

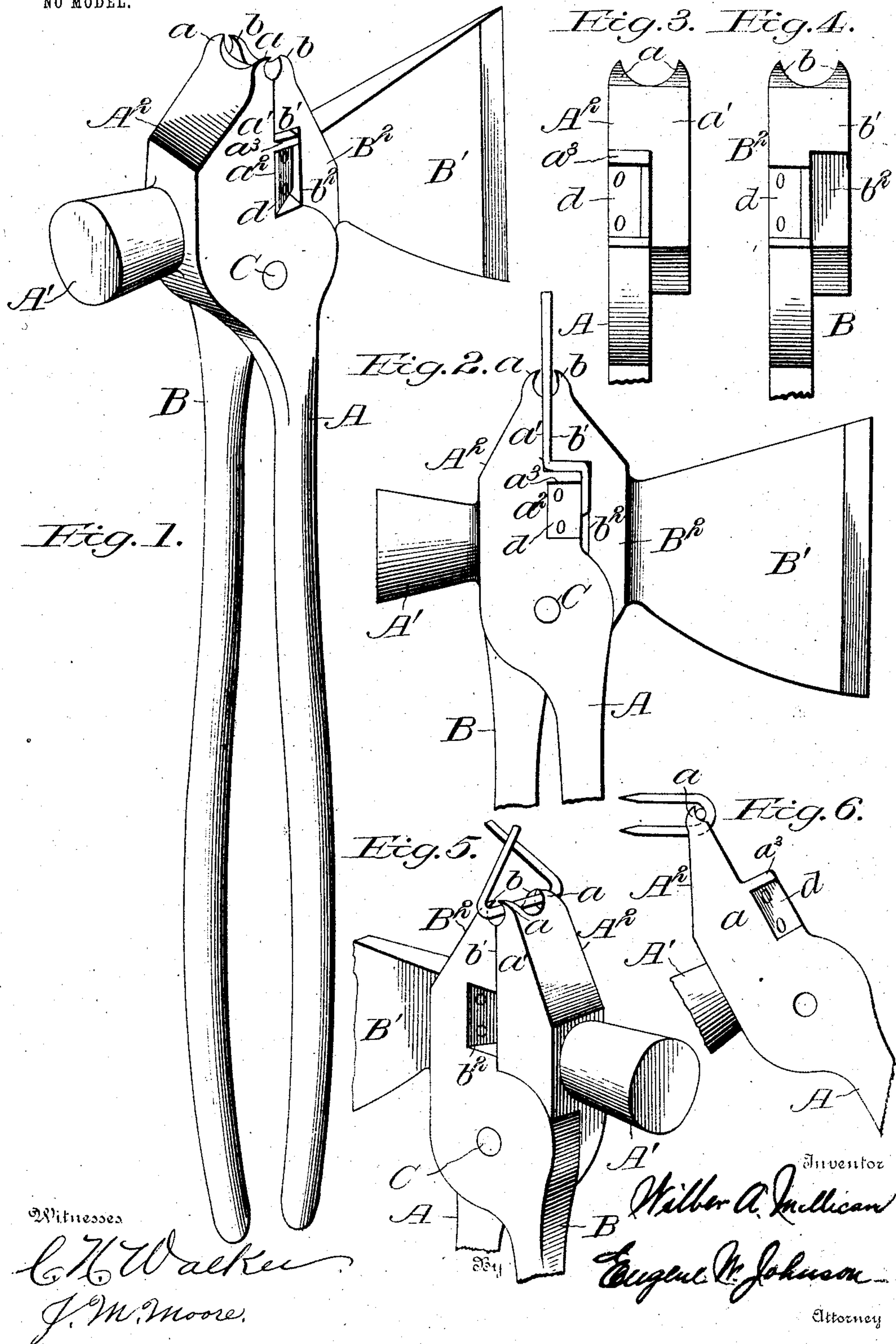
No. 772,624.

PATENTED OCT. 18, 1904.

W. A. MILLICAN.
COMBINATION TOOL.

APPLICATION FILED MAY 8, 1903.

NO MODEL.



Witnesses

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WILBER ASHBY MILLICAN, OF BRYAN, TEXAS.

COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 772,624, dated October 18, 1904.

Application filed May 8, 1903. Serial No. 156,223. (No model.)

To all whom it may concern:

Be it known that I, WILBER ASHBY MILLICAN, a citizen of the United States, residing at Bryan, in the county of Brazos and State of Texas, have invented new and useful Improvements in Combination-Tools, of which the following is a specification.

This invention relates to improvements in combination-tools, and has for its object to provide an implement for use in performing such operations as arise in building and repairing wire fences, and with such end in view there are assembled in a single implement a hammer, a hatchet, pliers, wire-cutters, wire-benders, and staple-pullers, as will be hereinafter fully set forth.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of the implement, showing the jaws closed, so that the same may be used either as a hammer or hatchet. Fig. 2 is a side elevation with the jaws partially closed and showing a wire bent at an angle by the jaws. Figs. 3 and 4 are inner plan views of the end members of the implement separated. Fig. 5 is a view showing the claws as used in forming a loop in a wire as in tightening wire fences, and Fig. 6 is a view showing the implement as used in drawing staples.

A refers to one of the members of the implement, said member having a hammer-head A' , and beyond the head a jaw A^2 , the inner side of which is at substantially right angles with the hammer-head, the outer wall then being inclined and terminates with claws a , these claws being semicircular on their inner sides. Below the claws and extending toward the pivot there are plane surfaces, which extend entirely across the jaws, as shown at a' , to form with a similarly-constructed jaw b' pliers or pincers.

The member B is secured to the member A by a pivot C, and there projects and is formed integral with the member B a hatchet B' , the jaw B^2 being formed integral with the hatchet and the handle. The jaw B^2 has claws b , and below the plane surfaces b' there is formed in the jaw a recess b^3 , having one side substantially straight and beyond said straight portion an angular portion into which a project-

ing portion a^2 will partially extend, said part a^2 being beveled and carrying on said beveled surface a cutter or blade d . It will be noted that adjacent to the beveled or inclined recess a^2 there is an extension or shoulder a^3 , and that the jaw B^2 has simply a beveled recess and an inclined cutter, the cutter being kept out of engagement with the walls formed by the recess by the pliers or parts a' and b' when they engage. This construction provides means whereby a wire may be clamped between the jaws without bending the wire, which is desirable when the implement is used in stretching wire, and when used for such purpose the hammer-head or hatchet-blade is, when placed in engagement with a post, the part in engagement with the post serving as a fulcrum.

When it is desired to bend a wire so as to form an angle preparatory to making a loop, the wire is passed between the jaws a' and b' , the end of the wire extending beyond the shoulder a^3 and into the recess b^3 , which is to one side of the plane surface b' , and when the jaw A^2 is moved on its pivot two right-angled bends will be formed in the end portions of the wire, which will prevent the wire slipping between the jaws.

The cutters are of the usual type, being simply steel blades secured in beveled recesses, and the implement otherwise may be made of cast-steel or drop-forgings.

The jaws A^2 and B^2 each have a pair of claws a b formed thereon. The points of these claws do not quite come together, but approach each other and are adapted to embrace a staple, either all four claws simultaneously or a pair at one time. When a wire is clasped between the claws, by twisting the implement a loop may be formed and the wire may be further drawn together by twisting, after which the loop can be severed by the cutters to form barbs.

I am aware that prior to my invention combination-tools have been provided in which a pair of handles were pivoted together, one of the handles having formed integral therewith a hammer and the other one a hatchet, the ends of the members having duplicate claws and adjacent to the pivots wire-cutters. I

therefore do not claim such an implement as my invention; but

What I claim as new, and desire to secure by Letters Patent, is—

- 5 In an implement of the plier type comprising a pair of handles fulcrumed one upon the other and provided beyond the fulcrum with jaws which terminate in non-contacting claws; shaped to present concave faces, cutters be-
10 tween the claws and the fulcrum for the han-

dles, and shoulders for bending wires on opposite sides of the jaws from the cutters, substantially as shown and for the purpose set forth.

In testimony whereof I affix my signature 15 in the presence of two witnesses.

WILBER ASHBY MILLICAN.

Witnesses:

M. NAGLE,

A. G. BOARD.