No. 702,385. Patented June 10, 1902.

# H. H. WAUGH.

## LENS FASTENING FOR GLASSES.

(Application filed June 21, 1901.)

(No Model.)

Fig. 1.

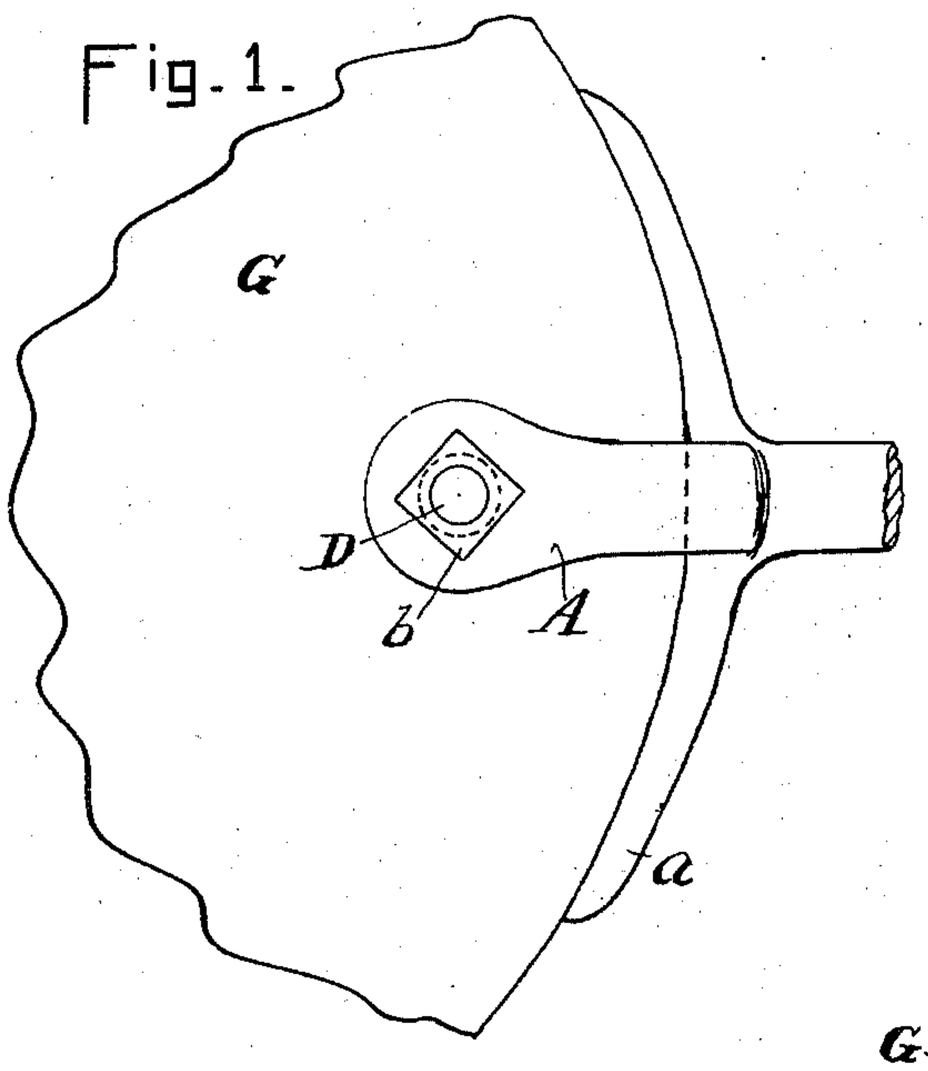



Fig. 2.

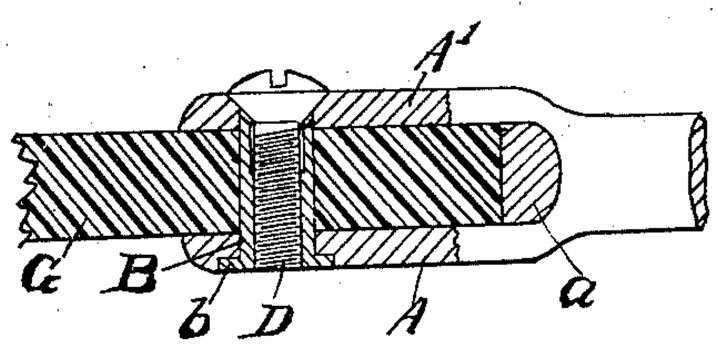



Fig. 3.

