(Model.)

F. TERSTEGEN.

EYEGLASS FRAME.

No. 254,070. Patented Feb. 21, 1882.

Fig. 1

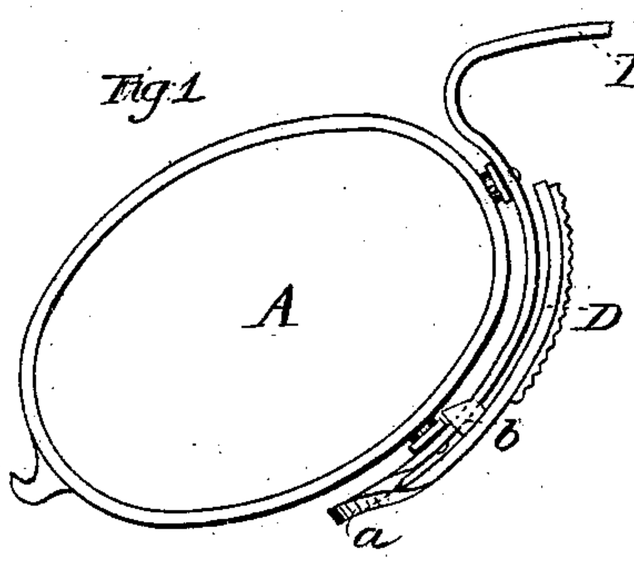

Fig. 2.

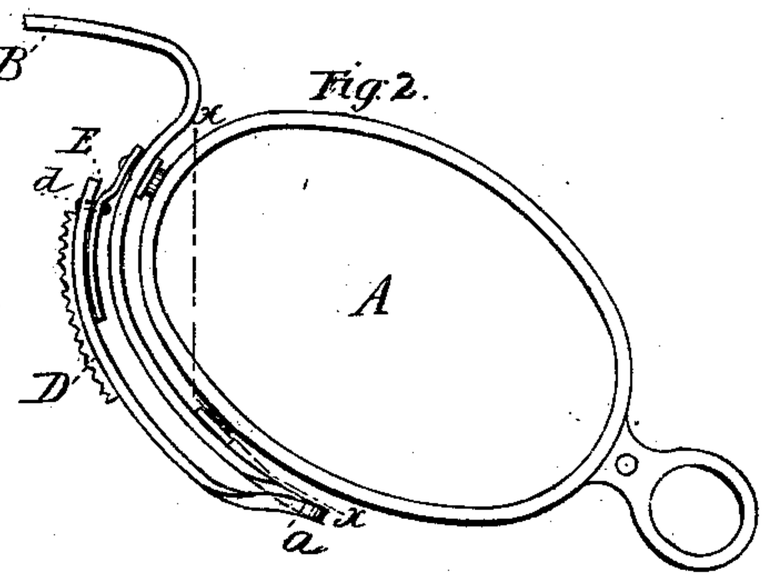

Fig. 3.

