

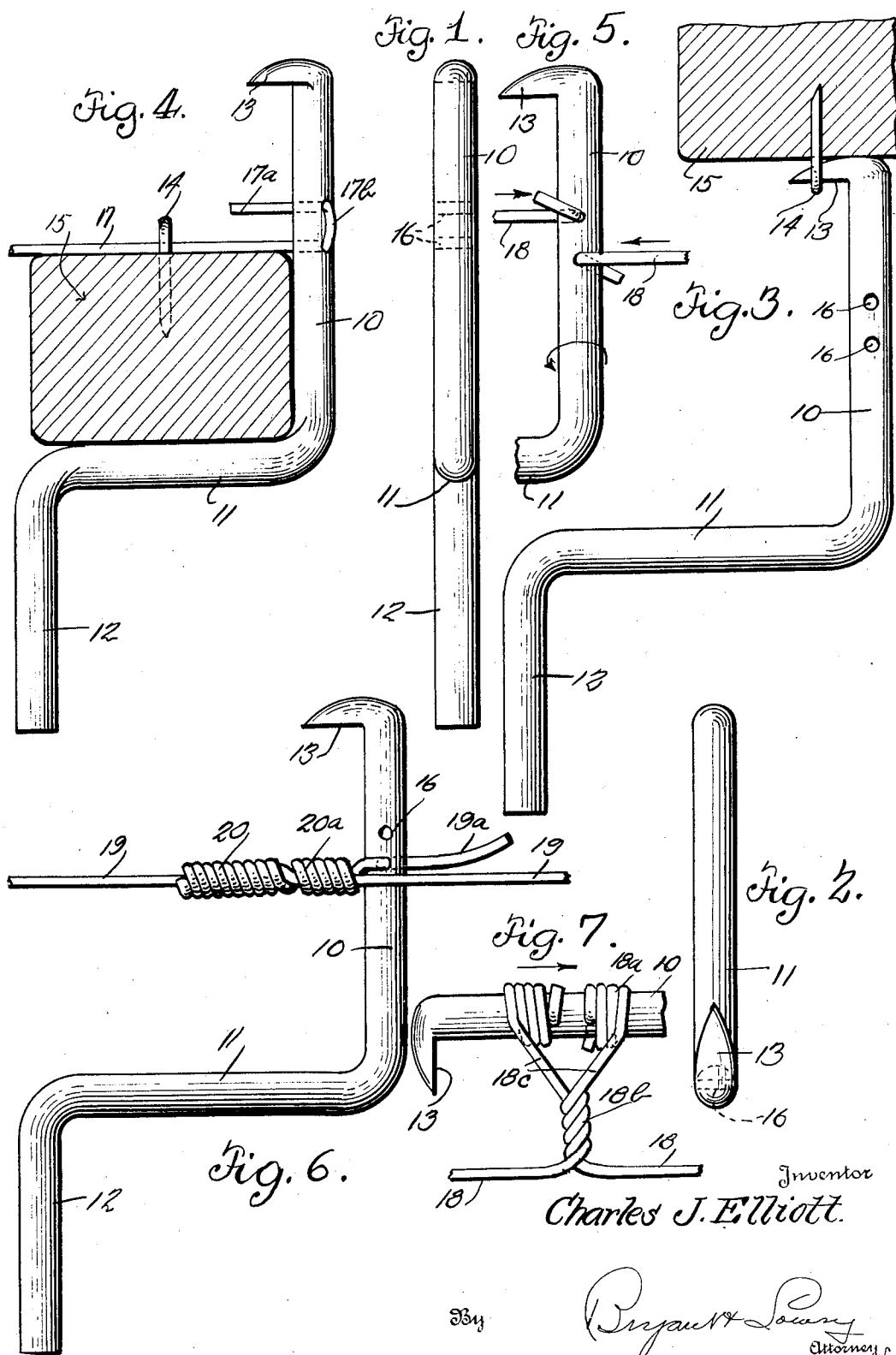
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WIRE SPLICING, STRETCHING, AND TWISTING TOOL

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WIRE SPLICING, STRETCHING, AND
TWISTING TOOL

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1 Claim. (Cl. 140—123.5)

This invention relates to certain new and useful improvements in wire splicing, stretching and twisting tool.

The primary object of the invention is to provide a wire splicing, stretching and twisting tool comprising a rod or bar of crank handle formation with a pair of spaced parallel openings extending transversely through a shank portion of the tool for the selective reception of one or two wire ends to accomplish the stretching of wire, either one or two strands, the splicing of wire ends and the twisting of wire ends, the foregoing operations being accomplished by movement of the tool relative to the wire or wires in certain directions.

It is a further object of this invention to provide a wire tool of the foregoing character embodying a single bar member of crank handle formation to the exclusion of any attachments or accessories which greatly simplifies the construction and materially reduces the cost of manufacture, the tool efficiently performing all functions ascribed thereto.

