

S. C. LAFLIN.
SPECTACLE TEMPLE.
APPLICATION FILED JULY 21, 1908.

931,776.

Patented Aug. 24, 1909.

Fig. 1.

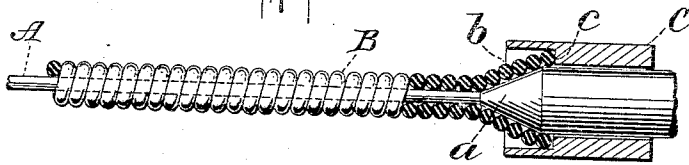


Fig. 2.



Fig. 3.

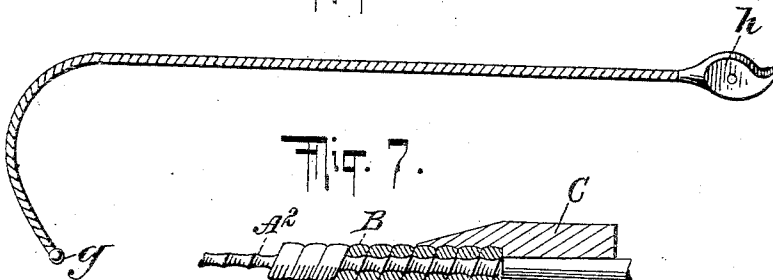


Fig. 7.

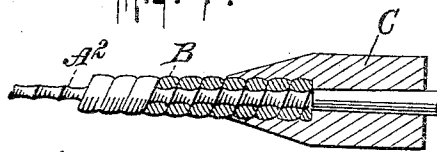


Fig. 4.

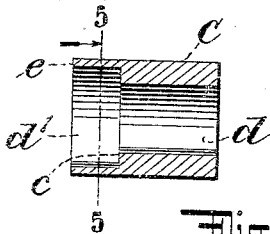


Fig. 5.

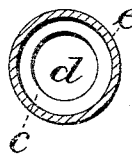


Fig. 6.



WITNESSES:

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SPECTACLE-TEMPLE.

931,776.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, STEPHEN C. LAFLIN, a citizen of the United States, residing at Southbridge, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Spectacle-Temples; of which the following is a clear, exact, and complete description.

My invention relates particularly to that class of temples well known in the art, in which the temple is made up of a central, uniform or tapered core over which are placed one or more layers of fine wire coiled into a snugly fitting tube, and has for its object the production of a temple in which the butt may be completely and inexpensively formed by a simple sequence of mechanical operations while at the same time serving permanently and substantially to join the several parts of the temple together into a complete whole.

In the accompanying drawings Figures 1 to 5 illustrate one form of my invention, Fig. 1 illustrating the first assembly of the separately made parts, a portion of such parts being shown in section; Fig. 2 is a similar view of the same assembly at a later stage of the manufacture. In both Figs. 1 and 2, portions of the length are omitted; Fig. 3 is a perspective view of the completed temple; Fig. 4 is an axial section of the special tubular piece or sleeve from which I finally form my completed butt; Fig. 5 is a section of the same tubular butt piece taken at right angles to the axis along the line 5—5 of Fig. 4; Figs. 6 and 7 are views similar to Fig. 2, but illustrating two additional forms of my invention.

Referring to Fig. 1, B is a tube made of fine wire tightly coiled and formed to slip snugly over the fine wire core A and the tapered butt *a*. A tubular metallic piece or sleeve C (shown in detail in Figs. 4 and 5) is then slipped over the core butt *a* until the internal shoulder *c* is in contact with the butt end *b* of the coiled wire cover tube. The bore *d* of this sleeve is an easy fit for the core butt *a* while the increased bore *d'* beyond the shoulder is sufficient to slip just nicely over the butt end of the wire tube. The outside diameter of the sleeve C is only slightly greater than the diameter *d'* so as to leave the wall thickness *e* between the shoulder and inner end of the tube quite thin. By suitable mechanism I now reduce

