(No Model.)

L. HAMMEL.

SPECTACLES.

No. 362,377. Patented May 3, 1887.

Fig. 1.

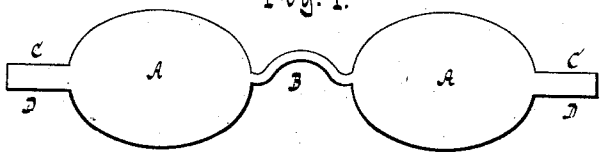


Fig. 2.

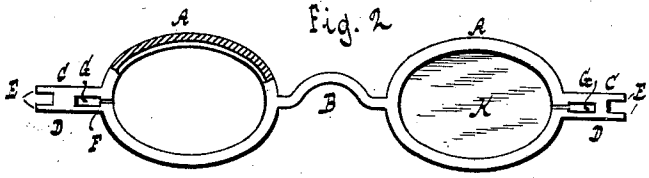


Fig. 5

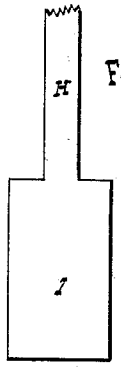


Fig. 3.

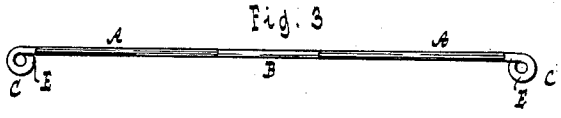


Fig. 6.

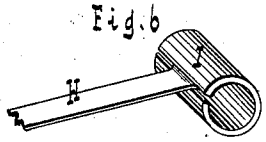


Fig. 7.

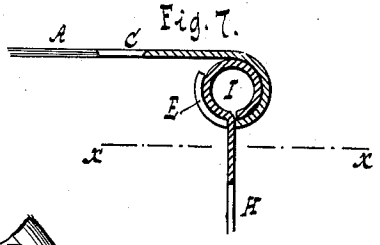


Fig. 8.

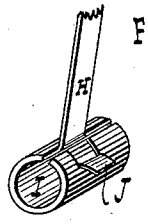


Fig. 4.

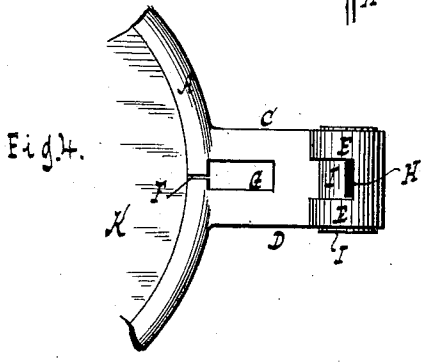
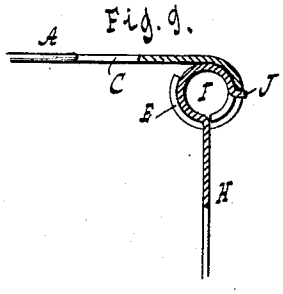


Fig. 9.



WITNESSES:

A. Faber du Faur Jr.

William Miller

INVENTOR

Leo Hammel.

BY Van Santvoord & Hauff

his ATTORNEYS

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

LEO HAMMEL, OF NEW YORK, N. Y.

SPECTACLES.

SPECIFICATION forming part of Letters Patent No. 362,377, dated May 3, 1887.

Application filed February 9, 1887. Serial No. 227,050. (No model.)

To all whom it may concern:

Be it known that I, LEO HAMMEL, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Spectacles, of which the following is a specification.

This invention relates to an improvement in spectacles, as set forth in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a blank for a spectacle-frame. Fig. 2 is a view similar to Fig. 1, the blank being in a more advanced stage of manufacture. Fig. 3 is a plan view of a spectacle-frame. Fig. 4 is a section in the plane *x x*, Fig. 7, on a larger scale than Fig. 7. Fig. 5 is a detail plan view of a blank for a temple. Fig. 6 is a detail perspective view of a temple. Fig. 7 is a sectional view of the application of the temple of Fig. 6. Fig. 8 is a detail perspective view of a temple with a stop. Fig. 9 shows in sectional view the application of the temple of Fig. 8.

