

C. C. WOLCOTT.

Improvement in Nippers for Fastening Telegraph Wires.
No. 130,778.

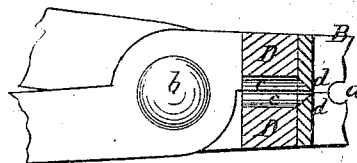
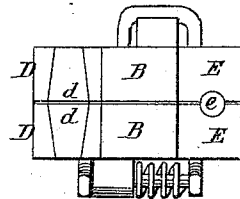
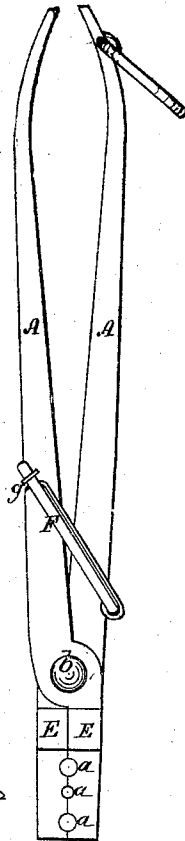
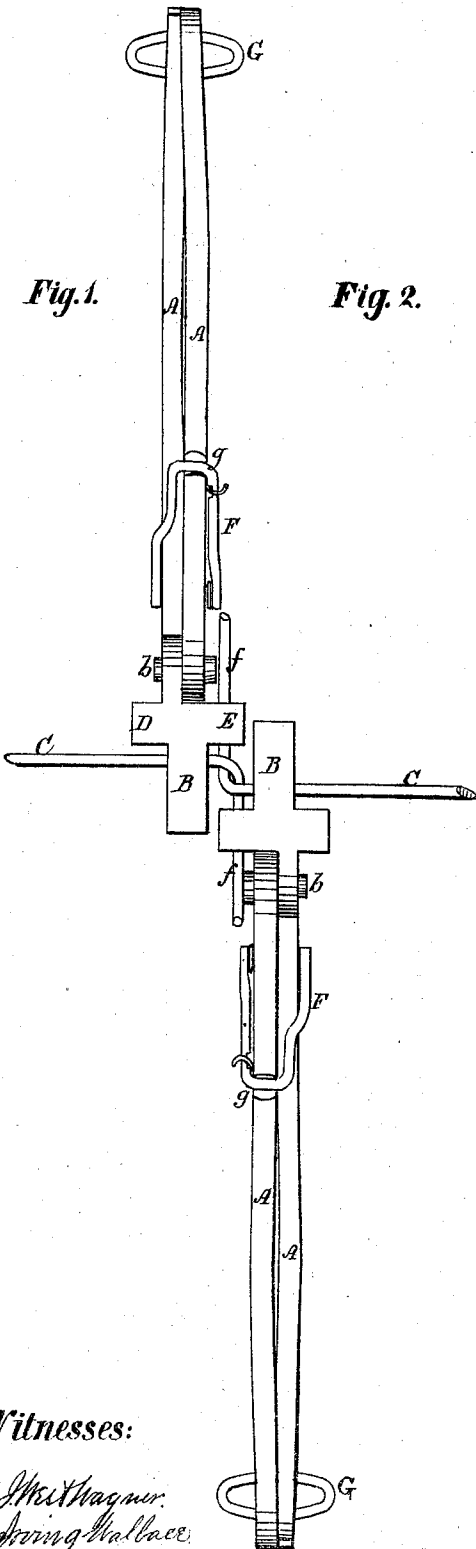
Patented Aug. 20, 1872.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.



Witnesses:

Wm. Wagner.
Irving Wallace.

Inventor:

Christopher C. Wolcott,
by Johnson, Hauke & Co.
his Attorneys.

UNITED STATES PATENT OFFICE.

CHRISTOPHER C. WOLCOTT, OF UNITED STATES ARMY.

IMPROVEMENT IN NIPPERS FOR FASTENING TELEGRAPH-WIRES.

Specification forming part of Letters Patent No. 130,778, dated August 20, 1872.

To all whom it may concern:

Be it known that I, CHRISTOPHER C. WOLCOTT, of the United States Army, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Nippers, specially adapted for tying telegraph-line wires or insulator-ties, of which the following is a specification:

My invention relates to joining telegraph-line wires and connecting the insulator-ties therewith; and my said invention consists in constructing the joining-nippers with lateral arms, designed to perform two separate and distinct functions, in combination with the usual nose—that is to say, a side arm to clip the ends or sever the wire and a similar arm to bend the end of the wire and to hold it while making the tie; and, in connection with nippers thus constructed, providing the handles thereof with a spring-link, which serves to clamp the nipper to the wire, and thus leave the hands free to manipulate another pair of nippers of like construction to seize the other end of the wire and complete the tie.

