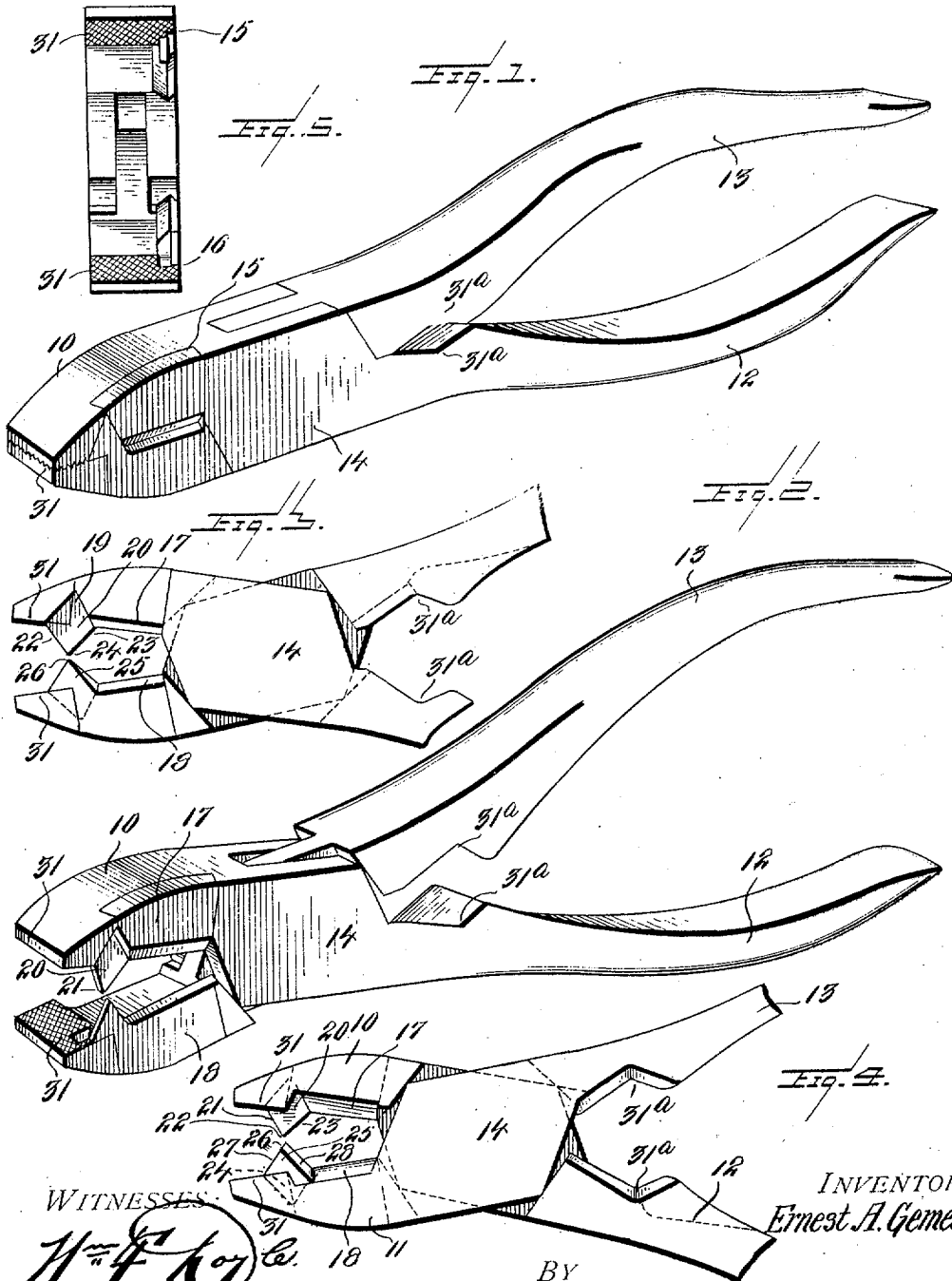


E. A. GEMENY.
PLIERS.

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WITNESSES:

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UNITED STATES PATENT OFFICE.

ERNEST A. GEMENY, OF JUNCTION CITY, KANSAS, ASSIGNOR OF ONE-HALF TO WILLIAM H. COLEMAN, OF ATCHISON, KANSAS.

PLIERS.

No. 888,606.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ERNEST A. GEMENY, a citizen of the United States, residing at Junction City, in the county of Geary and State of Kansas, have invented certain new and useful Improvements in Pliers, of which the following is a specification.

The present invention relates to certain new and useful improvements in pliers of the wire cutting type, and has specially in view the production of wire cutting pliers adapted for cutting insulated wires.

