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1,453,155

M. B. MARTINEZ

COMBINATION TOOL

Filed April 26, 1921

Fig. 1.

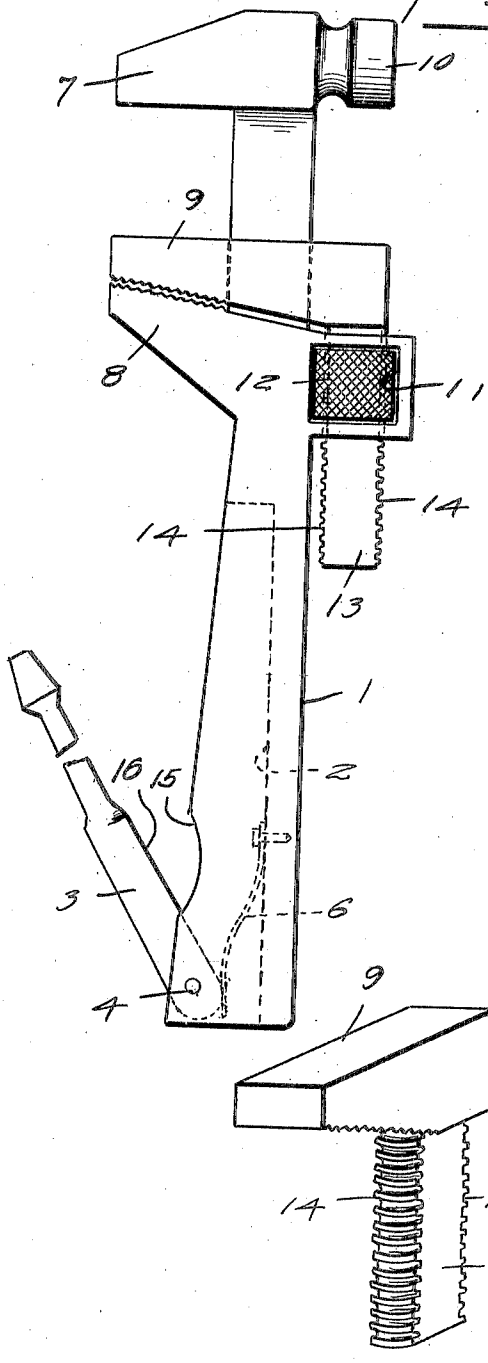


Fig. 2.

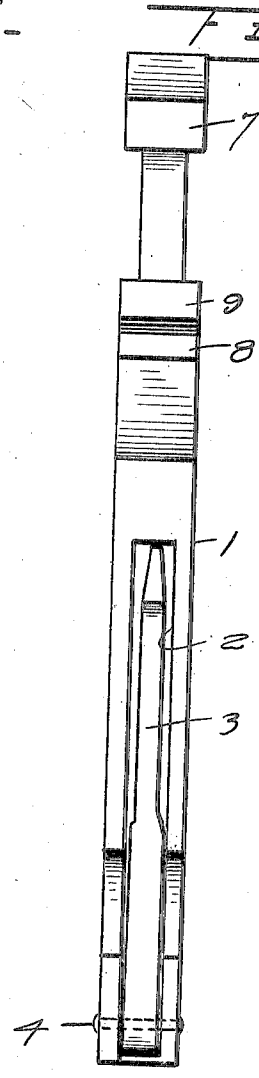


Fig. 3.

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By A. Landgraf Jr. Attorney

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UNITED STATES PATENT OFFICE.

MATIAS BERENDA MARTINEZ, OF GUASTI, CALIFORNIA.

COMBINATION TOOL.

Application filed April 26, 1921. Serial No. 464,618.

To all whom it may concern:

Be it known that I, MATIAS B. MARTINEZ, a citizen of the United States, residing at Guasti, in the county of San Bernardino and State of California, have invented certain new and useful Improvements in Combination Tools; and I do hereby declare the following to be a full, clear, 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.

The invention relates to tools and has for its primary object to provide an implement embodying a variety of tools, such as a hammer, nut and pipe wrench, and screw-driver, disposed in compact form and adapted for independent use without interfering of the one with the other.

