

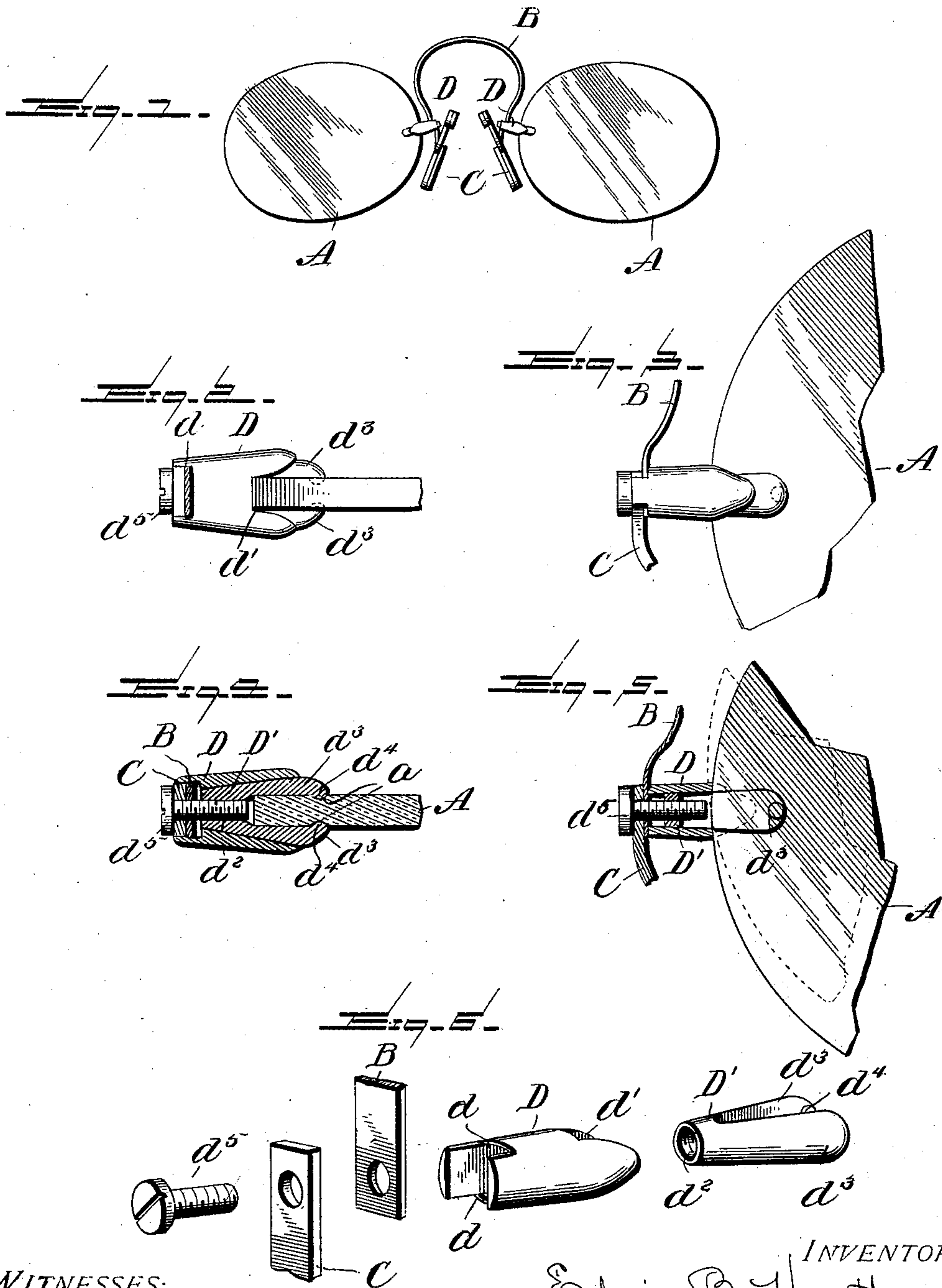
No. 689,617.

Patented Dec. 24, 1901.

E. B. HOWITT.
EYEGLASSES.

(Application filed May 22, 1901.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWIN B. HOWITT, OF NEW BRUNSWICK, NEW JERSEY.

EYEGLASSES.

SPECIFICATION forming part of Letters Patent No. 689,617, dated December 24, 1901.

Application filed May 22, 1901. Serial No. 61,408. (No model.)

To all whom it may concern:

Be it known that I, EDWIN B. HOWITT, a citizen of the United States, residing at New Brunswick, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Eyeglasses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists in the novel features hereinafter described, reference being had to the accompanying drawings, which illustrate one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

Referring to the said drawings, Figure 1 represents an elevation of a pair of eyeglasses fitted with my improvements. Fig. 2 is an enlarged top plan view of one of the lens-clamps. Fig. 3 is a side elevation of the same. Fig. 4 is a horizontal sectional view of the clamp. Fig. 5 is a vertical sectional view showing a portion of the lens attached. Fig. 6 is a perspective view of the parts of the clamp and its connections detached.

