(No Model.)

S. M. FORBES.

COMBINATION WIRE FENCE TOOL.

No. 479,561. Patented July 26, 1892.

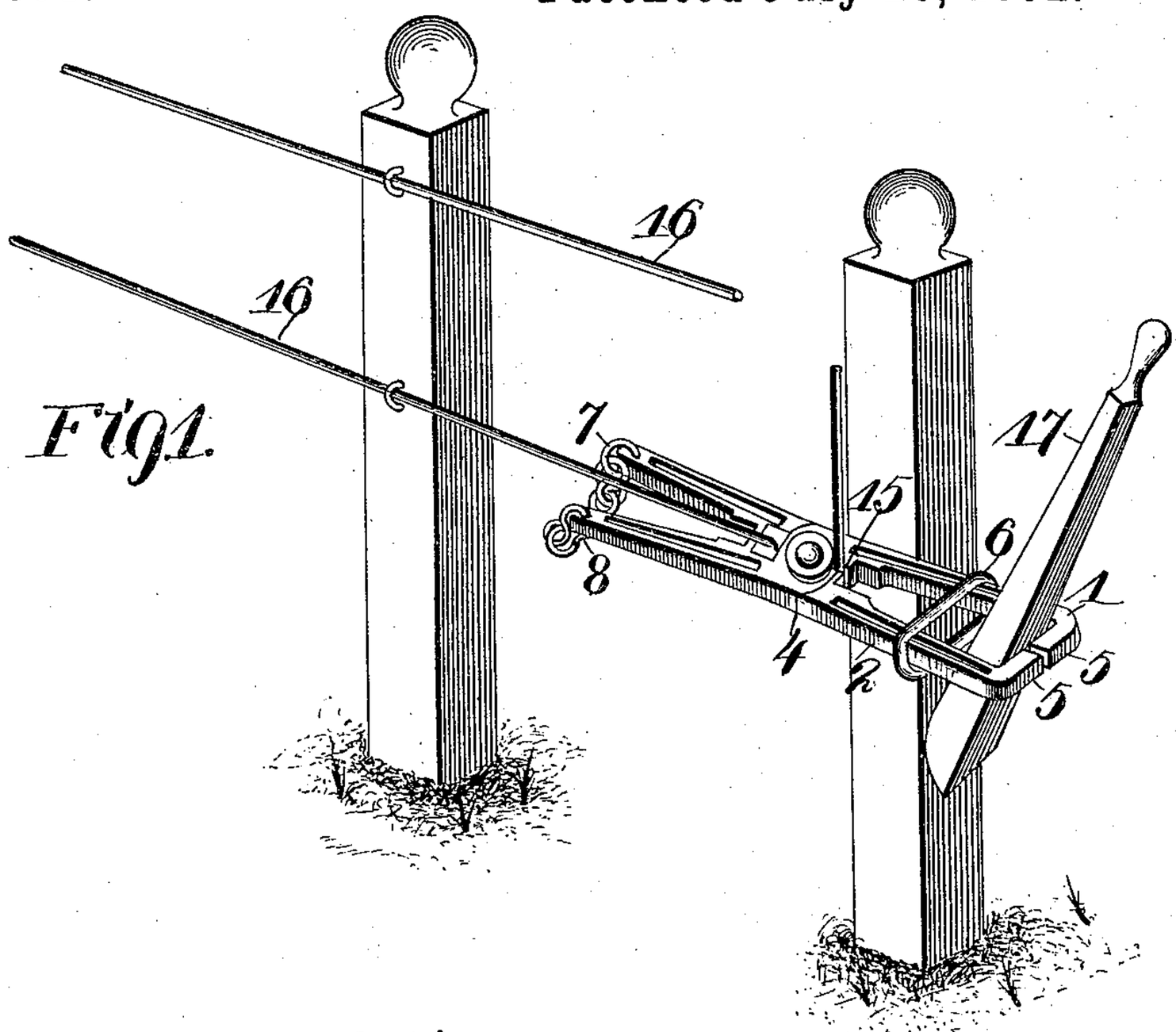


Fig. 1.

Fig. 2.

