B. BROUGHTON.

EYEGLASSES.

APPLICATION FILED APR. 13, 1908.

908,737. Patented Jan. 5, 1909.

Fig. 1.

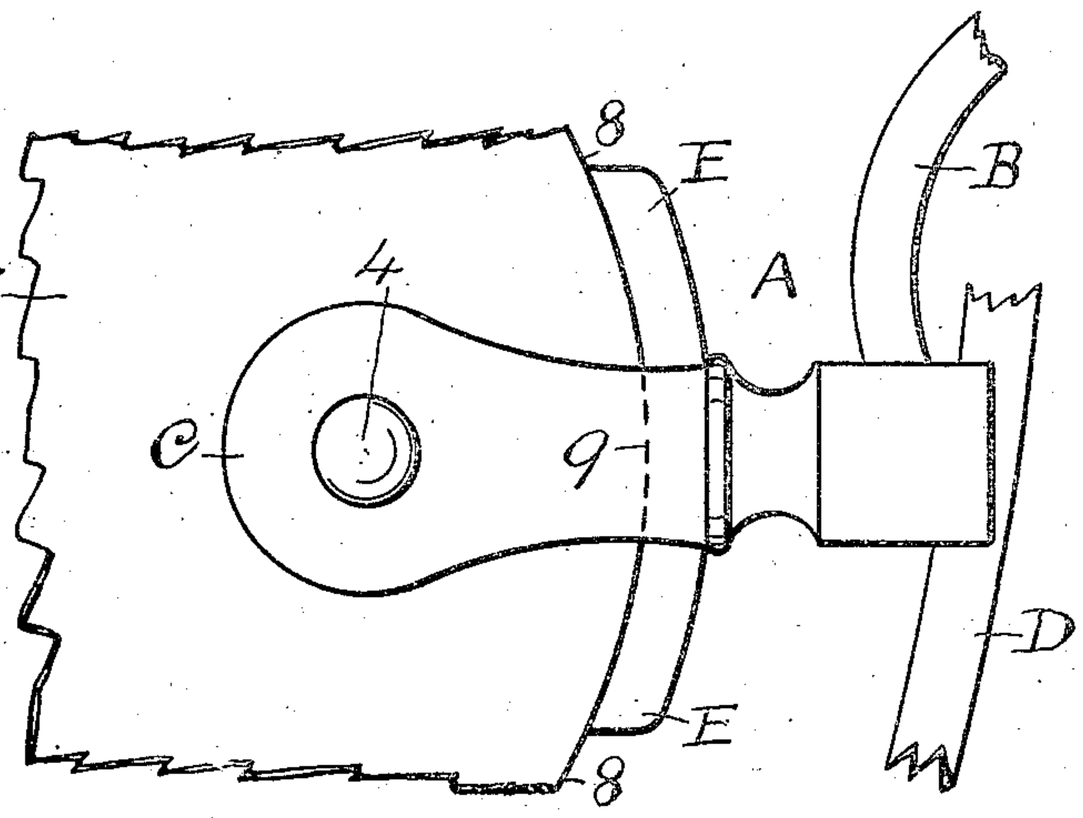


Fig. 2.

