

(No Model.)

G. JOHNSTON.
SPECTACLE BRIDGE.

No. 384,260.

Patented June 12, 1888.

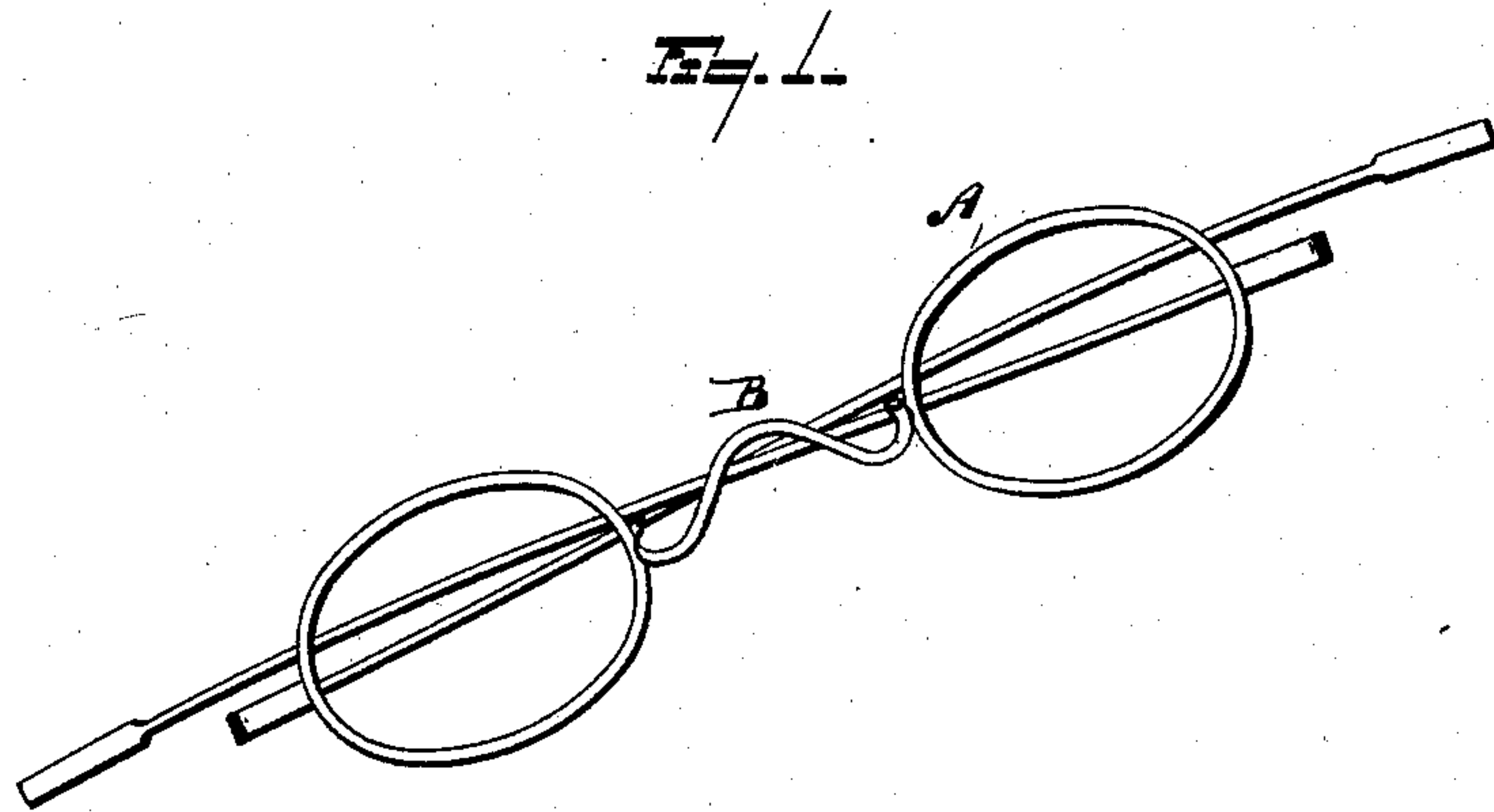


Fig. 2.

