

No. 886,616.

PATENTED MAY 5, 1908.

P. H. LONG.  
METHOD OF MAKING BRACELETS.  
APPLICATION FILED JAN. 20, 1908.

2 SHEETS—SHEET 1.

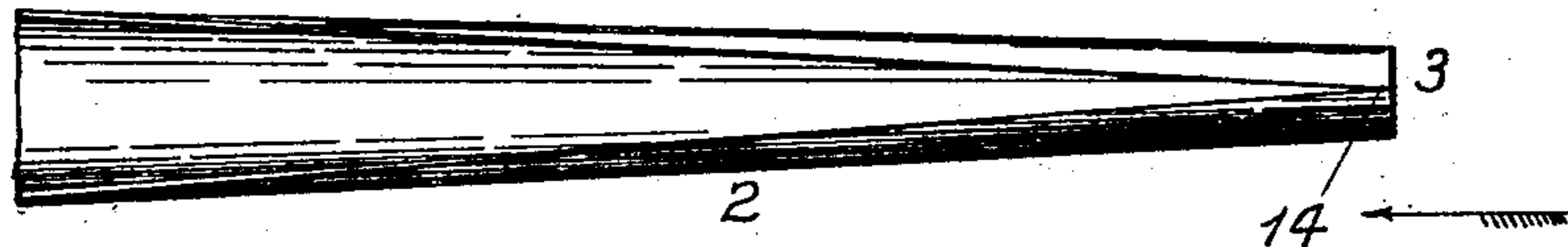


FIG. 1.

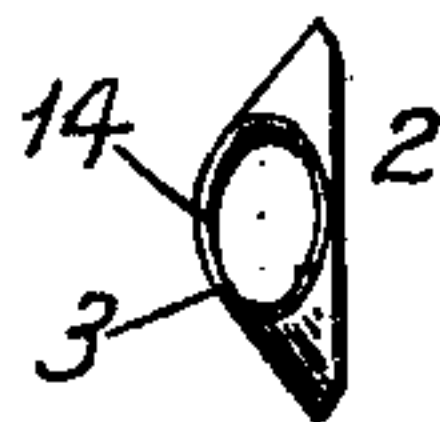


FIG. 2.

