(No Model.)

F. M. HARRIS.

WIRE SPLICER.

No. 261,706. Patented July 25, 1882.

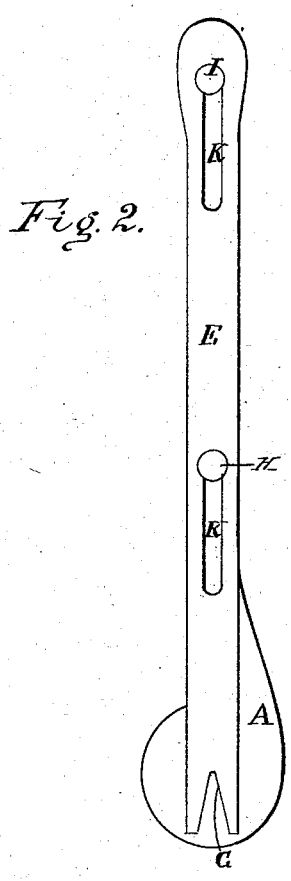

Fig. 2.

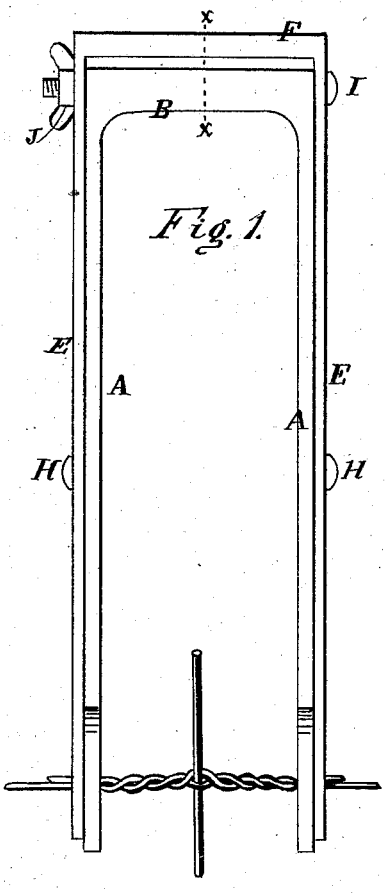

Fig. 1.

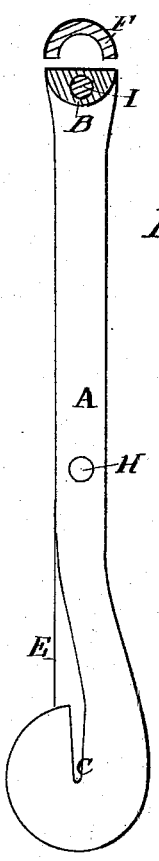

Fig. 3.

Fig. 4.

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FRANK M. HARRIS, OF ST. CHARLES, MISSOURI.

WIRE-SPLICER.

SPECIFICATION forming part of Letters Patent No. 261,706, dated July 25, 1882.

Application filed April 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. HARRIS, of St. Charles, in the county of St. Charles and State of Missouri, have invented a new and Improved Wire-Splicer, of which the following is a full, clear, and exact description.

My invention relates to improvements in wire-splicers; and it consists in the peculiar construction and arrangement of parts, as hereinafter fully set forth.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of my improved wire-splicer. Fig. 2 is a side elevation. Fig. 3 is a section of Fig. 1 on line *x x;* and Fig. 4 is a side view of a wire-splice such as the improved splicer herein described is designed to make.

A represents a couple of bars of iron or steel projecting from a handle, B, parallel to each other a suitable distance, and being two or three inches apart, (more or less,) with tapered notches C near the extremities, opening toward the handle.

E represents another similar pair of bars projecting from a handle, F, about the same length as bars A, but enough wider apart than said bars A to receive them between said bars E, and these bars E have tapering notches G opening in the opposite direction. These notches C and G are so arranged as to their depth in the respective plates and distance from handles B F that when a wire is placed in notches C and secured therein by the notches G of bars E the handles B and F will not quite touch, thus enabling the wire to be clamped firmly in said notches by holding the two handles B F in the hand.

The bars A and E of the two clamp-frames are connected by rivets H and a bolt, I, with a thumb-nut, J, on the bolt, the bars E being slotted at K to slide along said rivets and bolt. The bolt passes through handle B from the bars of one side of the clamp to those of the other side. The bolt and nut are employed to set the clamp and hold it on the wires when required.

The clamp is used in splicing wires by inserting the two ends to be spliced in the notches from opposite sides when part E F is drawn back on A B sufficiently to open said notches. The clamp is then pressed together on the wires by the hand and held firmly, while the twister, consisting of a short rod, one end of which is inserted between the wires midway of the clamps, is turned around through the clamp, thus twisting the splice.

It will be seen that the arms A and E of the clamp will spring by the shortening of the wires between them in consequence of being twisted, and thus allow the points of the wires being clamped to approach each other a slight measure equal to the shortening which the twist causes. The clamp is then opened by sliding part E F back on A B sufficiently to open it for discharge of the twisted wire from the clamp.

In the splice, Fig. 4, it will be noticed that the lapped ends of the wires *a* are twisted from the gap *b* at the middle of the lap, where the twisting-tool is applied each way to ends of the respective wires, making a neat and substantial twist.

I do not limit myself to the particular construction of clamp here represented for holding the wires and yielding to the shortening of them by the twist, for the same operations may be effected with tools differing materially in form.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of clamp bars A, having handle B and notches C, with the clamp bars E, having handle F and notches G, substantially as specified.

2. The handle F, having bars E, provided with notches G and slots K, in combination with handle B, having bars A, provided with notches C, rivets H, and bolt I, substantially as specified.

FRANK M. HARRIS.

Witnesses:
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