

(No Model.)

DE WITT C. PRUDDEN & E. F. JENSEN.
EYEGLASSES.

No. 588,175.

Patented Aug. 17, 1897.

Fig I

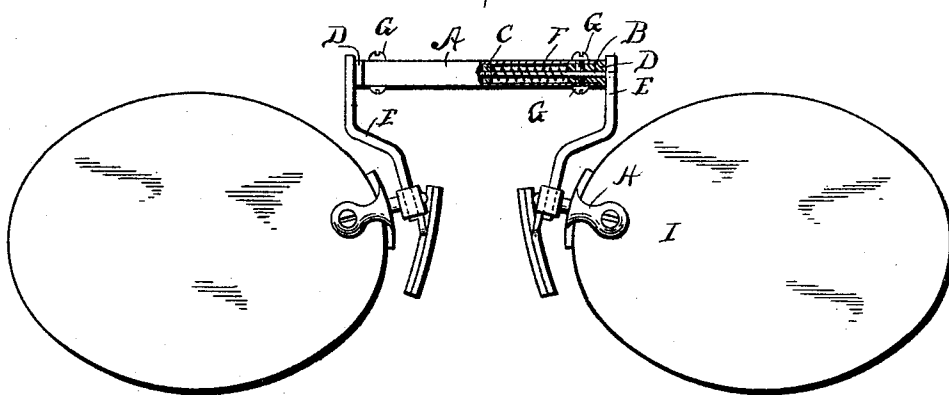


Fig II

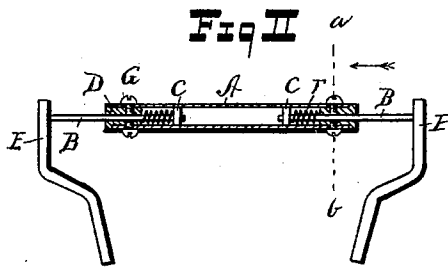


Fig III

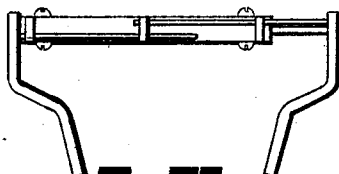


Fig IV

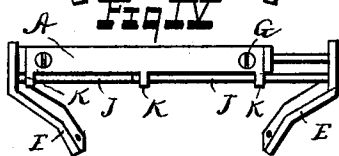


Fig V

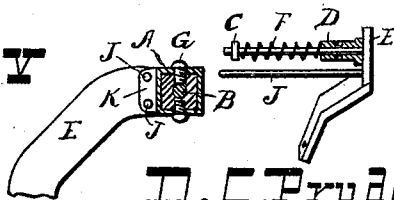


Fig VI

Witnesses.
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Inventors,

By Warren L. House, their Attorney.

UNITED STATES PATENT OFFICE.

DE WITT C. PRUDDEN AND EDWARD F. JENSEN, OF KANSAS CITY,
MISSOURI; SAID PRUDDEN ASSIGNOR TO SAID JENSEN.

EYEGLASSES.

SPECIFICATION forming part of Letters Patent No. 588,175, dated August 17, 1897.

Application filed February 26, 1896. Serial No. 580,807. (No model.)

To all whom it may concern:

Be it known that we, DE WITT C. PRUDDEN and EDWARD F. JENSEN, citizens of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Eyeglasses, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to improvements in spring-clasps for eyeglasses or eyeglass-mountings.

The object of our invention is to provide a spring-clasp which is readily attachable to the ordinary eyeglass-frame or eyeglass-mountings; to provide a spring-clasp which by its peculiarities of construction is cheap to manufacture, easily adjusted for use, not liable to get out of order, and in which the parts may be quickly detached for the purpose of repairing, cleaning, or for any other object.

Our invention consists, further, in certain peculiarities of construction hereinafter fully described, and set forth in the claims.

In the accompanying drawings, illustrative of our invention, Figure 1 represents a front elevation view of our invention as applied to a pair of eyeglass-mountings. In this view a portion of the tubular box is shown in section. Fig. 2 represents an elevation view with the tube and the two end thimbles shown in vertical section. Fig. 3 represents a rear elevation view showing one of the arms E in the outer position. Fig. 4 represents a top view of what is shown in Fig. 3. Fig. 5 represents a transverse vertical sectional view taken on the dotted line *a b*, as indicated by the arrow. In this view the lower end of the arm E is broken away. Fig. 6 represents a top view of one of the arms E and some of its connected parts, the thimble D being shown in section.

Similar letters of reference indicate similar parts.

