(No Model.)

J. M. GILE.

ELECTRICIAN'S COMBINATION TOOL.

No. 529,488. Patented Nov. 20, 1894.

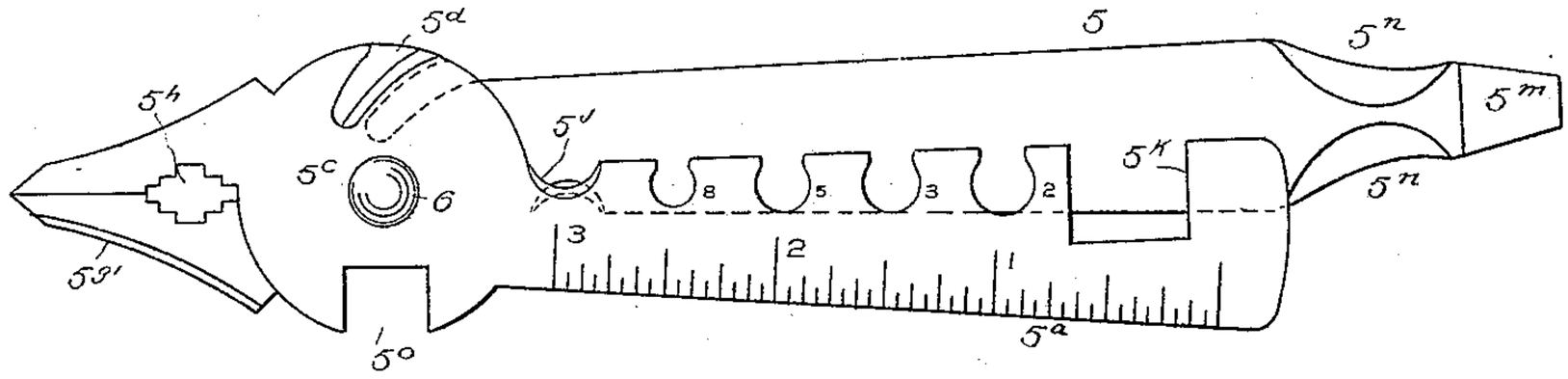

Fig. 1.

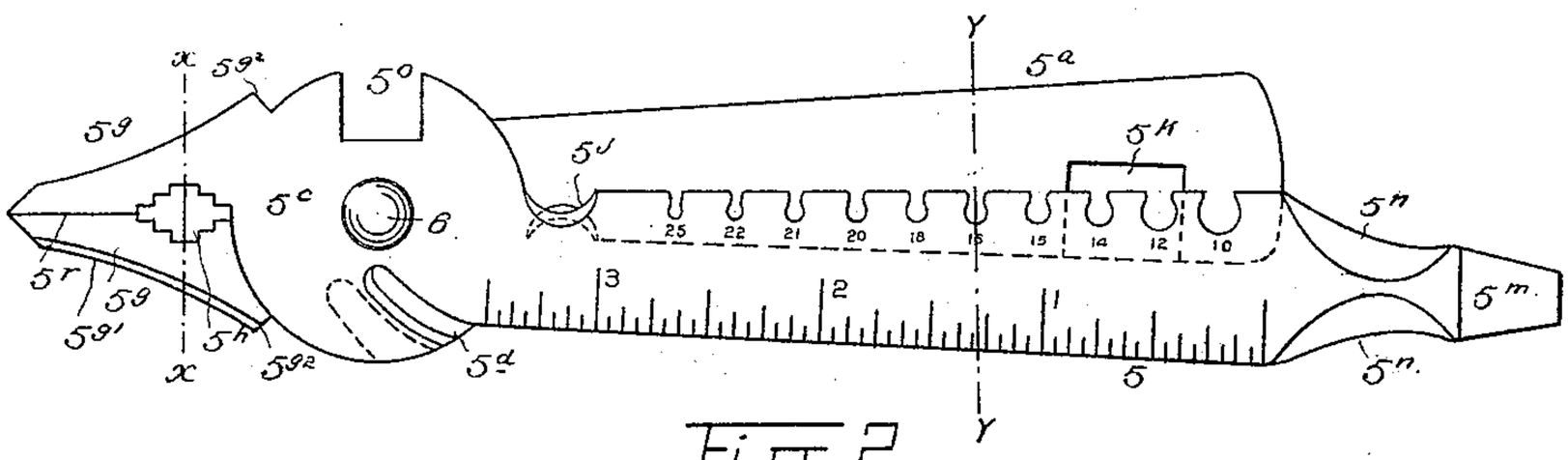

Fig. 2.

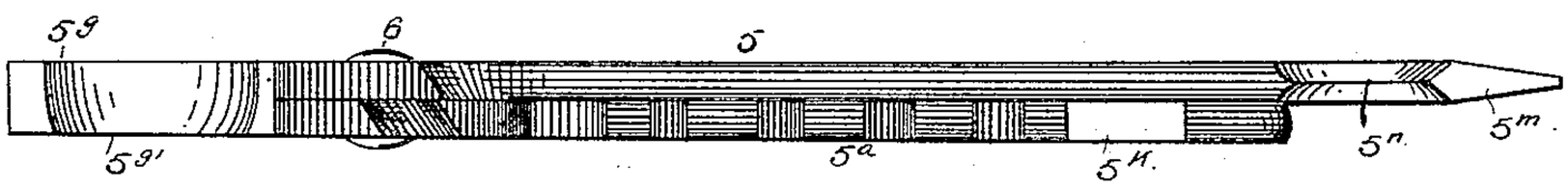

Fig. 3.