With the above and other objects in view that will become apparent as the nature of the invention is better understood, the same consists in the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing:—

Figure 1 is a side edge elevational view of the tool;

Figure 2 is an end edge elevational view;

Figure 3 is a side elevational view showing the tool of crank handle formation with spaced openings extending through one leg of the tool with a staple puller at the end thereof, a post or other member having a staple therein being illustrated in section;

Figure 4 is a side elevational view of the tool engaged with a post and showing a wire threaded through the openings in the tool with the tool in position to be rotated against a post that is shown in section for stretching the wire;

Figure 5 is a fragmentary side elevational view of the tool showing adjacent ends of wires threaded through the tool openings with tool rotatable in a direction indicated by the arrow line for simultaneously stretching both wires;

Figure 6 is a side elevational view of the tool employed as a wire splicer; and

Figure 7 is a fragmentary side elevational view of the tool employed as a wire twister.

The wire splicing, stretching and twisting tool is formed of a single bar or rod of iron, steel or

the like and is entirely free of movable accessories or attachments so that the tool may be inexpensively manufactured, the tool rod being of crank handle formation, comprising a shank 10 carrying a right angularly directed crank arm 11 at one end with a handle 12 extending at right angles to the crank arm 11 and in a direction away from the shank 10, the shank, crank arm and handle occupying the same plane.

The outer end of the shank 10 of the tool carries a laterally directed claw 13 capable of various uses, such as a staple puller as shown in Figure 3, the claw 13 being engaged with the staple 14 carried by the post 15 or other member.

Intermediate the ends of the shank 10, there is provided a pair of spaced parallel openings 16 extending transversely through the shank with the axes thereof at right angles to the longitudinal axis of the crank arm 11 and into which openings the ends of wires are adapted to be received with the tool manipulated in different manners to accomplish the splicing, stretching and twisting of wire.

The use of the tool as a staple puller is illustrated in Figure 3 as previously described, while in Figure 4, the tool is illustrated as a stretcher for a single wire strand. As shown in Figure 4, the wire strand 17 to be anchored to the post 15 passes through the looped head of the staple 14 with the free end 17a of the wire strand passed through one of the openings 16 in the tool shank 10 and redirected through the other opening 16 in a reverse direction forming an intermediate loop 17b. The shank 10 of the tool is engaged with a side of the post 15 and upon rotation of the shank 10 by means of the handle 12 and connecting crank arm 11, the wire end is wound upon the shank 10 for stretching the wire strand 17 which is then anchored to the post 15 by completely driving the staple 14 home. The end of the wire strand 17 outwardly of the staple 14 is then severed and the wire end 17a wrapped upon the tool shank 10 is cut therefrom or otherwise removed in any desired manner.

The tool is illustrated in Figure 5 as having adjacent ends of two wire strands connected thereto by passage through the openings 16 for the simultaneous stretching of two wires, the wires 18 preferably respectively entering the openings 16 from opposite sides with a shank 10 rotatable in the direction indicated by the arrow line to cause the wire strands 18 to be wound on the shank for the stretching of the wires, the stretched wires being then anchored to a support, severed adjacent the tool and the portions

wound upon the tool and passed through the openings 16 are removed therefrom.

When the wire ends are wound upon the tool shank 10 as described in connection with Figure 5, the result of such operation is illustrated in Figure 7, the wire ends 18 forming convolutions 18a on the tool shank 10. The twisting of wire ends is also illustrated in Figure 7, the shank 10 being rotatable in a plane parallel with the wires 18 to form the twist 18b, the wires being severed at any point in the untwisted sections 18c between the wire twist 18b and the tool shank 10; the coiled portions of the wire upon the tool shank being then removed in any desired manner.

The use of the tool as a wire splicer is illustrated in Figure 6, wherein adjacent ends of wire strands 19 are twisted by the tool into spliced coils 20 and 20a, one end 19a of one of the wire strands being extended through one of the openings 16 in the tool shank with the tool rotatable around the other wire strand 19 for forming the spliced coil, such as in the formation of the spliced coil 20a.

From the above detailed description of the invention, it is believed that the construction and

use thereof will at once be apparent, it being noted that the tool embodies a single bar bent to crank handle formation and provided with a pair of spaced openings in the shank portion thereof for accomplishing the splicing, stretching and twisting of wire without the aid of extraneous devices, other accessories or attachments and while there is herein shown and described the preferred embodiment of the invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

I claim:—

In a wire splicing, stretching and twisting tool, a single metallic rod of crank handle formation having a shank, crank arm and handle, said shank having wire end receiving openings therein extending transversely of the shank, parallel with each other, longitudinally spaced and intermediate the ends of the shank with the wire ends insertable in the openings from either end thereof, spaced from sides of the shank parallel with the axes of the openings.

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