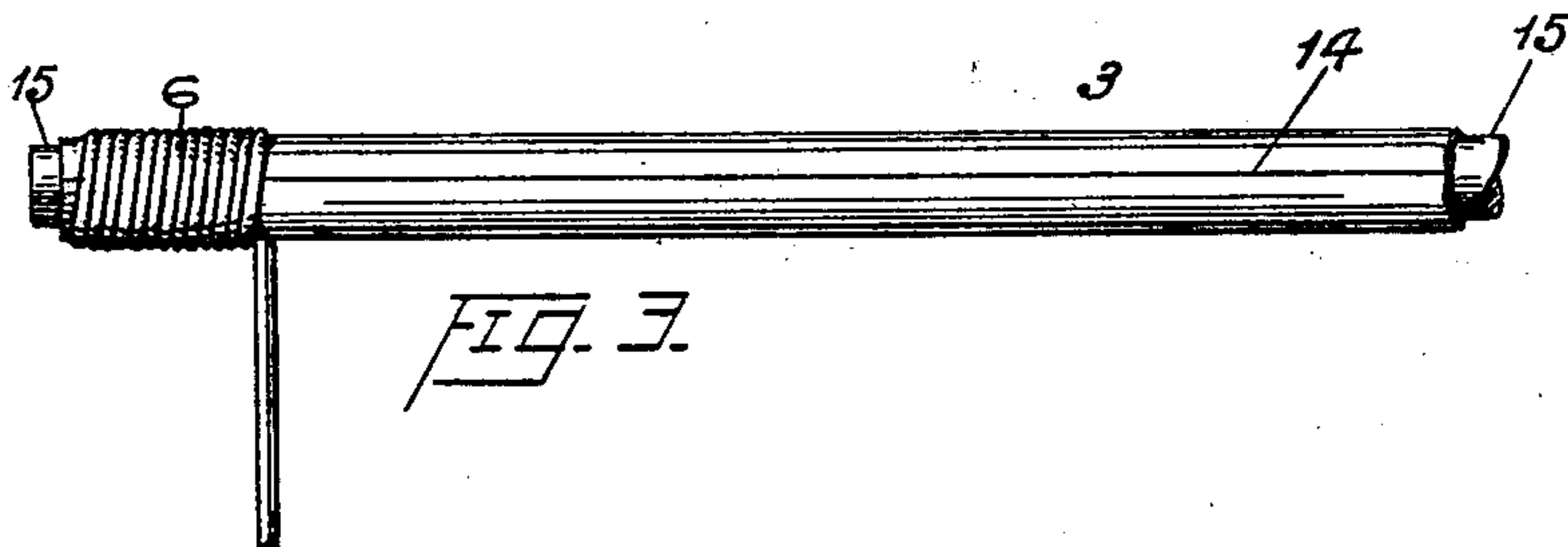


FIG. 3.

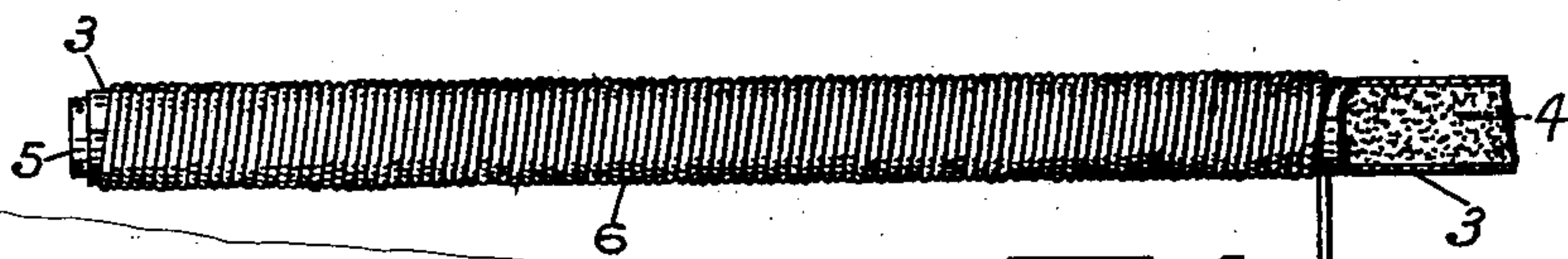


FIG. 4.