The principal object of the invention is to provide a novel form of insulated wire cutting pliers, in which a pair of laterally projecting auxiliary cutters are employed to first cut through the insulation, and then guide the wire to a position where it will be severed by the main cutters.

With the above and many other objects in view the invention contemplates certain features of construction, a preferred embodiment of which will be described in detail in the following specification, and shown in the accompanying drawings.

In said drawings, wherein like characters of reference designate corresponding parts,—

Figure 1 is a perspective view of the pliers, showing the same with the jaws closed. Fig. 2 is a similar view, the jaws being open. Fig. 3 is a side elevation of the pliers showing the jaws opened. Fig. 4 is a side elevation of the jaws, the view being of the opposite side to that shown in Fig. 3. Fig. 5 is an end elevation showing the jaws opened.

Referring to said drawings, 10—11 designate two gripping jaws, the general outline of which are of the usual type of cross handle pliers, and which are provided with handles 12—13, the jaw 10 carrying a housing 14 within which the jaw 11 is fulcrumed. On one face the jaws, intermediate their reduced gripping ends and their pivotal connection, are recessed as at 15—16, to form seats for the elongated projecting wire cutters 17—18, the cutting edges of which are beveled.

One end of the upper surface of the wire cutter 17 is reduced in thickness to form a V-shaped recess 19. The bottom of the recess is projected outwardly to form a thin V-shaped insulation cutter 20, having a sharp penetrating point 21 and outwardly inclined sides 22—23.

One end of the under surface of the wire cutter 18 is reduced in thickness to form a

V-shaped recess 24. The outer end of the cutter 18, above the V-shaped recess 24, is projected outwardly to form a thin V-shaped insulation cutter 25, having a sharp penetrating point 26 and outwardly inclined sides 27—28.

The two insulation cutters 20—25 are located in opposite positions and arranged in horizontal planes slightly above one another, so that when the pliers are in the closed position as shown in Fig. 1 of the drawings, the cutter 25 will be snugly seated flush in the V-shaped recess 19 at the end of the upper surface of the wire cutter 17, and the insulation cutter 20 will be snugly seated flush within the V-shaped recess 24 at the end of the under surface of the wire cutter 18.

In using the pliers, the insulated wire is caught between the points of the insulation cutters 20—25. Pressure applied upon the handles will force the said points through the insulation and cause the inclined cutting edges thereof to cut through the insulation, and at the same time gradually force the wire rearwardly to a position where the wire cutters 17—18 will enter the opening in the insulation formed by the insulation cutters, and act upon and sever the wire.

From the foregoing it will be observed that the present invention provides a simple and effective means for cutting through the insulation, and at the same time imparting a rearward movement to the wire causing it to move to a position where the elongated wire cutters will enter the "cut" made by the pointed insulation cutters, and thereby be in a position to have a direct cutting action upon the wire only.

An important feature of the invention is in the manner of locating the insulation cutters opposite one another, but in different horizontal planes, which provides for an overlapping joint between the two cutters when the pliers are closed, causing each cutter to enter its corresponding recess, thereby disposing the sharp points and cutting edges in a position where there is no danger of injury being done to the user when the pliers are in their inoperative position.

The wire cutters just described are to be associated with jaws having flat gripping faces 31—31, subserving the ordinary plier functions. And preferably the handles, adjacent to the pivotal connection of the jaws, are provided with V-shaped cutter notches

31^a—31^a in opposing relation to form an auxiliary wire or rod cutter.

I claim:—

5 1. An implement of the character described comprising a pair of pivoted jaws each provided with a cutter seat, a wire cutter in each of said seats, the upper surface of one end of one of said wire cutters being reduced in thickness to form a recess and a thin
10 outwardly projecting insulation cutter, the under surface of the other wire cutter being reduced in thickness to form a recess and an outwardly projecting insulation cutter, whereby when the jaws are closed, the said
15 insulation cutters will be disposed in an overlapping position with their cutting edges in said recesses.

20 2. An implement of the character described comprising a pair of pivoted jaws each provided with a cutter seat, a wire cutter in each of said seats, one end of said wire cutters being recessed and provided with insulation cutters, said insulation cutters and

recesses being so arranged relatively that when the jaws are closed the said insulation
25 cutters will be disposed in an overlapping position with their cutting edges in said recesses.

3. An implement of the character described comprising a pair of pivoted jaws
30 each provided with a cutter seat, a wire cutter in each of said seats, each of said wire cutters having one end reduced in thickness to form recesses and thin projecting insulation cutters, said insulation cutters and recesses
35 being so arranged relatively that when the jaws are closed the said insulation cutters will be disposed in an overlapping position with their cutting edges in said recesses.

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

ERNEST A. GEMENY.

Witnesses:

Z. E. JACKSON,
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