No. 715,915. Patented Dec. 16, 1902.

H. L. WHITE.

PLIERS.

(Application filed Apr. 21, 1902.)

(No Model.)

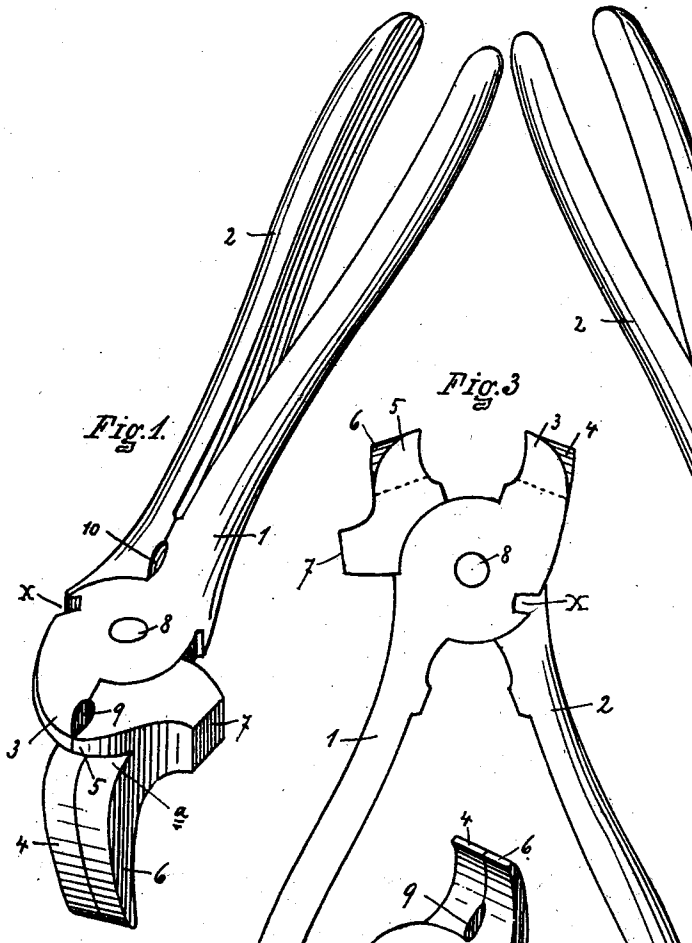



Fig. 1.




Fig. 3.

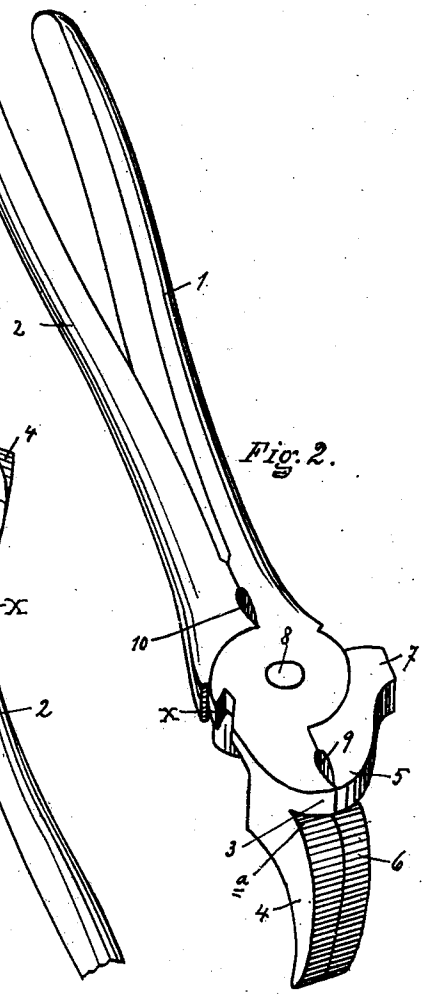



Fig. 2.

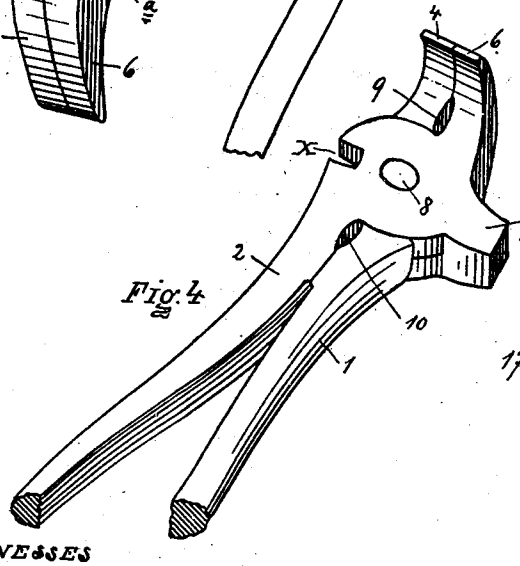



Fig. 4.