Similar letters indicate corresponding parts.

In the drawings, the letters A A indicate the eye-pieces of a spectacle-frame. B is the nose-piece. C D are end pieces.

The eye-pieces, nose-piece, and end pieces are cut, punched, or formed from a suitable blank. The eye-pieces, nose-piece, and end pieces are thus made integral or of one piece with one another, whereby strength is given the device.

After the blank has been formed, as seen in Fig. 1, the inner edges of the eye-pieces A are grooved by any suitable means—such, for example, as a milling-tool. The lenses K, Fig. 4, can be retained in place by such grooves in the eye-pieces A.

The outer edges of the eye-pieces A, as also the edges of the nose-piece B, should be rounded or brought to such shape as to be sightly and comfortable in handling and using. Such rounding or shaping is done by any suitable means. For example, the outer edges of the eye-pieces A and the edges of the nose-piece B are rounded or shaped by grinding or filing; or such edges may be shaped by a drop-forge or by a suitable cutting-tool, as is apparent to any skilled mechanic.

By splitting the eye-pieces A, as at F, Fig. 2, the eye-pieces A are enabled to be flared open to some extent during the insertion of lenses or glasses K, and when the lenses have been inserted the eye-pieces A are allowed to spring back to their original condition. The lenses are thus clamped firmly in place.

In Figs. 2 and 4 the split F is shown as extending part way into the end piece, C D, and said split communicates with a hole, G, in the end piece. By the split F the end pieces are divided, or partly divided, into two portions, C and D. The end pieces are so shaped as to have tongues E, Fig. 2. When said tongues E are properly shaped, said tongues E serve as bearings for the temple-pivots I, Figs. 3 and 4.

A convenient way of forming the temple is shown in Fig. 5, where a blank is formed with the parts H and I. By properly shaping the part I, said part I will form a pivot, as seen in Fig. 6. Said pivot I can be made to engage the tongue E, as seen in Fig. 7, so that the temple H can swing or vibrate.

The temple H may be provided with a stop, J, Figs. 8 and 9, to limit the motion of the temple, or the temple H may be made to serve also as a stop, as seen in Fig. 7. The stop can be readily formed by suitably bending a portion of the material of the pivot I, as is apparent from an inspection of Fig. 8.

By having the temple H and pivot I integral, or of one piece with one another, said temple and pivot are not liable to become detached from one another.

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

1. A spectacle-frame composed of the eye-pieces A, the nose-piece B, and the end pieces, C D, formed integral of a single piece, said end pieces being each provided with two separated curved tongues, E, forming a circular bearing for the pivot of the temples and a space for the movements of the latter, substantially as described.

2. A spectacle-frame composed of the eye-pieces A, the nose-piece B, and the end pieces, C D, formed integral, said eye-pieces having the splits F, and the end pieces being each provided with an opening, G, and two separated curved tongues, E, to form circular bear-

ings, in combination with the temples H, having circular pivots F, arranged in said bearings, with the temples adapted to swing in the spaces between the tongues, substantially as described.

3. The process herein described of making spectacle-frames, which consists in providing a suitable blank with eye-pieces A, with a nose-piece, B, and with end pieces, providing the eye-pieces with splits or openings F, and providing the end pieces with bearings or tongues E, adapted to support temples H, substantially as set forth.

4. The process herein described of making spectacle-frames, which consists in providing a suitable blank with eye-pieces A, with a nose-piece, B, and with end pieces, and providing the end pieces with bearings or tongues E, adapted to support temples H, substantially as set forth.

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

LEO HAMMEL. [L. S.]

Witnesses:
B. H. BLANK,
W. HAUFF.