April 2, 1957 W. L. FRYE 2,787,177

WIRE STRIPPING TOOL

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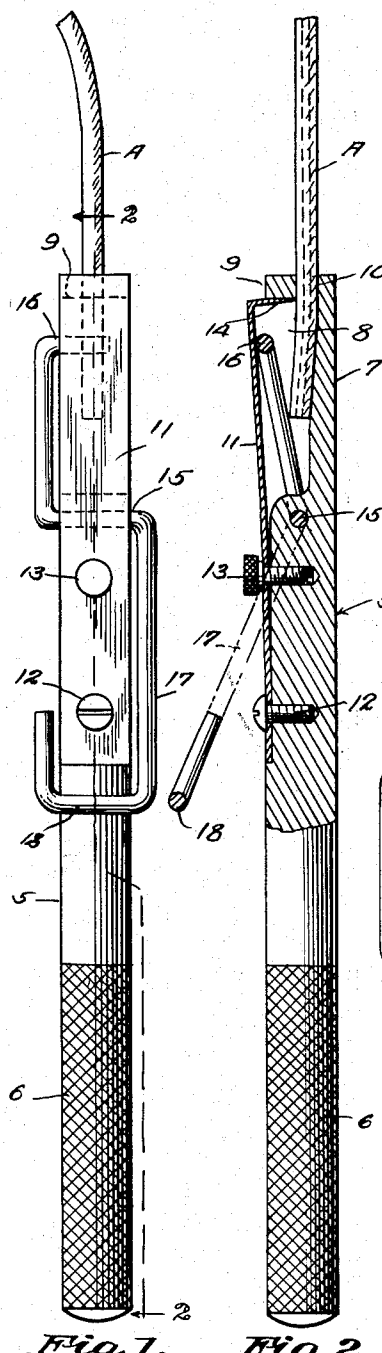


Fig. 1.

Fig. 2.

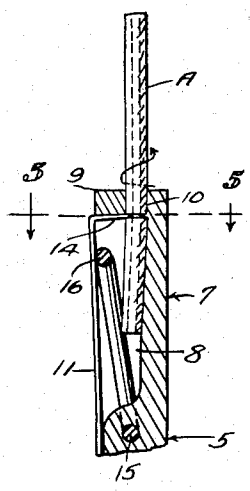


Fig. 3.

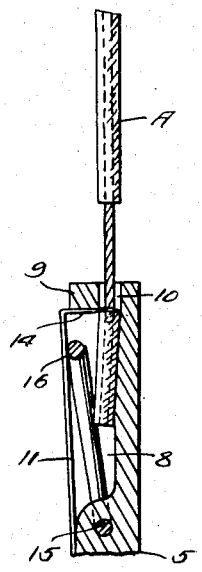


Fig. 4.

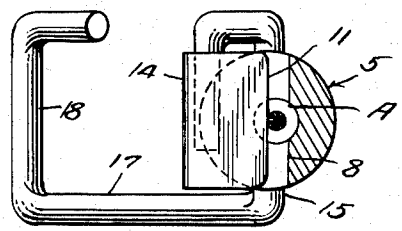


Fig. 5.

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WIRE STRIPPING TOOL

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1 Claim. (Cl. 81—9.5)

This invention relates to a tool designed for use in stripping the insulation from electric wires so that the exposed ends of the wires may be inserted in electric terminals and secured therein in the usual manner.

An important object of the invention is to provide a tool of this character which will operate to remove insulation from electric wires, quickly and without danger of damaging the wires.

Still another object of the invention is to provide an insulation stripping tool including an insulation cutting blade constructed of yieldable metal equipped with adjusting means for regulating the tension of the blade, adapting the blade for cutting insulation from wires of various diameters.

Other and further objects and advantages of the invention will be hereinafter described and the novel features thereof defined in the appended claim.

Referring to the drawings:

Fig. 1 is a plan view of an insulation stripping tool, constructed in accordance with the invention.

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a fragmental sectional view illustrating the blade of the tool as having cut the insulation on an electric wire.

Fig. 4 is a fragmental sectional view illustrating how the insulation is stripped from the wire after having been cut.

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 3.

Referring to the drawing in detail the tool comprises a body portion 5 which is preferably elongated, one end thereof being formed into a handle 6, while the other end 7 thereof constitutes the jaw end of the tool.

As better shown by Fig. 2 of the drawing, one surface of the body portion 5 is cut away providing a recess 8 which is of a length substantially one fourth the length of the body portion 5.

This recess presents an end 9 formed with an opening 10 at the base of the recess, the opening 10 providing a guide for the wire to be stripped.

The reference character 11 indicates a resilient blade which is elongated, and is secured to the body portion on the side of the body portion in which the recess is formed, the blade being secured to the body portion by means of the screw 12.

In addition to the screw 12, an adjusting screw 13 is provided and fitted in an opening formed in the body portion, the adjusting screw 13 having a knurled head so that it may be readily rotated to vary the tension on the blade 11 and hold the blade against movement, during the stripping operation.

The free end of the blade is extended at right angles at 14, the edge of the right angled portion being beveled providing a cutting edge that moves along the inner surface of the end 9 of the tool.

Pivotally mounted on the body portion 5, is a lever 15 that is substantially S-shaped in formation, the lever having a right angled end 16 which extends transversely of the upper surface of the body portion so that it lies in contact with the under surface of the blade 11, at all times.

The lever is also provided with an arm 17 that is disposed at an oblique angle with respect to the other end of the lever, the arm 17 being provided with a laterally extended end portion 18 which under normal conditions, lies in spaced relation with the adjacent surface of the body portion 5, as better shown by Fig. 2 of the drawing. Thus it will be seen that a person holding the tool by the handle 6, may, by the action of his thumb, press the arm 17 downwardly causing the other end of the lever to move upwardly consequently elevating the cutting edge of the blade 11 to permit an electric wire, which in the present showing is indicated by the reference character A, to be inserted in the opening 10 the proper distance for stripping the insulation therefrom.

In the operation of the tool, the lever is actuated to elevate the cutting edge of the blade as previously described, and the wire to be stripped of insulation, is inserted in the opening 10 of the body portion. The blade 14 is now forced through the insulation until the blade contacts the wire, thereby cutting the insulation. By slightly rotating the body portion over the wire, the insulation is cut in a manner as indicated by Fig. 3 of the drawing.

The wire is now pulled holding the tool with the left hand with the result that the insulation is stripped from the wire evenly and without damage to the wire under treatment.

While the specific details of one embodiment of this invention have been herein shown and described, the invention is not confined thereto as changes and alterations may be made without departing from the spirit and scope thereof as defined in the appended claim.

What is claimed is:

An electric wire insulation or stripping tool, comprising a body having a recess formed in one surface thereof adjacent to one end of the body, the extremity of said body adjacent to said recess having an opening, a yieldable blade secured at one of its ends to said body, overlying said recess, one end of said blade extending at right angles and being beveled providing a cutting edge, operating adjacent to said opening, said blade being biased inwardly to operative position said cutting edge adapted to cut insulation from a wire held in said opening, and said right angled end adapted to hold the cut portion of the insulation against movement through said opening, stripping the insulation from the wire as the wire is withdrawn through said opening and a blade releasing member rockably carried by said body and formed with a right angle extension projecting into said recess.

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