WITNESSES  
*Frederick Hermann Jr.*  
*John W. Kemper*

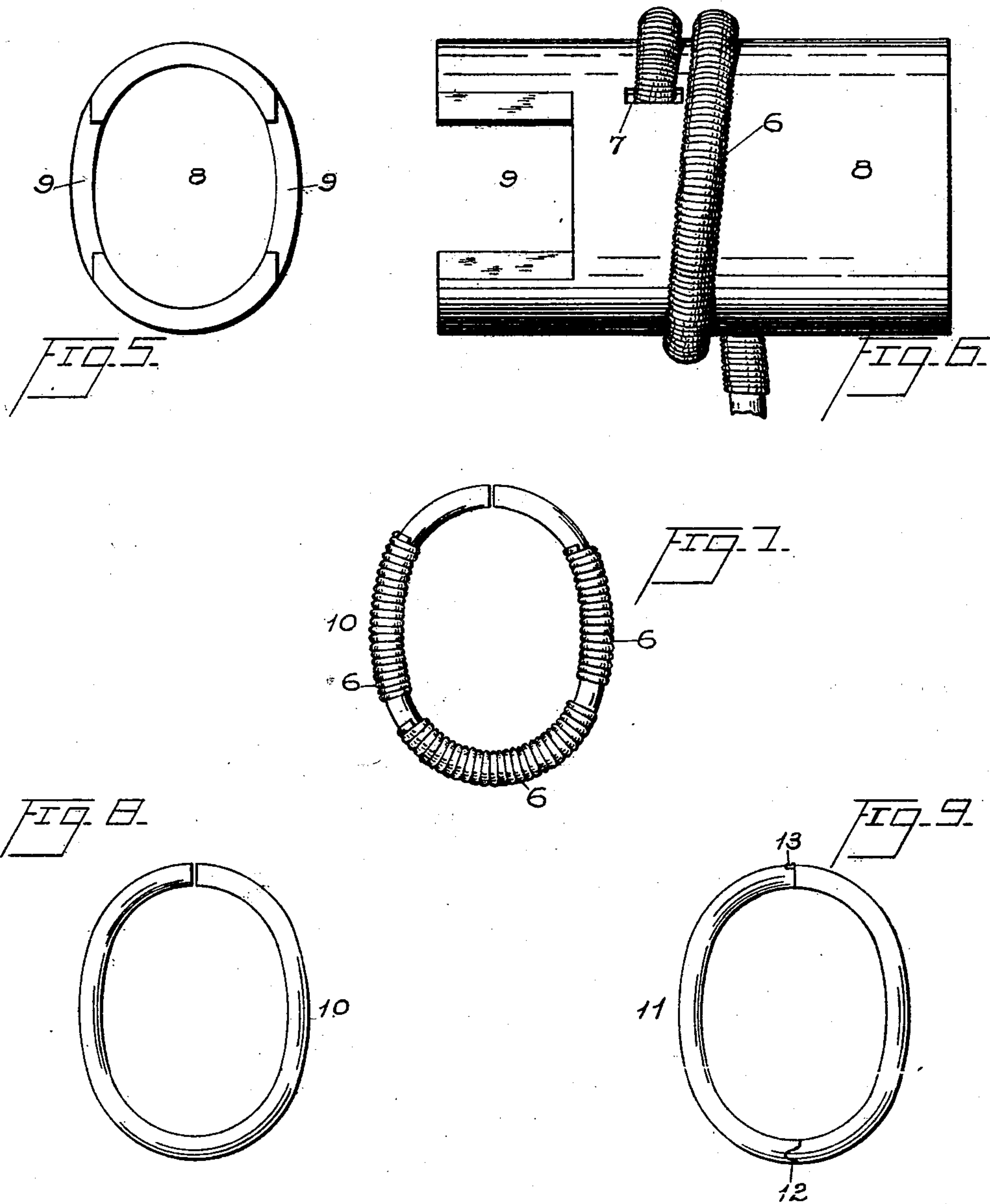
INVENTOR  
*Philip H. Long*  
BY  
*Russell M. Everett*,  
ATTORNEY.

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2 SHEETS—SHEET 2.



WITNESSES  
*Frederick Germann Jr.*  
*John W. Kamper.*

INVENTOR  
*Philip H. Long*  
BY  
*Russell W. Everett,*  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

PHILIP H. LONG, OF NEWARK, NEW JERSEY.

## METHOD OF MAKING BRACELETS.

No. 886,616.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed January 20, 1908. Serial No. 411,607.

*To all whom it may concern:*

Be it known that I, PHILIP H. LONG, a subject of the King of Great Britain, and a resident of Newark, in the county of Essex and State of New Jersey, have invented certain Improvements in Methods of Making Bracelets, of which the following is a specification.

This invention relates to the manufacture of bracelets formed of hollow wire or tubing, and more particularly to the production of the coils or curved pieces of hollow wire or tubing for such bracelets.

The objects of the invention are to enable exceedingly thin stock to be employed and yet a uniformly smooth even bending of the hollow wire or tubing into the form of the bracelet obtained; to secure lightness and a smaller amount of expensive material in a bracelet; to save labor and produce a perfectly formed bracelet, and to obtain other advantages and results as may be brought out in the following description.

Referring to the accompanying drawings, in which like numerals of reference indicate the same parts in the several figures, Figure 1 illustrates in plan the drawing of flat sheet-metal into tubular form, and Fig. 2 is an end view of the same, looking in the direction indicated by the arrow in Fig. 1; Fig. 3 shows a piece of straight tubing upon an arbor or core and being wound or wrapped with wire, one end being broken away; Fig. 4 shows the wound or wrapped piece of tubing filled with granular material, and a stopper in one end, the other end being broken away; Fig. 5 is an end view of a certain mandrel for winding the prepared tubing upon to secure the shape of the bracelet, and Fig. 6 is a side view of the same with a piece of tubing partially wound thereon; Fig. 7 shows one of the coils or circlets into which the tubing is cut after being removed from the mandrel, said coil or circlet being adapted to form a bracelet, and being shown with its wrapping of wire only partly removed; Fig. 8 shows the coil or circlet of tubing after its wrapping of wire has been removed, and Fig. 9 illustrates a complete bracelet.

