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3,078,485

ELECTRICIAN'S TRIM TOOL

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FIG. 1.

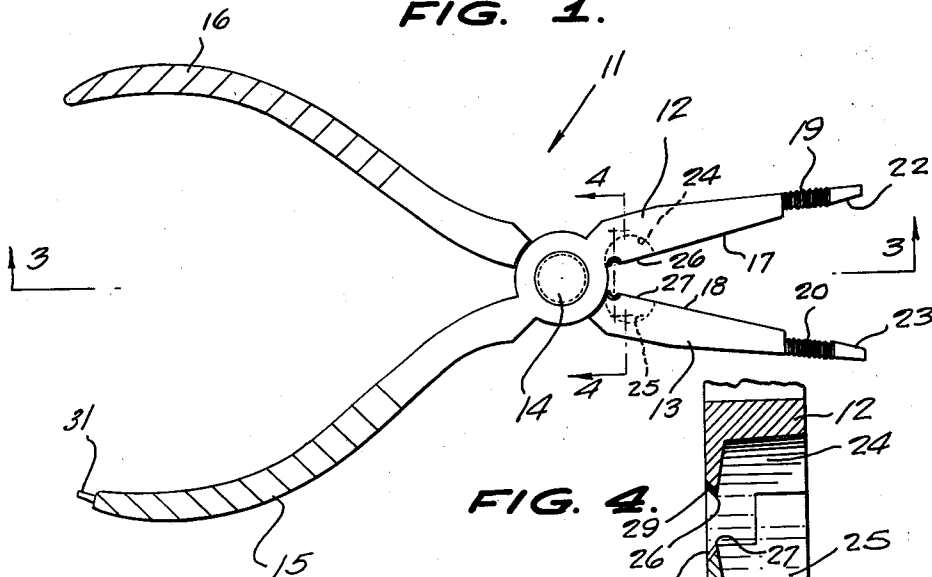


FIG. 4.

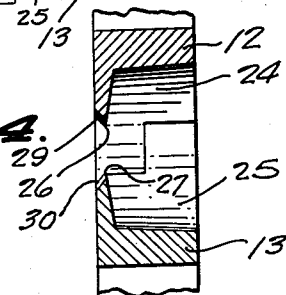


FIG. 2.

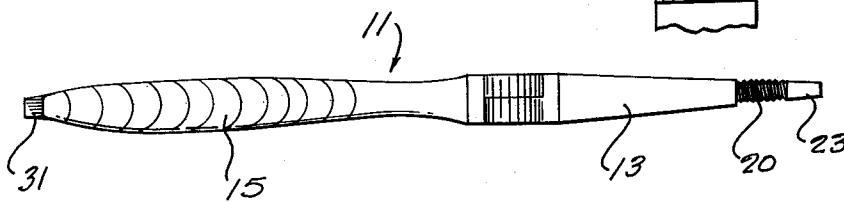
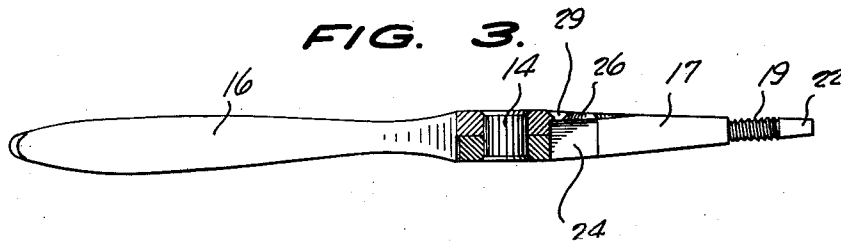


FIG. 3.



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ELECTRICIAN'S TRIM TOOL

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2 Claims. (Cl. 15—104.02)

This invention relates to hand tools, and more particularly to a pair of electrician's pliers.

A main object of the invention is to provide a novel and improved pair of electrician's pliers provided with means for performing various different operations incident to making electrical connections, the tool being especially suitable for cleaning out threaded holes for the insertion of terminal screws associated with electrical connections, the tool being simple in construction, being easy to use, and eliminating the necessity of using other implements in making electrical connections of wires to terminal posts or the like.

