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F. A. STEVENS & J. F. BRADY.

BLANK FOR HINGE JOINTS OF SPECTACLES.

(Application filed Nov. 22, 1899.)

(No Model.)

Fig. 1.



Fig. 2.

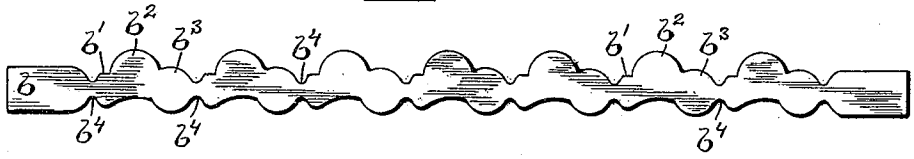


Fig. 3.

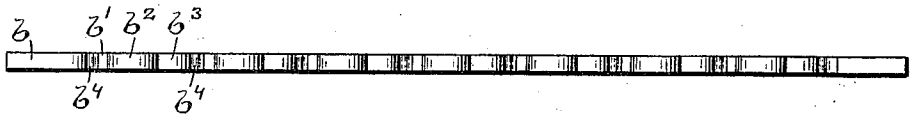


Fig. 4.

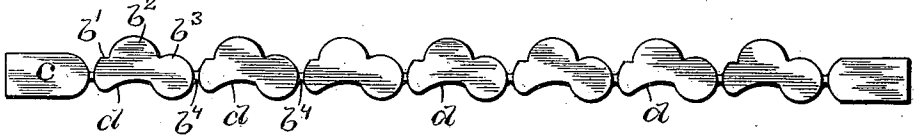


Fig. 5.



Fig. 6.

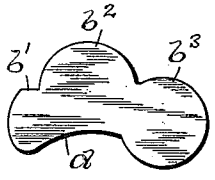
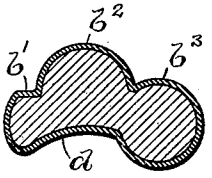


Fig. 7.



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FREDERICK A. STEVENS AND JOHN F. BRADY, OF PROVIDENCE, RHODE ISLAND.

BLANK FOR HINGE-JOINTS OF SPECTACLES.

SPECIFICATION forming part of Letters Patent No. 658,598, dated September 25, 1900.

Application filed November 22, 1899. Serial No. 737,908. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK A. STEVENS and JOHN F. BRADY, citizens of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Blanks for the Hinge-Joints of Spectacles, of which the following is a specification.

In the manufacture of spectacle-frames it is desirable to use the stock-plate wire made by plating an ingot of inferior metal with precious metal and rolling or drawing the same down to the required size of wire. As this stock-plate wire is covered with a thin sheet of precious metal, usually gold, it combines the strength of the base metal with the non-oxidizable quality of the gold, so that only the ends present raw edges.

This invention relates to an improvement in the manufacture of the blanks from which the hinge-joints by which the temple-bars are pivotally connected with the spectacle-frame are made.

The invention consists in the peculiar and novel construction of the blanks whereby the same are formed of stock-plate and all exposed surfaces are covered with precious metal, as will be more fully set forth hereinafter.

The object of the invention is to facilitate the manufacture of the blanks and supply a superior article in which all the exposed edges are protected.

The hinge-joints of spectacle-frames are formed of two parts, one of which is secured to each of the opposite ends of the frame-wires supporting one of the lenses. The blanks for these hinge-joints may be made in one piece to be cut apart when the joints are finished. In illustrating our invention we have shown the blanks in the successive steps of the proportions required when two blanks are used to make one joint-hinge. When it is desired to make the two parts out of one blank, the sole difference is that the thickness of the blank is doubled.

Figure 1 is a perspective view of a bar of stock-plated wire which has been rolled into a bar of rectangular cross-section all the sides of which are covered with a film of precious metal. Fig. 2 is a side view, and Fig. 3 an edge view, of the bar after it has been stamped. Fig. 4 is a side view, and Fig. 5 an edge view, of the finished bar. Fig. 6 is a side view, on an enlarged scale, of a separated blank; and Fig. 7 is a longitudinal cross-section of the same, showing the film of precious metal covering the exposed surfaces.

In the drawings, a indicates a rectangular bar of inferior metal plated with precious metal and of sufficient cross-section to form one of the two parts of one hinge-joint. The bar a is subjected to the action of suitable dies, acting on the opposite edges a' a' to produce the bar b. (Shown in Figs. 2 and 3.) In this process the more ductile precious metal flows under the pressure of the dies with the inferior metal to assume the shape shown in Fig. 2 without exposing the inferior metal.

In the bar b are the elements of a series of the joints developed in their required shape. The part b' is the part secured to one end of the frame-wire, the part b^2 receives the clamp-screw, and the part b^3 receives the pivot. The several blanks are connected by the stock b^4. The bar b is now subjected on the flat side to dies, which force in the metal on the stock b^4 to about the middle of the thickness of the blank, carrying the precious metal of the surface over the edges of the blank and producing the bar c, (shown in Figs. 4 and 5,) consisting of a series of blanks d. When the two parts of the joint are required to be made in one piece, the connecting-stock b^4 is nicked on both sides of the bar.

The bars c are sold to the spectacle-manufacturer or delivered, preferably, as shown in Fig. 4. In this condition these bars may be kept in stock without injury. As all the surfaces except the extreme end edges of the waste are covered with precious metal, exposure will not corrode or injure them. When required, the blanks are readily broken apart. The cutting of the hinge-seat for the temple-bar removes the only rough points in the two-part joints, and the cutting of the groove for the hinge in joints made in one piece removes the central rough point of connection between the blanks.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. As a new article of manufacture, a bar of stock-plate, containing a plurality of blanks consisting of the parts b', b^2, and b^3, adapted to form the hinge-joints of spectacles, said blanks being connected together by contracted necks b^4, all of the exposed surfaces of said bar being covered with the plating metal, as described.

2. A bar of stock-plate, containing one or more blanks, consisting of the parts b', b^2, and b^3, adapted to form the hinge-joints of spectacles, said blanks being connected together by contracted necks b^4, whereby the bar may be kept in stock without injury and the blanks may be readily separated, as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

FREDERICK A. STEVENS.
JOHN F. BRADY.

Witnesses:
J. A. MILLER, Jr.,
B. M. SIMMS.