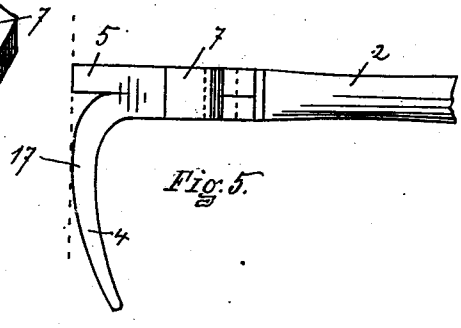



Fig. 5.

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# UNITED STATES PATENT OFFICE.

HUBERT LAWRENCE WHITE, OF UTICA, NEW YORK.

## PLIERS.

SPECIFICATION forming part of Letters Patent No. 715,915, dated December 16, 1902.

Application filed April 21, 1902. Serial No. 103,852. (No model.)

*To all whom it may concern:*

Be it known that I, HUBERT LAWRENCE WHITE, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Pliers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form part of this specification.

The object of my invention is to provide a pliers particularly adapted for use in the construction of wire fences, but which on account of its peculiarities to adapt it to this use is free as possible from objections in its general use as a pliers or pincers.

In the drawings, Figure 1 shows a perspective view of a pliers embodying the features of my invention. Fig. 2 shows also a perspective from the other side of the tool. Fig. 3 is a plan view except as to a portion of the handles, which are broken off. Fig. 4 is a perspective view from the under side, except as to a portion of the handles. Fig. 5 is a partial edge view or side elevation.

The pliers consists of the two main portions 1 and 2, the part 1 including the narrow somewhat-pointed jaw 3 and the integral fulcrum projection 4. This projection 4 springs from a point back of the working point of the jaw, leaving the undercut or recess shown at *a*, or, in other words, a clearance between the working point of the jaw and the operative portion of the fulcrum projection. The part 2 is provided with a jaw 5 and a fulcrum projection 6, similar to 4, and also spring from a point back of the working portion of the jaw, affording a clearance, as before stated. The part 2 is also provided with a small head 7, which may be used for a hammer or for driving purposes. The high point 17 of the fulcrum projection is substantially in the same plane with the extreme end of the jaws and is arranged in quite close proximity thereto. These two features are shown more clearly in Fig. 5 of the drawings. The jaws or parts are hinged or pivoted together on a pivot 8 and are extended, forming handles for the pliers in the usual manner. Between the working faces of the jaws when closed there is provided a cut-out or recess 9, which extends not only through the jaws, but through the portion of the fulcrum projections connecting at this point with the jaws, and as clearly shown on the under view in Fig. 4. There may also be provided the usual wire-cutting device, consisting of a notch in the edges of the disk-like plates, as indicated at *x*.

The narrow working portions of the jaws 3 and 5 are readily inserted in a staple such as is used in connection with wire fences, and the same can be pulled with ease by bringing the fulcrum portion against the post. The bearing is first at the high point 17 of the fulcrum projections and afterward moves down as the staple is being drawn. The most power, it will be observed, is obtained in the first part of the movement, where it is more desirable in starting the staple. The working points of the jaws 3 and 5 when opened can also be forced into soft wood to get the head of a nail, which nail may be drawn by prying on the fulcrum projection, as before described. The clearance between the working points of the jaws and the shank ends of the fulcrum-piece is particularly useful when the tool is thus used. It will be noted that when open the parts 4 and 5 of the fulcrum projection separate with the jaws, and there is no obstruction or projection into the open space between the jaws. Two or more wires may be passed into the open jaws and when closed will take their position in the opening 9, where they can be more or less gripped and the tool used for what is known as a "splicer" with the wires thus held. Another splicer acting somewhat similar may be provided, as indicated at 10. The outer ends of the fulcrum projections 4 and 5 are also adapted for use for pinching or nipping purposes and are particularly useful in getting in narrow and otherwise inaccessible places in which other pliers are not adapted to operate.

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

1. The combination in a pliers of the parts pivoted together, each having a narrow-faced jaw and a fulcrum projection springing from the part at a point back of the working point of the jaw, whereby a clearance is provided

between the jaw and fulcrum projection, said fulcrum projection projecting in an irregular curve with the high point substantially in the plane of the outer ends of the jaw, substantially as set forth.

2. The combination in a pliers of the two parts pivoted together, each part including a jaw and a half of a fulcrum projection projecting at right angles to the plane of the jaws, and springing from a point back of the working face of the jaw whereby a clearance is afforded, substantially as set forth.

3. The combination in a pliers of the two parts including jaws and handles pivoted together, each part having the cut-out to form the opening or recess 9 extending entirely through the jaws and base of the fulcrum-piece when the pliers are closed, substantially as set forth.

In witness whereof I have affixed my signature, in presence of two witnesses, this 18th day of April, 1902.

HUBERT LAWRENCE WHITE.

Witnesses:

S. A. BROWN,

J. BENJ. BRADY.