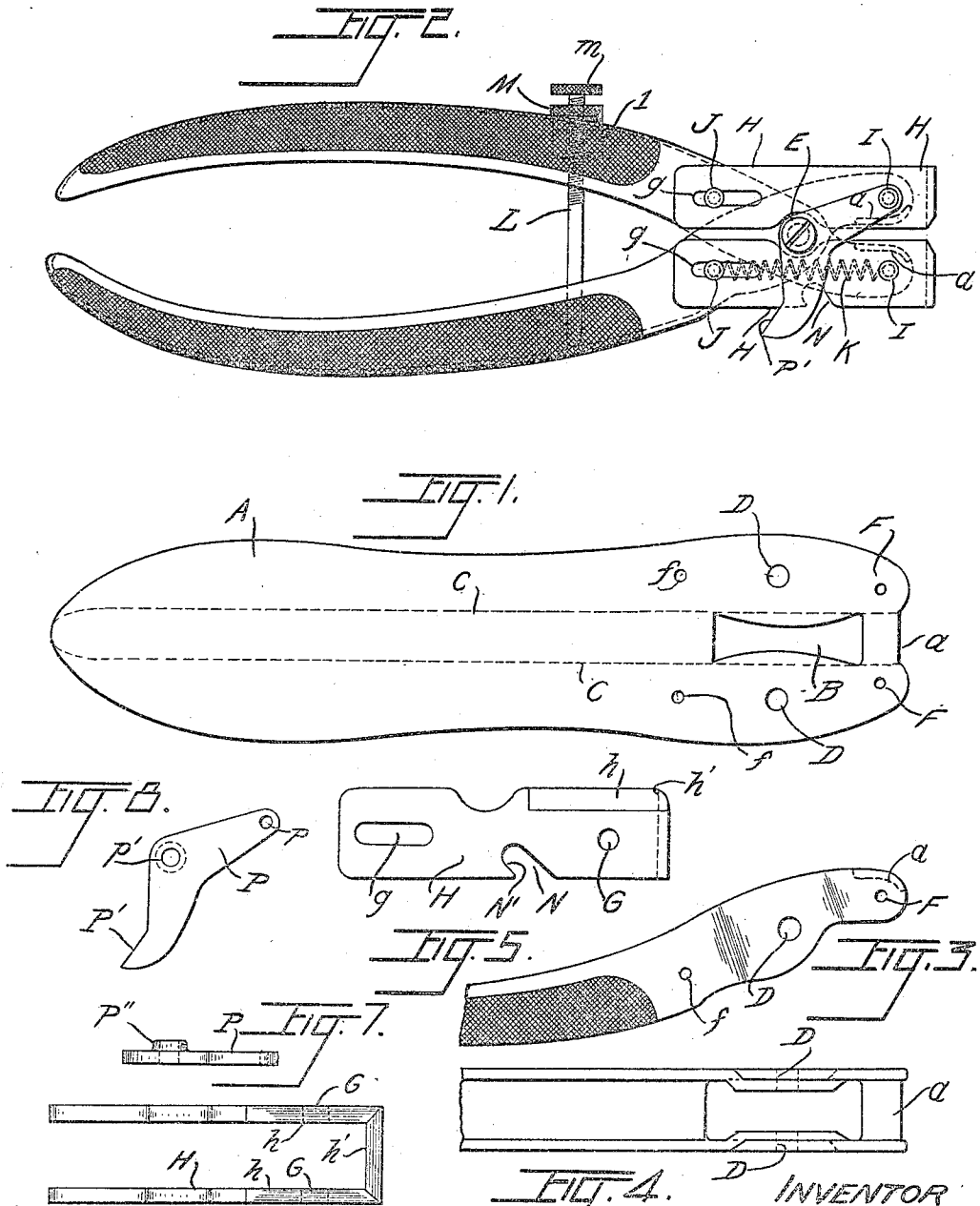


G. A. SEESSLE.
INSULATION CLIPPING PLIERS.
APPLICATION FILED FEB. 17, 1909.

946,074.

Patented Jan. 11, 1910.



WITNESSES:
Adams
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FIG. 4. INVENTOR
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UNITED STATES PATENT OFFICE

GUSTAV A. SEESSLE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO THOMAS
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INSULATION-CLIPPING PLIERS.

946,074.

Specification of Letters Patent. **Patented Jan. 11, 1910.**

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To all whom it may concern:

Be it known that I, GUSTAV A. SEESSLE, a subject of the Emperor of Germany, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Insulation-Clipping Pliers, of which the following, when taken in connection with the drawing accompanying and forming a part hereof, is a full and complete description, sufficient to enable those skilled in the art to which it pertains to understand, make, and use the same.

This invention relates to a device for cutting insulation off of covered wire.

The object of the invention is to obtain a device by means of which insulation, consisting of rubber, gutta percha, and woven fabric, can be cut off of a wire covered thereby, without nicking or otherwise injuring such wire.

A further object of the invention is to obtain a device which is simple in construction, durable, not easily gotten out of order and readily manipulated to quickly cut the insulation off of a wire.

A further object of the invention is to obtain an economically made device of the kind named which can also be used to cut the wire after the insulation thereon has been removed therefrom.

In the drawing referred to I have illustrated a device embodying my invention wherein the primary levers are formed up from a sheet metal blank, but I do not thereby intend to have it understood that such primary levers are necessarily so made.