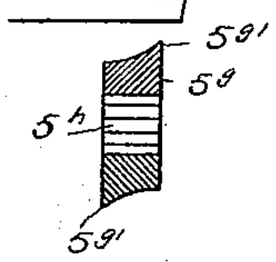

Fig. 4.

Fig. 5.

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ELECTRICIAN'S COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 529,488, dated November 20, 1894.

Application filed March 20, 1894. Serial No. 504,371. (No model.)

To all whom it may concern.

Be it known that I, JACOB M. GILE, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Electricians' Combination-Tools; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to an improved combination tool, specially designed for electricians' use, and consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a view of one side of the tool. Fig. 2 is a view of the opposite side of the same. Fig. 3 is an edge view thereof. Figs. 4 and 5 are sections taken on the lines *x*—*x*, and *y*—*y*, respectively, Fig. 2.

Similar reference characters indicate corresponding parts or elements in the views.

Let the numerals 5 and 5^a designate two lever arms connected by a pivot 6. The pivoted parts 5^c of the arms are enlarged and formed circular in shape. They constitute the head of the tool. Each part 5^c is provided with a recess 5^o. These two recesses register or coincide as to position when the tool is closed, whereby it becomes a wrench. Each of these head parts 5^c is further provided with a curved recess 5^d, which recesses register with each other when the arms are partly open. The sides of these recesses are beveled to form cutting edges which are specially designed for use in severing uninsulated wire, since they are not supposed to be large enough to receive wire having a coating of insulation.

Above the head parts 5^c, each arm is provided with a jaw 5^g. These jaws are double the width of the head parts, and meet on a line 5^r forming pliers. Between the meeting faces of the plier-jaws and the head parts, the jaws are provided with counterpart recesses which are notched and adapted for use in connecting wires. When the jaws are closed, these recesses form an aperture 5^h located between the parts 5^g and 5^c. On the side of the head opposite the pliers, both arms are recessed to form cutting edges 5^j which are beveled, crescent-shaped and oppositely located, whereby when the arms are opened, a wire covered with insulating material may be easily severed. The inner edges of the arms 5 and 5^a overlap below the head and are provided with wire gage recesses suitably numbered to designate the different sizes of wire ordinarily employed in electrical service; while on the outer edge of the arms, both are provided with a graduated measuring scale. Near the lower extremity, or that farther from the head of the tool, the arm 5^a is provided with a recess 5^k whereby the arm is adapted for use as a wrench. The arm 5 projects below the other arm and is formed into a screw-driver 5^m, while between the last named part and the body of the arm, the latter is cut away on both sides to form edges 5^n adapted for use in removing the insulation from wires, as is frequently necessary in all kinds of electrical work. The outer edges of the jaws 5^g are oppositely curved to form edges $5^{g'}$ also adapted for use in removing insulation. It will thus be seen that either extremity of the tool may be employed in scraping off this coating of insulation, whereby the device is always ready for work, a scraping edge being always at hand, regardless of the position in which the tool is held by the user. Each jaw 5^g is provided with a shoulder 5^{g2} adapted to engage the opposite arm of the tool when they are open to the desired width, thus stopping the movement of the jaws further than is necessary in the proper performance of their function.

It will thus be seen that my improved device embodies ten distinct features (each ordinarily requiring a separate tool) while all these features are so ingeniously blended and combined in my device that it is scarcely more cumbersome, and hardly less symmetrical than any one of the separate tools whose function it embraces.

As heretofore stated it is specially designed for the convenience of electricians, and is designed to answer all requirements in a tool of this class, under ordinary circumstances.

Having thus described my invention, what I claim is—

1. A combination tool composed of two arms pivoted together, the pivoted parts being recessed to form wire cutters and a wrench, plier-jaws formed at one extremity and recessed for wire connecting purposes, the outer faces of the jaws having oppositely disposed cutting edges, the arms below the pivot being adapted to overlap, and provided with wire gage recesses formed on their inner edges, and having a graduated scale adjacent to their outer edges, one arm being provided with a wrench socket near its lower extremity, while the other is longer and formed into a screw-driver, above which, exterior cutting edges are formed on opposite sides of the arm, substantially as described.

2. A combination tool composed of two lever arms, 5 and 5^a, pivoted together at 6, the pivoted parts recessed at 5^d to form wire cutters, plier-jaws located above the pivot and recessed for wire connecting purposes, the outer faces of the jaws having cutting edges, the arms below the pivot being adapted to overlap, and oppositely recessed to form cutting edges, the inner edges of the arms being provided with wire gage recesses, substantially as described.

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

JACOB M. GILE.

Witnesses:
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