A further object of the invention is to provide an improved electrician's tool which performs the function of pliers, reamer, screwdriver and wire stripping implement, the tool being inexpensive to manufacture, being sturdy in construction, and being compact in size.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

FIGURE 1 is a plan view of an improved electrician's trim tool constructed in accordance with the present invention.

FIGURE 2 is a side elevational view of the tool of FIGURE 1.

FIGURE 3 is a longitudinal vertical cross sectional view taken on the line 3—3 of FIGURE 1.

FIGURE 4 is an enlarged transverse vertical cross sectional view taken on the line 4—4 of FIGURE 1.

Referring to the drawings, 11 generally designates the improved tool of the present invention. The tool 11 comprises a pair of relatively movable jaws 12 and 13 which are pivoted together at 14 and which are provided respectively with the handle grip arms 15 and 16 for exerting gripping force on the jaws. The gripping jaws 12 and 13 are formed for the major portion of their length with the inner opposing flat gripping faces 17 and 18, and the jaws are tapered toward their ends. The jaw 12 is formed at a location spaced inwardly from its end with screw threads 19 of a first standard size, for example, $\frac{1}{8}$, and is therefore threadably engageable in a threaded hole, for example, a hole intended to receive a terminal screw, for cleaning paint or other foreign material from the hole. The jaw 13 is likewise formed at a location spaced inwardly from its end with threads 20 of another standard size, for example, $\frac{3}{32}$, for the same purpose as the threads 19, namely, for threaded engagement in a threaded hole of corresponding screw thread size for cleaning foreign material therefrom.

The tip portions 22 and 23 of the jaws may be rounded off at their inwardly facing surfaces so as to facilitate the use thereof in shaping or bending wire.

The jaws 12 and 13 are recessed, as shown at 24 and 25 to define opposing cutting edges 26 and 27, and the cutting edges are formed adjacent the pivotal connections 14 with opposing arcuately notched portions 29 and 30, which are sharpened to define arcuate cutting edges, as illustrated in FIGURE 4, where the cutting edges of the notches 29 and 30 merge with the straight cutting edges 26 and 27. The opposing arcuate cutting edges defined

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by the notches 29 and 30 are cooperatively used for stripping insulation from a conductor, the conductor being positioned between the notches and the jaws being closed so that the arcuate edges of the notched portions 29 and 30 engage the insulation and enable the insulation to be pushed from the conductor.

The straight cutting edges 26 and 27 may be employed for cutting wire in the manner of an ordinary wire cutter.

One of the gripping handles, for example the gripping handle portion 15, is formed at its end with a straight screwdriver blade 31 which may be employed in the same manner as a screwdriver, for example, for tightening or loosening terminal screws.

As will be readily apparent, the implement may be employed to perform functions ordinarily associated with pliers, a knife, a screwdriver or a reamer, enabling all of these functions to be performed with the use of a single implement. This eliminates the necessity of providing separate implements to perform the above required operations.

As will be readily apparent, the rounded tips 22 and 23 are used for facilitating the shaping or bending of wire ends, so that the implement also performs the function of a wire shaping or forming tool. Due to the taper of the jaws 12 and 13, the threaded portions 19 and 20 are insertable in threaded openings, such as the threaded terminal holes of an electrical device, without interference from the tips 22 and 23.

While a specific embodiment of an improved electrician's tool has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitation be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. An electrician's reaming tool of the character described for cleaning at least two different sizes of internally threaded holes comprising a pair of relatively movable members pivoted together and having free ends, said members tapering toward their free ends, and external screw threads on each of said free ends, the screw threads on the respective free ends being of different size for threaded engagement in internally threaded holes of corresponding size for cleaning foreign material therefrom.

2. An electrician's tool of the character described for cleaning at least two different sizes of internally threaded holes comprising a pair of relatively movable members pivoted together at their intermediate portions and having handles thereon at one side of their pivotal connection and having free ends at the other side of said pivotal connection, the portions of the members on the other side of said pivotal connection tapering in cross sectional size toward said free ends and external screw threads of different size on said last-named portions for threaded engagement in internally threaded holes of corresponding size for cleaning foreign material therefrom.

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