In the drawing Figure 1 is a top plan view of a blank from which the primary levers of the device are formed up. Fig. 2 is a side elevation of the device embodying the invention. Fig. 3 is a side elevation of one end of one of the primary levers of the device. Fig. 4 is a top view of one end of the primary levers of the device. Fig. 5 is a side elevation of one of the cutting jaws or secondary levers, of the device. Fig. 6 is a top, or edge view, of the cutting jaw which is illustrated in Fig. 5. Fig. 7 is a top or edge view of the wire cutting blade of the device, and Fig. 8 is a side view of the wire cutting blade.

A reference letter applied to designate a given part is used to indicate such part

throughout the several figures of the drawing wherever the same appears.

A, Fig. 1, is a blank, from which the primary levers of the device, illustrated in Fig. 2, are formed up.

B is an aperture in blank A arranged so as to form the bar *a*, at one end of the blank and so that the primary levers, which are obtained by forming up the blank on lines C, C, may be crossed, in the usual manner of making pliers where formed up members are used.

D, D, are holes in the blank A through which the pivotal pin or bolt E, on which the primary levers of the device turn, extends when the several members of the device are assembled.

F, F, and *f*, *f*, are holes in the primary levers of the device.

G, G, are holes in members H, H.

H, H, are the insulation cutting jaws of the device.

g, *g*, are elongated apertures or slots in members H, H.

I, I, are bolts which extend through the holes F, and G, respectively and J, J, are like bolts which extend through apertures *f* and slots *g* respectively.

K is a spring the ends whereof engage with one of the bolts I and one of the bolts J, to yieldingly hold the jaws H, H, open.

L is an adjustable set-screw by means of which the primary levers are set to control the shutting together of the cutting jaws H, H.

l is a nut rigidly secured in one of the primary levers and such nut is provided with threads corresponding with the threads on set-screw L.

M is a set nut on set-screw L and *m* is a thumb-nut by means of which the set-screw L is turned for adjustment of cutting jaws H. The part of the cutting jaws H which are used to cut the insulation on a wire transversely is lettered *h*, and the part of such cutting jaws which are used to cut said insulation longitudinally is lettered *h'*.

The wire cutting blade of the device consists of a sheet metal knife, P, mounted on bolt E and on one of the bolts I. This blade is mounted so as to move over the notch N in one of the cutting jaws H so as to give a shearing action between the cutting blade P and one side of the notch N.

p is the hole in blade P through which the bolt I extends.

p' is the hole through which the bolt E extends, and p'' is a flange around the hole p' , said flange being obtained by punching the hole p' and forcing metal out from the body of the cutting blade P. When the cutting blade P is mounted as described the opening and closing of the cutting jaws H, H, moves the cutting edge P' by or adjacent to the cutting edge N' of recess N so that a wire in such recess is cut thereby.

In assembling the device the primary levers and the wire cutting blade P are joined by the bolt E; the cutting jaws or secondary levers H, H, are mounted on the primary levers by means of the bolts I, I, and J, J, one of the bolts I, I, being extended through the hole p in the cutting blade P.

To use the device the set-screw L is first adjusted so that the cutting edges of the cutting jaws H, H, when brought together as closely as possible will cut through the insulation on the wire from which such insulation is to be removed and will not cut the wire. That is, the distance apart of the cutting edges of jaws H, H, when such jaws are closed as closely as the adjustment of the set-screw L will permit is substantially equal to the diameter of the wire. The wire, with the insulation thereon, is then put between the jaws H, H, so that such insulation will be cut transversely by the cutting edges h, h , when said jaws are closed by closing the primary levers. The wire is turned once or twice and transverse cuts made as described. The wire is then put between the cutting edges h', h' , of the jaws H, H, and the primary levers again closed, thereby making a longitudinal cut in the insulation. The insulation when cut transversely and longitudinally, as described, can be removed from the wire.

It will be observed that the blank A is formed up so that the one of the primary levers which is passed through the aperture B in the other lever is bent inwardly, so that when the levers are assembled the outside edges of both levers are in substantially the same plane, so that the inner faces of the cuttings jaws H, H, may come adjacent to the side edges of such members. This arrangement is to prevent bending or buckling of the sides of the cutting jaws H, H.

Having thus described my invention what

I claim as new and desire to secure by Letters Patent is:—

1. The combination of pivotally connected primary levers and secondary levers, said secondary levers respectively constructed to obtain parallel sides and a connecting end and provided with holes and slots, and said secondary levers mounted on the primary levers by bolts extending through said primary levers and through the holes and slots in the secondary levers to form parallel moving cutting jaws respectively provided with parallel cutting edges adjacent to the connecting ends and with cutting edges on said connecting ends, substantially as described.

2. The combination of pivotally connected primary levers and secondary levers, said secondary levers respectively constructed to obtain parallel sides and a connecting end and provided with holes and slots, and said secondary levers mounted on the primary levers by bolts extending through said primary levers and through the holes and slots in the secondary levers to form parallel moving cutting jaws respectively provided with parallel cutting edges adjacent to the connecting ends and with cutting edges on said connecting ends, an adjusting set-screw on the primary levers, and a coiled spring attached at its ends to the bolts extending through the hole and slot in one of the secondary levers.

3. The combination of pivotally connected primary levers and secondary levers, said secondary levers respectively constructed to obtain parallel sides and a connecting end and provided with holes and slots, and said secondary levers mounted on the primary levers by bolts extending through said primary levers and through the holes and slots in the secondary levers to form parallel moving cutting jaws respectively provided with parallel cutting edges adjacent to the connecting ends and with cutting edges on said connecting ends, one of said secondary levers provided with recesses in the parallel sides, and a cutting blade pivotally mounted on the pivot of the primary levers and on one of the bolts attaching the secondary levers to the primary levers.

GUSTAV A. SEESSLE.

In the presence of—

CHARLES TURNER BROWN,
THOMAS ANGST.