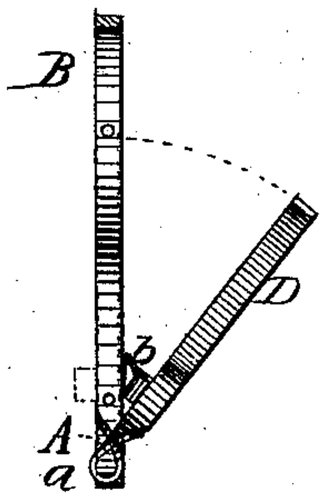

Fig. 5

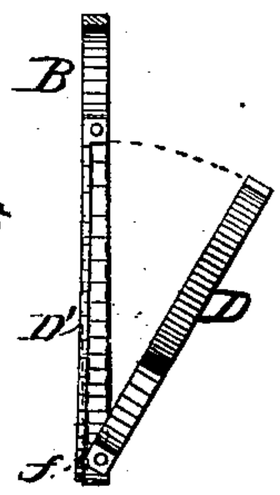

Fig. 4

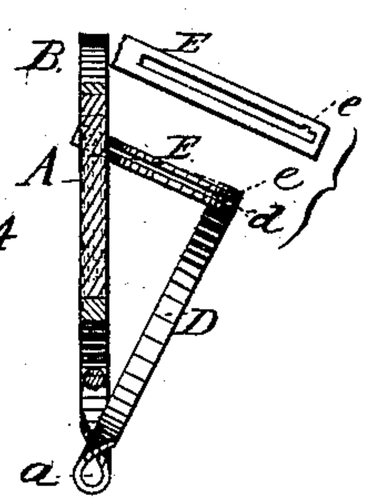

Fig. 6.

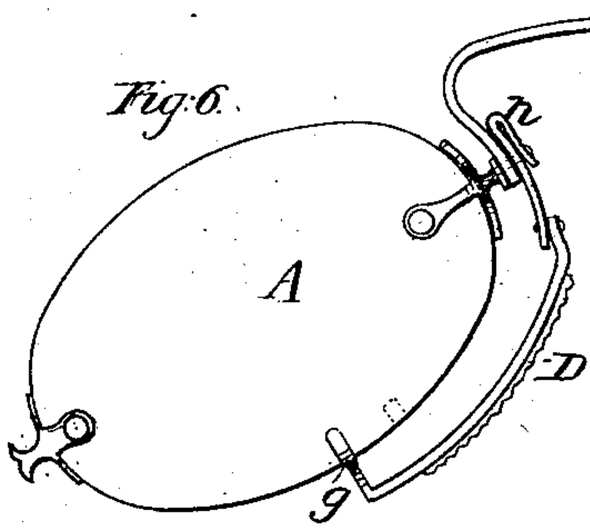

Fig. 7

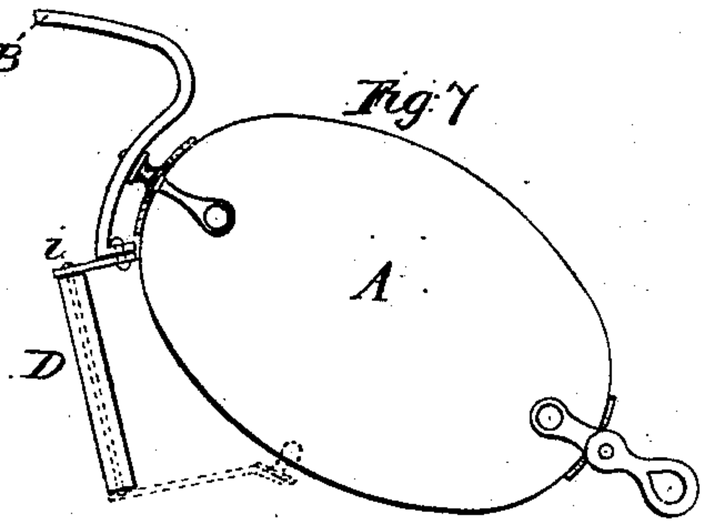

Fig. 8.

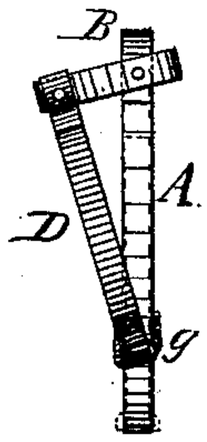

Fig. 10.

