

(No Model.)

G. E. A. KNIGHT.
JEWELER'S STOCK.

No. 450,412.

Patented Apr. 14, 1891.

Fig. 1.

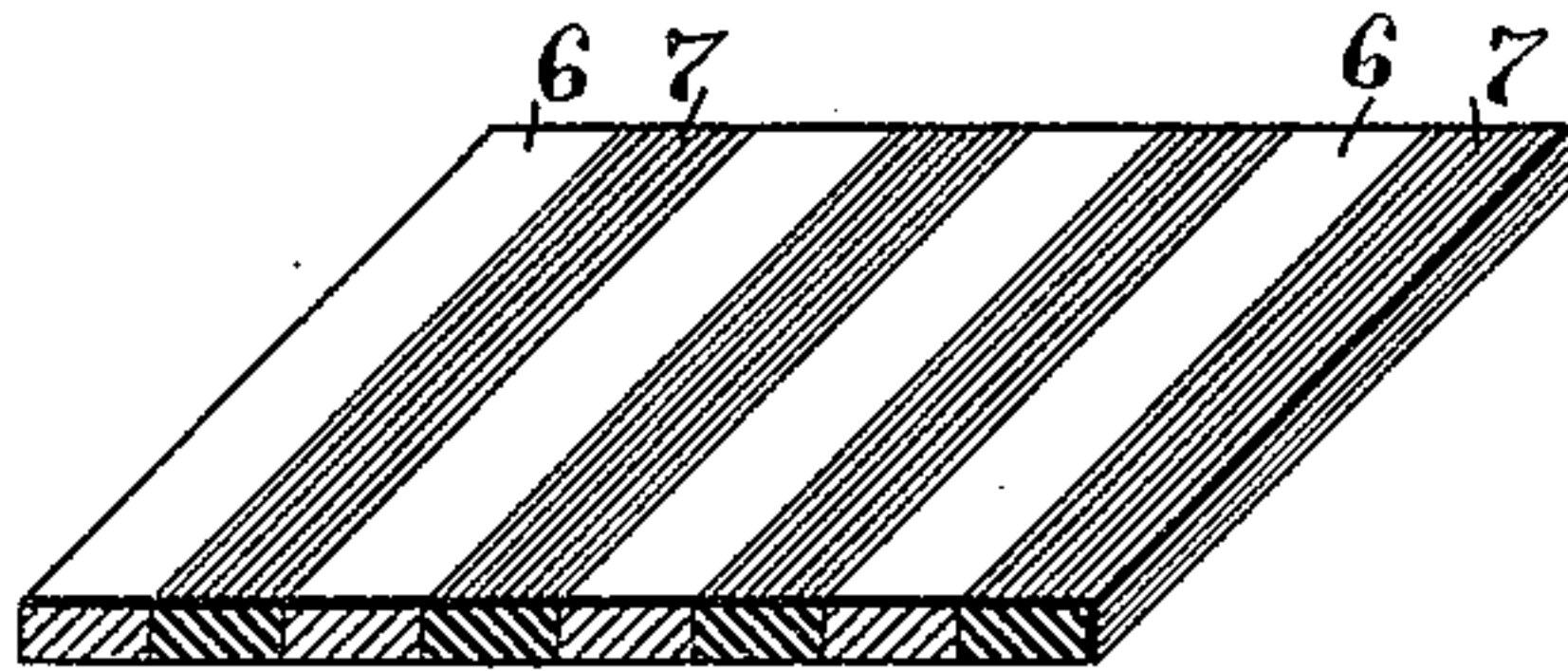


Fig. 3.

