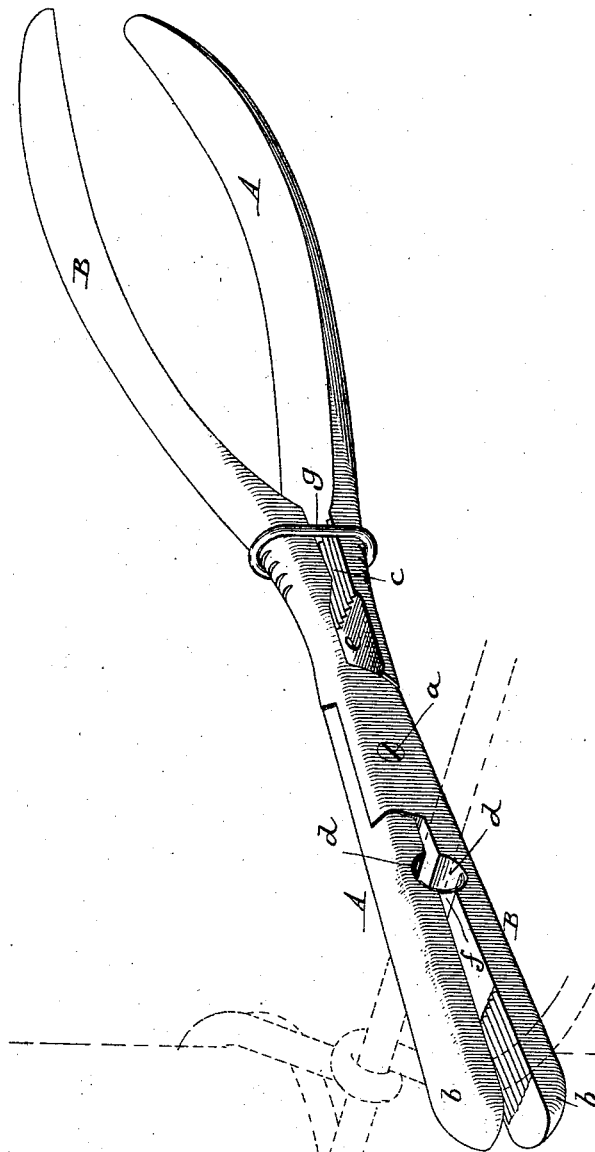


(No Model.)

L. E. WHIPPLE.  
TOOL FOR UNITING WIRES.

No. 347,675.

Patented Aug. 17, 1886.



Attest.

*Frederic P. Hollingworth*  
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Inventor.

*L. E. Whipple*  
*By his Atty*  
*Phil. T. Dodge*

# UNITED STATES PATENT OFFICE.

LEANDER E. WHIPPLE, OF HARTFORD, CONNECTICUT.

## TOOL FOR UNITING WIRES.

SPECIFICATION forming part of Letters Patent No. 347,675, dated August 17, 1886.

Application filed April 5, 1886. Serial No. 197,900. (No model.)

### *To all whom it may concern:*

Be it known that I, LEANDER E. WHIPPLE, of Hartford, in the county of Hartford and State of Connecticut, have invented certain  
5 Improvements in Tools for Uniting Wires, &c., of which the following is a specification.

My invention relates to a hand-tool intended for use in coiling the end of a wire upon itself or upon another wire for the purpose of fast-  
10 ening the two together; and to this end it consists, essentially, in a pair of pliers having each of its jaws formed with one or more surfaces adapted to grasp and firmly hold the extremity of the wire, and with a transverse re-  
15 cess, through which the body of the wire or the second wire may pass freely, to serve as a pivot around which to revolve the tool.

Referring to the accompanying drawing, the figure represents a perspective view of my  
20 improved tool.

In the drawing, A and B represent two handles or levers crossed and pivoted together at  
25 a, after the manner of an ordinary pair of pliers or pinchers. At their forward ends the handles are fashioned into opposing jaws, b, the inner surfaces of which are corrugated, or otherwise formed that they may grasp the  
30 end of the wire firmly between them. If desired, a second pair of surfaces, c, may also be formed in rear of the pivot, to grasp the wire in like manner when the tool is to be used  
35 in places which admit of the wire being more conveniently grasped in rear of the pivot. At suitable points in their length the two  
40 jaws are provided with transverse grooves d, opposing each other, and forming jointly a circular transverse passage between the jaws of sufficient size to admit of the body of the wire passing freely therethrough while its end  
45 is grasped, as before explained.

In making use of my tool the wire is passed, as in dotted lines, around a post or other support and doubled or returned upon itself.

The tool is slipped over the body of the wire, so as to embrace the latter within the openings  
45 d, and the end of the wire grasped between either pair of surfaces. With the parts in this position, the tool is revolved around the body of the wire as a center, thereby twisting  
50 or coiling the end of the wire upon the body portion and securing it firmly thereto. There may be an additional opening, e, in rear of the jaws, if preferred; but under ordinary  
55 circumstances this is unnecessary.

In order to prevent the possibility of the  
60 main wire slipping out of the notches d, I prefer to provide one of the jaws with a lip, f, spanning the space between them and entering a notch in the opposite jaw, as shown in the drawing.

For the purpose of locking the tool upon the wire I propose to make use of a fastening  
65 device of any suitable character. A sliding ring or band, g, encircling the middle of the tool, as shown in the drawing, and adapted to slide outward around its enlarged ends, will  
70 answer an excellent purpose; but in place of this ring a hook, catch, or other equivalent device, many of which are known in the art for locking tongs or pliers in a closed posi-  
75 tion, may be used.

Having thus described my invention, what I claim is—

The wire-fastening tool consisting of the  
75 pivoted arms formed with two opposing wire-grasping surfaces, two opposing notches, d, and a lip, f, substantially as described and shown.

In testimony whereof I hereunto set my hand, this 5th day of February, 1886, in the  
80 presence of two attesting witnesses.

LEANDER E. WHIPPLE.

Witnesses:

ALFRED JENNINGS ESTLOW,  
LEWIS ELIOT STANTON.