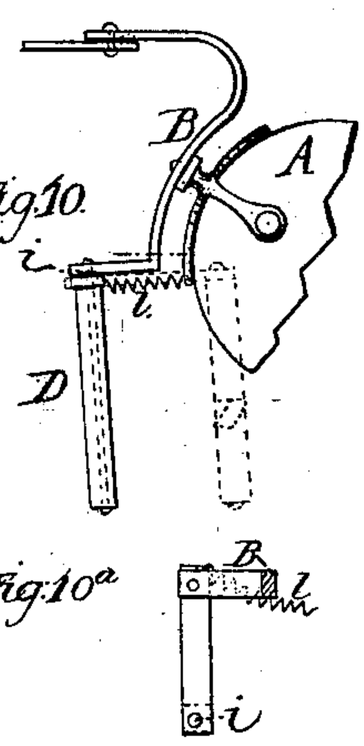

Fig. 9

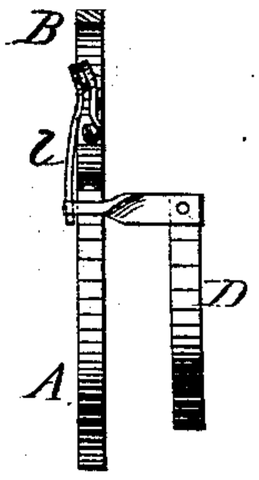

Fig. 10a

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FRED TERSTEGEN, OF ELIZABETH, NEW JERSEY.

EYEGLASS-FRAME.

SPECIFICATION forming part of Letters Patent No. 254,070, dated February 21, 1882.

Application filed May 20, 1881. (Model.)

To all whom it may concern:

Be it known that I, FRED TERSTEGEN, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented new and useful Improvements in Nose-Pieces for Eyeglasses, of which the following is a specification.

The object of my invention is, first, to adapt the nose-pieces of eyeglasses to be adjusted quickly and accurately to the required position out of the plane of the glasses; second, to arrange them to be held in the position to which they are set; third, to make them self closing or folding; and, lastly, to construct them so that they will not catch in the guard, clothing, or other object.

In the accompanying drawings, Figure 1 represents in elevation my improvement in nose-pieces applied to an eyeglass. Fig. 2 shows the same with the end guard attachment. Fig. 3 is an edge view of Fig. 1. Fig. 4 is a sectional view of Fig. 2, taken on line *x x*. Fig. 5 is a modification of Fig. 1. Fig. 6 represents the improvement adapted specially for application to frameless glasses. Fig. 7 shows a nose-piece capable of adjustment in different directions. Fig. 8 shows an edge elevation of Fig. 6. Fig. 9 represents a self-opening nose-piece. Figs. 10 and 10ª show the nose-piece represented in Fig. 7 arranged to open automatically.

Referring to the drawings, A represents the lenses, B the bow-spring, and D the nose-pieces.

In Figs. 1 and 2 the bow-spring and nose-piece are represented as formed in one piece, the bend which connects them forming a spring, *a*. The nose-piece may, however, be made separate and connected at its attached end by a spiral or other suitable spring with the bow-spring or with the frame, or, if a frameless glass is used, with a clamp on the edge of the lens. The purpose of the spring is to make the nose-pieces self-closing.

To hold the nose-pieces in place when set out of the plane of the glasses, any suitable device may be employed. In Fig. 1 a finger lug or stop, *b*, is shown for this purpose. This finger lug or stop consists of an angular piece of metal attached to the nose-piece so that its free end projects out at right angles to the nose-piece. Instead of connecting the lug finger or stop *b* with the nose-piece, it may be attached to the bow-spring or to the frame of framed glasses, or to a clamp placed on the lens of frameless glasses, in the same manner as it is attached to the nose-piece. The said stop, when attached to the nose-pieces, as in the figure, is passed by the bow-spring when the nose-pieces are moved out to the side opposite that it occupies when the nose-pieces are closed, and, engaging the edge of the bow-spring, prevents the nose-pieces from springing back. When attached to the bow-spring, frame, or lens the nose-piece is moved past the end of the stop. The said stop may also be adjustably attached to its place of attachment, so as to be capable of movement toward and from the axis of the nose-piece, and thus enable the nose-piece to be set and held at variable angles to the plane of the glasses.