One of the principal features is a bar constituting a handle member, and spaced crosspieces on the bar between which a jaw is adjustable and adapted to cooperate with either of the crosspieces, an end of the outer crosspiece forming a hammer and the corresponding end of the inner crosspiece receiving a nut whereby the movable jaw is adjusted.

Other objects and advantages will be apparent and suggest themselves as the nature of the invention is understood.

While the drawings illustrate an embodiment of the invention, it is to be understood that in adapting the same to meet different conditions and requirements, various changes in the form, proportion and minor details of construction may be resorted to without departing from the nature of the invention.

Referring to the accompanying drawings forming a part of the specification,

Figure 1 is a side view of a combination tool embodying the invention,

Fig. 2 is an edge view thereof, and

Fig. 3 is a detail perspective view of the intermediate jaw.

Corresponding and like parts are referred to in the following description and designated in the several views of the drawings by like reference characters.

The tool comprises a bar 1 which constitutes a handle. An end portion of the bar 1 is recessed, as indicated at 2, and receives a blade 3 which is pivoted at one end thereto, as indicated at 4, so as to fold within the recess 2. The blade 3 is provided with a tool which, in the present instance, appears as a screwdriver point 5. A spring 6, within the recess 2, cooperates with the blade 3 to positively hold the same folded or extended in a manner well understood. Spaced crosspieces 7 and 8 are provided at one end of the bar 1 and corresponding ends of these crosspieces constitute jaws to cooperate with an intermediate jaw 9 which is adjustable on the bar 1 between the crosspieces 7 and 8. The outer face of the adjustable jaw 9 is plane and cooperates with the corresponding end of the crosspiece 7 to provide a nut wrench. The inner face of the jaw 9 is inclined and toothed and cooperates with the corresponding end of the crosspiece 8 to provide a pipe wrench. The opposite end of the crosspiece 7 is formed to provide the face piece of a hammer. The opposite end of the crosspiece 8 forms a cage or open frame 11 to receive a nut 12 and the shank 13 of the intermediate jaw 9. The shank 13 is flattened and its sides are plain, whereas its inner and outer edges are formed with thread sections 14 for cooperation with the nut 12, whereby adjustment of the jaw 9 is effected by rotation of the nut 12 in a manner well understood.

The handle member of the implement is common to the several tools. The intermediate jaw 9 is common to the nut and pipe jaws of the tool and is adjustable to adapt the tool for use either as a nut or a pipe wrench by the same means. When the jaw 9 is drawn close against the inner jaw, it is prevented from play when the tool is used as a hammer.

The parts of the handle 1 separated by the recess 2 are notched, as indicated at 15, to form a seat for the reception of wire. The blade 3 is formed with an inner cutting edge 16 to coact with a corresponding cutting edge formed by one of the notches 15, whereby to provide means for cutting wire. The edges forming the wire cutter may be tempered or hardened in any manner to resist wear and provide an effective and lasting wire cutter.

What is claimed is:

1. A wrench comprising a shank having a handle at one end, a pair of spaced stationary unlike jaws carried by the other end of said shank, a cage formed with one of said stationary jaws and on said shank, a nut mounted in said cage, a movable jaw surrounding said shank and having a pair of unlike jaw faces, said movable jaw having a

shank, said nut having screw-threaded engagement with the last-named shank to adjust said movable jaw, and said movable jaw being movable to bring corresponding jaw faces into cooperation with either of said stationary jaws.

2. A tool of the character specified comprising a bar constituting a handle member, spaced cross-pieces on the bar having corresponding ends constituting jaws, the opposite end of the outer cross-piece adapted to form a hammer, and the corresponding end of the other cross-piece forming a cage or open frame, an intermediate jaw adjustable on the bar between said cross-pieces and having a shank parallel with the bar and extending through the said cage, and a nut held within the cage and having screw-threaded engagement with the shank of the adjustable jaw to effect movement thereof.

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

MATIAS BERENDA MARTINEZ.

Witnesses:

VERA WRIGHT,

ARCHIE MITCHELL.