(No Model.)

G. E. A. KNIGHT.

JEWELER'S STOCK.

No. 437,862. Patented Oct. 7, 1890.

Fig. 1.

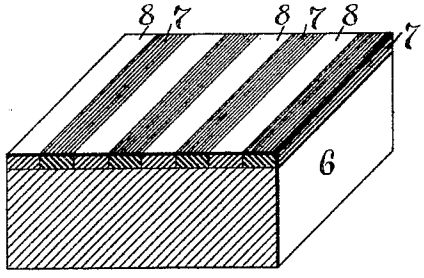


Fig. 3.

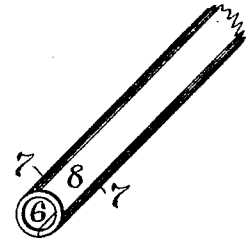


Fig. 2.

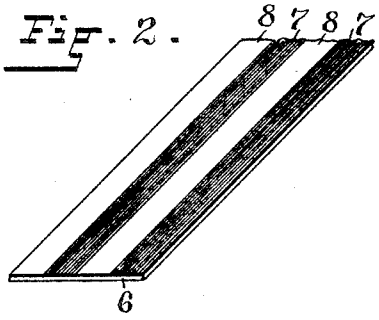
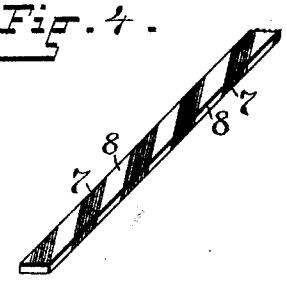


Fig. 4.



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UNITED STATES PATENT OFFICE.

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JEWELERS' STOCK.

SPECIFICATION forming part of Letters Patent No. 437,862, dated October 7, 1890.

Application filed July 2, 1890. Serial No. 357,549. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. A. KNIGHT, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Jewelers' Stock; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to an improvement in the art of manufacturing bars, rods, and wire for jewelers' use, plated with precious metal in stripes of different metal or metal of different colors.

This invention consists in the peculiar and novel method of producing jewelers' stock by folding the plated sheets and consolidating the same into stock of any desired section, as will be more fully set forth hereinafter.

The object of this invention is to produce striped jewelers' stock from an ingot especially prepared to form the stock by rolling, so that the stripes in the finished stock will be of uniform width and the stock produced at a low cost, and thus chains, chain-bars, and other articles of jewelry be made from stock at or nearly at the price of ordinary plated jewelers' stock.

Figure 1 is a perspective view of an ingot plated with strips of alternate different colors. Fig. 2 is a perspective view of a sheet of inferior metal plated with strips of precious metal. Fig. 3 is a perspective view of a tube formed of a sheet of inferior metal plated with strips of precious metal, and Fig. 4 is a perspective view of a strip of my improved jewelers' stock-plate.

In the drawings, the number 6 indicates a block or sheet of inferior metal, to the upper surface of which is secured a plating of precious metal, consisting of strips of different colors of precious metal secured by the usual process of sweating or fusing the plating metal with the inferior metal, or by plating, by means of solder, the surface of the inferior metal with the striped sheet of precious metal.

The number 7 indicates a strip of metal of one color, and the number 8 of another color. These strips may be all of gold, each strip being of a different color. Red, blue, green, and other colors are readily produced to form these strips. The strips 7 and 8 may also be made of different metals. Gold, silver, platinum, and other metals or compositions of metals may be used to form the stripes of the plating metal, and these stripes may be of uniform width, or they may differ in width. As the strips 7 and 8 are firmly secured to the inferior metal 6, they can be rolled, drawn through the draw-plates, and twisted without being distorted or loosened.

The prepared stock can be worked into any desired article in the same manner as jewelers' stock-plate is now used, and a great variety of highly-ornamental articles produced.

I will now more fully describe the process for manufacturing the same. The prepared ingot, (shown in Fig. 1,) consisting of the block of inferior metal and the plating-sheet formed of strips of different-colored metal firmly secured to the inferior metal, I subject to the process of rolling longitudinal with the direction of the strips 7 and 8, by which the thickness is reduced and the length increased without materially altering the width. When the ingot is thus reduced to the desired thickness, the sheet of stock, as shown in Fig. 2, is formed into a tube, the inferior metal being on the inner side of the tube and the striped plate on the outside, as is shown in Fig. 3. The joint in this tube may be soldered; but in practice I find that a fine quality of the improved stock-plate can be produced without soldering the joint. The so-formed tube is now drawn through a draw-plate the area of which is less than the area of the sectional outline of the tube, so as to consolidate, lengthen, and elongate the tube, and the tube is so successively drawn through draw-plates or elongated and reduced in thickness by rolling until a rod or wire of the desired size and cross-section is produced. To produce a diagonal stripe, the rod or wire is now twisted in the usual manner in a twister-head. The longitudinal strips 7 and 8 are thus placed at the desired angle around the axis of the twisted rod or wire, and the twisted rod or wire is now rolled or drawn into a plate, rod, or wire of the required cross-section.

The improved jewelers' stock has a core of

inferior metal the surfaces of which are covered by a plate of precious metal consisting of stripes extending across each of the surfaces. On closely examining the cut end of this jewelers' stock it becomes evident that the stock is formed from sheet metal bent and compressed into the striped stock-plate.

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

1. The herein-described process for manufacturing diagonally-striped jewelers' stock, the same consisting in plating a block or plate of inferior metal with strips of precious metal varying in color, to form an ingot, rolling out the ingot into a sheet, bending the sheet into a tube, and twisting the tube and flattening the surfaces by drawing or rolling, as described.

2. As an improved article of manufacture, diagonally-striped jewelers' stock formed of striped and twisted stock-plate, as described.

3. Jewelers' stock consisting of a sheet of base metal having one side plated with strips of precious metal of different colors folded and condensed to form a bar, rod, or wire, the outer surface of which consists of stripes of different-colored precious metal, as described.

In witness whereof I have hereunto set my hand.

GEORGE E. A. KNIGHT.

Witnesses:
J. A. MILLER, Jr.,
M. F. BLIGH.