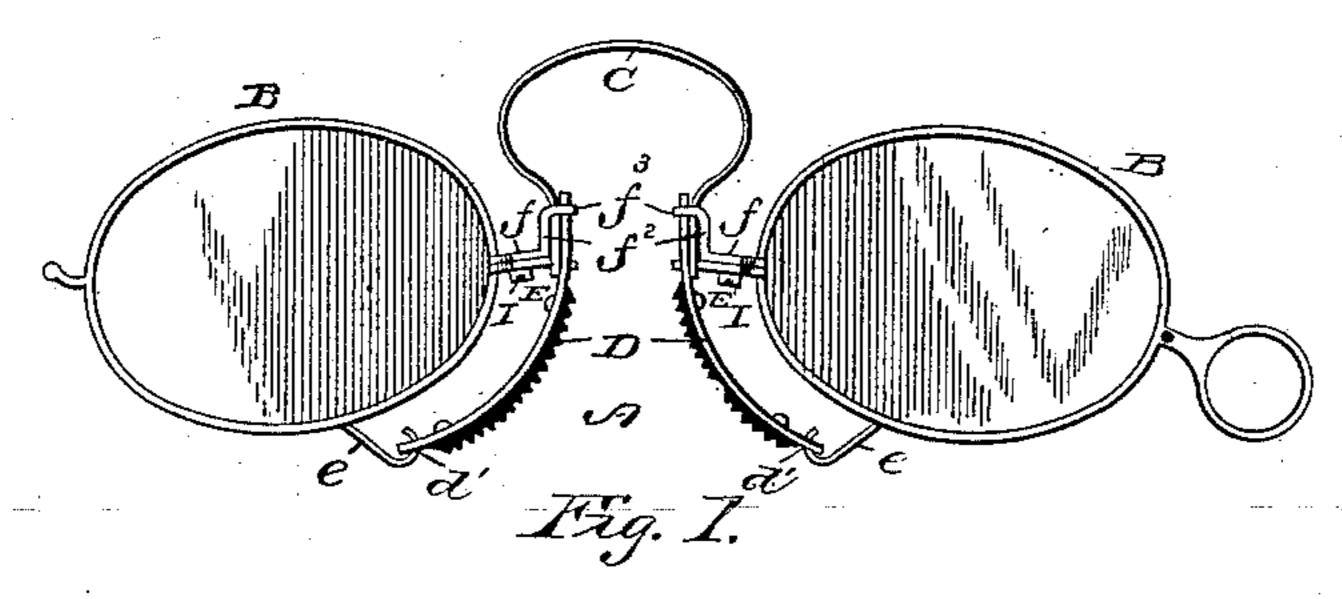
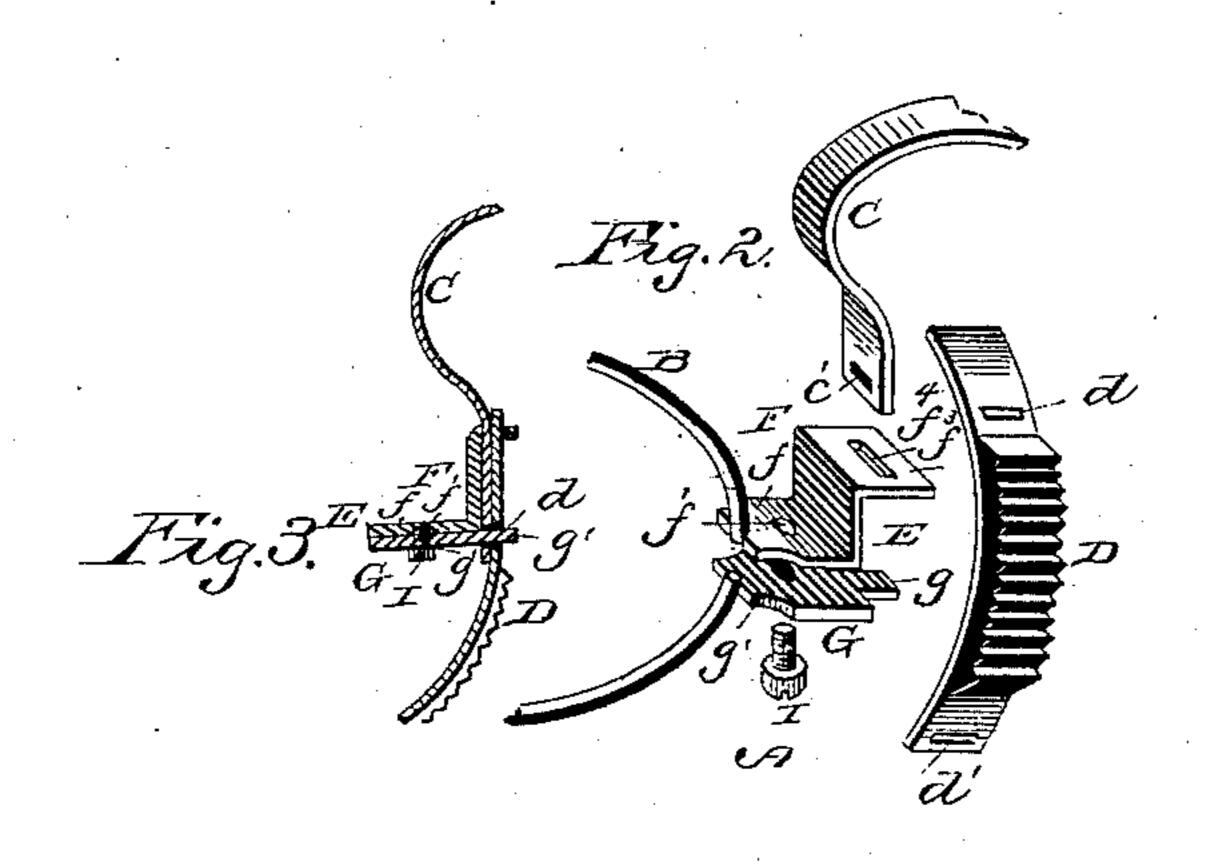
## J. CURRIN.

