July 27, 1926. 1,594,036

W. G. BAKER

PLIERS

Filed March 2, 1925

Fig. 1.

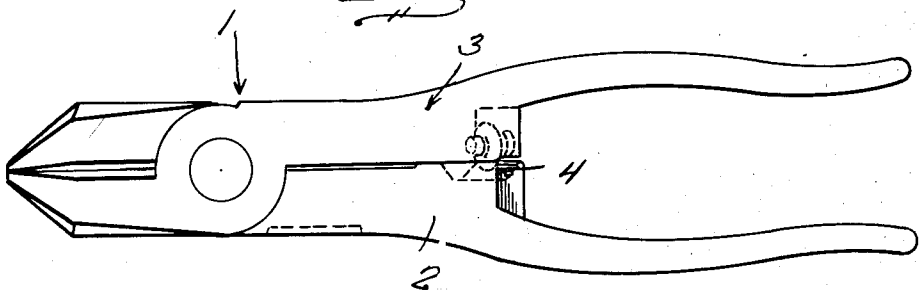


Fig. 2.

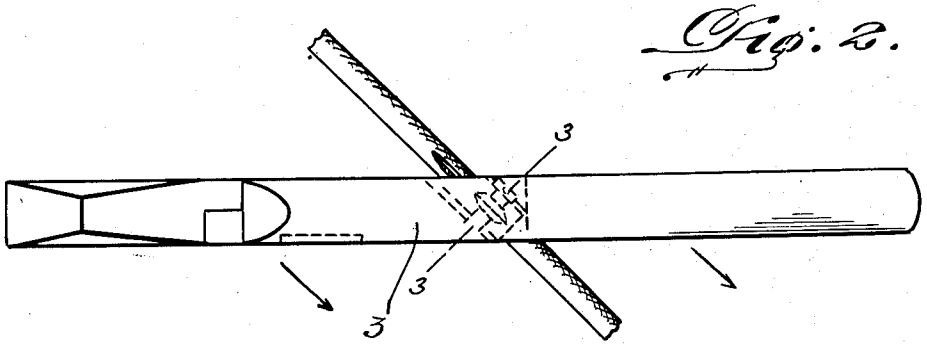
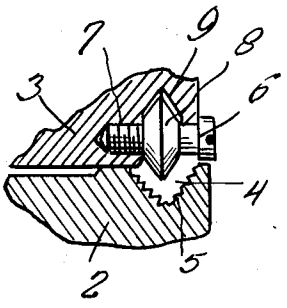


Fig. 3.



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PLIERS.

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This invention relates to improvements in pliers, and is more particularly adapted to a tool for use by electricians.

One of the important objects of the present invention is to provide a tool wherein means is associated therewith for facilitating the slitting of the insulation of a conductor wire whereby said insulation may be readily and easily removed without the loss of any considerable length of time or labor.

A further object is to provide a tool of the above mentioned character, which is simple in construction, inexpensive, and further adapted for the purposes for which the same is designed.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawing forming part of this specification and in which like numerals designate like parts throughout the same:—

Figure 1 is a top plan view of a pair of pliers showing my invention associated therewith;

Fig. 2 is an edge elevation illustrating the use of the tool; and

Fig. 3 is a sectional view taken approximately on line 3—3 of Fig. 2.

In the drawing wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates generally a pair of pliers the construction of which is well known in the art. The pliers include a pair of pivoted cross levers 2 and 3, the forward ends thereof cooperating to provide a pair of coacting jaws while the rear ends of the levers provide handles.

The inner face of the lever 2 is provided with a diagonally extending groove 4, the same being substantially V-shaped in cross-section as clearly illustrated in Fig. 3. The diagonally disposed V-shaped groove 4 is provided with longitudinally extending serrations 5 as also clearly illustrated in Fig. 3.

A set-screw 6 is threaded into a substantially diagonally extending threaded opening 7 provided in the coacting lever 3 directly opposite the substantially diagonally extending groove 4. Adapted for rotation on the set-screw is the rotary cutter 8, a suitable opening 9 being formed in the lever 3 to accommodate the cutter so that the same will be free to rotate. The rotary cutter is of such diameter as to have a portion thereof extending into the substantially V-shaped groove 4 as clearly illustrated in Fig. 3.

The provision of the rotary cutter and the serrated V-shaped groove 4 provides a means whereby the insulation of a conductor wire may be slit longitudinally to facilicate the removal of the insulation from the wire. In use, the conductor wire having the insulation thereon which is to be stripped therefrom, is placed in the groove 4 and by clamping the handle portions of the levers together, the rotary cutter will be caused to bite into the insulation and as the pliers are moved in the direction of the arrows, a longitudinal slit will be formed in the insulation, as illustrated clearly in Fig. 2.

By turning the conductor wire slightly in the V-shaped groove 4, a series of longitudinally extending slits may be formed in the insulation, it being understood of course that the slits formed will extend through the insulation to the copper wire.

After the insulation has been slit, the ends of the insulation may then be readily and easily removed or stripped from the wire in a comparatively easy and efficient manner, thus saving considerable time and labor.

It will thus be seen from the foregoing description, that a tool has been provided for use particularly by electricians and the insulation slitting attachment is associated with the levers of the pliers in such a manner as not to interfere with the ordinary use of the pliers. By removing the set-screw 6, the cutter 8 may be readily disengaged from the set-screw for resharpening the cutting edge thereof or replacing a worn cutter with a new one.

While I have shown the preferred embodiment of my invention, it is to be understood that various changes in the size, shape, and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claims.

Having thus described my invention, what I claim as new is:—

1. A tool of the class described comprising a pair of coacting levers, one of said levers having a substantially V-shaped groove formed in the inner face thereof, the other lever being provided with a vertically extending opening in the inner face thereof, said opening being in alinement with said V-shaped groove, a set-screw threaded into a

transversely extending opening provided in the last-mentioned lever, and a rotary cutter loosely mounted on said set-screw and adapted for operation within said vertical opening, said cutter adapted to slit the insulation of a conductor wire placed in said groove.

2. A tool of the class described comprising a pair of pivoted coacting levers, one of said levers having a diagonally disposed substantially V-shaped groove formed in the inner face thereof, serrations formed in said groove and extending longitudinally thereof, the other lever being provided with a diagonally disposed vertical opening in the inner face thereof and arranged in alinement with the diagonally disposed V-shaped groove, a set-screw threaded into a transversely extending opening formed in the lever having the vertical opening, the head of said set-screw abutting the side face of said lever, and a rotary cutter loosely mounted on the set-screw and adapted for operation within the vertical opening, said cutter adapted to slit the insulation of a conductor wire when the latter is placed in said V-shaped groove.

In testimony whereof I affix my signature.

WILLIAM G. BAKER.