

J. W. STEWART.
SPECTACLE-FRAME.

No. 170,644.

Patented Nov. 30, 1875.

Fig. 1.

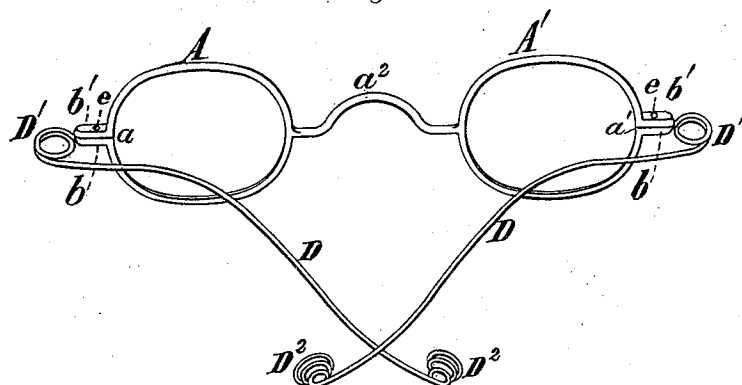


Fig. 2.

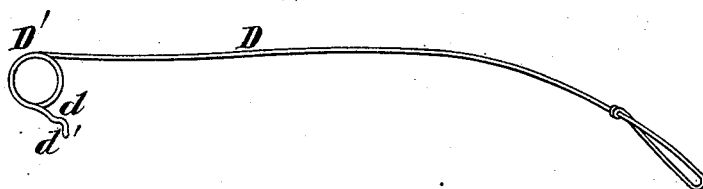


Fig. 3.

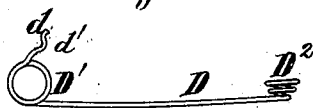
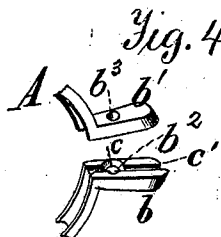


Fig. 4.



Witnesses.
A. Rupert,
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UNITED STATES PATENT OFFICE.

JOHN W. STEWART, OF WOODVILLE, TEXAS, ASSIGNOR OF TWO-THIRDS
HIS RIGHT TO JAMES K. DURHAM AND JOHN N. GOOLSBEE.

IMPROVEMENT IN SPECTACLE-FRAMES.

Specification forming part of Letters Patent No. **170,644**, dated November 30, 1875; application filed
July 15, 1875.

To all whom it may concern:

Be it known that I, JOHN W. STEWART, of Woodville, in the county of Tyler and State of Texas, have invented a certain Improvement in Spectacle-Frames, of which the following is a specification:

This invention relates to spectacle-frames in which the bows are turned into a coil near the points where they are connected to the lens-hoops for the purpose of forming spring-joints, instead of the ordinary pivot-joints.

My improvement consists of a peculiar method of confining the extreme inner ends of the bows between flanges of the lens-hoops, which method will be fully described in the ensuing description, as specifically pointed out in the claims. My improvement further consists in forming what may be termed pads at the outer end of the bows by coiling such ends into volutes.

In the annexed drawings, Figure 1 is a perspective view of my improved spectacle-frame. Figs. 2 and 3 illustrate modified forms of bows. Fig. 3 shows, in perspective and on a magnified scale, the ends of one of the lens-hoops, sprung apart to expose the groove receiving the end of the coil of the bow.

The same letters of reference are used in all the figures in the designation of identical parts.

The lens-hoops A and A', connected, as usual, by the bridge a², are divided, respectively, at a' and a. The adjacent ends of each hoop are provided with flanges b and b¹, the latter having a screw-tap, b³, opposite to a countersunk hole, b², in the former, for the reception of a screw, e, by means of which the ends of the hoop are drawn together to clamp onto the lens. A semicircular groove, c, curved around the holes and intersecting a straight groove, c', is formed in each of the flanges b and b¹, in their contiguous faces, for the reception of the end d of the bow D, said end d being curved at d' to pass around the clamping-screw. The straight portions of the end d lie in the straight groove c' and the curved portion d' in the semicircular groove c.

The bows, whether of the form shown in Fig. 1, or Fig. 2, or Fig. 3, are always coiled near the end, which is to be secured between the flanges b and b¹, as at D¹, by giving it one or two turns, forming a spring at that point answering the purpose of a hinge-joint, which is dispensed with. The bows are made of thin wire, the elasticity of the coil D¹ being sufficient to cause the bows to press inward with a gentle force to hold the spectacles in position on the head of the wearer. When short bows, such as shown in Figs. 1 and 3, are used, their extreme ends are coiled into a volute, as at D², to obtain a broad bearing-surface. The long bow, illustrated in Fig. 2, intended to reach behind the ear, has a loop at its extreme end.

I do not claim broadly forming a coil in the bows near their junction with the lens-hoops for obtaining spring-joints, but confine myself to the manner of uniting the bows thus provided with coils to the lens-hoops, as I have shown and described it; nor do I claim broadly providing short bows with pads or holding-cups, but limit myself to such pads when formed out of the material of the bow itself, by coiling its end into a volute.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The bow D, coiled at D¹, and terminating in the end d, curved at d', in combination with the lens-hoop A, having flanges b and b¹, provided with straight grooves c', and intersecting semicircular grooves c, and the clamping-screw e, substantially as and for the purpose specified.

2. The bow D, turned into a volute, D², at its extreme outer end, substantially as shown, and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JNO. W. STEWART.

Witnesses:

T. D. ROCK,
W. CHAS. HYDE.