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J. H. CHANEY.

COMBINED TOOL.

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UNITED STATES PATENT OFFICE.

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COMBINED TOOL.

No. 871,476. Specification of Letters Patent. Patented Nov. 19, 1907.

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To all whom it may concern:

Be it known that I, JAMES H. CHANEY, a citizen of the United States, residing in Stanton, in the county of Haywood and State of Tennessee, have invented certain new and useful Improvements in Combined Tools, of which the following is a specification.

This invention relates to improvements in combined tools, especially designed for use in the erection of either plain or barb-wire fence structures, particularly those in which wire or other metallic staples are employed for securing the fencing wires to their supports.

The object of my invention is to provide a hand implement combining the necessary tools and devices for cutting, clamping and stretching the wire for driving and pulling the staples and for affording a leverage for pulling the staples and particularly as a fulcrum for the implement when employed for stretching wire.

With these ends in view, my invention consists in certain features of novelty in the construction, combination and arrangement of parts by which the said objects and certain other objects hereinafter appearing are attained, all as fully described with reference to the accompanying drawing and more particularly pointed out in the claims.

In the said drawing: Figure 1 represents a plan view of a combined fence wire manipulating tool embodying my invention. Fig. 2, a front end elevation of the same. Fig. 3, a cross-section on the line 3, 3 of Fig. 5. Fig. 4, a detail showing the position of the cutting and gripping devices in an open position. Fig. 5, a side elevation of the implement, and Fig. 6 a cross-section on the line 3, 3 of Fig. 5, of a modified form of cutting edges.

Similar numerals of reference indicate the same parts in the several figures of the drawing.

7 and 8 respectively represent two levers secured together by a pivot bolt 9 in any usual manner for pivoting the gripping members of a hand-tool, and preferably by recessing one of said members into the other, as indicated in Figs. 1 and 2.

The pivoted members or bars 7 and 8 may be of any metal suitable for the purpose but preferably of steel and terminate at one end in handles 10 and 11 which may be screw-threaded into the ends of the bars, as indicated at 12, or secured thereto by any well known means.

The members 7 and 8 at a point between their pivot and the handles are recessed so as to receive two cutting-blades 13, 14 as shown in Figs. 3 and 5, which blades are secured in their recesses by set-screws 15 so that the blades may be removed for sharpening.

The blades 13 and 14 are preferably as near the pivot 9 of the implement as possible, in order that the greatest possible leverage may be secured for the purposes of their operation and these blades are arranged so that as the handles are pressed toward each other from an open position, a wire inserted between the edges of the blades will be severed by a shear cut. For ordinary purposes however, the cutting-blades may be formed integral with the bars 7 and 8 as respectively indicated at 16 and 17 in the modification shown in Fig. 6, but where the additional cost of using separate and hardened steel blades is of no substantial importance, then the removable blades 13 and 14 are preferably employed and mortised, as shown in Fig. 3, in order that they may be firmly and rigidly held against movement when removably secured in place by the set-screws.

Between the pivot and the front ends of the members 7 and 8 their opposing fences are corrugated to form a series of teeth 18, 19 and each member so as to oppose each other and grip a wire when the handles of the implement are forced outwardly away from each other, the gripping surfaces being somewhat extended to secure such and hold on the wire when pulling to stretch it, that it may not slip from between the gripping surfaces of the implement.

Both members 7 and 8 terminate respectively in wedge shaped prongs 20 and 21 which project at a right angle from the members 7 and 8, which prongs are adapted for pulling staples and to which end the outer side thereof is straight, as indicated at 22 and the inner side inclining, as shown at 23 and preferably convex, as indicated by the dotted lines 24 in Fig. 5, to conform to the crown of the staple, so that when the prong or prongs of the implement are passed downwardly or upwardly through a staple, a flat side 22 will lie parallel with and against the fence post and the curved side fit the curvature of the staple crown, so that when the

necessary leverage is applied by bearing down or up upon the handles, as may be, the staple may be withdrawn without disfiguration and without injury. Two of these prongs are employed, one on each of the members 7 and 8, so that two staples may be simultaneously withdrawn at any point within the range of the prongs when the gripping jaw portions of the implement are open, by spreading the handles apart.

The members 7 and 8 on their side opposite the base of these prongs serve as a hammer for driving staples and to this end the members are reinforced by projections 25 and 26, which, if desired, may have steel or hardened faces, the arranging of these hammer portions opposite the prongs, provides for the latter, adding a desirable weight facilitating the operation of the hammers, and as shown in Fig. 5, these hammer faces diverge outwardly so that when the gripping jaws are close together, a claw is provided, as shown in Fig. 5, for the pulling of nails and other purposes, which claw is expansible owing to the pivot connection of the members 7 and 8.

As indicated in Fig. 1, the members 7 and 8 next the handles, have a twist for the purposes of facilitating the gripping of the handles and alining the one immediately over the other in order to better center the gripping force.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. A combined tool comprising two bars or members pivoted together and having handles at one side of their pivot, and at the opposite side thereof diverging pointed prongs projecting at substantially a right angle to said members.

2. A combined tool comprising in combination two bars or members pivoted together and having handles at one side of their pivot, and at the opposite side, prongs having convex surfaces and projecting at substantially a right angle thereto.

3. A combined tool comprising two bars or members pivoted together and having handles at one side of their pivot and at the opposite side prongs projecting at substantially a right angle thereto, one surface of which is convex and the opposite surface flat.

4. A combined tool comprising two bars or members pivoted together and having handles at one side of their pivot and at the opposite side thereof, prongs and serrated surfaces between said prongs and pivot.

5. A combined tool comprising two bars or members pivoted together and having handles at one side of their pivot and at the opposite side, prongs projecting at substantially a right angle thereto, and serrated surfaces between said prongs and pivot.

6. A combined tool comprising two bars or members pivoted together and having handles at one side of their pivot and at the opposite side diverging pointed prongs projecting at substantially a right angle thereto and serrated surfaces between said prongs and pivot.

7. A combined tool comprising two bars or members pivoted together and having handles at one side of their pivot and at the opposite side diverging pointed prongs having a convex surface upon one side and projecting at substantially a right angle to said members, and serrated surfaces between said prongs and pivot.

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