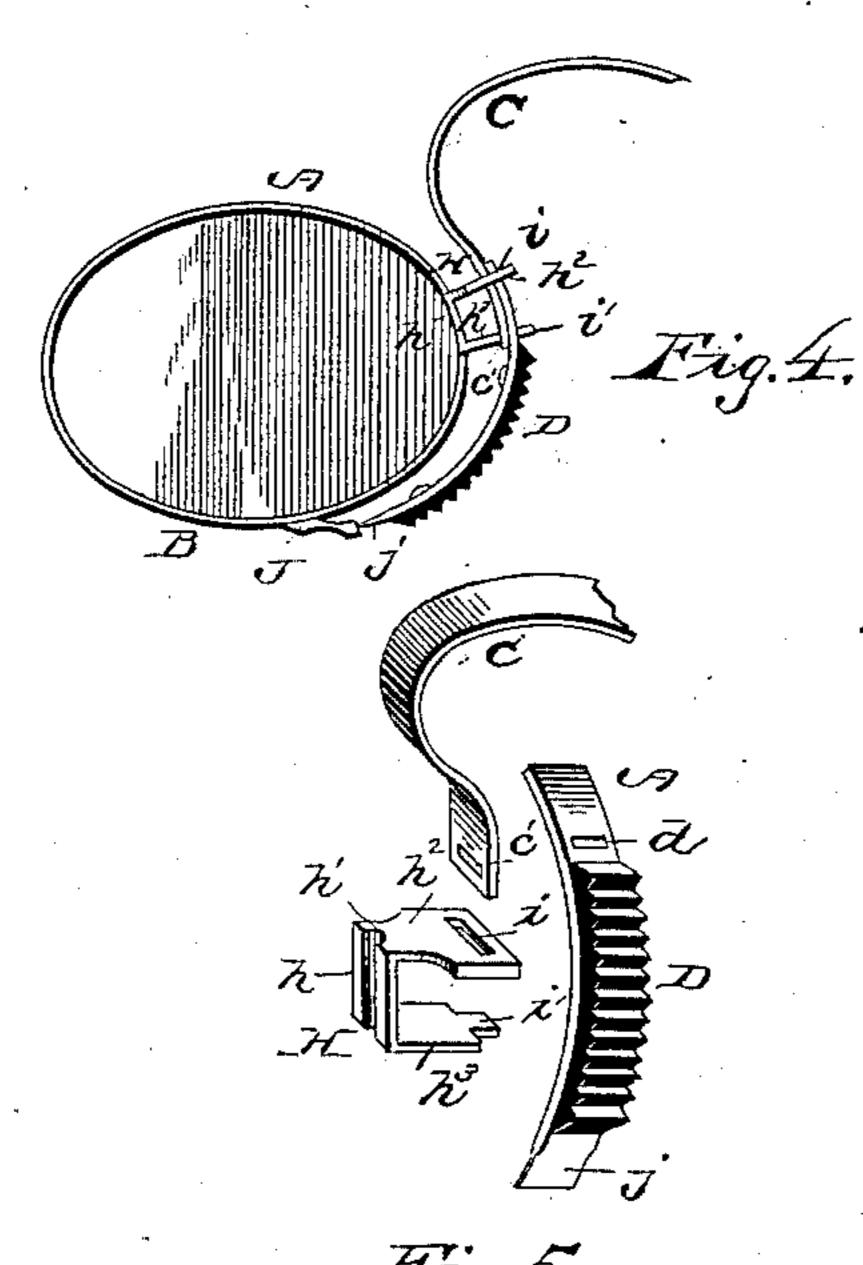
EYEGLASSES.