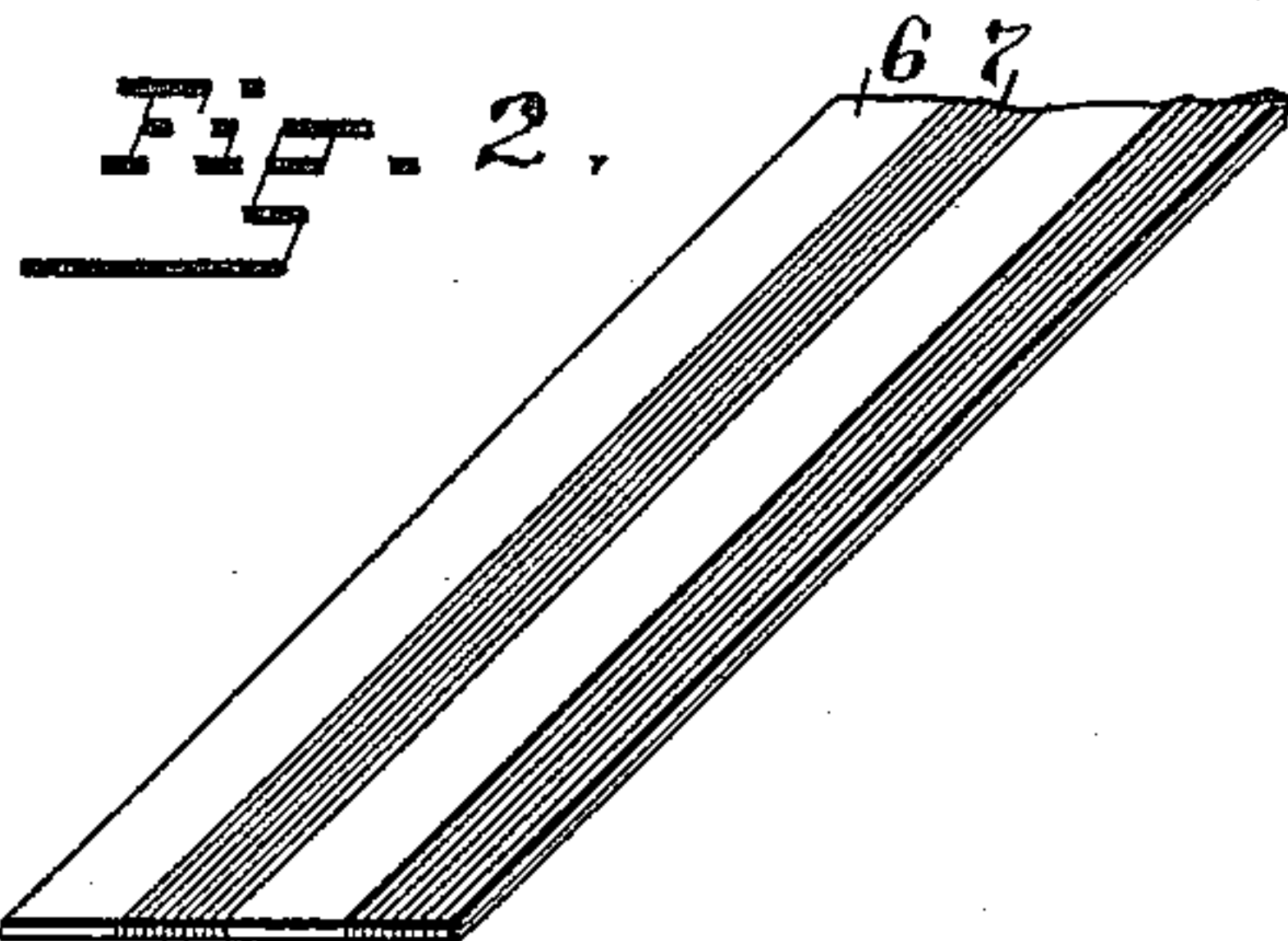
