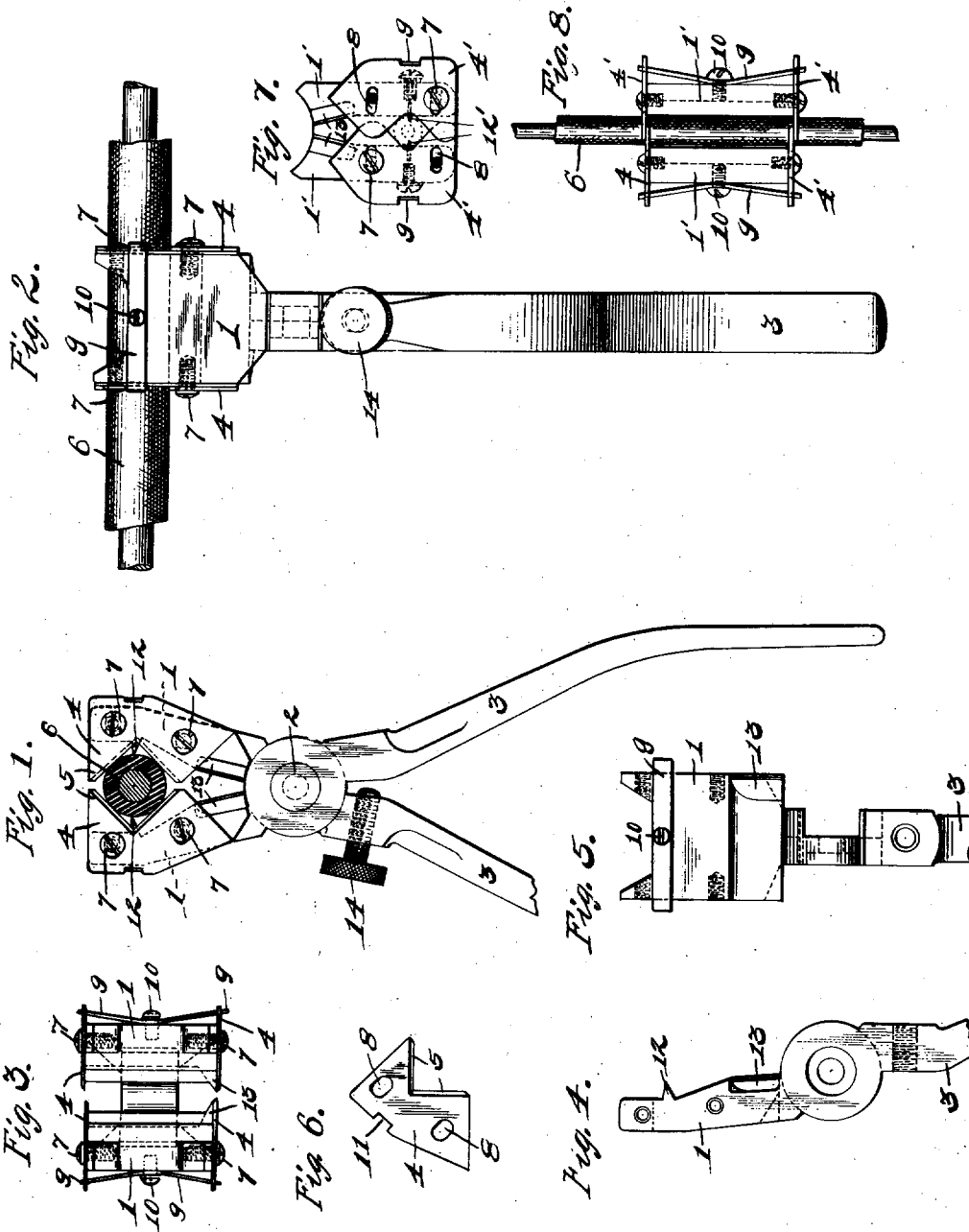


H. R. CIRVES.
PLIERS.

APPLICATION FILED JUNE 2, 1910.

973,760.

Patented Oct. 25, 1910.



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UNITED STATES PATENT OFFICE.

HERMAN R. CIRVES, OF MADISON, WISCONSIN.