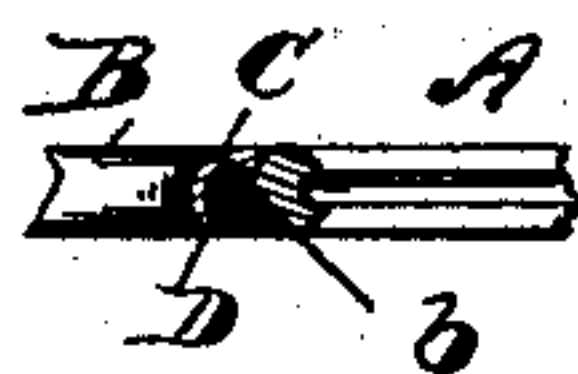
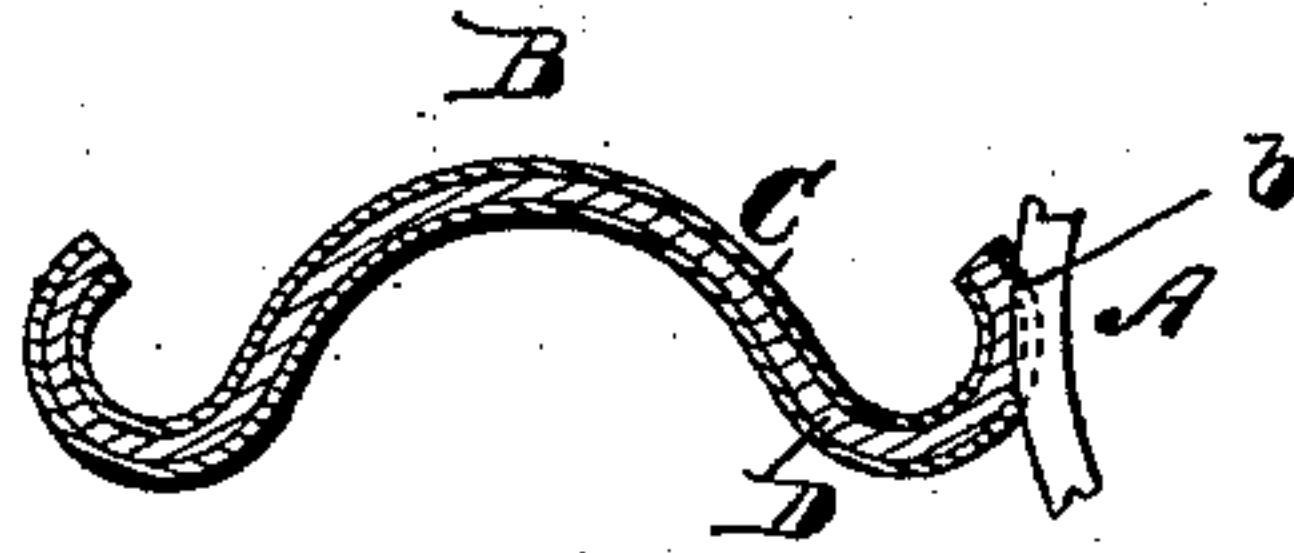
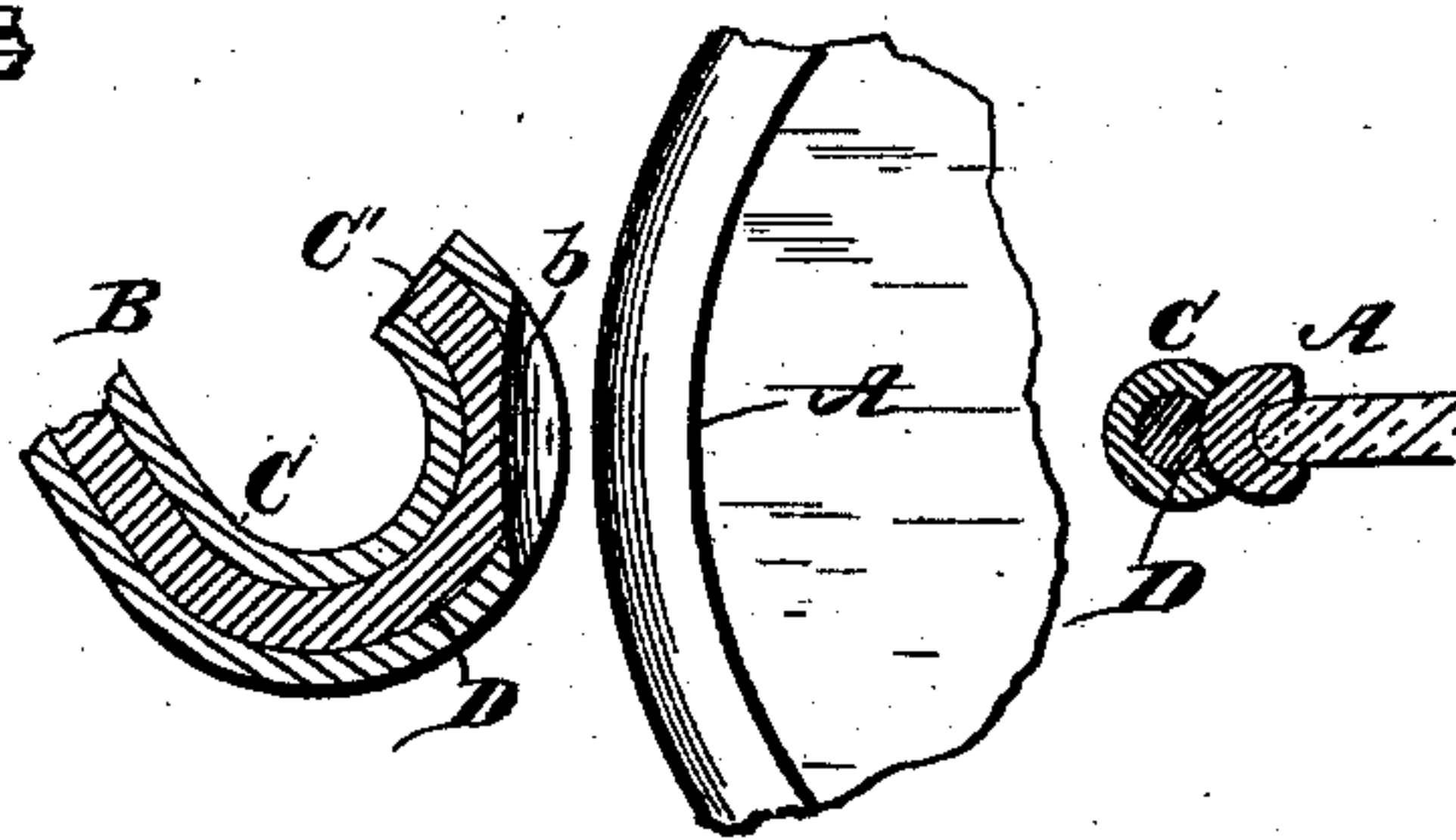