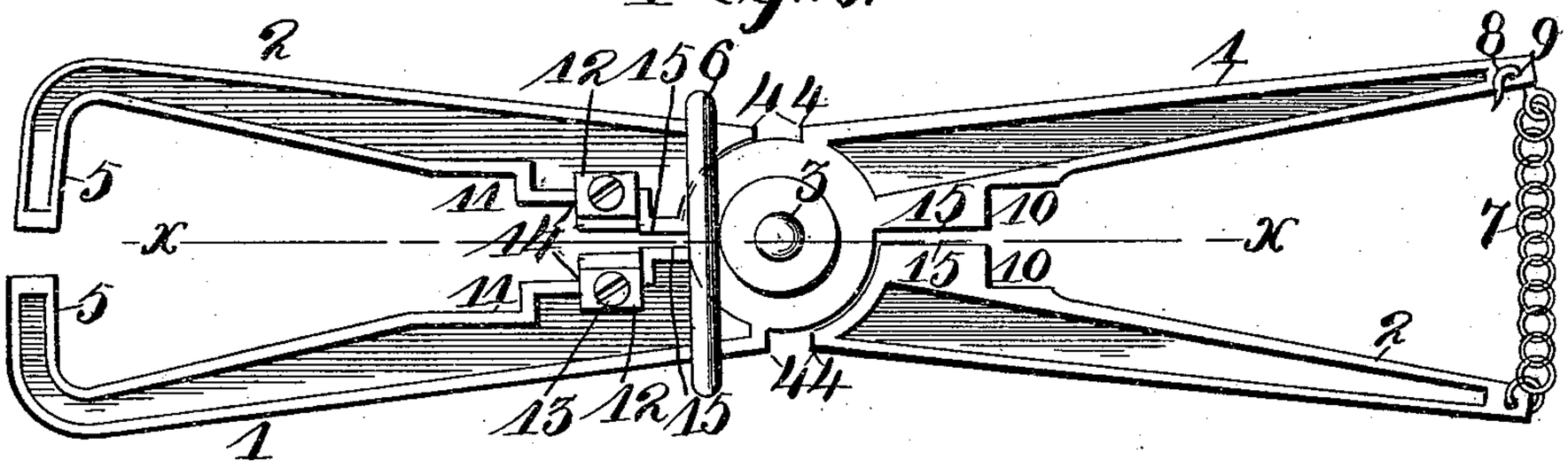
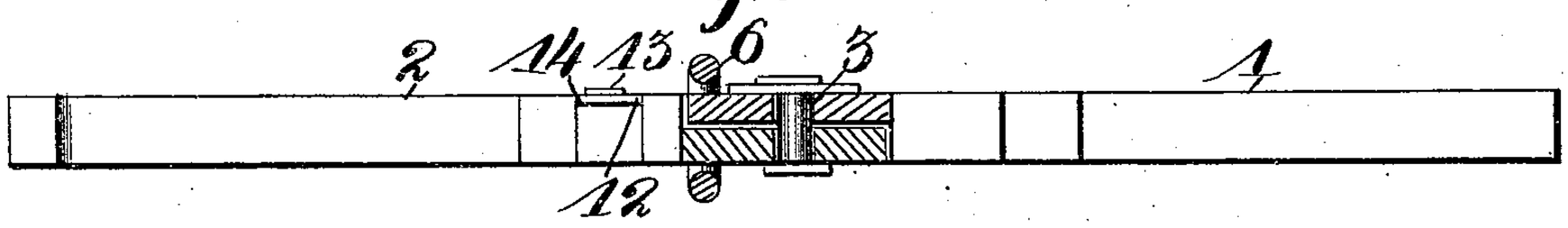


Fig. 3.



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UNITED STATES PATENT OFFICE.

STEPHEN M. FORBES, OF ST. LOUIS, MISSOURI.

COMBINATION WIRE-FENCE TOOL.

SPECIFICATION forming part of Letters Patent No. 479,561, dated July 26, 1892.

Application filed March 7, 1892. Serial No. 424,041. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN M. FORBES, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in a Combination Wire-Fence Tool, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in combination wire-fence tools; and it consists in the novel arrangement and combination of parts, as will be more fully hereinafter described, and designated in the claims.

In the drawings, Figure 1 is a perspective view of a portion of a wire fence, illustrating the practical application of my improved tool in stretching a strand of wire. Fig. 2 is an enlarged plan view. Fig. 3 is a longitudinal sectional elevation, the section being taken on line *x x* of Fig. 2.

