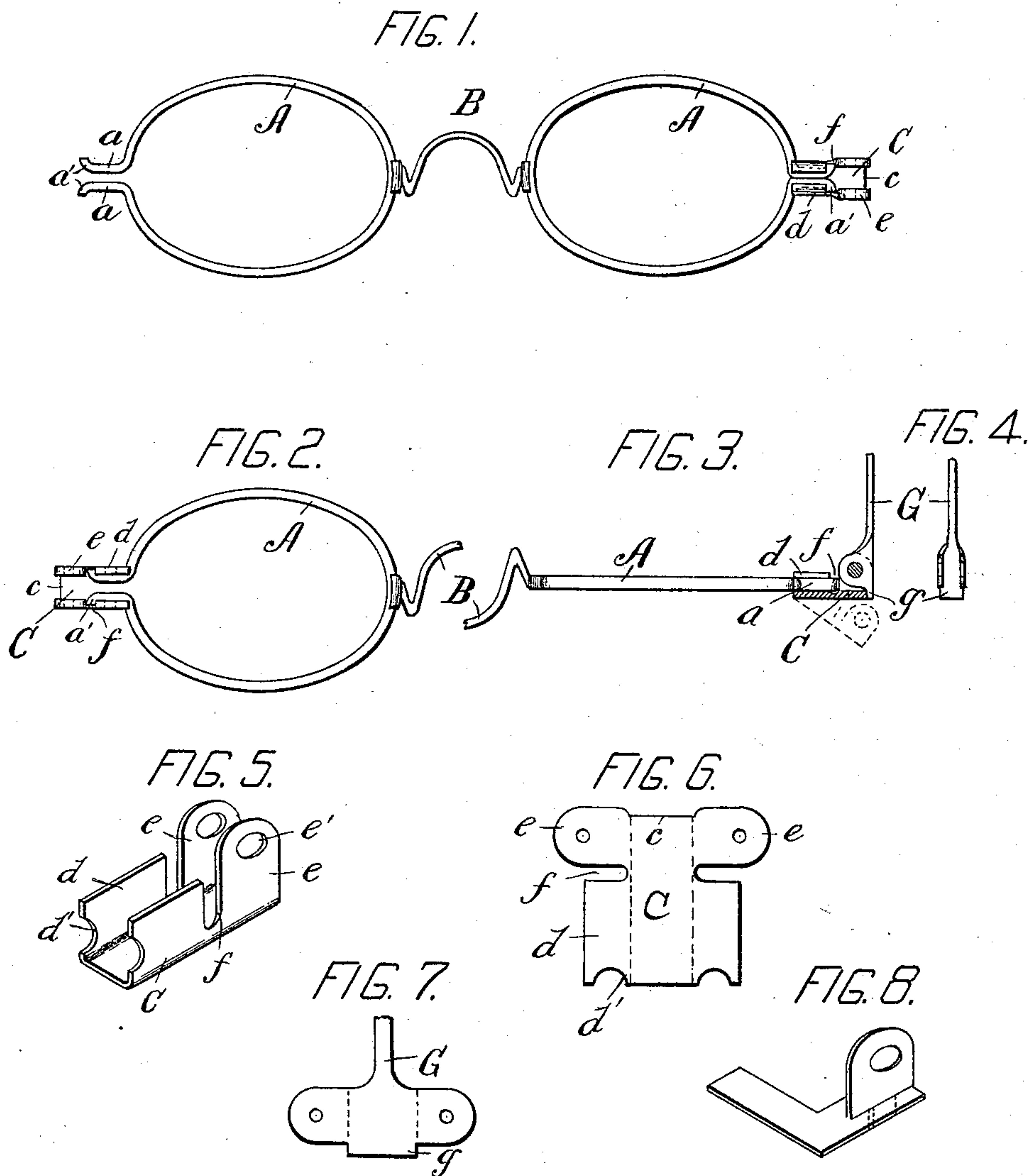


(No Model.)

T. A. WILLSON.
SPECTACLES.

No. 452,008.

Patented May 12, 1891.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS A. WILLSON, OF READING, PENNSYLVANIA.

SPECTACLES.

SPECIFICATION forming part of Letters Patent No. 452,008, dated May 12, 1891.

Application filed January 8, 1891. Serial No. 377,182. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. WILLSON, a citizen of the United States, residing at Reading, in the county of Berks, State of Pennsylvania, have invented certain Improvements in Spectacles, of which the following is a specification.