PLIERS.

973,760.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed June 2, 1910. Serial No. 594,642.

To all whom it may concern:

Be it known that I, HERMAN R. CIRVES, a citizen of the United States, residing at Madison, county of Dane, and State of Wisconsin, have invented certain new and useful Improvements in Pliers, of which the following is a specification.

My invention relates to improvements for pliers especially adapted for the use of electricians in "skinning" or removing the insulation from electric wires.

The object of the invention is to provide a pair of pliers of the nature set forth which shall be of simple construction and efficient in operation.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which—

Figure 1 is a partial plan view of pliers embodying my invention, Fig. 2, a side elevation of Fig. 1, Fig. 3, an end elevation of Fig. 1, Fig. 4, a partial plan view of one of the jaw members of the pliers, Fig. 5, an elevation of Fig. 1, Fig. 6, a plan view of one of the cutting blades employed on the pliers, Fig. 7, a partial plan view of a modified form of construction, and Fig. 8, an end view corresponding to Fig. 7.

The preferred form of construction as illustrated in the drawings comprises a pair of plier jaws 1 pivoted together at 2 and provided with operating handles 3. A pair of cutting blades 4 having angular cutting edges 5 is secured to each side of jaws 1 in position to embrace an insulated wire 6 as indicated in Fig. 1. Each of the blades 4 is slidably secured in position by means of screws 7 taken through elongated slots 8 in said blades. Each of said blades is yieldingly pressed to contact with a wire between said jaws by means of flat steel springs 9 secured to the backs of said jaws at their centers by means of screws 10 having their free ends engaging notches 11 in the outer edges of said blades. Each of the jaws 1 is provided on its inner face with longitudinal splitting edges 12 extending the full height of said jaws and from one pair of said blades to the other. Jaws 1 are also provided with wire cutting projections 13 by means of which wires may be cut off and one of the handles 3 is provided with a set screw 14

adapted to contact with the other handle 3 and limit the approach of said handles and consequently of said jaws. By this construction it will be observed that an insulated wire may be placed between angular cutting edges 5 and slit edges 7 and the insulation thereon cut and readily removed by pressing said jaws together and turning the pliers relatively to the wire. By means of set screw 14 the approach of jaws 1 may be adjusted to different sizes of wires so as to prevent injury or cutting of said wires, a result which is facilitated by yielding of blades 4 when in use.

In Figs. 7 and 8 I have illustrated a slightly different form of construction employing a slightly different shape of cutting blade 4' and slightly different shape of jaws 1' having separate longitudinal splitting edges 12' fitted to grooves in said jaws. Otherwise the two constructions are identical.

While I have illustrated and described the preferred form of construction for carrying my invention into effect this is capable of variation or modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the exact details set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. The combination with a pair of pliers, of angular cutting blades slidably secured to the jaws of said pliers and adapted to yieldingly embrace an insulated wire; and springs arranged to yieldingly press said blades to contact with a wire, substantially as described.
2. The combination with a pair of pliers, of angular cutting blades slidably secured to the jaws of said pliers and adapted to yieldingly embrace an insulated wire; springs arranged to yieldingly press said blades to contact with a wire; and longitudinal splitting edges on the inner faces of said jaws, substantially as described.
3. The combination with a pair of pliers, of a pair of angular cutting blades slidably secured to each side of the jaws of said pliers and adapted to yieldingly embrace an insulated wire; springs arranged to yieldingly press said blades to contact with a wire; longitudinal splitting edges on the inner faces of said jaws extending from one pair of said

blades to the other; and a set screw arranged to limit the approach of said jaws, substantially as described.

4. The combination with a pair of pliers,
5 of a pair of angular cutting blades slidably secured to each side of the jaws of said pliers and adapted to yieldingly embrace an insulated wire; springs arranged to yieldingly press said blades to contact with a
10 wire; longitudinal splitting edges on the inner faces of said jaws extending from one

pair of said blades to the other; a set screw arranged to limit the approach of said jaws; and wire cutting edges on said plier jaws, substantially as described.

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In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERMAN R. CIRVES.

Witnesses:

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