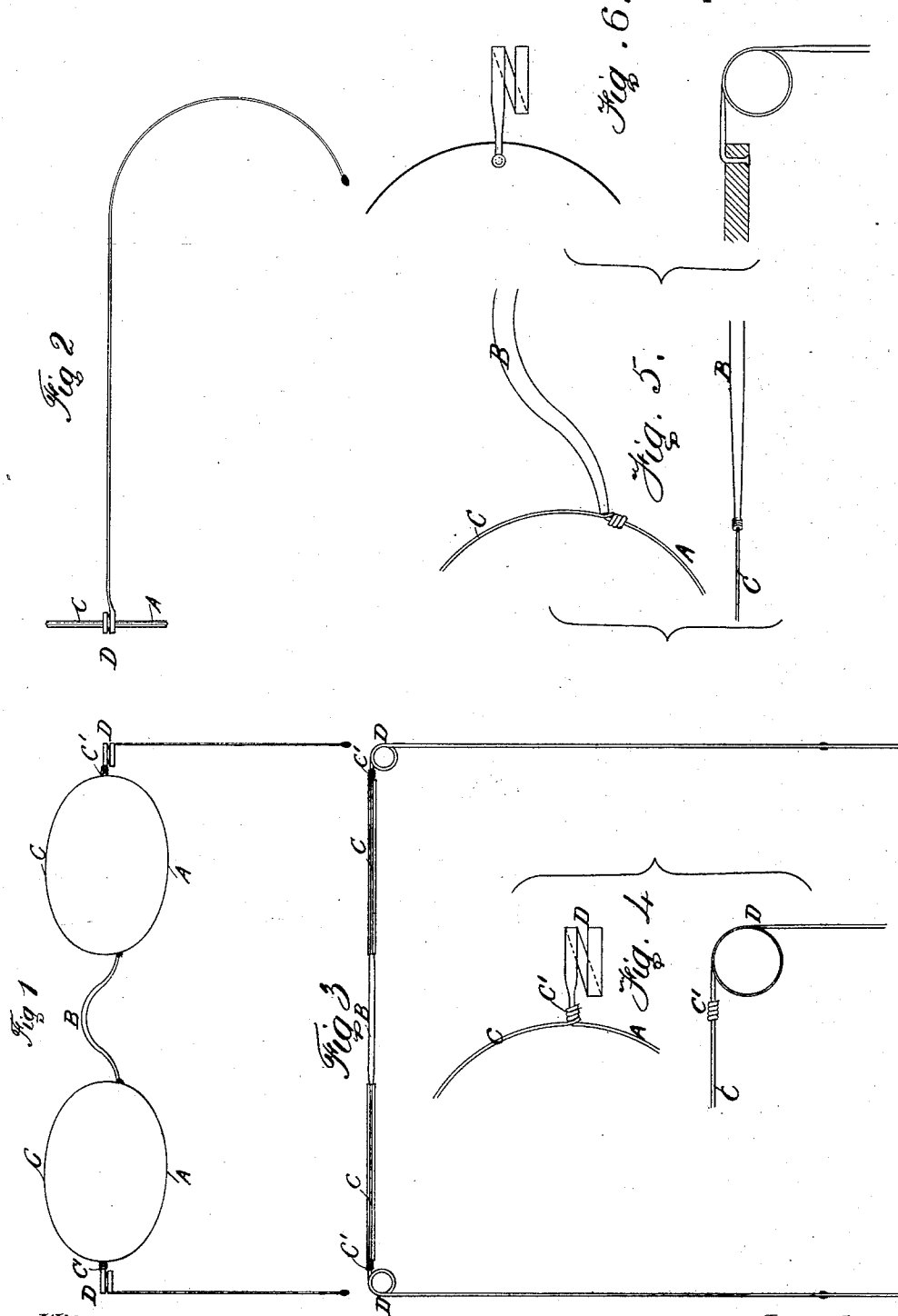


(No Model.)

S. Z. DE FERRANTI.
SPECTACLE FRAME.

No. 327,145.

Patented Sept. 29, 1885.



Witnesses.
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UNITED STATES PATENT OFFICE.

SEBASTIAN ZIANI DE FERRANTI, OF WEST KENSINGTON, COUNTY OF MIDDLESEX, ENGLAND.

SPECTACLE-FRAME.