and draw out the thin walled portion *e* of the sleeve C until it covers a portion of the butt end of the wire covering tube as seen at *e'* in Fig. 2; the pressure necessary for this reduction causes the metal of the said sleeve to flow into the hollow spaces which lie between the convolutions of the wire covering tube, thus firmly joining the tubular butt piece to the wire covering tube and uniting them, in effect, into an integral whole. By this reduction also I am able to fix the inner core wire A permanently in place. The pressure upon the coil at the taper causes the spiral wire to be depressed into the metal of the core *a* thus forming a corresponding spiral form depression therein. Thus additional means are provided for keeping the spiral wire from slipping upon the core piece and for thereby making the connection between them more secure. In practice I prefer to reduce or taper the section of the temple for its entire length (Fig. 7) instead of only over the length represented by the taper, as I find advantages in the way of increased flexibility, better appearance and economy, such complete reduction of course, operates to more firmly anchor the core wire A. Finally, having performed the previously described operations, I flatten, by suitable means, the entire end of the butt outside of the taper and then shape and finish it, as at *h* in Fig. 3, to suitably engage the corresponding hinge member of the spectacle frame. The far end of the temple I provide with a suitable tip as *g*.

Previously temples of the wire wound type have generally been held together at the butt by soldering. Solder is unsightly and even when applied with a maximum of skill is far from reliable as applied in the rapid manufacture of duplicate parts, requiring, as it does, the greatest cleanliness and definiteness of temperature and the permanency of a soldered joint is extremely uncertain. Add to this that the heat required for soldering tends to soften the wire and injure its elasticity while the fluxes used, unless most completely removed, tend to rot the metal; solder, moreover, becomes unsightly in time because of discoloration. In my improved construction I eliminate heating and the use of solder completely and secure a much more permanent and perfect joining together of the parts than could be

obtained by its use. I find, also, that my construction is less costly than the older one where the parts are held together with solder.

I desire to call attention to the taper which connects the body of the temple to the butt in my construction and under which the butt end of the wire covering tube is held. By using this form I take advantage of a well known principle of mechanics of gradually increasing the strength of the temple proportionally to the probable strain.

The exact sequence of operations, character of materials and proportional relations of dimensions may be varied considerably without losing the advantageous features of my invention and I do not, therefore, confine myself to them.

In the construction illustrated by Figs. 1 and 2 I have employed a core having an enlarged butt. Fig. 6 illustrates a construction in which the core A' is of a uniform diameter throughout and Fig. 7 represents another manner of carrying out my invention according to which the core A² is tapered uniformly throughout its length. The manner of covering this core with a coiled wire and holding the end of this wire in a sleeve under a pressure such as to enable the coil both in the sleeve and in the core, is the same as in the construction first described.

I claim as my invention:

1. A spectacle temple comprising a core, a coiled wire covering for the same and a metal sleeve in which one end of the core and one end of the covering is received and held under pressure.

2. A spectacle temple comprising a core, a wire coiled thereon, a sleeve having a por-

tion engaging the core, and, adjacent thereto, a chamber or enlargement to receive the end of the coiled wire held under pressure.

3. A spectacle temple comprising a core having a flaring portion, a wire coiled on said core at the flaring portion thereof and a sleeve surrounding the flaring portion of the coil.

4. A spectacle temple comprising a core, a wire wrapping upon said core, and a sleeve surrounding a portion of said wrapping, said sleeve being provided with internally projecting portions which fit between the convolutions of said wrapping.

5. A spectacle temple comprising a core having a flaring portion, a wire wrapping on said core at the flaring portion thereof, and a sleeve surrounding said flaring portion, said sleeve being provided with internally projecting portions which fit between the convolutions of said wrapping.

6. A spectacle temple comprising a core, a wire wrapping upon said core, and a parallel sided butt adapted for hinging attachment to the lens mount, said butt being provided with a sleeve surrounding a portion of said wrapping and of said core, and being further provided with internally projecting portions which fit between the convolutions of said wrapping.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

STEPHEN C. LAFLIN.

Witnesses:

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N. M. BAKER.