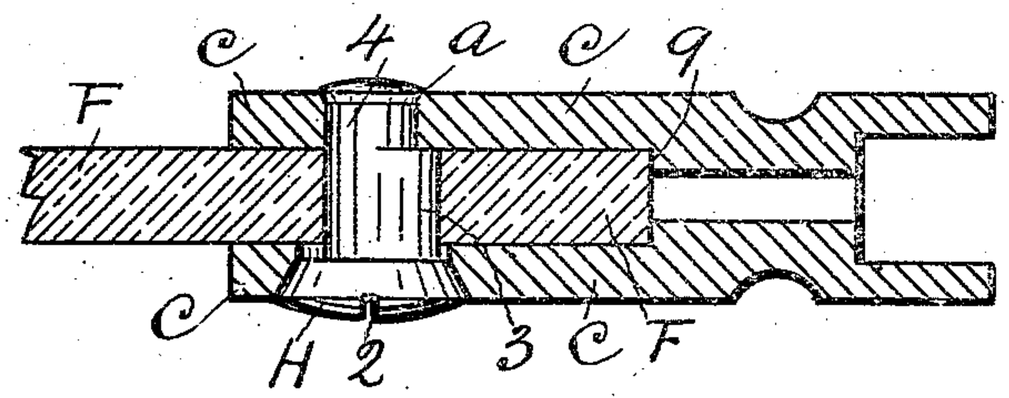
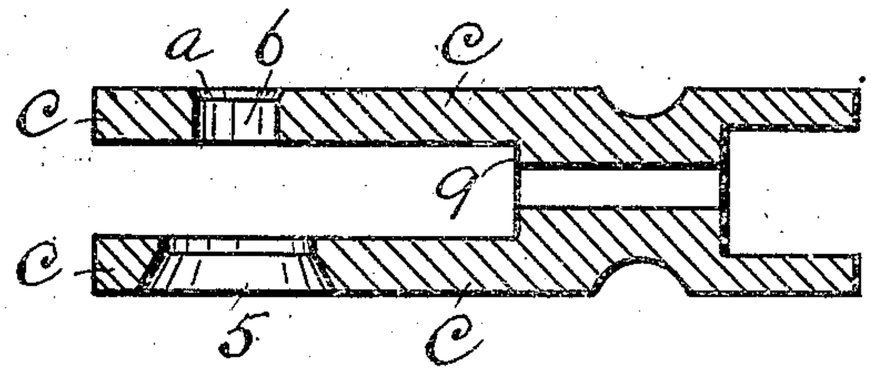


Fig. 3.



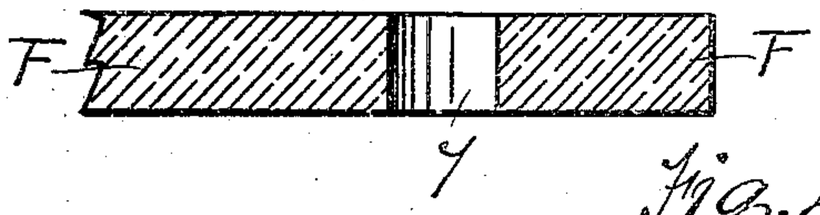
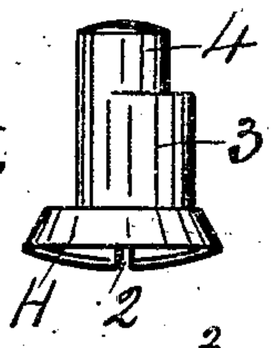


Fig. 4.

Fig. 5.



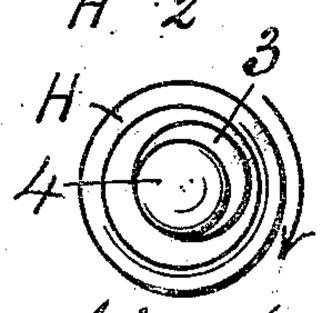


Fig. 6.

Witnesses.
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UNITED STATES PATENT OFFICE.

BEN BROUGHTON, OF HAMILTON, ONTARIO, CANADA.

EYEGLASSES.

No. 903,737.

Specification of Letters Patent. Patented Jan. 5, 1909.

Application filed April 13, 1908. Serial No. 426,645.

To all whom it may concern:

Be it known that I, BEN BROUGHTON, a subject of the King of Great Britain, and resident of Hamilton, in the county of Wentworth and Province of Ontario, Canada, have invented new and useful Improvements in Eyeglasses, of which the following is a specification.

My invention relates to improvements in eye glasses, in which side straps are rigidly secured to the sides and end of the lens of a rimless eye glass, said end of the lens being brought to close contact with the root, or base, of said straps, and the extended arms of the straps, and held there.

