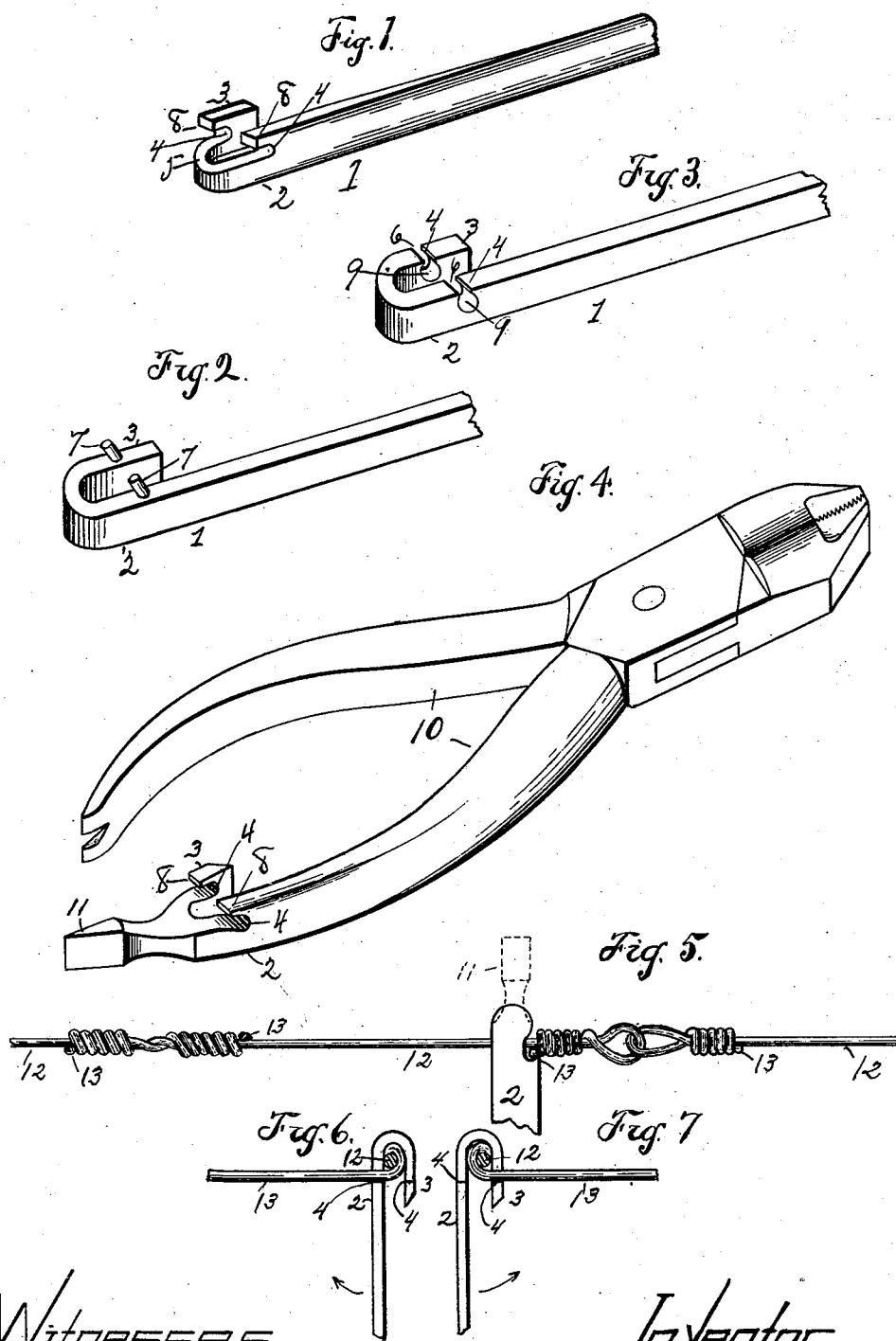


(No Model.)

J. B. MURDOCK.
WIRE SPLICING TOOL.

No. 508,963.

Patented Nov. 21, 1893.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN B. MURDOCK, OF WASHINGTON, DISTRICT OF COLUMBIA.

WIRE-SPLICING TOOL.

SPECIFICATION forming part of Letters Patent No. 508,963, dated November 21, 1893.

Application filed February 21, 1893. Serial No. 463,144. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. MURDOCK, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Wire-Splicing Tools; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 figures of reference marked thereon, which form a part of this specification.