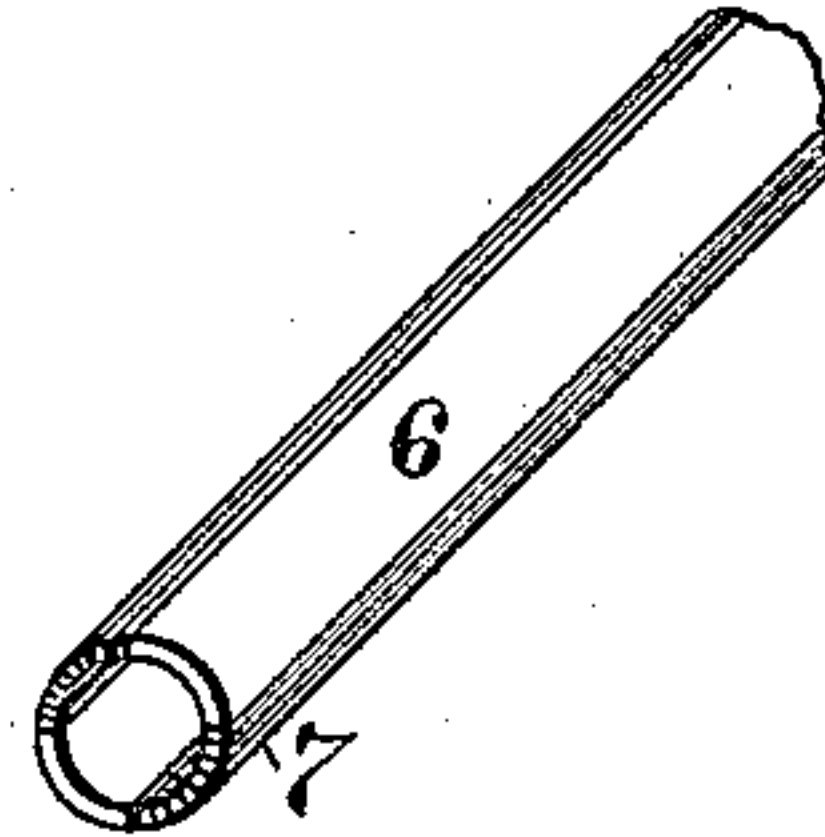
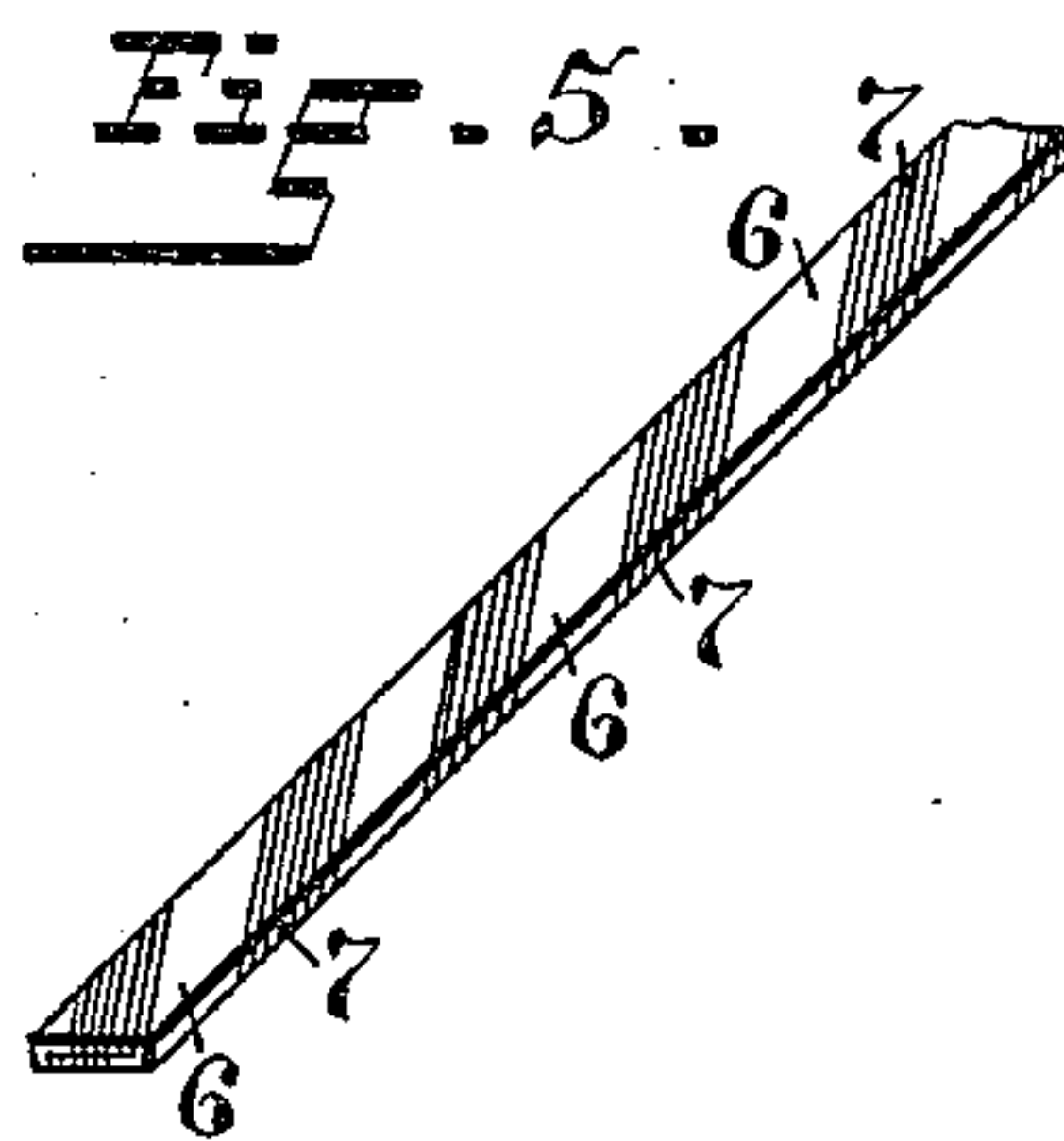
