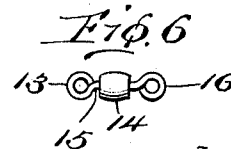
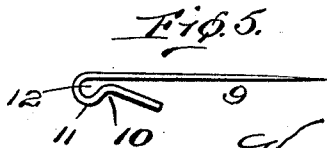
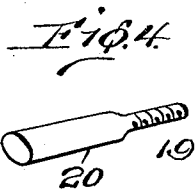
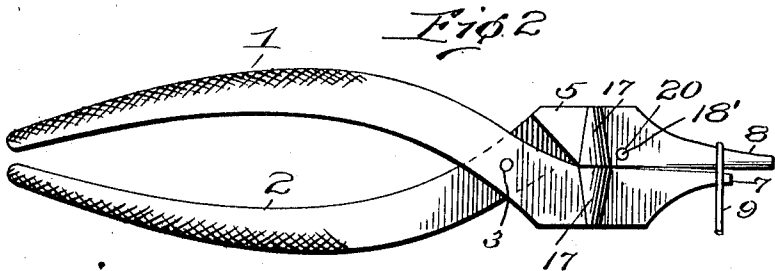
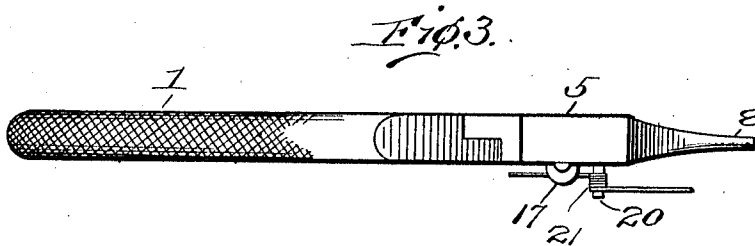


1,004,289.



Witnesses
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M. E. Moore

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By Jeff Moore Attorney

UNITED STATES PATENT OFFICE.

HARRY JAMES McKEON, OF SAYBROOK, ILLINOIS.

JEWELER'S PLIERS.

1,004,289.

Specification of Letters Patent.

Patented Sept. 26, 1911.

Application filed November 2, 1910. Serial No. 590,403.

To all whom it may concern:

Be it known that I, HARRY JAMES McKEON, a citizen of the United States, residing at Saybrook, in the county of McLean and State of Illinois, have invented certain new and useful Improvements in Jewelers' Pliers, of which the following is a specification.

My invention relates to improvements in pliers, and has particular reference to an improved form of wire bending pliers for the use of jewelers in forming beauty pins and other articles from wire.

The object of my invention is the provision of a pair of pliers which will be inexpensive of production and thoroughly efficient for the purpose intended.

To attain the desired object my invention consists of a pair of pliers embodying novel features of construction and combination of parts substantially as disclosed herein.

Figure 1 represents a perspective view of the complete device. Fig. 2 represents a top plan view thereof illustrating the use of the jaw extensions. Fig. 3 represents a side elevation illustrating the use of the supplemental side jaws and shaper. Fig. 4 represents a perspective view of one form of shaper detached. Fig. 5 represents a plan view of a pin formed by the use of the jaw extensions, and, Fig. 6 represents a similar view of a link for a chain so formed.

In the drawings, in which similar characters of reference are employed to denote corresponding parts in the several views, the numerals 1 and 2 denote the handles of the pliers, said handles being pivotally united by the rivet 3, the handles having formed on their ends the jaws 4 and 5 having gripping faces 6 of the usual form. The jaws 4 and 5 of my pliers are provided with the extensions 7 and 8, said extension 7 being shorter than the extension 8, and both of said extensions being semi-oval in cross-section. The use of said extensions 7 and 8 is shown in Fig. 2, in which the pin 9, shown in Fig. 5, is shown as having the initial bend 10 formed therein and the jaws being engaged at the point 11 adjacent to the said bend and the wire being bent around the ex-

tension 8 in a reverse direction to form the completed article of Fig. 5. If a larger loop or eye 12 is desired, the wire may be bent around the lug 7 to form the same in a like manner. The link shown in Fig. 6 is also formed by the use of the end jaw extensions, the wire being held between the members 7 and 8 and bent around the latter to form the loop 13; the bead 14 is then threaded on the shank 15 and the second loop 16 formed on the end as was the first. Formed on the side of the members 4 and 5 are the supplemental jaws 17 having the gripping face 18, while formed in the jaw 5 is a socket 18, preferably screw threaded, in which is engaged the end 19 of the spindle or shaper 20, shown in Fig. 4, in which a shaper of oval shape in cross-section is shown, but it will be understood that any desired shape may be employed, either cylindrical, rectangular or otherwise according to the shape of the article desired, and it will be further understood that different diameters of shapers can be employed on the same tool, all of the shapers having similar tangs 19 for engagement in the socket 18.

Fig. 3 shows the side supplemental jaws and shaper employed to form the coil 21, one end of the wire being engaged between the supplemental jaws, and the other projecting from the shaper to be engaged by ordinary pliers or by hand to wind the same on the shaper. It will be understood, however, that the use of these members is not limited to the forming of coils, but that they may be employed to form any intermediate loop in wire, such as the spring joint of a pin of the safety type, or an intermediate loop for attaching an article.

From the foregoing description taken in connection with the drawings the construction and use of my improved wire bending pliers will be readily understood and their advantages be fully apparent, and it will be seen that I have provided a simple, durable and efficient tool which fulfils all the objects of the invention in a highly satisfactory manner and which is adapted for various kinds of work, the end extensions of the jaws serving especially for bending and

shaping the ends of the wire while the lateral supplemental jaws and shaper serve to shape the intermediate portion of the wire.

I claim:

- 5 The pliers herein described, consisting of the pivoted handles, the jaws having the flat gripping faces, the pair of lateral extensions having the gripping faces in line with the gripping faces of the jaws, the forward

tapered extensions on said jaws, and the 10 lateral shaper extending from one of the jaws.

In testimony whereof I affix my signature, in presence of two witnesses.

HARRY JAMES McKEON.

Witnesses:

ERNEST O. RUGLESS,
RUTH SAILOR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."