No. 868,178. PATENTED OCT. 15, 1907.

G. H. GOUGHNOUR.

WIRE SPLICER.

APPLICATION FILED SEPT. 5, 1906.

Fig. 1.

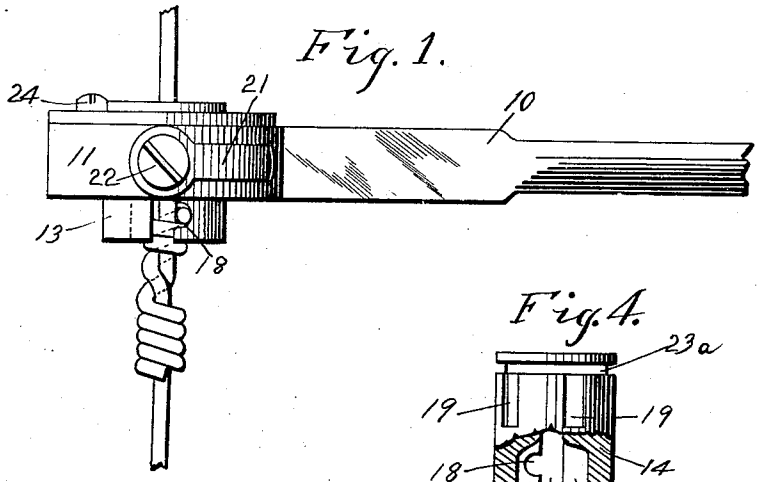



Fig. 4.




Fig. 2.

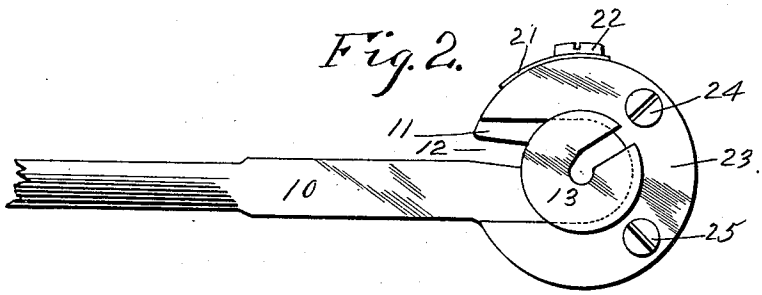
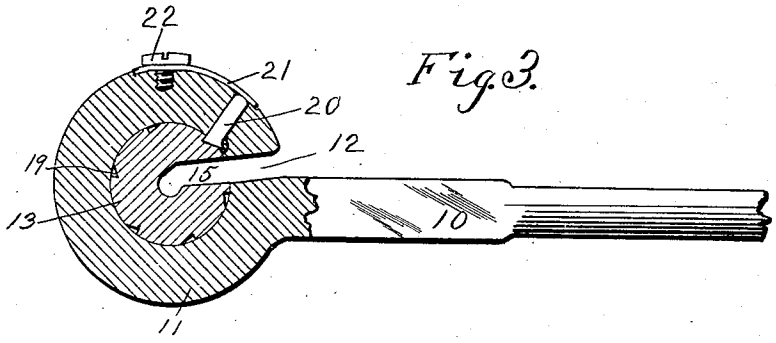



Fig. 3.




Witnesses.

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THE NORRIS PETERS CO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

GEORGE H. GOUGHNOUR, OF STUART, IOWA.

## WIRE-SPLICER.

No. 868,178. Specification of Letters Patent. Patented Oct. 15, 1907.

Application filed September 5, 1906. Serial No. 333,727.

*To all whom it may concern:*

Be it known that I, GEORGE H. GOUGHNOUR, a citizen of the United States, residing at Stuart, in the county of Guthrie and State of Iowa, have invented a certain new and useful Wire-Splicer, of which the following is a specification.

