(No Model.)

A. B. PROBASCO.

WIRE STRETCHING IMPLEMENT.

No. 591,495. Patented Oct. 12, 1897.

Fig. 1.

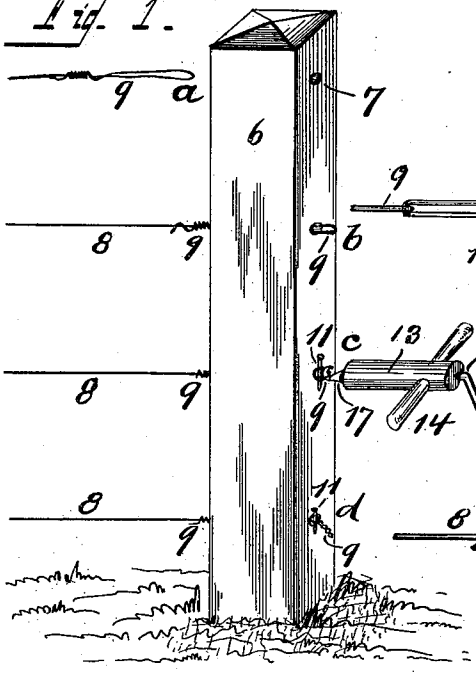


Fig. 4.

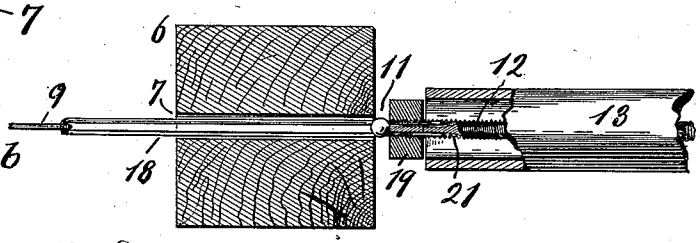


Fig. 5.

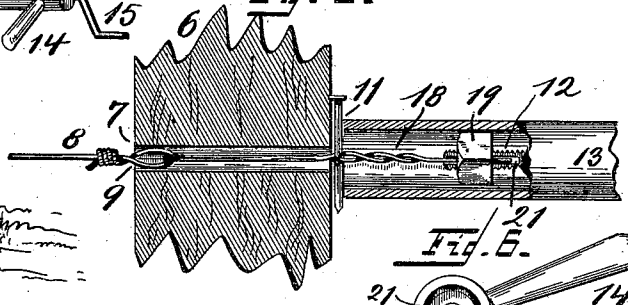


Fig. 6.

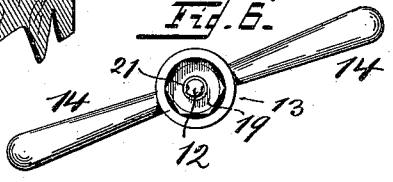
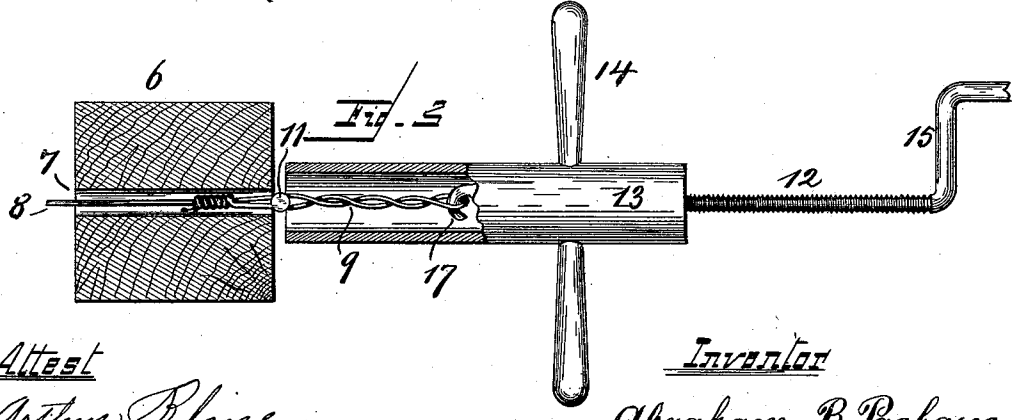


Fig. 2

Fig. 3



Attest

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UNITED STATES PATENT OFFICE.

ABRAHAM B. PROBASCO, OF NEAR LEBANON, OHIO.

WIRE-STRETCHING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 591,495, dated October 12, 1897.

Application filed May 3, 1897. Serial No. 634,803. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM B. PROBASCO, a citizen of the United States, residing near Lebanon, Warren county, State of Ohio, have invented a certain new and useful Wire-Stretching Implement; and I do declare the following to be a clear, full, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, attention being called to the accompanying drawings, with the reference numerals and letters marked thereon, which form a part of this specification.

This invention relates to an implement for stretching wires, such as are used, for instance, in wire fences. It is intended to be used particularly on such fences as described in my pending application, Serial No. 649,151, and where wires are stretched between posts and supported by them, their ends being secured to the corner or end posts after the slack is taken out of the wires by drawing them taut.

The construction of my implement is such that it permits first the wires to be stretched, after which, without removal and without giving the wires a chance to slacken again, it may be used to make the final connection.

