

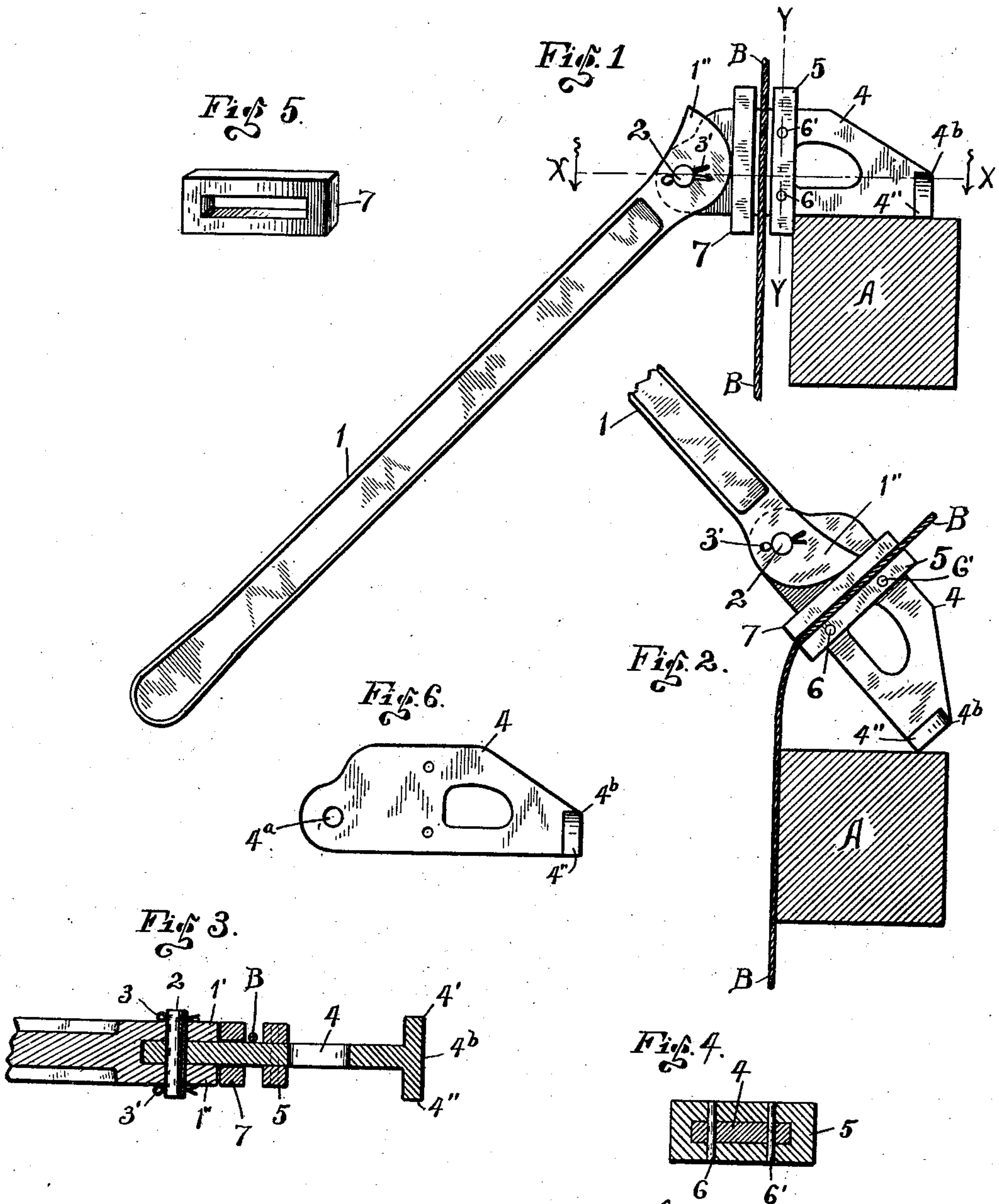
No. 880,830.

PATENTED MAR. 3, 1908.

T. A. SCOTT & H. E. CRAWFORD.

WIRE STRETCHING TOOL.

APPLICATION FILED MAR. 12, 1906.



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# UNITED STATES PATENT OFFICE.

THOMAS A. SCOTT AND HENRY E. CRAWFORD, OF BENTONVILLE, INDIANA.

## WIRE-STRETCHING TOOL.

No. 880,830.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed March 12, 1906. Serial No. 305,476.

*To all whom it may concern:*

Be it known that we, THOMAS A. SCOTT and HENRY E. CRAWFORD, citizens of the United States, and residents of Bentonville, in the county of Fayette and State of Indiana, have invented new and useful Improvements in a Wire-Stretching Tool, of which the following is a full and complete specification and exposition of our invention.

Our invention relates, more particularly, to improvements in tools for stretching wires or the like, and particularly applicable in the building of wire-fence, and our object, broadly speaking, is the provision of a wire stretching tool which will be neat and attractive in appearance, strong and durable in construction, easily operated and controlled, positive in action, and which can be manufactured and sold at a comparatively low price.

Our invention consists particularly in the several novel features of construction and the combination of parts hereinafter set forth and definitely pointed out in the claims hereunto appended, the construction and operation of the device being clearly shown in the accompanying drawings forming a part of this specification.