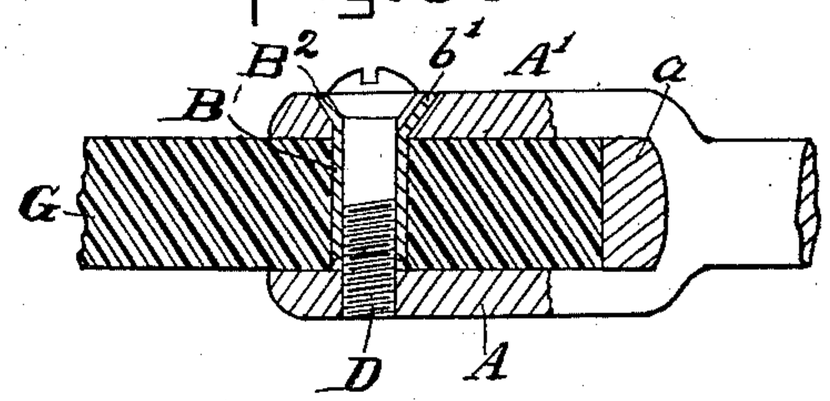
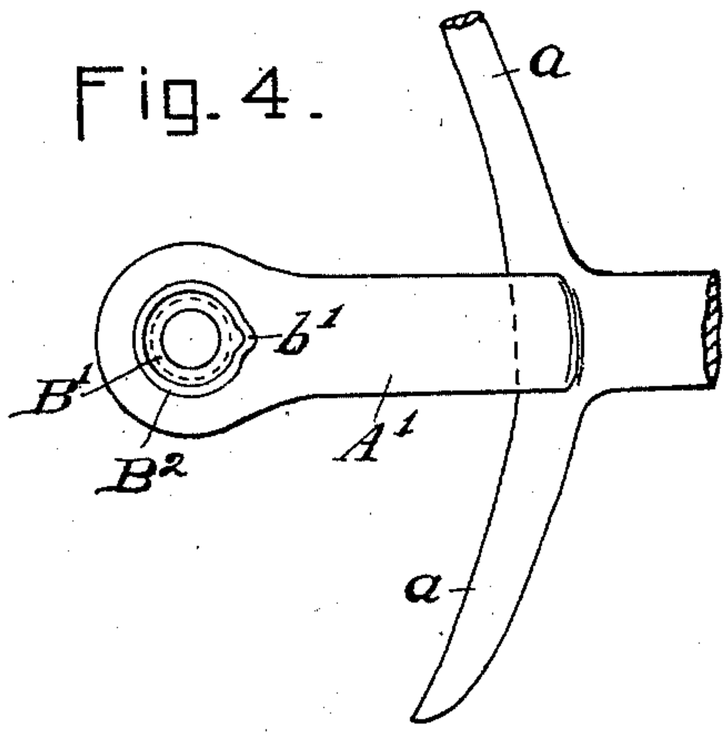



Fig. 4.




Witnesses.
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# UNITED STATES PATENT OFFICE.

HENRY H. WAUGH, OF BROOKLYN, NEW YORK, ASSIGNOR TO CHARLES F. WALL, TRADING AS THE FIRM OF WALL AND OCHS, OF PHILADELPHIA, PENNSYLVANIA.

## LENS-FASTENING FOR GLASSES.

SPECIFICATION forming part of Letters Patent No. 702,385, dated June 10, 1902.

Application filed June 21, 1901. Serial No. 65,433. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY H. WAUGH, a citizen of the United States, and a resident of New York city, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Lens-Fastening for Glasses, of which the following is a full, clear, and exact description.

My invention relates to an improvement in devices for securing the arms of rimless glasses to the glasses, and comprises the novel features hereinafter described, and particularly set forth in the claims.

Figure 1 shows in plan and on an exaggerated scale a portion of a glass and the attached part of a frame. Fig. 2 is a section through the arms. Fig. 3 is a section through the arms, showing a modified construction; and Fig. 4 is a plan view of the arms of the same construction as shown in Fig. 3.

In using rimless glasses much trouble is caused by loosening of the screw which is used to bind the arms of the frame upon the glasses. This screw in the usual construction passes through one arm and the glass and screws into the other arm. It is in direct contact with the glass, and the slight working of the glass about the screw as a pivot causes the screw to quickly loosen. By my invention I protect the screw from contact with the glass by placing a sleeve about the screw and supporting this sleeve from the frame so that it cannot turn.