My invention relates to rimless eyeglasses; and it consists of a clamp or device for securing the lens to the bow-spring, by means of which the lens will be rigidly held and may be adjusted to the desired position with respect to the bow-spring and nose-clamps, which are also firmly united to the lens-clamp. I also provide means for locking the screw to prevent it from turning.

In the drawings, A A represent the lenses of a pair of eyeglasses, B the bow-spring, and C C the nose-clamps, all of usual or preferred construction. The lens is preferably not bored, as is usual, to receive the lens-clamp, but is provided with a shallow recess *a* (see Fig. 4) on each side at points adjacent to the edge of the lens.

My improved lens-clamp comprises the following members:

D represents a sleeve of tapering construction, provided at its narrow end with notches or recesses *d d* to receive the bow-spring B and an arm of one of the nose-clamps C, which parts are perforated, as shown in Fig. 6. The

wider end of the sleeve is provided on opposite sides with deep recesses or notches *d' d'* in line with the notches *d d* to receive the lens and prevent it from turning.

D' represents the lens-gripping device, which is generally of tapering form and is provided with a threaded aperture *d²* at its smaller end and with spring gripping-jaws *d³ d³*, each provided on its inner face with a projection *d⁴* to engage one of the recesses *a* of the lens.

In assembling the parts the gripping device D' is placed upon the lens with the projections *d⁴* in engagement with the recesses *a*. The gripping device is then inserted in the sleeve D, so as to bring the edge of lens A into the recesses *d' d'*. The end of the bow-spring B and an arm of one of the nose-clamps C are then inserted in the recesses *d d* of sleeve D, and a screw *d⁵* is passed through apertures in the bow-spring and nose-clamp and into the threaded aperture of the gripping device. The screw is then turned up tight, it being observed that this will draw the gripping device into the sleeve and by reason of the conical shape of the parts will compress the gripping device onto the lens, while the lens is held rigidly from turning by the recesses or notches *d' d'*. The parts will be so constructed that when the screw *d⁵* is turned up tight the lens will be clamped rigidly between the jaws of the gripping device, and the inner edge of the lens will be drawn into engagement with the bottom edges of the recesses *d' d'*, which form seats for the lens.

In adjusting eyeglasses to the nose of a wearer it is customary to bend the bow-spring or nose-clamps to accomplish this result; but this is frequently unsatisfactory, especially in the case of cylindrical lenses, where the correct position of the lenses while in use is extremely necessary. In using my improved clamp the exact position of the lens can be obtained by filing away the lens-seat in the bottom of one or the other of the recesses *d' d'*, thus raising or lowering the lens with respect to the frame without distorting or bending the bow-spring and nose-clamps. This is a very important feature of the invention, and in Fig. 5 I have illustrated in dotted lines a position to which the lens may be adjusted by filing away the upper lens-seat in the upper

recess d' . The jaws of the gripping device are also formed so that as they are pressed together by being drawn into the sleeve D they will engage and clamp the threaded portion of the screw d^5 , thereby forming a lock to prevent the screw from turning accidentally. This is clearly shown in Fig. 4. The screw-threaded part of the gripping device being of very thin metal as actually constructed will also be wedged within the sleeve when the screw is turned up tight and will be compressed upon the threads of the screw, so as to form an additional lock for the same.

In the drawings I have shown the device several times magnified in order that the construction of the parts might be more readily understood. The device, however, is very small and is neat and attractive in appearance and holds the lens with absolute rigidity.

What I claim, and desire to secure by Letters Patent, is—

1. In an eyeglass, the combination with a sleeve provided with recesses to receive a lens, and hold it from lateral movement, of a gripping device, provided with jaws for engaging opposite sides of the lens, and means for drawing said gripping device into said sleeve to clamp the lens between said jaws and draw it rigidly into said recesses, substantially as described.

2. In an eyeglass, the combination with a sleeve provided at its outer end with recesses in line with each other, the bottom of each recess forming a seat for the edge of the lens, of a gripping device provided with two jaws

to engage the lens, and means for drawing said gripping device into said sleeve to draw the edge of said lens into contact with said seats, whereby by filling one or the other of said seats the position of the lens can be adjusted, substantially as described.

3. In an eyeglass, the combination with a sleeve tapered internally and provided with recesses to receive the edge of a lens and prevent it from lateral movement, of a tapered gripping device having a threaded aperture and gripping-arms provided with projections to engage recesses in a lens, and a screw passing through the aperture in said gripping device and lying between said gripping-arms, said arms being constructed to clamp said screw and form a lock to prevent it from turning, substantially as described.

4. In an eyeglass, the combination with a sleeve tapered internally, of a tapered gripping device having an internally-threaded portion of very thin material, and a pair of lens-gripping arms, and a screw engaging said internally-threaded portion of said gripping device to draw it within the tapered sleeve, whereby the threaded part of said gripping device will be compressed upon the screw and form a lock therefor, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

EDWIN B. HOWITT.

Witnesses:

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ROBT. W. HELM.