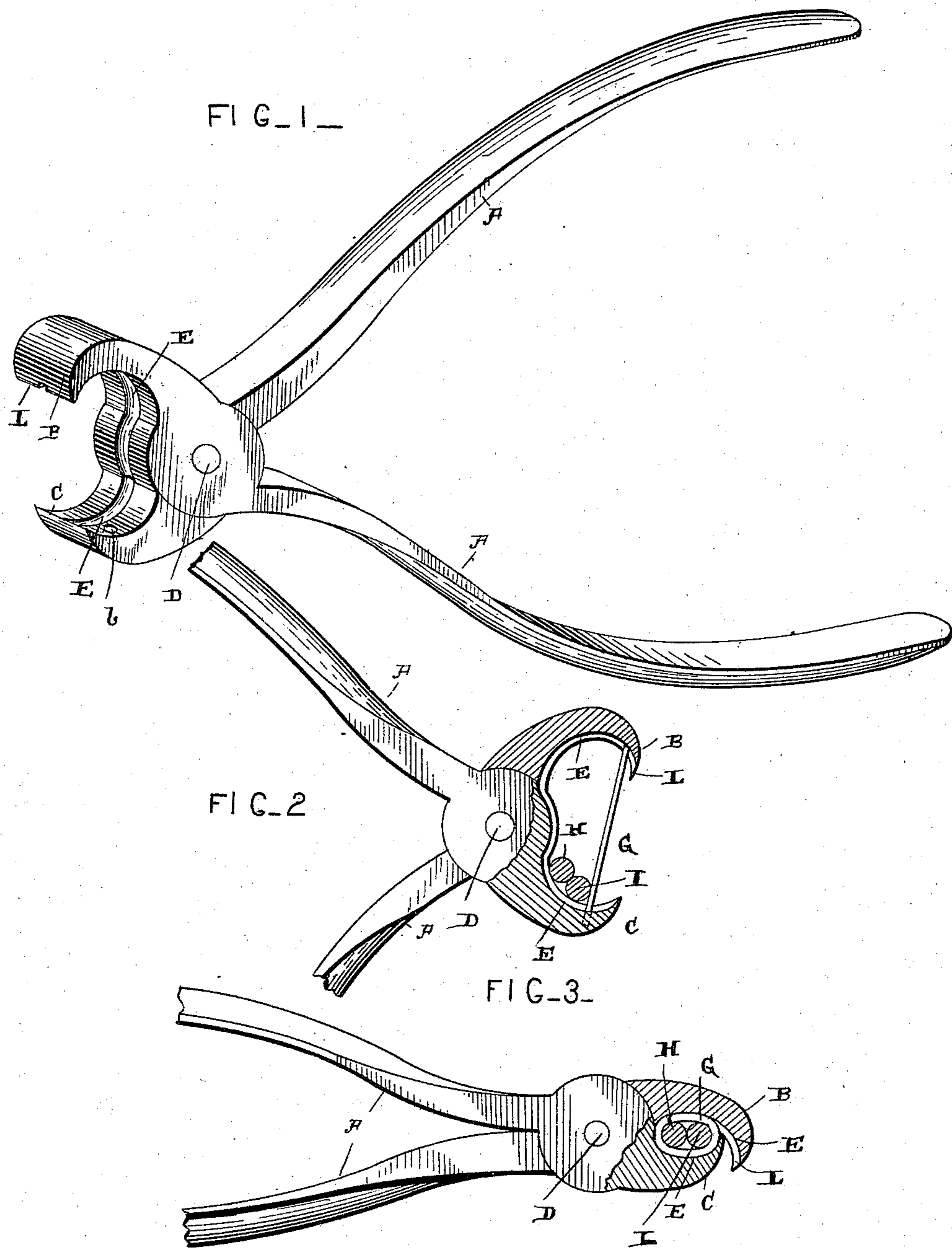


(No Model.)

J. M. COCHRAN.
WIRE BENDING PLIERS.

No. 470,545.

Patented Mar. 8, 1892.



WITNESSES

Geo. C. French.
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UNITED STATES PATENT OFFICE.

JOHN M. COCHRAN, OF RUSSELLVILLE, ALABAMA.

WIRE-BENDING PLIERS.

SPECIFICATION forming part of Letters Patent No. 470,545, dated March 8, 1892.

Application filed September 9, 1891. Serial No. 405,194. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. COCHRAN, of Russellville, in the county of Franklin and State of Alabama, have invented certain new and useful Improvements in Wire-Bending Pliers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in wire-bending pliers for use in splicing the ends of wires together, as hereinafter shown and described; and it consists in the construction of parts which will be fully described hereinafter, and particularly referred to in the claims.