This invention relates particularly to improved means for securing the lens and providing a temple-joint. Heretofore it has been generally customary to make the joint-pieces integral with the eye-wires and to connect the ends by means of a screw. The end pieces have, however, been made separate and removably secured to eye-wires, and in order to permit the convenient changing of the lenses the ends of the eye-wires have been connected by separate pieces which are hinged by suitable ears to the temple-jointing ends of the wires, so as to readily clasp or unclasp the wires.

The main object of my invention is to provide a separate piece which will itself serve both as a temple-joint and as a means for permanently securing the lens.

The invention is described in connection with the accompanying drawings and is specifically pointed out in the claims.

Figure 1 represents a spectacle-frame, one eye of which shows my separate joint-piece firmly secured thereto, while the other is shown with it entirely removed. Fig. 2 shows one eye of the frame with the joint-piece in position but unsecured. Fig. 3 is an edge view of the finished eye in Fig. 1, showing the joint-piece in section and the temple pivoted thereto. Fig. 4 shows the temple detached. Fig. 5 is a perspective view of the completed joint-piece detached from the frame. Figs. 6 and 7 show the sheet-metal blanks (enlarged) from which the joint-piece and temple are formed. Fig. 8 shows a modified form of joint-piece.

The eye-wires A A are united at their junction with the nose-piece B, as usual. The outer ends *a a*, however, instead of being formed with end pieces which serve as a means for attaching the temple directly, are merely bent at about right angles to that portion of the wire inclosing the lens, thus forming, in connection with said wire and heels or stops *a' a'* at their extremities, U-shaped wire ends

arranged to abut inversely. The separate joint-piece C is preferably punched out of sheet-steel or other suitable metal. The blank thus formed is shown in Fig. 6, and its conversion into the proper form for use (illustrated in Fig. 5) is effected by bending the sides upward at right angles to the dotted lines. Slots *f f* in the bent-up sides divide them into separate ears *d d* and *e e*, the former of which are provided with holes for the temple pivot-pin, while the latter are adapted to fit over the U-shaped ends *a a*, as shown in Fig. 3, the heels *a' a'* of the ends passing into the slots *f f*. Recesses *d'* receive the eye-wires A.

In completing a spectacle the joint-piece C is placed upon the ends of the eye-wires in the manner indicated by dotted lines in Fig. 3, the wires being first placed in the recesses *d'* of the inclined joint-piece, which is then straightened up to position. The lens being in place, a suitable clamping mechanism is used to bend the ears *d d* over the ends *a a*, thus simultaneously closing the wires tightly upon the lens and securing the joint-piece firmly to the spectacle-frame. The temple G is then pivoted between the ears *e e*, and is so arranged that its projecting tongue *g* is seated in a recess *c* in the joint-piece when the temples are spread.

A very neat looking and substantial spectacle-frame may be manufactured easily and economically by means of my separate joint-piece. The construction may evidently be modified without departing from the spirit of my invention. In Fig. 8, for instance, I show a joint-piece having single jointing and clamping ears, and which is obviously used in substantially the same way as that already described. I do not therefore limit myself to the exact means described; but

What I claim is—

1. A separate temple-joint piece for a spectacle-frame, formed with clamping and jointing ears and with a slit or recess, as *f*, between said ears, substantially as and for the purpose set forth.

2. A separate joint-piece for a spectacle-frame, formed with clamping and jointing ears, with a slit or recess, as *f*, between said ears, and eye-wire recesses *d'* in the clamp-

ing-ears, substantially as and for the purpose set forth.

3. A spectacle-frame having the eye-wires bent to form abutting ends without temple-joints, in combination with a separate temple-joint piece having clamping-ears engaging said ends, substantially as set forth.

4. A spectacle-frame having the eye-wires bent to form abutting U-shaped ends, in combination with a separate temple-joint piece having clamping-ears engaging said U-shaped ends between the bends, substantially as set forth.

5. A spectacle-frame having the eye-wires bent to form abutting U-shaped ends, in combination with a separate temple-joint piece

having recesses d' , and clamping-ears engaging said U-shaped ends between the bends, substantially as set forth.

6. In spectacles, the combination, with a detachable joint-piece having a recess c between its jointing ears, of a temple having corresponding jointing-ears and projecting tongue or stop g entering said recess, substantially as set forth.

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

THOMAS A. WILLSON.

Witnesses:

DANIEL ERMENTROUT,
JOS. R. DICKINSON.