No. 333,928.

Patented Jan. 5, 1886.







WITNESSES M. Kashiele, Deruhas Thy Charles Attorneys

## United States Patent Office.

JOHN CURRIN, OF SOUTHBRIDGE, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO NELSON BAKER, OF SAME PLACE.

## EYEGLASSES.

SPECIFICATION forming part of Letters Patent No. 333,923, dated January 5, 1886.

Application filed October 10, 1885. Serial No. 179,550. (No model.)

To all whom it may concern:

Be it known that I, John Currin, a citizen of the United States, residing at Southbridge, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Eyeglasses, of which the following is a specification, reference being had to the accompanying drawings.

My invention has relation to improvements in eyeglasses; and the novelty consists in the peculiar construction, arrangement, and combination of parts, substantially as hereinafter fully set forth, and particularly pointed out in the eleips.

the claims.

The invention has for its object the provision of means whereby the spring and noseguard are detachably connected to and easily and readily removable from the frame that supports the glass, and which can be fitted to and removed from the "studs" without the aid of a screw-driver or other tools, as is necessary in devices of this class employing screws, thus providing a screwless eyeglass-frame; and it has, further, for its object to provide means which shall be simple, strong, and durable in construction, thoroughly effective in operation, and manufactured and sold at a minimum of cost.

In the accompanying drawings, Figure 1 is a view in elevation of an eyeglass-frame embodying my invention. Fig. 2 is an enlarged detail view of one of the frames and the spring and nose-piece attaching devices, and Fig. 3 is a vertical sectional view thereof. Figs. 4 and 5 are detail views of modified forms of my invention.

invention.

Like letters of reference in the several figures of the drawings denote corresponding parts.

Referring by letter to the drawings, A designates my improved eyeglass, comprising the glass-frames B, the spring C, for connecting the frames together, and the nose pieces or guards D, secured to the adjacent edges of the frames B, and adapted to clamp the device upon the nose of the wearer.

The frames B are of the usual well-known form and construction, and no claim is made thereto in the present case, the novelty in the present invention being confined to the peson culiar features or devices for securing the

springs and nose-guards detachably to the eyeglass-frames without employing any fasteningscrews, as has heretofore been the common practice, thus necessitating the employment of screw-drivers and other tools when taking 55 the device apart for repairs.

I will only describe the connecting or fastening device for one end of the spring and one of the nose-guards; but it will be understood that two of such fastening devices and noseguards are necessarily employed in a com-

plete eyeglass.

E designates a stud secured to the eyeglassframe B, on the upper inner edge thereof, by solder, or in any other suitable manner, and 65 comprising two parts, F.G. The part G is a flat piece or plate having its outer end reduced or pointed to provide a projecting ear or lug. g, said plate being further provided with an aperture or opening, g', for the passage of the 70 securing bolt or screw I, to fasten the parts F G together. The part F comprises a horizontal lower arm, f, having an aperture, f', a vertical arm,  $f^2$ , arranged at right angles to the arm f, at the outer edge of the same, and an 75 upper projecting arm,  $f^3$ , at right angles to the vertical arm  $f^2$ , and having a transverse slot,  $f^4$ , for the passage of the lower end of the spring and the upper end of the nose-guard.