SPECIFICATION forming part of Letters Patent No. 327,145, dated September 29, 1885.

Application filed February 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, SEBASTIAN ZIANI DE FERRANTI, a subject of the Queen of Great Britain, residing at 5 Stanwick Road, West Kensington, in the county of Middlesex, England, electrician, have invented certain new and useful Improvements in Spectacle-Frames, of which the following is a specification.

This invention has for its object to construct the frames of spectacles at less cost, and to make them lighter than is now usual. For this purpose, in place of connecting the side arms of a frame by hinged joints to the rims which surround the glasses, I form them in one piece with parts of the rims, and I flatten each arm near to the rim from which it springs, and so give it greater flexibility, in order that the side arms may either be folded down, so as to lie parallel with the glasses, (allowing of the spectacles being placed in an ordinary spectacle-case,) or permitted to spring upward to a position at right angles to the glasses, as they have to be when worn. I also increase the flexibility of the side arm by forming it where it meets the rim into a small spiral or helix. One piece of wire forms half of each rim, together with the bridge, which lies over the nose of the wearer, and also, by preference, the two side arms. The other half of each rim is a separate piece, which is prepared with a small helical coil at one end. Through this coil the wire forming the other part of the rim is threaded, and the rim is completed by twisting the former wire around the latter in such a manner that the two parts together embrace the glass.

The edges of the glasses are grooved to receive the rims.

In order that my said invention may be most fully understood and readily carried into effect, I will proceed to describe the drawings hereunto annexed.

In the drawings, Figures 1, 2, and 3 represent a pair of spectacles with frames constructed in accordance with my invention. Figs. 4 and 5 each show in two positions portions thereof to a larger scale. Fig. 6 shows in two positions a modification in the construction of the spectacle-frame. In these figures, A is the continuous main wire, which is preferably of

steel. B is the small tube, of soft iron, (or it may be other metal,) which is threaded on the wire to give substance to the bridge. C are the wires forming the upper parts of the rims. These wires are threaded onto the main wire before this is bent to shape. C' is a small helix at the end of the piece C, through which the main wire passes, fitting it accurately. D is the flattened part of the side arm, bent to a helical form to give the requisite flexibility.

Fig. 5 shows in two positions, the one at right angles with the other, to an enlarged scale, the junction of the wires at the end of the bridge-piece. Fig. 4 shows in two positions, the one at right angles with the other, to a larger scale, the part where the side arms join with the rim and where the wire C is lapped around the main wire to complete the rim and inclose the glasses.

I would remark that the part of my invention which relates to the connection of the side arms without joints, and obtaining the requisite flexibility by flattening and helically coiling, is applicable where the spectacle-frame is not otherwise constructed, as hereinbefore described. For example, Fig. 6 shows in two positions, the one at right angles with the other, this part of the invention applied to spectacles having holes drilled through the glasses. The end of the wire forming the side arm is inserted through the hole, and is made fast by riveting or clinching the end of the wire. Although I prefer to both flatten the wire and to coil it helically, still it is not essential that both methods of obtaining flexibility should be resorted to, for, on the one hand, the unflattened wire may be helically coiled, or, on the other hand, the wire may be flattened and the coiling dispensed with.

I would remark also that other variations in the construction are possible. Thus one piece of wire may be continuous from rim to rim, and form a part of each, while two other pieces of wire each form the side arm and complete a rim.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A frame for spectacles, constructed of

wire in three pieces, with one of these pieces continuous along the two glasses and the bridge and the other pieces completing the frame, substantially as set forth.

5 2. A frame for spectacles, constructed of wire, with one continuous length of wire forming the two side arms and passing along the two glasses and the bridge, substantially as set forth.

10 3. A frame for spectacles, constructed of wire, with the piece of which a side arm is composed continuous along the glass to the bridge, substantially as set forth.

15 4. A side arm for spectacles, constructed of one piece of wire and rendered flexible in the manner described, whereby a jointed connec-

tion is dispensed with, substantially as set forth.

5. A frame for spectacles, having a rim composed of two pieces of wire, one of which is formed with a coil and threaded onto the other, substantially as set forth. 20

6. A frame for spectacles, having the bridge formed of a metal tube with a wire passing through it, and also forming parts of the rims on either side of the bridge, substantially as set forth. 25

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