Referring to the drawings, G represents the glass, and A A′ the two arms by which it is embraced. The arms A and A′ are perforated to receive the screw D and the sleeve B, which surrounds it. The hole in the glass is made to receive the sleeve B as snugly as possible, and the sleeve in the form shown in Figs. 1 and 2 is threaded interiorly to act as a nut for the screw D. On one end the sleeve is provided with a head *b*, which may be of any convenient shape, which is non-circular. I have herein shown it as square. The arm A is preferably recessed about its hole to receive the head *b*. By this or some equivalent means the sleeve is held against turning. The opposite end of the sleeve preferably enters the hole in the arm A′ and also preferably stops short of contact with the head of the screw D, so that the strain of the bolt will act upon the two arms of the frame to bind them upon the glass.

In the construction shown in Figs. 3 and 4 the sleeve B′ is flared or coned out at one end to fit the under side of the screw-head and is not threaded. The conical flange $B^2$ on one side is crimped or pressed outward to form a rib *b*′, and the arm A′ is provided with a corresponding recess to receive this rib, so that the sleeve cannot turn. The screw D screws into the arm A. The sleeve B′ stops short of the inner surface of the arm A. The arms *a* of the frame are the ones which engage the edge of the glass.

With the screw surrounded by a sleeve, which is prevented from turning and prevents contact between the screw and glass, there is no chance for the glass to act upon the screw to loosen it and it will stay tight a long time. Another advantage of the form shown in Figs. 1 and 2 is that a greater number of threads of the screw are engaged, whereby the friction is increased and the chance of unscrewing reduced.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a fastening for frame and lens of glasses, the combination with the lens, two arms adapted to lie upon opposite sides of the lens and a removable securing member passing through the lens and binding the arms thereto, of a removable sleeve surrounding the securing member within the side faces of the lens, said sleeve and an arm having interlocking irregularities to prevent the sleeve from turning.

2. In a fastening for frame and lens of glasses, the combination with the lens and arms adapted to be on opposite sides of the lens, said lens and arms having registering holes, of a separable sleeve passing through the hole in one arm and the lens, a securing member passing through the sleeve and binding the arms upon the lens, and means for preventing said sleeve from turning.

3. In a fastening for frame and lens of glasses, the combination with the lens and arms adapted to lie on opposite sides of the lens, of a separable sleeve passing through one arm and the lens, and a screw passing through said sleeve and engaging the two arms to bind them upon the lens and means for preventing said sleeve from turning.

4. In a fastening for frame and lens of glasses, the combination with the lens and arms adapted to embrace the lens, of a separable sleeve passing through one arm and the lens, said sleeve and an arm having interlocking irregularities preventing the sleeve from turning, and a securing member passing through said sleeve and engaging the arms to bind them upon the lens.

5. In a fastening for frame and lens of glasses, the combination with the lens and arms adapted to embrace the lens, of a sleeve passing through one arm and the lens and having a flange on its outer end engaging the arm to limit its insertion, said sleeve and one arm having interlocking irregularities preventing the sleeve from turning, and a screw passing through the sleeve and engaging the opposite arm to bind the arms upon the glasses.

6. In a fastening for frame and lens of glasses, the combination with the lens, and arms extending from the frame and adapted to engage the opposite sides of the lens, said arms and lens having registering holes, of a screw adapted to pass through said arms and lens, and a nut therefor independent of the arms and having a sleeve extending through one arm and interposed between said screw and glass, and means for engaging said nut with its engaged arm to prevent its turning.

7. In a fastening for frames and lens of glasses, the combination with the lens and arms adapted to embrace the lens, said arms and lens having screw-receiving holes adapted to register, of a screw, a sleeve-nut therefor adapted to be interposed between screw and lens and having a flange or head at one end non-circular in outline, one of the arms having a recess in its outer surface adapted to receive said head.

8. In a fastening for frames and lens of glasses, the combination with the lens and arms adapted to engage opposite sides of the lens, said lens and arms having registering holes, of an interiorly-threaded removable sleeve having a head or flange on one end and adapted to pass through the hole in one arm and the lens and to enter the hole in the other arm, a screw engaging by its head the arm opposite that engaged by the head of the sleeve and screwing into said sleeve, and means for preventing turning of said sleeve.

In testimony whereof I have signed my name to this specification in the presence of the two subscribing witnesses.

HENRY H. WAUGH.

Witnesses:
H. L. REYNOLDS,
JENNIE REYNOLDS.