Fig. 3.



WITNESSES.

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SPECTACLE-BRIDGE.

SPECIFICATION forming part of Letters Patent No. 384,260, dated June 12, 1888.

Application filed September 2, 1887. Serial No. 243,622. (No model.)

To all whom it may concern:

Be it known that I, GEORGE JOHNSTON, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Spectacle-Frames; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which a form part of this specification.

My invention relates to spectacle-frames, and has for its more particular object a novel construction of bridge.

Referring to the drawings, Figure 1 represents a spectacle-frame with my improved bridge attached. Fig. 2 shows sectional views of said bridge, showing its more particular construction. Fig. 3 is an exaggerated view illustrating the method of uniting the eye-frames to the nose-piece.

The bridge of spectacle-frames has been heretofore made of hard metal—such as spring-steel—or soft metal—viz., gold, silver, &c. When steel or other hard metal is used, it is well known that the natural moisture of the face coming in contact with the nose-piece soon causes it to corrode, rendering it irritating to the skin, and at the same time very liable to fracture. To avoid this unpleasant tendency many attempts have been made by the manufacturers; but all have their defects. One often practiced is the mere substitution of a soft metal, such as gold or silver; but by employing metals of this nature the necessary stiffness cannot be given to the bridge. It easily bends out of shape and is quite expensive.

Having made a brief statement of the objections to spectacle-frames as they are now made, I will now proceed to explain how they may be entirely removed.

A in the drawings represents the frame of a pair of spectacles; B, the bridge; C, tubing or other covering of soft metal, preferably gold or silver; D, an inner piece of hard metal, preferably steel.

I form the bridge as follows: Over a strip of steel or similar hard metal I slide a tubing of soft metal, then by a tool adapted for the purpose force the tubing into perfect contact with the interior hard metal.

Of course the manner of covering the hard metal may be accomplished in a great variety of ways, and I would have it distinctly understood that I do not limit myself to the precise manner described, but have found the same simple, cheap, and effective.

A bridge of this character is at once stiff and strong, and possesses all the characteristics of a steel bridge, while the gold, silver, or other soft metal prevents corrosion and adds to its lasting qualities.

To attach the bridge to the frame, I prefer to dress off the soft metal at *b* until the metal *D* is exposed; then solder it to the frame. The soft metal is dressed or milled away from the nose-piece in such manner as to form a concaved seat corresponding with the surface of the eye-frame, so that the eye-frame will set in against the steel, or even slightly into the steel, and the soft metal will lie up around the outer surface of the eye-frame. In this position they are soldered, as explained, and the joint thus produced is very strong and secure. This is shown in Fig. 2 of the drawings, but is more particularly illustrated in exaggerated form in Fig. 3. When the nose-piece is thus constructed of a separate piece of steel surrounded by a tubing of gold or non-corrosive metal closely embracing the same, and then bent, as shown in the drawings, dressed away and soldered to the eye-frame, the nose-piece appears to be and has all the advantages of a gold or non-corrosive nose-piece at the extreme ends, the steel is rendered visible at *C'*, which assists materially in convincing, and therefore in selling to, a customer. At the same time, the nose-piece being made entirely separate from the eye-piece, it is adapted for ready connection to any of the various forms of eye-pieces, and so constitutes in itself an article of manufacture applicable to any spectacles.

It is also found that when the bridge is to be attached to a steel or other hard-metal frame it can be accomplished in a much more satisfactory manner by exposing the hard metal in the bridge, so that the two similar metals can be soldered together.

Having described my invention, what I claim is—

The combination, with the steel eye-frames of spectacles, of a separate bridge made of gold or non-corrosive metal tubing forced into

close contact with a steel core, said non-corrosive metal dressed away near the extremities sufficient to expose the steel and form a concaved seat conforming to the eye-frame, 5 said steel frame and steel core being brought together in the said seat and the whole united by solder, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

GEORGE JOHNSTON.

Witnesses:

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