

(No Model.)

A. E. O. RIECKEL.

DEVICE FOR REMOVING INSULATION FROM ELECTRIC WIRES.

No. 562,097.

Patented June 16, 1896.

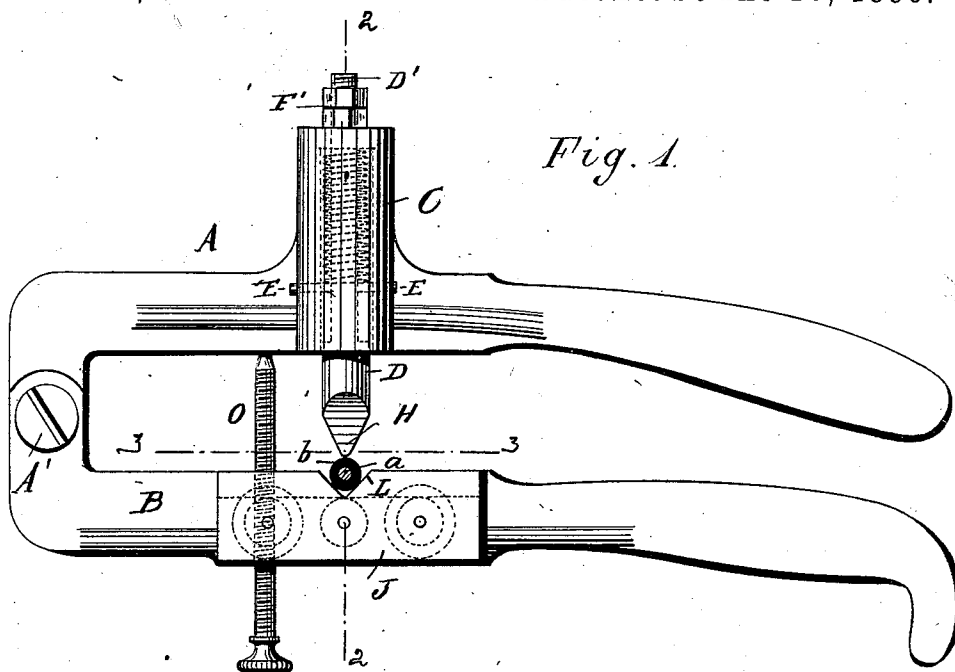


Fig. 1.

Fig. 2.

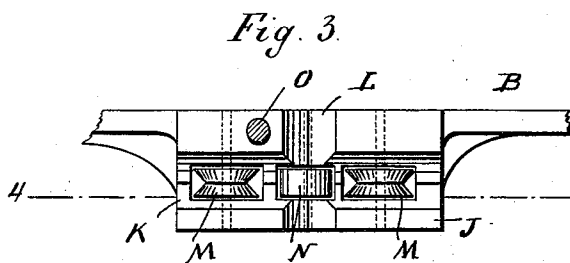
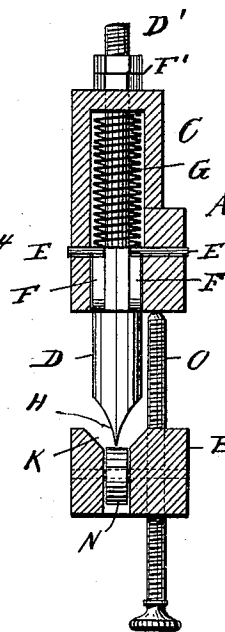
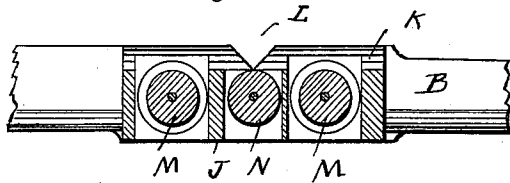


Fig. 4.



Witnesses  
Edw. F. Haegele  
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# UNITED STATES PATENT OFFICE.

ADOLPH E. O. RIECKEL, OF BROOKLYN, NEW YORK.

## DEVICE FOR REMOVING INSULATION FROM ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 562,097, dated June 16, 1896.

Application filed December 13, 1895. Serial No. 571,999. (No model.)