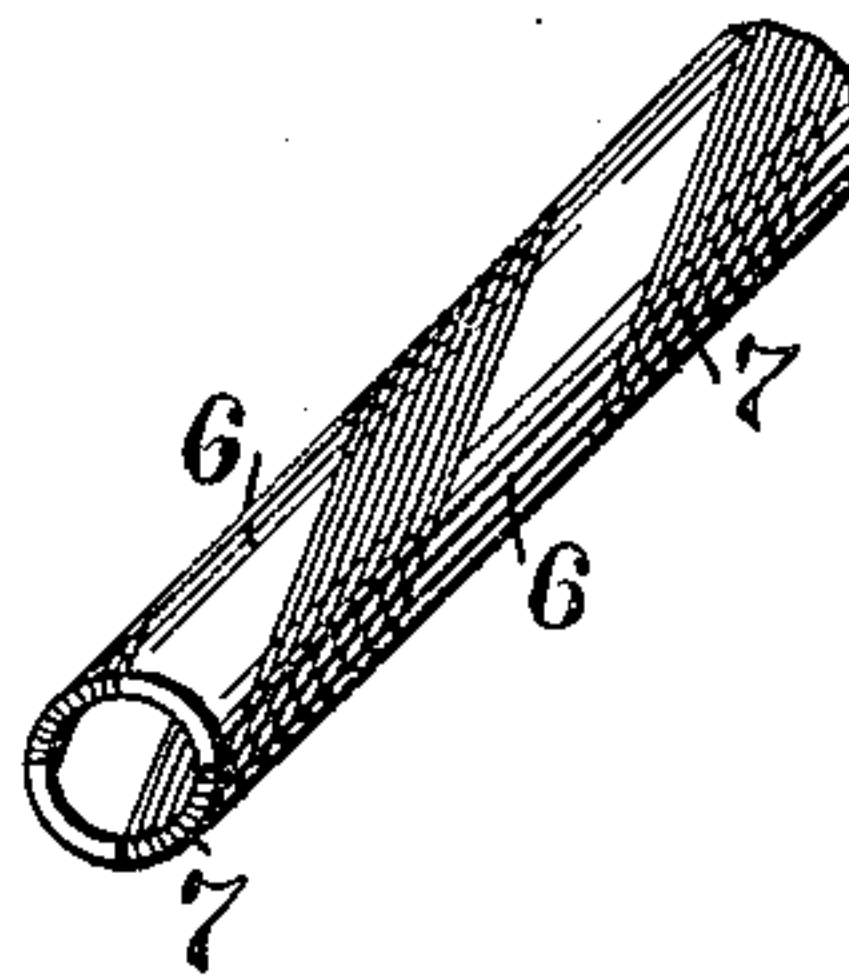