The objects of my invention are, first, to provide means, whereby the side straps of a rimless eye glass, are adapted to move equally and positively together on the lens and draw the lens to the base, and the arms, of said straps, and lock the same, second, to provide means whereby the lens may be readjusted to the base of the straps and the arms of the straps, and locked, after the eye-glass has been in use for a length of time, and third, to provide means whereby in adjustment of the side straps they shall have equal and positive movement on the sides of the lens, to position, thereby avoiding any inequalities of pressure on the straps, the same pressure being exerted on both said straps, consequently the lens has smooth and equal movement between both said straps. I attain these objects by the mechanism illustrated in the accompanying drawing, in which:—

Figure 1 is an enlarged elevation of one side of an eye glass, showing one side strap secured to the broken lens. Fig. 2 is a sectional plan of the same. Fig. 3 is a plan of the same, the lens together with the adjusting device being removed. Fig. 4 is a sectional plan of the detached lens. Fig. 5 is a plan of the detached eccentric stud, and, Fig. 6 is an elevation of said stud.

Similar letters refer to similar parts throughout the several views.

In the drawing the rimless eye glass frame, is indicated by A, the broken nose bridge by B, the nose side stays by D, the arms by E, and the side straps by *c*, the several parts indicated, are parts of the frame, and together with the lens F, are not new. The lens F, fits snugly between the straps *c*, and the end of the lens abuts the arms E, as shown.

H, is a stud or head adapted to rotate in one said strap *c*, and has an outer slot 2, to admit an ordinary screw-driver to rotate the stud. The stud has an eccentric body part 3, extending therefrom, and a shank 4, extending from said eccentric body part, and through the opposite strap *c*, and concentric with said head H. The stud or head H, fits into and conforms to the round hole 5, of one strap *c*, and the shank 4, of the stud H, fits into, and conforms with the round hole 6 of the opposite strap *c*. The head H, and the shank 4, are concentric with each other, as are also their respective holes 5 and 6. The lens F, has a common round hole 7 into which fits snugly the eccentric body part 3, of the stud.

Figs. 1, and 2, of the drawing, show the convex end 8, of the lens F, brought in close contact with the arms E of the frame A, and consequently in close contact with the shoulder, or base, or root 9, of the straps *c*. The arms E, and the shoulder 9, are in concave form and on the same concave line, which conforms to the convex end 8 of the lens F.

When the stud head H, is slightly rotated, as indicated by arrow in Fig. 6 of the drawing, the straps *c* together with their base, or root 9, are brought in close and rigid contact with the convex end 8 of the lens, and held in secured position by means of a light tap of a hammer on the end of the shank 4. Considering the light construction, or thickness, of the straps *c*, in actual size, of the eye-glass, the hole 6 extends through its strap *c*, and the outer part of the hole is slightly countersunk, as at "*a*", that the shank 4 may be riveted thereto. A nut on the end of the shank would answer the purpose set forth, in lieu of riveting of the shank.

Previous to the shank 4, being secured in the hole 6, the lens is adjusted to position by means of the rotary movement of the stud head H.

As hereinbefore stated, the head H, and the shank 4, are concentric with each other. and also, the holes 5, and 6 in the straps *c*, the only eccentric part of the device, is, the eccentric body part 3, which fits in the round hole 7, of the lens. It will be obvious, in Fig. 6, of the drawing, that after a long term of wear and tear of the eye-glass, and thereby the possible loosening of the lens, that the stud H, may be slightly rotated to bring the straps and the lens to positive position.

It will be noticed that when the stud is ro-

tated, the pull on the side straps is positive, equal and together, on account of the same integral stud operating at the same time in the side straps *c*. I regard this as an important feature of my invention.

What I claim as my invention and desire to secure by Letters Patent, is:—

1. In eye-glasses, a lens having a round hole, side straps having concentric holes, on the sides of the lens, a stud head adapted to rotate in the concentric hole of one said strap, an eccentric body part of said stud adapted to rotate in the hole of the lens, a shank on the eccentric body part of the stud, and concentric with said head adapted to rotate in the opposite said strap.

2. In an eye-glass, a lens having a round hole, side straps having concentric holes, one larger than the other, the smaller hole having an outer countersink, a stud head adapted to rotate in the larger hole of one said strap, an eccentric body part, or eccentric extension of said head, adapted to rotate in the hole of the lens, a shank concentric with said head and extending from the eccentric body part, and integral therewith, adapted to rotate in the concentric hole of the opposite said side strap.

BEN BROUGHTON.

Witnesses:
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