*To all whom it may concern:*

Be it known that I, ADOLPH E. O. RIECKEL, a citizen of Germany, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Devices for Removing Insulation from Electric Wires, of which the following is a specification.

In electrical work it very frequently becomes necessary to bare the ends and other parts of insulated electric conductors for the purpose of making connections and the like.

The object of my invention is to provide a new and improved implement or device for readily cutting the insulation circumferentially throughout its entire thickness down to the wire and also slitting it lengthwise, so that the cut part of the insulation can readily be peeled off the wire.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate like parts, Figure 1 is a side view of my improved device for removing insulation from electric conductors. Fig. 2 is a vertical transverse sectional view of the same on the line 2 2 of Fig. 1. Fig. 3 is a horizontal sectional view on the line 3 3 of Fig. 1. Fig. 4 is a vertical longitudinal sectional view on the line 4 4 of Fig. 3.

The implement is constructed with two handle-levers A and B, pivoted to each other at the ends by means of a pivot A', so as to adapt them to swing toward and from each other.

A cylindrical socket C is made integral with the lever A and is located on one side of the same, and from the lower open end of said socket the plug D projects, which is mounted to slide longitudinally in said socket and is prevented from turning axially by two pins E, which pass into longitudinal grooves F of said plug.

A stem D' projects upward from the top of the plug and through an aperture in the top of the socket, and above said socket retaining-nuts F' are screwed on said stem. A helical spring G surrounds the stem D' and bears against the pins E and the upper end of the socket and the top of the plug.

The lower end of the plug D is beveled and sharpened to form a knife edge or blade H.

The lever B is provided with a side wing J, having a longitudinal V-shaped groove K and a transverse V-shaped groove L, crossing the groove K at right angles in its upper surface. The point of intersection of said grooves is directly below the point of the blade H.

Two rollers M, having V-shaped annular grooves in their rims, are mounted in longitudinal slots in the bottom of the groove K, and a cylindrical roller N is pivoted in a slot in the wing J at the intersection of the grooves K and L, the axis of all of said rollers being at right angles to the longitudinal groove K.

A stop-screw O is screwed through the lever A for the purpose of limiting the movement of the levers A and B toward each other.

The operation is as follows: The screw O is adjusted according to the diameter of the wire *a*, so that when the levers A and B are pressed together and the wire is below the blade H the levers cannot be brought together sufficiently to cut the wire. The insulated wire is placed into the transverse V-shaped groove L and the levers A and B pressed together to force the blade H through the insulation *b* down to the wire, and then the wire is turned axially, so as to cause the blade H to make a circumferential cut in the insulation. Then the lever A is raised and the wire shifted a distance equal to the length of insulation to be removed and another circumferential cut is made, as set forth above. Then the wire is placed lengthwise in the groove K and the lever A brought down, so that the blade H penetrates the insulation *b* at one of the circumferential cuts, and then the wire is pulled lengthwise on the rollers M and N until the blade H is at the other circumferential cut, whereby that part of the insulation *b* between the two circumferential cuts is slitted longitudinally and can readily be peeled off the wire *a*. When the end of the wire is to be bared, only one circumferential cut is required, and the insulation is then slitted only from the circumferential cut to the end of the wire. The spring G is so adjusted that when the screw O is not correctly adjusted and the blade H would cut into the wire the plug D will give to prevent cutting the wire in case it is slightly buckled or bent.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with two pivoted handle-levers, of which one is provided with a lateral wing, having a longitudinal groove and a transverse groove in its upper surface, a socket extending upward from the other lever, a blade mounted to move lengthwise in said socket and a spring in said socket for pressing the blade downward with a yielding pressure, substantially as herein shown and described.

2. The combination with two pivoted handle-levers, of a blade held in one and a wing

on the other which wing has a longitudinal and a transverse groove, crossing each other at right angles, in the upper surface of said wing, and rollers mounted in slots of the longitudinal groove; substantially as herein shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 3d day of December, 1895.

ADOLPH E. O. RIECKEL.

Witnesses:

WILLIAM FITZGERALD,  
HENRY HELD.