

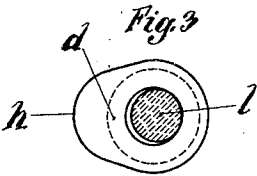
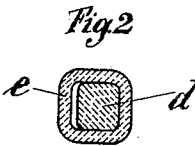
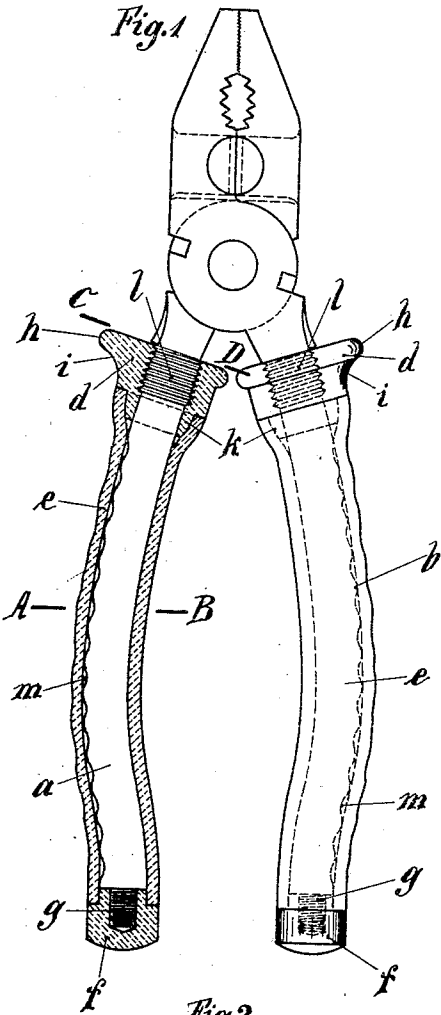
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G. KLAUKE

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TOOL INSULATOR SPECIALLY FOR THE HANDLES OF PLIERS AND THE LIKE

Filed July 10 , 1923



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UNITED STATES PATENT OFFICE.

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TOOL INSULATOR SPECIALLY FOR THE HANDLES OF PLIERS AND THE LIKE.

Application filed July 10, 1923. Serial No. 650,726.

To all whom it may concern:

Be it known that I, GUSTAV KLAUKE, a citizen of the German Republic, residing at Remscheid, Germany, have invented certain new and useful Improvements in Tool Insulators Specially for the Handles of Pliers and the like, for which I have filed an application for patent in Germany on the 26th of September, 1922, and of which the following is a specification.

The insulating of the tools designed to be used in connection with electro-technic, specially the insulating of the handles of pliers, is generally very expensive and connected with great difficulties as the tools made in one factory have to be sent to other works where the handle has to be coated with ebonite. The transport of the tools from one place to the other requires much time so that the manufacturing cost is further increased by the expenses for transport and by the repeated packing and unpacking of the tools. The handles of tools which have been covered in a factory with ebonite are sometimes further insulated by means of removable rubber sleeves. Such sleeves are however not securely attached so that they get easily lost. Tool factories could hitherto not insulate the tools in their own works as it was impossible to securely attach in position the rubber sleeves covering the handles of the tools.

This invention has for its object an improved tool insulator specially for the handles of pliers or similar instruments which permits of mounting the insulation on the instruments directly in the tool factory so that it is no longer necessary to send the finished tools and instruments to another factory for insulating. In this manner a considerable saving of time, material and expenses is realized.

The salient feature of the invention consists in securing the rubber sleeves which cover the handles of pliers or other instruments securely in position at the upper end by means which are designed to prevent the hand from slipping off the tool and at the lower end by an ebonite button screwed upon a threaded stud projecting from the free end of the handle.

In this manner it is possible to insulate the tools in the tool factory so that it is no longer necessary to send the same to special works for insulation.

All attempts which have been made to in-

sulate the handles of tools, pliers and the like at the place where they are made by coating with soft rubber have failed as it was found to be impossible to sufficiently secure the soft rubber at the upper and lower ends against displacement and tearing.

The improvement which forms the object of the present invention eliminates these inconveniences. The improvement consists in preventing the slipping of the hand by a kind of guard at the upper end of the insulating sleeve and in preventing the accidental detachment of the insulating sleeve by said upper guard in combination with the ebonite button screwed on the lower end of the handle.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming a part of this specification, with the understanding that while one embodiment of the invention is disclosed, the invention is not confined to any strict conformity such as shown in the drawings, but may be embodied in any manner which does not make a material departure from the salient features of the invention.

In the drawing:

Fig. 1 shows pliers with the improved insulation, the insulation on the left hand shank of the handle being shown in section.

Fig. 2 is a cross section on line A—B of Fig. 1.

Fig. 3 is a cross section on line C—D of Fig. 1.

The two shanks *a*, *b* of the handle of the pliers may be of any convenient shape, each of these shanks is covered by a tight rubber sleeve *c* which, in accordance with the invention, is secured in its position at the upper end by a guard *d* and at the lower end by an ebonite button *f*. This ebonite button has a central threaded bore and is set off at the upper end so that the outer surface of the button is flush with the outer surface of the rubber sleeve, the outer surface of the set off part of the knob being flush with the inner surface of the rubber sleeve.

The guard *d* which is designed to prevent the slipping of the hand and to protect the hand from contact with the part of the pliers which is not insulated, presents an outwardly extending bead *h* of well known shape extended by a curved part *i* with which the hand engages when the pliers are being used. The lower part *k* of the guard made from

india rubber, is set off for the thickness of the rubber sleeve so that the sleeve fits tightly on the guard.

5 In accordance with the cross section of the shank of the pliers the guard *d* is either simply pushed over the shank or screwed on the upper threaded part *l* of the shank.

10 In order to facilitate the secure gripping of the handle of the pliers the outer sides of the shanks may have corrugations *m* which are scarcely visible from the outside as they are covered by the rubber sleeve, these corrugations enabling a secure grip for the hand and the guard *d* preventing the hand from
15 coming in contact with the un-insulated parts of the pliers.

I claim:—

A tool insulating cover for handles of pliers or the like, comprising in combination a rubber sleeve covering the handle, a guard 20 securely attached on the upper end of the handle and having a set off lower end designed to receive the upper end of said sleeve and an ebonite button securely fixed on the lower end of the handle and having a set off 25 upper end designed to receive the lower end of said rubber sleeve.

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

GUSTAV KLAUKE.

Witnesses:

OTTO STEHN,
PAUL FLÜSTAER.