In the following specification and particularly pointed out in the claims is found a full description of the invention, its manner of use, parts, and construction, which latter is also illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a fence-post with the ends of some of the wires fixedly secured, while others are about to be so connected with my implement. Figs. 2 and 3 are respectively vertical and horizontal sections of such a fence-post, taken on a plane where it is perforated and showing the tool in position in the first figure for drawing the wire tight and in the second for connecting the same after it has been drawn tight. Figs. 4 and 5, in views similar to the preceding figures, show the parts in the same condition and position as shown in those figures, with those parts, however, whereby the tool is attached to the fence-wire modified. Fig. 6 is an end view of the tool as so modified.

6 may indicate a fence-post having perforations 7 at such points where it is desired to connect the ends of the wires 8. To permit connection of my implement, the ends of the wires to be stretched and connected are provided with loops 9, which are brought up close to the post, as shown at *a*, Fig. 1. Next the wire is drawn as tight as possible by hand or otherwise, and its loop 9 is inserted into one of the perforations of the post which is intended to receive it. It is pushed through the same to an extent to cause its end to project sufficiently at the other side of the post at *b* to permit placing of the tool, as shown at *c*. Nails or pieces of wire 11, passed through the projecting end of the loop and resting against the post on both sides of the perforation, prevent the wire end from slipping back through the perforations and hold the wire to the point to which it has been stretched both at this stage of the proceedings and later after the final stretching and connection has been accomplished. The tool used for all these purposes consists of a screw 12, carried within a barrel 13, the two so mounted on each other as to permit each to be independently rotated on the other. For such rotation each is provided with suitable handles 14 and 15 on the barrel and at one end of the screw, respectively. The latter is held to the former by a nut 16, formed, preferably, by closing up one end of the barrel, as shown. The inner end of the screw is provided with suitable means permitting attachment of it to the loop at the end of the wire, which means consist, preferably, of a hook 17, either formed integrally at the end of the screw or connected thereto.

The manipulation is now as follows: Nail 11 having been placed in position and the tool attached, as shown in Fig. 1, the outer end of screw 12 is held with one hand, while with the other barrel 13 is rotated about it in a manner to cause its inner end to move first toward the post, as shown in Fig. 2, after which, rotation being continued, screw 12, with hook 17, is caused to move away from the post, drawing loop 9 after it without rotating it, and thereby stretching the wire tight. After this latter has been stretched sufficiently and hook 17 has arrived in about a position as shown in dotted lines in Fig. 2, which position, however, altogether depends on the

slack of the wire, then barrel 13 is held stationary, and screw 12 is rotated by means of handle 15 in opposite direction to the previous rotation of barrel 13 and to the left as the screw-thread is shown in the drawings. This causes the drawn-out part of the loop between nail 11 and the hook to become twisted about itself, as shown in Fig. 3. Rotation of screw 12 is then continued until the loop has been sufficiently twisted to warrant security against opening, after which such rotation is discontinued and barrel 13 is rotated again, but in reverse direction, as before, and in a manner to cause it to move away from the post. This rotation is continued until hook 17 is sufficiently clear again, about as shown in Fig. 1, to permit detachment of the tool. The twisted projecting end of the wire loop is then preferably bent toward the post, as shown at *d*, to prevent it from becoming an obstruction.

In Figs. 4, 5, and 6 a modified construction of the tool is shown, the change affecting merely the means for connecting the end of the fence-wire to the stretching-screw. It is for such cases where an intermediate loop 18, with open ends, is used for any reason whatever. In this case instead of hook 17 the inner end of screw 12 carries a locking-nut 19 and is provided with grooves 21 of decreasing depth as they extend inwardly, and which grooves receive the ends of loop 18 when the tool is first placed in position for use. To admit such wires freely, nut 19 is first run out over the deeper part of the grooves, after which the ends of the wires may then be readily placed. The nut is then run inwardly again until it rides upon the wire ends in the shallower parts of the grooves, which ends are thus firmly clamped and held in position.

Otherwise the manipulation is the same, the position of the parts as shown in Figs. 4 and 5 corresponding with the position as shown, respectively, in Figs. 2 and 3.

Having described my invention, I claim as new—

1. The wire stretching and twisting tool consisting of the combination of a barrel 13, a screw 12 within, the two mounted on each other in a manner to permit independent rotation for each on the other, and locking means at the inner end of the screw adapted to permit temporary connection of the wire loop thereto, the end of the barrel resting against the post when the tool is in position to permit the locking means to draw the end of the wire into the barrel.

2. The wire stretching and twisting tool consisting of the combination of a barrel 13 having handles 14, screw 12 mounted in one end of the same, a handle 15 at its outer end and locking means at the inner one, adapted to permit temporary connection of a wire loop thereto.

3. The wire stretching and twisting tool consisting of the combination of a barrel 13, a screw 12 within the same, the two mounted on each other in a manner to permit independent rotation for each on the other and a hook 17 at the free end of the screw, the wire being stretched by operating screw 12 in a manner to cause hook 17 to move into the barrel while the end of the latter rests against the post.

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

ABRAHAM B. PROBASCO.

Witnesses:

C. SPENGEL,

ARTHUR KLINE.