My invention relates to wire splicing tools and has for its object to provide such a device as will be simple, cheap and effective, and one which can be combined with other tools, as a pair of pliers, and it consists of the improved construction as will be hereinafter more particularly set forth.

In the accompanying drawings in which the same reference numerals indicate corresponding parts in each of the views where they occur: Figure 1 is a perspective view of one form of my improved wire splicing tool. Figs. 2 and 3 are other forms of it. Fig. 4 shows it in combination with a pair of pliers. Fig. 5 shows some of the forms of splices or connections that can be made with the tool, and Figs. 6 and 7 are detail views showing how the different twists can be given to the wire by rotating the tool in opposite directions.

Referring more particularly to the drawings, 1 indicates the tool, which is preferably made in the form of a hook, each leg of which, 2 and 3, is formed or provided with a shoulder 4 upon one side, and one of the legs, as 2 is extended to form a handle for rotating or operating the tool. The shoulders may be formed by cutting away a portion of the bottom of the hook as at 5, in Fig. 1, or by cutting transverse notches, as 6, in Fig. 3, or by means of pins, 7, 7, projecting from the sides of the legs, as in Fig. 2. When a portion of the bottom is cut away, as in Fig. 1, the cut away portion may extend back in under a portion of each leg so as to form an overhanging portion, 8 to prevent the end of the wire from slipping off the shoulder as it is being twisted. When the transverse notches are

used, the bottom of each notch may be slightly enlarged as at 9 to prevent the wire from catching and binding as it is being wrapped around the other wire, and when the pins are used they may be slightly inclined toward the bottom of the hook, as shown in Fig. 2.

When the tool is combined with a pair of pliers, 10 the long leg of the tool is combined in any manner, as by welding, or being formed integral with one of the handles of the pliers, as shown in Fig. 4. With this construction, a screw driver 11 may also be used which can be formed integrally therewith, or be fitted into a socket in the bottom of the hook in any usual manner, and be secured therein by screw-threads or by means of a set-screw in the tool. By making the screw-driver detachable, other tools, as a gimlet, &c., may be used instead of the screw-driver.

In use, the straight strand of wire 12 is passed through the hook of the tool and the end of the other strand 13 that is to be wrapped or twisted around the straight wire is bent out and put in one of the notches or shoulders of one of the legs of the tool, according as a right or left twist is to be made. After the end has been placed against the shoulder the tool is rotated around the straight wire with the end of the other wire bearing firmly against the shoulder. The rotation is continued until the splice is completed. As both of the shoulders are on the same side of the tool, a twist in either direction can be made at either end of the splice without changing the position of the tool, but simply by passing the free end of the wire through the desired notch.

As shown in Figs. 5, 6 and 7, the end of the short leg is over the wire at all times so that if the tool should slip out of the hands it would not drop, but would be supported by the wire. This feature makes the device a very desirable implement for use by line men in telegraph or electric light work, for the tool can be suspended from the wire at any time, or it may be hooked over an adjoining wire without the necessity of putting it in the pocket every time that it is not needed. The addition of the screw driver is often useful with linemen in fastening insulators, and such

like work, and by combining the tool with a wire cutting pair of pliers, the tool becomes valuable for such work.

Having thus described my invention, I claim—

1. A wire splicing tool consisting of a hook having a shoulder upon each leg thereof, and means for rotating the hook around a wire, each of said shoulders being adapted to engage with the free end of the wire and to wrap it around the straight wire according to the direction of rotation of the tool.

2. A wire splicing tool consisting of a hook having a shoulder upon each leg thereof, said shoulders being upon opposite sides of the wire when in position and adapted to engage with the free end of the wire to be twisted according to the direction of the rotation of the tool and wrap it around the straight wire, one of the legs of the tool being extended to form a handle for rotating the tool.

3. A wire splicing tool consisting of a flat substantially U-shaped hook, a portion of the bottom of which is cut away to form a shoul-

der upon each leg thereof, said shoulders being upon the same side of the legs of the hook and adapted to be upon opposite sides of the wire when in position, and one of the legs being extended to form a handle.

4. The herein described combination tool comprising a pair of cutting pliers, one handle of which is provided with a hook, each leg of which hook is provided upon the same side with a recessed shoulder.

5. The herein described combination tool comprising a pair of cutting pliers, one of the manipulating handles of which is flattened and formed into a hook at its outer end and having a portion of the bottom of the hook cut away to form shoulders upon each leg of the hook, said shoulders being upon the same side of the legs of the hook.

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

JOHN B. MURDOCK.

Witnesses:

LEWIS V. BOGY,
F. D. BLACKSTONE.