

(No Model.)

R. A. CARTER.

MANUFACTURE OF FRAMES FOR EYEGLASSES.

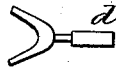
No. 267,493.

Patented Nov. 14, 1882.

*Fig. 1.*



*Fig. 2.*



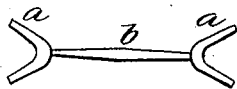
*Fig. 3.*



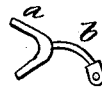
*Fig. 4.*



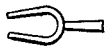
*Fig. 5.*



*Fig. 6.*



*Fig. 7.*



*Fig. 8.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## MANUFACTURE OF FRAMES FOR EYEGLASSES.

SPECIFICATION forming part of Letters Patent No. 267,493, dated November 14, 1882.

Application filed May 13, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT A. CARTER, of Elizabeth, in the county of Union and State of New Jersey, have invented a new and useful Improvement in the Manufacture of Spectacles and Eyeglasses, of which the following is a full, clear, and exact description.

My invention has reference to frameless spectacles and eyeglasses, especially to those in which a screw or bolt passes through the glass and through the arms of the clip. It is, however, applicable to that class of frameless eyeglasses, &c., in which the glass is not perforated, but furnished with one or more cavities, engaging projections on the clip.

The distinctive novelty of this invention lies in the construction of the metallic connections of spectacles, eyeglasses, &c., by a turning process, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, in which my process is illustrated by views of the several parts in their different stages of manufacture.

Figure 1 shows the fork-shaped piece of metal and its shank before connection. Fig. 2 shows a fork with its shank when turned as required in order to be bent into the piece for attaching the glass to the spring of an eyeglass. Fig. 3 is the side view of a fork with its shank, the latter being bent to form a hook for keeping an eyeglass closed. Fig. 4 is the side view of a fork with its shank, the latter being bent to form the handle of an eyeglass. Fig. 5 shows two forks attached to the same shank in order to form the bridge of a pair of spectacles. Fig. 6 shows a fork with its shank, the latter being turned and bent in order to form a hinge for spectacles. Fig. 7 shows a fork when the arms have been reduced and bent, and Fig. 8 shows another form of the piece punched out to form the fork.

The method or process of manufacture is as follows: I first punch out a fork-shaped piece of metal with two arms, as shown in Fig. 1, and where the two arms unite drill a hole, as shown at *a*. Into this hole I fasten a shank, *b*, either by screwing, soldering, or any other method, the shank being so placed that it coincides in direction with the axis of the fork, so

that the whole can be made to revolve around that axis. The shank may be either a round wire, square in cross-section, or of any other suitable form. I then fasten the fork in a lathe and turn off the outside of the fork, the joint, and part or all of the shank. If the shank is to form the connecting-piece for an eyeglass, it is turned for a short distance, and the further portion *d*, as shown in Fig. 2, is left square or of any other suitable shape. It may then be bent in form for being secured to the spring and nose-piece of the glasses. If the shank is to be formed as a catch to the glasses, it will be rounded, as shown in Fig. 3, and then bent up to form the hook. If the shank is to form the handle of the glasses, it will be turned round and made a suitable length, and then bent into the form of a loop, as shown in Fig. 4.

To form the central part or bridge of the spectacles, a fork is attached to each end of the shank, as shown in Fig. 5, and the whole then turned up as required, after which the shank is bent.

To form the hinge-piece shown in Fig. 6, a part of the shank is turned small and a further portion left large and either round or any other shape. The shank is then bent and the thick part slotted and drilled in order to complete the hinge.

To fit the fork for use, the interior is cut out, by a milling-cutter or otherwise, until the arms are sufficiently reduced, and the two arms will then be bent toward each other, thereby forming the clip, as shown in Fig. 7.

Instead of punching out the fork and attaching the shank to it, the shank and fork may be cut out of the same piece of metal, and then turned down, as before described; or, if preferred, the fork may first be turned and the shank, consisting of the wire, attached to it; or the shank may first be attached to the fork and then secured in the lathe and the fork turned up.

Instead of punching out a piece of metal of the form shown in Fig. 1, a piece may be punched out in the form shown in Fig. 8, and the extremities then bent toward each other in order to form the fork, a suitable hole being made in the piece to receive the end of the

shank; or, if desired, a shank may be soldered to the bottom of the fork or clip instead of being inserted in a hole, as described.

5 By this method of construction elegance of appearance is combined with lightness and strength. The fork or blank for the fork is made regular and uniform in the exterior outline of both arms.

10 Having thus described my invention, I claim as new and desire to secure by Letters Patent—  
The hereinbefore-described process of manu-

facturing the metallic connections for spectacles and eyeglasses, which consists in first punching out a piece of metal suitable for a fork, then attaching thereto a shank-piece, and 15 finally shaping the fork and shank by a turning operation, substantially as described.

ROBERT A. CARTER.

Witnesses:

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