In carrying out my improved method of making bracelets, which constitutes the present invention, a strip 2 of sheet-metal, as gold, is drawn into a straight tube 3. I have shown the edges of the strip which are thus brought together as left unsoldered or unattached to

each other in any way, as at 14, although if desired this seam could be closed or soldered. I have also shown the tubing as oval in cross-section, although it could be of any cross-sectional shape whatever. This tube 3 then has wire 6, of iron or the like, wound or wrapped closely upon its exterior surface, said wrapping being done by mounting the tube upon a core or arbor 15 in a lathe, so that great tightness and evenness is secured. The tube thus wrapped is then filled or packed with sand 4, or other material, preferably granular, and the ends of the tube plugged with stoppers 5 to prevent escape of the said filling. The tube thus wrapped and filled is then bent or wound around a mandrel 8, of the requisite cross-sectional shape to give the desired form of a bracelet. Preferably, this winding of the prepared tubing upon the mandrel is done by inserting one end of the tube in an aperture 7 of the mandrel 8, and rotating said mandrel, as in a lathe. The mandrel 8 is shown hollow with one end recessed on opposite sides, as at 9, 9, to enable it to be mounted for turning, and preferably the longitudinal seam 14 of the tubing is laid against the mandrel in winding.

After being wound on the mandrel 8, the coiled tubing is slipped off of said mandrel and is cut into single coils or circlets 10, as shown in Fig. 7, each of such single coils or circlets being adapted to form a bracelet. The filling is of course readily removed, and by cutting the wrapping wire 6 at intervals around the coil or circlet, the short pieces of said wrapping are easily slipped off. A curved piece of tubing of perfectly uniform cross-section is thus provided, and if not seamless the longitudinal seam 4 is then soldered, and the circlet formed into a complete bracelet 11, such as shown in Fig. 9, with hinge 12 and snap or catch 13, or of any construction.

Obviously, my invention is just as applicable to the manufacture of bangles as it is to bracelets, or to any other similar articles, and furthermore the hollow wire or tubing may be of gold, silver or any suitable material, and either having its longitudinal seam unsoldered or being seamless, as stated.

Having thus described the invention, what I claim as new is:

1. The herein described method of bending tubing for bracelets and similar articles, consisting in wrapping the tubing exteriorly with



wire or the like, inserting a filling in the tubing, and then bending the tubing thus wrapped and filled on a mandrel.

2. The herein described method of bending  
5 tubing for bracelets and similar articles, consisting in wrapping the tubing exteriorly with wire or the like, filling the tubing thus wrapped with a granular material and securing it against escape at the ends of the  
10 tube, and then bending the tubing thus wrapped and filled on a mandrel.

3. The herein described method of producing curved or coiled tubing, consisting in wrapping exteriorly with wire or the like a  
15 straight piece of tubing having a longitudinal open seam, filling said wrapped tube with sand or the like and closing its ends, and bending the tubing thus wrapped and filled on a mandrel.

20 4. The herein described method of making tubular bracelet coils, consisting in bringing the edges of a strip of sheet-metal together

and forming a tube with open seam, wrapping said tube exteriorly with wire or the like, inserting a filling in the tubing thus  
25 wrapped, winding the wrapped and filled tubing on a mandrel, removing said filling and wrapping, and soldering the said seam.

5. The herein described method of making tubular bracelet coils, consisting in bringing  
30 the edges of a strip of sheet-metal together and forming a tube with open seam, wrapping said tube exteriorly with wire or the like, filling the tubing thus wrapped with sand or the like and closing its ends, bending the  
35 wrapped and filled tubing on a mandrel with the longitudinal seam toward the same, removing the filling and wrapping, and soldering the said seam.

PHILIP H. LONG.

In the presence of—

ETHEL B. REED,

BERTHA S. FULTON.