially as shown and described.

In testimony whereof I affix my signature, in presence of two witnesses, this 1st day of June, 1894.

JOHN L. BORSCH.

Witnesses:

ARCHER MCLEAN,
C. MCGARRY.