In Fig. 2 the device for holding the nose-piece in position also serves as a guard for the end of the nose-piece, which prevents the latter from catching in objects. It consists of a slotted link, E, pivotally attached at one end to the bow-spring; or it may be attached to the frame or to the lens, if preferred. The said link is connected with the nose-piece by a pin, *d*, passed through the slot and fixed to the nose-piece. The edge of the slot in the link may be provided with one or more notches, *e*, adapted to receive and retain the pin *d*, and thereby hold the nose-piece out of the plane of the glasses, as shown in Fig. 4. When the pin is released from the notch the spring-connection throws the nose-piece back in line with the lenses.

Fig. 5 shows a modification of Fig. 1. In this the nose-piece is separate and pivoted to the bow-spring, frame, or lens, as the case may be. A flat spring, D′, is also attached to the bow-spring B or to the lens or to the frame, so that its free end, in which there is a notch, *f*, is opposite the pivoted end of the nose-piece. When the latter is turned out its end bears against and forces back the spring until its angular portion enters the notch *f*, where it is held, and thereby the nose-piece is held in position. As soon as released from the notch the spring throws the nose-piece back in place, as indicated by the dotted lines.

The sliding-link connection for the nose-rest may be made in various ways. For example,

it may be pivoted to the nose-piece, and its slotted and notched part connected with a pin entered into the bow-spring, the frame, or a clamp attached to the lens, and instead of a sliding link an extension link may be employed, made in two or more parts, arranged to slide together when the nose-piece is folded in and to extend when the nose-piece is moved out of the plane of the glasses. The link connection has, in addition to regulating the opening of the nose-piece, the further advantage of preventing the nose-pieces from catching in objects and being broken, as frequently occurs when the ends swing free.

In Fig. 6 the nose-piece has one end provided with a claw, *g*, which grasps the edge of the lens (or the frame, if used,) and the other end pivoted to a link, which in turn is pivoted or fastened to the attachment which connects the bow-spring with the glass; or it may be attached directly to the bow-spring or to the frame. The nose-piece, when closed or folded, is parallel to the lens, but by pushing its claw end in line with the edge of the lens the swinging end of the nose-piece is forced out at an angle to the plane of the glasses, as shown. The fixed end of the link may be doubled over and fastened by the pivot which attaches the link, and thereby form a spring-loop, *h*, which presses against the bearing of the link and tightens the latter on its bearings, so that it will stay in the place it is set. This mode of tightening the nose-piece and holding it in place may be applied to those nose-pieces which have one end free, instead of the spiral spring now employed, as shown in my Letters Patent No. 238,985, dated March 15, 1881.

Instead of a spring-loop for retaining the nose-piece (shown in Fig. 6) in position, the edge of the lens may be provided with notches, as indicated by the dotted lines, to receive and retain the claw *g*, and thereby hold the nose-piece out in the required position.

In Fig. 7 the nose-piece, which may be square or of other suitable shape, is held on a pivot, *i*, fixed to one end of a link, the opposite end of which is pivoted or otherwise suitably attached either to the end of the bow-spring, to the frame, or to a clamp on the edge of a frameless glass. A suitable spring may be attached to the link, so as to throw it around at right angles to the plane of the glasses, and thereby retain the nose-piece out of the plane. By pivoting the nose-piece to the link its surfaces will adjust themselves axially to the part of the nose the nose-piece bears against.

In Fig. 9 the nose-piece is attached in a pendent position to one end of a link, the opposite end whereof may be connected by a pivot or other suitable device with the attachment that connects the bow-spring with the frame or lens, or in any other convenient and suitable manner. A spring, *l*, engages the end of the link and retains it at nearly right angles to the glasses and the nose-piece in a suitable position out of the plane of the glasses, as shown.

