G. H. FULLER.

Manufacture of Joints for Jewelry, &c.

No. 147,053. Patented Feb. 3. 1874.

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

WITNESSES.

Thos. P. Barnefield.

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GEORGE H. FULLER, OF PAWTUCKET, RHODE ISLAND.

IMPROVEMENT IN THE MANUFACTURE OF JOINTS FOR JEWELRY, &c.

Specification forming part of Letters Patent No. **147,053**, dated February 3, 1874; application filed January 21, 1874.

To all whom it may concern:

Be it known that I, GEORGE H. FULLER, of Pawtucket, in the county of Providence and State of Rhode Island, have invented certain Improvements in the Manufacture of Joints for the Use of Jewelers and others, of which the following is a specification:

My said improvements relate to the manufacture of jewelers' joints in solid form; and consists in making the same out of and from a single strip or piece of metal or metallic wire.

The old method is to braze or solder a short strip of metal to a small cylinder, and these united pieces are subsequently attached to the wire which forms the shank of the joint.

By the new method aforesaid, the joint is made solid from the wire itself, and in a rapid and simple manner, substantially as hereinafter described.

The accompanying drawing is hereby made a part of this specification, similar letters of reference indicating corresponding parts.

Figure 1 shows a strip or piece of wire out of or from which said joints are made. This figure shows a threaded wire, but smooth, and other shapes of wire may be used in precisely similar ways for the purposes set forth. Fig. 2 shows said strip of wire with one end thereof flattened and enlarged by any of the usual means. Fig. 3 shows a completed joint ready for the reception of the pin, the slits *c c* having been made, and the metal between and on either side thereof having been pressed into the cylindrical form shown. Fig. 4 is a side view of Fig. 3, the dotted lines showing the pin annexed.

a is the flattened and enlarged end of the wire. *c c* are the slits made in said flattened end, two or more of which may be made, as desired. *e* is the shank, by which the said joint is united and secured to the article with which it is to be used. *f* is a shoulder or fulcrum for the pin, above the slits *c c*.

In my said improved method or means of manufacturing said joints, I take the wire of which the same are to be made, and flatten and enlarge one end thereof by any of the well-known means. I then cut the slits *c c* in said flattened end, and by a properly-shaped die or press force or bend the metal between said slits into a semicircular form. At the same time, and by the same means, the metal on the outside of said slits is forced or bent in the opposite direction, and in form also semicircular. This bending into opposite semicircular forms of the metal between and on either side of the slits *c c* produces a cylindrically-shaped perforation in or through the flattened end *a*, when the same is viewed edgewise, as in Fig. 4. The joint is then completed by severing it from the wire, the threaded or smooth shank being left of the desired length, and the wire is then ready for a repetition of the process.

The method or means described may be continued or repeated *ad libitum*, and entire coils of wire may be thus made into completed joints without interruption or subsequent process.

To connect the pin with said joints, its head is run through the cylindrically-shaped perforation aforesaid, and subsequently bent and clinched. The pin so connected as aforesaid is made to bend over the shoulder or fulcrum *f*, when used, and its requisite elasticity or spring is thereby secured.

Joints of this kind, and made substantially as described, may be produced with much greater rapidity, and vastly more cheaply than by the old method of brazing or soldering together three different pieces of metal, and the solid joint, made of one piece of metal, substantially as described, will wear much longer, and be far less liable to get out of order than the soldered joint above mentioned.

I do not confine myself to the style of wire hereinbefore mentioned. Any style or size of wire may be made into joints in substantially the manner set forth.

I claim as my invention and desire to secure by Letters Patent—

The mode of making joints for the use of jewelers and others, in which the joint is made solid and from a single strip of metal or metallic wire, the said mode consisting in flattening and enlarging one end of said wire, slitting the interior of said flattened surface, and bending or pressing into opposite semicircular forms the metal between and on either side of said slits, substantially as and for the purposes described and shown.

GEO. H. FULLER.

Witnesses:
GEORGE H. SMITH,
THOS. P. BARNEFIELD.