Referring now to the drawings for a visualization of our preferred construction: Figure 1 shows the invention in position ready to engage a wire to be stretched; Fig. 2 shows the device in engagement with a wire and by which the wire has been stretched ready to be secured; Fig. 3 is a sectional view of the device as taken on the line  $x-x$  of Fig. 1, and as taken in the direction indicated by the arrows on said line; Fig. 4 is a cross sectional view as taken on the line  $y-y$  of Fig. 1; Fig. 5 is a detail perspective view of one of the clamping members; and Fig. 6 is a side elevation of the shank or body piece of the device.

Similar indices denote like parts throughout the several views of the one sheet of drawings.

In order that our invention may be fully understood and its operation properly comprehended we will now take up the detail description thereof in which we will describe the various parts as briefly and as compactly as we may.

In the drawings the letter A denotes a fence-post, shown as looking directly down thereupon, and the letter B denotes a wire,

these parts appearing in Figs. 1 and 2, and are shown only to illustrate the operation of the invention.

In the invention proper the numeral 1 denotes the handle or lever, having integrally formed therewith the identical cams 1' and 1'', said cams being spaced apart as shown for purposes presently appearing. Axle apertures extend across through the cams and are located to register with each other to receive the axle 2 as shown. Said axle is of a length such as to extend slightly beyond the outer sides of the cams with apertures there-through at right angles to the axles to receive the spring keys 3 and 3' outside the said cams, respectively and as indicated.

The numeral 4 denotes the shank which is of a thickness such as to fit the space between the cams 1' and 1''. The inner end of the shank is formed rounded, and near this end an aperture 4<sup>a</sup> is formed for the axle 2. The outer portion of the shank 4 tapers down to a nose 4<sup>b</sup>. Extending out at right angles from the nose 4<sup>b</sup> are the two oppositely disposed lugs 4' and 4'', forming braces to hold the shank in working position.

The numeral 5 denotes the passive clamp-member, which is simply an oblong plate with an aperture formed centrally there-through to receive the central portion of the shank 4, to which it is permanently secured by the rivets 6 and 6' as shown most clearly in Fig. 4, there being rivet apertures formed through the shank 4 and through the clamp-member 5 for the purposes stated and as clearly indicated in the drawings.

The numeral 7 denotes the active clamp-member, which is identical with the member 5 except that no rivet apertures are formed therein. The member 7 also has a central aperture therethrough whereby it may fit over the central portion of the shank 4 and may be free to slide therealong, with its face adapted to contact with the opposing face of the member 5. The faces of the cams 1' and 1'' are adapted to contact with the outer face of the member 7 as indicated. The said handle or lever 1 is pivotally mounted to the shank 4 by the axle 2 which passes through the axle-aperture in the cams and through the aperture 4<sup>a</sup> of the shank and is securable by the keys 3 and 3'.

The relations of the axle 2, the clamp member 3, and the curvature of the cams are such that when the lever 1 is turned parallel with



the shank 4 the points of the cams will press the opposing faces of the members 5 and 7 together, and that with great power if desired.

Operation: The operation of our invention is very simple, one manner of its application being shown in Figs. 1 and 2. If it be desired to stretch the wire B and bring it to the face of the post A to be secured, then the relations of the parts are first arranged as shown in Fig. 1, bringing the face edge of the shank against the side of the post, with the front far corner of the post against the member 5, then allowing the wire, to be stretched, to lie across the shank 4 between the two members 5 and 7. Now by moving the handle on its pivot in the direction in which the wire is to be stretched it is apparent that the cams will press the member 7 towards the member 5 thereby clamping the wire therebetween; and, continuing to move the handle in the same direction as before, the nose of the shank will engage the post and the entire mechanism will be moved in the segment of a circle to the position shown in Fig. 2, thereby stretching the wire to the extent to which the members 5 and 7 are moved and also bringing the wire in contact with the face of the post where it may be secured in any well known manner. After the above the movement of the handle may be reversed and the wire thereby released. It is also apparent that the tool may be inverted and a wire may then be stretched in a direction opposite to that shown, and it should also be noticed that the wire to be stretched may be clamped by either side of the device, that is,—above or below the shank, as the jaws formed by the members 5 and 7 are identical on each side of the shank 4.

Should the opposing faces of the members 5 and 7 become worn or damaged through long use, or if for any reason they should become inoperative, then in that event each one or both of them may be removed and re-

versed or turned over, thereby bring new clamping faces into action.

From the above it is notably apparent that we have produced a wire stretching tool which is easily and quickly engagable with the wire to be stretched, and which will be positive in clamping and will not mar the wire acted upon, while the more pressure exerted in stretching the wire will cause the grip upon the wire to be more positive.

Having now fully shown and described our invention what we claim and desire to secure by Letters Patent of the United States, is—

A wire stretching tool, comprising a supporting plate having one edge adapted to lie against the face of a post, an active clamping member and an opposed passive clamping member encircling said supporting plate normal to said edge, each of said members consisting of a flat plate apertured to receive said supporting plate and having both of its apertured faces formed to constitute clamping faces, said passive clamping member projecting perpendicularly beyond the post-engaging edge of the supporting plate and having means for securing it to said plate, and said active clamping member being slidable on the supporting plate, an operating lever having cams coöperating with the outer face of the active clamping member, and an axially-removable pivot pin connecting said lever with the inner end portion of the supporting plate, said supporting plate being constructed to permit the removal of the clamping members over such end portion when the operating lever is removed.

In testimony whereof we have hereunto signed our names to this specification in the presence of two subscribing witnesses.

THOMAS A. SCOTT.

HENRY E. CRAWFORD.

Witnesses:

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