Referring to the drawings, 1 and 2 indicate two pivoted members of the tool, pivoted at a point intermediate of their ends, preferably at a point at about the center of their lengths, by means of a bolt or rivet 3, so that one member is pivoted to the other and each comes in contact with and works upon the other and has its pivotal movement limited by means of shoulders 4, formed opposite on each member, there being similar pairs of said shoulders on each edge of the tool. At one end of the tool the corresponding ends of each member 1 and 2 are bent inwardly, so as to form oppositely-located lugs or projections 5, which meet each other when said ends are at the limit of their inward movement, whereby said lugs will act as a stop to limit the inward movement of said members at that end and to perform a function which will be hereinafter mentioned. The normal position of the two members is with the lugs 5 in contact at the inner ends, in which position the outer edges of each member will incline toward each other, so that such surfaces may in use act as a sort of wedge, as will be set forth farther on. The outer surface of the edge of each member is preferably straight and smooth, and the corresponding ends diverge outwardly from a point near to the rivet 3, and a sliding or adjustable clamping ring or loop 6 is mounted on the tool for purposes hereinafter mentioned. The loop 6 is of such size and shape that it cannot be removed from the tool until the two members are separated by removing the rivet 3. It must be placed in position upon the tool before the members thereof are fastened together. I may explain this further by stating that the said loop 6 at its largest inner diameter is smaller than the normal distance apart of either of the corresponding ends of the members 1 and 2. By such construction it will be impossible to lose off the loop 6 during operation. A chain 7 is permanently secured at one end to the terminal of member 2, which is opposite the end which carries the lug 5, and the opposite end of said chain is provided with a hook 8, which is adapted to engage a hole or opening 9, formed in the corresponding end of the opposite member.

Angular recesses 10 are formed in the inner edges of members 1 and 2 opposite each other at a point adjacent to the pivot and at that end of the tool which carries the chain 7, and additional opposite recesses 11, similar in shape to the recesses 10, are formed in opposite inner edges of the opposite ends of said members, but separated a greater distance, the purpose of which will be made known farther on.

12 12 indicate oppositely-located wire-cutting knives or blades having adjacent sharpened edges, respectively. These cutting-knives are removably secured to corresponding sides of members 1 and 2 by means of suitable screws 13 being mounted in seats or sockets 14, of proper size, formed in the material of which said members are composed, and said knives are so arranged that their cutting-edges will meet when the members 1 and 2 are in normal position.

The tool is provided with opposite clamping-jaws 15 15, which are adapted to come nearly or quite in contact when the members are in their normal position, and the location of these clamping-jaws is preferably on the inner edges of said members at a point between the recesses 10 and the pivotal point of the members. I provide opposite clamping-jaws 15 on each side of the pivotal point of the members composing the tool, an additional pair of such jaws being located between the cutting-knives 12 and the rivet 3.

The operation is as follows: In stretching a wire—such as 16, which may be a barbed wire—the end thereof is first inserted between the clamping-jaws 15 at one end of the tool, passed downwardly under the pivotal point, and then upwardly at right angles until the end of the wire rests between the clamping-jaws on the other side of said pivotal point. (See Fig. 1.) Then the loop 6 is forcibly urged toward one end of the tool, while the operator at the same time firmly grasps both ends of both members in his hands and presses the oppositely-located ends toward each other, which operation will have the effect of bringing the jaws 15 forcibly in contact with the wire at two separate points on opposite sides of the pivot 3, thereby clamping the wire firmly between the jaws. Then a lever—such as 17—or a crowbar should have one end inserted in the opening between the members, (at either end of the tool,) and said lever may be used to stretch the wire, as will be readily apparent. Either end of the tool may be located adjacent to the lever, for it is clear that the chain 7 may be pried against in a manner similar to that shown in Fig. 1, where the tool is indicated with the lugs 5 in engagement with the lever. The opposite shoulders 4 will limit the outward movement of the respective ends of the members of the tool.

The recesses 10 10 and 11 11, being oppositely located, as before described, are adapted to perform very conveniently the function of a nut-wrench, capable of taking and turning nuts of different sizes.

The cutting-knives 12, located, as before described, in connection with the pivoted members of the tool, form a very convenient wire cutter or nipper, and as the operation thereof appears to be apparent further description thereof need not be given, except to say that the ends on the members 1 and 2, which carry the chain 7, are during the operation of cutting wire to be used in a manner similar to that in which the handles of an ordinary pair of pliers are used.

What I claim is—

1. The improved wire-fence tool comprising pivoted members 1 and 2, having opposite clamping-jaws 15 15 located adjacent to the fulcrum thereof and the adjacent ends of said members at one end of the tool turned inwardly to form opposite lugs 5 5, and a chain 7, adapted for connection with the ends of the members at the end of the tool opposite the ends carrying said lugs, substantially as described.

2. The improved wire-fence tool comprising two members pivoted together at approximately the center and formed at two of their adjacent ends with inturned opposing lugs, said members being provided with clamping-jaws 15, recesses 10 and 11, and cutters 12, a clamping-loop 6, embracing said members, and a chain 7 for connecting the ends of the members opposite said inturned lugs, all arranged substantially as and for the purpose set forth.

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

STEPHEN M. FORBES.

Witnesses:
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