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE E. A. KNIGHT, OF PROVIDENCE, RHODE ISLAND.

JEWELER'S STOCK.

SPECIFICATION forming part of Letters Patent No. 450,412, dated April 14, 1891.

Application filed September 22, 1890. Serial No. 365,782. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. A. KNIGHT, of the city of Providence, in the county of Providence and State of Rhode Island, have
5 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 a part of this
10 specification.

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

15 The invention consists in the peculiar and novel method of producing jewelers' stock by forming sheets having strips of different-colored metal extending through the thickness of the sheet, soldered or welded together into
20 tubes, twisting the tubes, and drawing the same into stock of any desired section, as will be more fully set forth hereinafter.

The present invention is an improvement on the invention described in the application
25 for Letters Patent filed by me July 2, 1890, Serial No. 357,549, for an improvement in jewelers' stock.

30 The object of this invention is to produce jewelers' stock both surfaces of which are diagonally striped, consisting of diagonal stripes of different color or diagonal stripes of different metal secured together edge to edge.

35 The invention described in my previous application required the strips to be secured to a sheet or block of inferior metal, and when rolled out into a thin sheet consisted of a sheet of inferior metal plated with a thin sheet of striped metal, thus forming a sheet of stock-plate one surface of which was striped.

40 I have found in practice that an ingot can be readily formed by securing the different metals or the strips of precious metal of different color together, either by the well-known sweating process or by soldering the strips
45 together. This ingot can be rolled into a sheet and used for all the purposes for which the striped stock-plate described in my previous application can be used, and can also be used for purposes in which both sides of
50 the plate require to be striped.

Figure 1 is a perspective view of an ingot formed of strips of different-colored metal of

any desired width and depth, soldered or welded together. Fig. 2 is a perspective view of a sheet formed of strips of different-colored
55 metal. Fig. 3 is a perspective view of a tube formed of a sheet of the striped metal. Fig. 4 is a perspective view of a tube formed of a sheet of the striped metal which has been twisted, showing the stripes of different-colored
60 metal extending through the thickness of the tube. Fig. 5 is a perspective view of a strip of my improved consolidated jewelers' stock, showing diagonal stripes of different-colored metal.
65

In the drawings, the number 6 indicates a strip of metal of one color and the number 7 a strip of another color. These strips may be all of gold, each strip being of a different
70 color. Red, green, blue, and other colors are readily produced to form these strips. The strips 6 and 7 may also be made of different metals. Gold, silver, platinum, and other metals or compositions of metals may be used to form the strips of the ingot, and these strips
75 may be of uniform width or they may differ in width and may be of any uniform depth. As the strips are firmly secured to one another, they can be rolled, drawn through a draw-plate, and twisted without being dis-
80 torted or loosened. The prepared stock can be worked into any desired article in the same manner as jewelers' stock is now used and a great variety of highly-ornamented articles produced.
85

I will now more fully describe the process for manufacturing the same. The prepared ingot, (shown in Fig. 1,) consisting of the alternate strips of different-colored metal firmly secured to one another, I subject to the process of rolling longitudinally with the direction of the strips 6 and 7, by which the thickness is reduced and the length increased without materially altering the width. When the ingot is thus rolled out or drawn into a sheet
95 of the desired thickness, the sheet (shown in Fig. 2) is formed into a tube, the strips extending through the thickness of the sheet forming the tube, as shown in Fig. 3. The joint in the tube may be soldered or welded.
100 To produce a diagonal stripe, the tube is now twisted in the usual manner in a twister-head. The longitudinal stripes are thus placed at any desired angle around the axis of the

twisted tube, as shown in Fig. 4. The so-formed twisted 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
5 as to consolidate and lengthen the tube, and the tube is so successively drawn through draw-plates or elongated and reduced in thickness by rolling until a tube, rod, or wire of the desired size and cross-section is produced.

10 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,
15 the same consisting in securing together edge to edge strips or plates of precious metal varying in color to form an ingot, rolling out the ingot into a sheet, bending the sheet into

a tube, twisting the tube, and rolling or drawing the twisted tube into the desired form, as
20 described.

2. As a new article of manufacture, jewelers' stock consisting of a series of diagonal strips of precious metal forming a sheet, tube, or bar both surfaces of which are striped, as
25 described.

3. Jewelers' stock consisting of a sheet formed of a number of strips of precious metal varying in color, both surfaces of which are striped, folded, and condensed to form a bar,
30 rod, or wire of precious metal, as described.

GEO. E. A. KNIGHT.

Witnesses:

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