The object of my invention is to provide a pair of pliers which have jaws of a particular shape and construction, whereby they are adapted to bend the wire into a ring around the overlapping ends of fence-wires for securing them together.

In the drawings, Figure 1 is a perspective view of a pair of pliers embodying my invention, the jaws being shown open wide. Fig. 2 is a side view showing the wires to be spliced in position and the short wire being bent into a ring around the ends of the wires to be spliced. Fig. 3 is a side elevation, enlarged, showing the manner of twisting the short wire sufficiently to make its ends overlap.

A indicates the handles of my pliers, which are of the ordinary shape, and B the upper jaw and C the lower jaw thereof. Passing through the pliers just in rear of the jaws is a pivotal pin or bolt D, in the usual manner.

Formed in the inner side of both the upper and lower jaws is a groove E, which groove in the upper jaw preferably extends to the outer end of the jaw, while the groove in the lower jaw preferably tapers toward its outer end, as shown, so that when the wire has been twisted entirely around to form a ring and the jaws are still compressed, as shown in Fig. 3, the end of the wire is directed upward and is caught by the overlapping end of the upper jaw. As shown, the upper jaw is made to overlap the lower one, so that the end of the wire as it overlaps and starts around again,

as shown in Fig. 3, is caught by this overlapping end of the upper jaw and made to start around again, which makes it clasp the wires to be spliced more securely.

Made in the inner surface or face of the short lower jaw is a small hole or shoulder or cavity b, in or against which the short wire G has one end to rest, while the upper end of the said wire catches in the groove made in the inner face of the upper jaw, as shown in dotted lines in Fig. 2.

H I indicate two wires of a barb or other fence wire, which have their ends brought together, and G a shorter wire which is made to overlap the meeting ends of the fence-wires. These wires H, I, and G are placed in between the jaws of the pliers, as shown in Fig. 2, and the short wire G, which is to be bent around the other wires, is placed with one end in the opening or cavity b, formed in the lower jaw and in front of the wires to be spliced. By pressing the handles of the pliers the jaws are brought together, and the short wire G follows the groove in the upper jaw, passing around the wires to be spliced until it is formed into a ring. Then by continuing to press the jaws together the end of the wire which was not placed in the said cavity passes around, overlapping the end which is in the opening, and is caught by the overlapping end of the upper jaw and started around again in the groove formed therein, as in the first instance, thus causing the short wire G to be tightly wrapped around the overlapping ends of the wires to be spliced.

These pliers are adapted and intended to be used in connection with my machine shown in an application filed in the United States Patent Office August 1, 1891, Serial No. 401,377, which machine draws together the ends of the wires to be spliced.

By means of pair of pliers of the above construction I am enabled to quickly secure together the overlapping ends of wires by means of claspings rings tightly around them. Owing to the fact that one jaw is longer than the other, the ring can be brought to any desired degree of tightness upon the wires to be spliced, as will be readily understood, and which could not be the case if the jaws did not fit one within the other, as shown. It will also be noticed that the other end of the up-

per or long jaw is hooked or bent inward, as shown at L, which materially aids in causing the end of the wire to bend and follow the groove. The lower end of the wire being
5 placed in the cavity in the shorter jaw, it cannot slip when the jaws are forced together for the purpose of forming the rings.

Having thus described my invention, I claim—

10 1. In a wire-bending pliers, the handles pivoted together and having their short ends formed into jaws, each of the jaws provided with a groove longitudinally formed in its inner face, and a cavity in one of the jaws, all
15 combined for the purpose described.

2. In an instrument of the character described, the pivoted handles having their short ends formed into jaws, each of the jaws having a groove and one of the jaws having a cavity, all combined for the purpose described.
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3. In an instrument of the character described, the handles pivoted between their ends, having their front ends formed into jaws, each of the jaws having a longitudinal groove

in its inner face, one of the jaws being longer 25 than the other, for the purpose described.

4. In an instrument for the purpose described, the pivoted handles having their front ends formed into jaws, each of the jaws having a longitudinal groove in its inner face, 30 one of the jaws being longer than the other, and the short jaw having a cavity in its inner face at one side of the said groove, the parts combined substantially as described.

5. In an instrument of the character described, the pivoted handles having their front ends formed into jaws, each of the jaws having a longitudinal groove in its inner face, 35 one of the jaws being longer than the other and having its extended end bent inward or made hooked, all combined for the purpose 40 specified.

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

JOHN M. COCHRAN.

Witnesses:

Q. M. CLARK,
E. A. JONES.