The lower end of the spring C is slotted as at 80 c', and in order to secure the spring to the stud-arms F G the lower slotted end thereof is passed through the slot  $f^*$  in the arm  $f^3$ , and the slot c' therein fitted over the projecting ear or lug g of the arm G, as clearly shown. 85

The upper end of the nose-guard D is provided with a transverse slot, d, near the outer end thereof, and to secure said upper end of the nose-guard detachably to the eyeglass-frame stud the slot d therein is fitted over the 90 lug g of the part G, and the upper end within the walls of the slot  $f^4$  of the part F, the upper end of said nose-guard bearing against the lower end of the spring G, and serving to hold it from disengagement. The lower end of the spring bears firmly against the outer vertical face of the arm  $f^2$ , and the upper end of the nose-guard bears firmly against the spring, and is held in place by reason of the upper end being fitted in the slot of the arm  $f^3$ , and 100

the slot d therein being in engagement with the lug g. The lower end of the nose-guard is provided with a transverse slot, d', that engages the bent arm or hook e, secured to the 5 eyeglass-frame, near the lower under surface thereof. The parts C D are thus securely and firmly connected to the eyeglass-frame without the use of screws or like fastening devices, while at the same time they can be readily to and easily detached or disengaged therefrom when one of the parts shall have been broken, and such detachment can be effected without the use of a screw-driver or other tool or implement, as will be very readily understood.

In the modification shown in Figs. 4 and 5 the stud is made in one piece, in lieu of two pieces, FG. (Shown in Figs. 1, 2, and 3.) This stud H comprises a vertical arm, h, having a recessed portion, h', on its inner face, where 20 it is secured to the eyeglass-frame B and an upper and lower horizontal arm, h2 h3, respectively. These arms  $h^2 h^3$  are provided with a slot, i, and a lug, i', respectively, which correspond to the slot  $f^4$  and  $\log g$  of the parts F G, 25 respectively. The spring and the nose-guard in this device are of similar construction to those shown in Figs. 1, 2, and 3, and the manner of connecting them to the stud-arms is precisely the same as in the first device, the 30 only difference between the two devices being in the construction of the studs and in the manner of securing the lower end of the noseguard to the eyeglass-frame. The lower end of the nose-guard in this instance is provided 35 with a projecting tongue, j, that is preferably reduced and fits in a socket (not shown) in an ear or lug, J, secured to the frame B, as shown.

portion of parts may be made without departo ing from the principle of my invention. Having thus fully described my invention,

Various slight changes in the form and pro-

•

what I claim as new, and desire to secure by

Letters Patent, is—

1. In an eyeglass, the combination of a frame, a stud secured thereto, a spring hav- 45 ing its lower end detachably connected to the stud, and a nose-guard removably secured at its lower end to the frame and having its upper end bearing against the lower end of the spring, to hold the same in place, and detach- 50 ably connected to the stud, substantially as described.

2. In an eyeglass, the combination of a frame, a stud secured thereto and having an upper slotted arm, and a lower arm provided 55 with a lug, a spring having a slotted lower end connected detachably to the lug of the lower stud-arm, and a nose-guard secured at its lower end to the frame and bearing at its upper end against the lower end of the spring 60 and detacnably connected to the stud, sub-

stantially as described.

3. In an eyeglass, the combination of a frame, a stud secured thereto and made in two pieces secured together, one piece having a 65 projecting ear or lug and the other piece having a slotted arm arranged above the projecting lug of the fellow piece, a spring passedthrough the slotted arm of one of the pieces of the stud and having a slot in its lower end 70 fitted over the lug of the lower piece of said stud, and a nose-guard detachably connected at its lower end to the frame and having its upper end passed through the slotted upper arm of the stud-piece, and slotted to fit over 75 the projecting lug of said stud and bearing against the spring, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

presence of two witnesses.

JOHN CURRIN.

Witnesses: JOSEPH E. PROULX, F. P. PRATT.