The objects of my invention are to provide a wire splicer of simple, durable and inexpensive construction, so constructed and arranged that it will splice a wire which is a very short distance from another wire; that is, strands used in a woven wire construction as well as wires which are separated a considerable distance.

A further object is to provide a device of this character which can be easily carried in the pocket of the user.

My invention consists in certain details, in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my device, showing the wire which has been partially spliced in it. The handle in this view is broken away. Fig. 2 is a plan view of my device with the handle broken away. Fig. 3 shows in cross section the head of my splicer and the handle in elevation, and Fig. 4 is a detail view, partly in section and partly in elevation, of the wire twisting sleeve.

Referring to the accompanying drawings, I have used the reference numeral 10 to represent the handle of the splicer having a circular head 11 at one end thereof. This circular head has an opening 12 in it adjacent to the handle. Extending through the head is a circular opening in which is mounted the wire twisting sleeve 13 which comprises a body 14, having an opening 15 extending through its central portion, designed to receive one end of the wire to be spliced. This opening leads to the exterior of the wire twisting sleeve, as shown clearly in Figs. 2 and 3 of the drawings, and is designed to be in line with the opening 12 when the device is in readiness for use, so that the wire can be slipped through the opening 12 into the opening 15 readily. At one end of the wire twisting sleeve I have provided an opening 16 which is formed by cutting out a circular portion of this wire twisting sleeve. In one of the members 17, formed by cutting the opening 15 in the wire twisting sleeve 13, is a lateral groove 18 designed to receive the wire which is to be wound around the wire entering the opening 15. In the exterior portion of the wire twisting sleeve, and on that portion of it which enters the circular opening in the head 11 is a ratchet face 19 designed to receive the pawl 20 in the head 11, which is constantly maintained in engagement with the wire twisting sleeve 13 by means of the spring 21, to which said pawl is secured, said spring being in turn secured to the head 11 by means of the screw 22. Encircling one end of the wire twisting sleeve is an annular groove $23^a$ just outside of the ratchet face 19, in which a plate 23 is designed to enter for securing the wire twisting sleeve against endwise movement as it is being rotated when said plate 23 is secured to the head 11 by the screws 24 and 25.

In practical operation, the wires to be spliced are placed in such a way that their ends overlap each other and one wire is then slipped into the opening 15 of the wire twisting sleeve, through the opening 12 in the head after the wire twisting sleeve has been turned to the position shown in Fig. 3 of the drawings. The wire to be twisted around this wire which has been slipped into the opening 15 is then bent so as to be placed in the lateral groove 18, as shown in Fig. 1 of the drawings. The handle is then oscillated so as to rotate the wire twisting sleeve by means of the pawl and ratchet, above described, and thus twist the wire in the lateral groove 18 around the wire in the opening 15, the chamber 16 being adapted to receive the convolutions of the twisted wire. When this has been twisted in this way sufficiently, the device is removed and the wire which has been in the lateral groove 18 is placed in the opening 15, and the wire which has been in the opening 15 is placed in the lateral groove 18, and the operation is repeated, and when completed, the wire is thoroughly spliced.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States, therefor is—

1. A wire splicer compising a handle provided with a head, and a cylindrical wire twisting sleeve formed of a single integral piece and rotatably mounted in said head, said sleeve having one wall cut out throughout its length to form a radial slot extending from the center to the periphery thereof, a transverse groove being formed in one wall of said slot, said slot adjacent one end of the sleeve being enlarged to form a cylindrical chamber to receive the convolutions of a twisted wire.

2. A wire splicer comprising a handle provided with a head, and a wire twisting sleeve rotatably mounted in said head, said sleeve having a diametrical slot extending to the periphery thereof, a transverse groove being formed in one wall of said slot, one end of said sleeve being provided with an annular chamber to receive the convolutions of a twisted wire, the other end of said sleeve having an annular groove, and a plate secured to said head and entering said groove.

GEORGE H. GOUGHNOUR.

Witnesses:
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J. P. MCLAUGHLIN.