The link which supports the nose-piece in Fig. 7 may be provided with a spring, *l*, similar to that shown in Fig. 9, to hold the nose-piece in position, as shown in Figs. 10 and 10ª, and the said nose-piece may be connected with the lens, or with the bow-spring or frame, if preferred, at its lower end, as indicated by the dotted lines in Fig. 7. The link may, however, be held in position by a spring-bearing similar to that shown at *h* in Fig. 6, or of any other suitable construction.

The nose-pieces shown in Figs. 7, 9, 10, and 10ª are folded by turning the link on its pivot to a position about parallel to the plane of the lenses, as indicated by the dotted lines in Fig. 10.

The essential features of my invention are embraced in the construction illustrated by Figs. 2 and 4; and they consist, first, in adapting the nose-pieces to be instantly set and secured in the required position out of the plane of the glasses; second, in connecting both ends of the nose-pieces with the glasses; and, third, in providing springs for throwing the nose-pieces into position, either to fold them or to open them. The first of these essentials is provided by the notched link E, which limits the movement of the nose-piece, so that when it is moved the required distance it is instantly engaged by the notch and thereby adjusted for placing on the nose, instead of having to be put on and taken off to find the right position. Modifications of this arrangement are shown by the stop *b*, Figs. 1 and 3, and the notched spring *f*, Fig. 5. In Figs. 9 and 10 the device for retaining the nose-pieces in position consists of the spring *l*, a yielding stop or adjustment being employed because the nose-pieces are designed to be self-opening.

The second essential feature of my invention—viz., the connecting of both ends of the nose-piece with the frames, &c—which in Fig. 2 is accomplished by the spring *a* and slotted link E is omitted from Figs. 1, 3, 5, 9, 10, and 10ª, but is shown in modification in Figs. 6 and 7.

The third essential feature, consisting in the spring connection for throwing the nose-pieces into position, is shown by the spring *a* in Figs. 1 and 2, and a modification is shown in Fig. 5; but this device is omitted from Figs. 6, 7, and 8. In the case of the arrangements of nose-pieces shown in Figs. 9, 10, and 10ª, the spring is applied to retain the nose-pieces out of the plane of the glasses instead of in a folded position, as in the arrangements heretofore described, thereby illustrating how the invention may be adapted to retain the nose-pieces in either a closed or open position, as may be desired.

The nose-piece shown in Fig. 7, it will be observed, has no device for retaining it in place or throwing it into position; but the arrangement shown in Figs. 10 and 10ª illustrates how it may be arranged when such attachments are required. This figure, however, shows a nose-piece which is adapted to turn on its longitudi-

nal axis, and thereby when applied to the nose to adjust itself to the surface against which it bears.

I claim—

1. As an improvement in nose-pieces for eyeglasses, a nose-piece adapted to be moved out of the plane of the glasses and fastened in the required position, substantially as herein described.

2. In combination with a nose-piece provided with a suitable device for fastening it in the desired position out of the plane of the glasses, a suitable spring for automatically closing the nose-piece, substantially as herein described.

3. A nose-piece for eyeglasses, having both ends connected with the frame or lenses and adapted to be moved out of the plane of the glasses, in combination with a suitable device for fastening the nose-piece in the required position, substantially as herein described.

4. A nose-piece for eyeglasses, having both ends connected with the frame or lenses and adapted to be moved out of the plane of the glasses, in combination with a suitable device for retaining the nose-piece in the required position and a spring for automatically closing the said nose-piece, substantially as herein described.

5. In combination with the nose-piece D, provided with the pin *d*, the slotted connecting-link E, provided with a notch, *e*, substantially as described.

6. The combination of the nose-piece D, provided with a spring for automatically closing the same, with the link E, for connecting its swinging end with the frame, lens, or bow-spring, substantially as described.

7. A nose-piece for eyeglasses, adapted to adjust itself axially to the surface it bears against, in combination with a suitable spring to retain it in place and automatically adjust it to a position out of the plane of the glasses, substantially as herein shown and described.

FRED TERSTEGEN.

Witnesses:

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T. F. SEGUR.