In the accompanying drawing, Figure 1 represents two pairs of nippers embracing my improvement and as applied to the ends of a severed telegraph-line wire to make the connection. Fig. 2 represents an elevation of such pairs of nippers. Fig. 3 represents an end view of the same; and Fig. 4, a section through the lateral clipping-arm.

The arms A of the nippers are pivoted near the nose B in the usual manner. The adjacent faces of the nose B are provided with grooves, so as to form circular openings *a*, when brought together, of different diameters to suit different sized wires. The nose, however, with these openings, is not used, as heretofore, to bite and clamp the wire, but to form openings as means for holding the nippers to the wire, and, also, an axis, upon which to revolve the nippers upon the line-wire C while making the tie. At the base of the nose B, and on either side thereof between the latter and the pivot-joint *b*, each branch B is provided with a laterally-projecting arm, D E, which opens and closes with the nose. The arms D are grooved on their contiguous faces at *c*, and provided on their sides with cutters *d* for clipping the wire, while the arms E are provided with semicircular grooves to form openings *e* to receive, guide,

force, and bend the ends of the wire upon and around each other in forming the tie. In applying the nippers to the ends of the line-wire C the latter are first bent at right angles to each other with sufficient length to form the proper number of wraps to make a strong and proper tie, as shown at *f* in Fig. 1. One of the bent ends *f* is then seized by the bending and tying arm E, while one of the openings *a* in the nose B is adjusted upon the line-wire C, around which the end is to be wrapped, so as to hold and support it upon said line-wire, and for this purpose the handles A are fitted with a spring-link, F, so as to draw and hold the branches B of the nose together, in which condition the first applied pair of nippers is held free from the hands and so as to be revolved upon the line-wire C as an axis in making the tie. The hands being thus free to manipulate the other pair of nippers, the latter is applied in the same manner to the other end of the line-wire, but in the opposite direction, as shown in Fig. 1.

The two pairs of nippers being thus applied to the two ends of the line-wire, their handles are grasped by the operator and turned in opposite directions, so as to wrap each end *f* of the wire at the same time, each pair of nippers having its fulcrum upon the line-wire on either side of the tie, and capable of being moved upon said fulcrum as the tie is made and according to the number of wraps which the ends will form.

In applying the first pair of nippers they are held free of the hands by their fulcrum upon the line-wire, so as to hold this end of the line-wire within the control of the operator. One of the handles of the nippers has a ring or hook, G, with which to attach the nippers to a belt on his body or the telegraph-pole, so that he is entirely free to grasp and join the other end of the wire. The spring-link F is hinged to one of the handles A of the nippers with its free end catching into a notch, *g*, in the other, and thus lock the handles together when adjusted and supported upon their fulcrum or making tie.

The nippers thus constructed may be used with much greater advantage and economy, both in time and labor, in making the tie than by the method now in use with the ordinary nippers, which will not admit of the complete

freedom of the hands in making the connections.

I have described my improved nippers as applicable for tying telegraph-line wires, but it is obvious that they may be used in the construction of wire fences, and, in fact, joining any wires.

Having described my invention, I claim—

1. In combination with a grooved nipper-nose, B, the laterally-projecting, grooved, guiding, forcing, and tying arm E, essentially as and for the purposes described.

2. In nippers having a grooved nose, B, and a grooved tying-arm, E, I claim the spring-link F of the handles A for closing the branches of the grooved nose B, and tying arm E to lock the nose of the nippers upon the line-wire C,

so as to form a fulcrum thereto upon said wire and hold them free from the operator in making the tie, as described.

3. In nippers for tying the ends of wires, I claim the combination of the grooved nose B, the grooved tying-arm E, the clipping-arm D, and the spring-link F for the handles A, the several parts being constructed and arranged for joint operation as herein described.

In testimony whereof I have hereunto set my hand this 23d day of April, A. D. 1872, in the presence of two subscribing witnesses.

CHRISTOPHER C. WOLCOTT.

Witnesses:

A. E. H. JOHNSON,

J. W. HAMILTON JOHNSON.