A indicates a horizontal tube or box, preferably rectangular in shape. In each end of the tube A is fitted a cap D, which is secured in its position by means of two vertical screws G, located, respectively, upon the upper and lower sides of the tube A and which pass through vertical openings provided in the

said tube and engage vertical screw-threaded openings provided in the cap D. Each of the caps D is provided with a central longitudinal opening, in which is movably fitted a horizontal rod B, the outer end of which is rigidly secured to a metallic arm E near its upper end, the lower end of the arm E being secured in any desirable manner to the eyeglass-mounting H, which may be of any of the forms in common use. The inner end of each of the rods B is screw-threaded and is provided with a nut C, which is of the same shape as the inside of the tube A and is longitudinally movable therein. Encircling the rod B and located between the nut C and the cap D is a coil-spring F, the tension of which is such as to force the rod B inwardly until the arm E comes in contact with the outer surface of the cap D. Rearwardly extending from the back of the tube A are three projections K, located, respectively, one at the center and one at each end of the said tube.

Parallel with each of the rods B is a rod J, the outer end of which is secured firmly to the arm E. The said arm J is movably fitted within openings through the projections K and is of a sufficient length not to be withdrawn from the central projection K when the arm E is pulled out to the farthest limit of movement. The object of the rods J and the projections K, through which the said rods extend, is to prevent rotation of the lenses about the tube A. Such rotation, if it should occur, would have the effect of placing the lenses at different angles with reference to the line of sight. In order not to interfere one with the other, one of the arms J is mounted a short distance above the other one.

The parts may be composed of any suitable material, but we prefer to always make the cap D of hardened steel to withstand the wear occasioned by frequently pulling out the rods B when adjusting the eyeglasses to the nose.

My invention is operated as follows: The arms E are withdrawn away from the tube A against the pressure of the springs F until the mountings H are far enough apart to embrace the bridge of the nose. The springs F by their constant tension serve to hold the apparatus securely upon the nose. One

of the functions of the nuts C is to provide means for varying or changing the tension of the coil-springs F. This is accomplished by rotating the nuts C upon the rods B forward or backward upon the screw-threaded ends of the rods to the desired position before the rods are placed in the tube A. The rods J, operating within the openings in the projections K, serve to prevent rotation of the rods B. If for any reason it is desirable to replace one of the springs F, the screws G are removed and the rod B, together with the nuts C, spring F, and cap D, are withdrawn from the tube A, after which the nut C may be removed and a new spring substituted for the spring removed. The tube A is made rectangular in shape to prevent the rotation of the nut C upon the rod B. However, the tube A may be cylindrical in form, in which case the nut C would have a circular shape and would be prevented from rotating upon the rod B. In cases where the tube A is cylindrical in form two nuts C would be required upon each inner end of the rods B, one of the nuts serving as a lock-nut to prevent circumferential movement of the other nut.

Various modifications in construction may be made from what we have shown without departing from the spirit of our invention.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In eyeglasses, the combination with two arms adapted to be secured to the lens-mountings, of a pair of inwardly-extending rods secured to each arm, the inner end of one of the rods of each pair being provided with an abutment, a tube provided with external guides in which the other two rods are movable lengthwise, a cap for each end of the tube, the said caps being provided each with an opening in which is fitted movably one of the rods having the abutment thereon, and a coil-spring encircling each of the rods located within the tube between the abutment thereon and the cap, substantially as described.

2. In eyeglasses, the combination with two arms adapted to be secured to the lens-mountings, of a pair of inwardly-extending rods secured to each arm, a longitudinally-adjustable

abutment upon one rod of each pair, a tube provided with external guides in which the other two rods are lengthwise movable, a detachable cap fitted to each end of said tube and provided each with an opening in which is movably fitted one of the rods having the adjustable abutment, and a coil-spring encircling each of the rods having said abutment between the cap and the abutment, substantially as described.

3. In eyeglasses, the combination with a tube provided at each end with a detachable cap having a central opening, of two arms adapted to be secured to the lens-mountings, a pair of inwardly-extending rods secured to each arm, one of each of said pairs being screw-threaded at its inner end, the said screw-threaded rods being longitudinally movable in the cap-openings, and the other two rods being fitted to and movable lengthwise in external guides provided on the said tube, a nut mounted upon the screw-threaded end of each of the rods located within the tube, and a coil-spring encircling each screw-threaded rod between the nut and cap, substantially as described.

4. In eyeglasses, the combination with two arms adapted to be secured to the lens-mountings, of a pair of rods inwardly extending from each of said arms, a tube provided with external projections having guide-openings in which are fitted respectively one of each of said pairs of rods, a cap for each end of the tube having an opening in which is fitted one of the other rods, an abutment upon the inner end of each of the rods which are located within the tube, a coil-spring encircling each of said rods between the abutment and the cap, and a screw fitted in a screw-threaded opening near each end of the said tube, and adapted to engage the adjacent cap to prevent its displacement, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

DE WITT C. PRUDDEN.
EDWARD F. JENSEN.

Witnesses:

WARREN D. HOUSE,
PHINEAS DEAN.