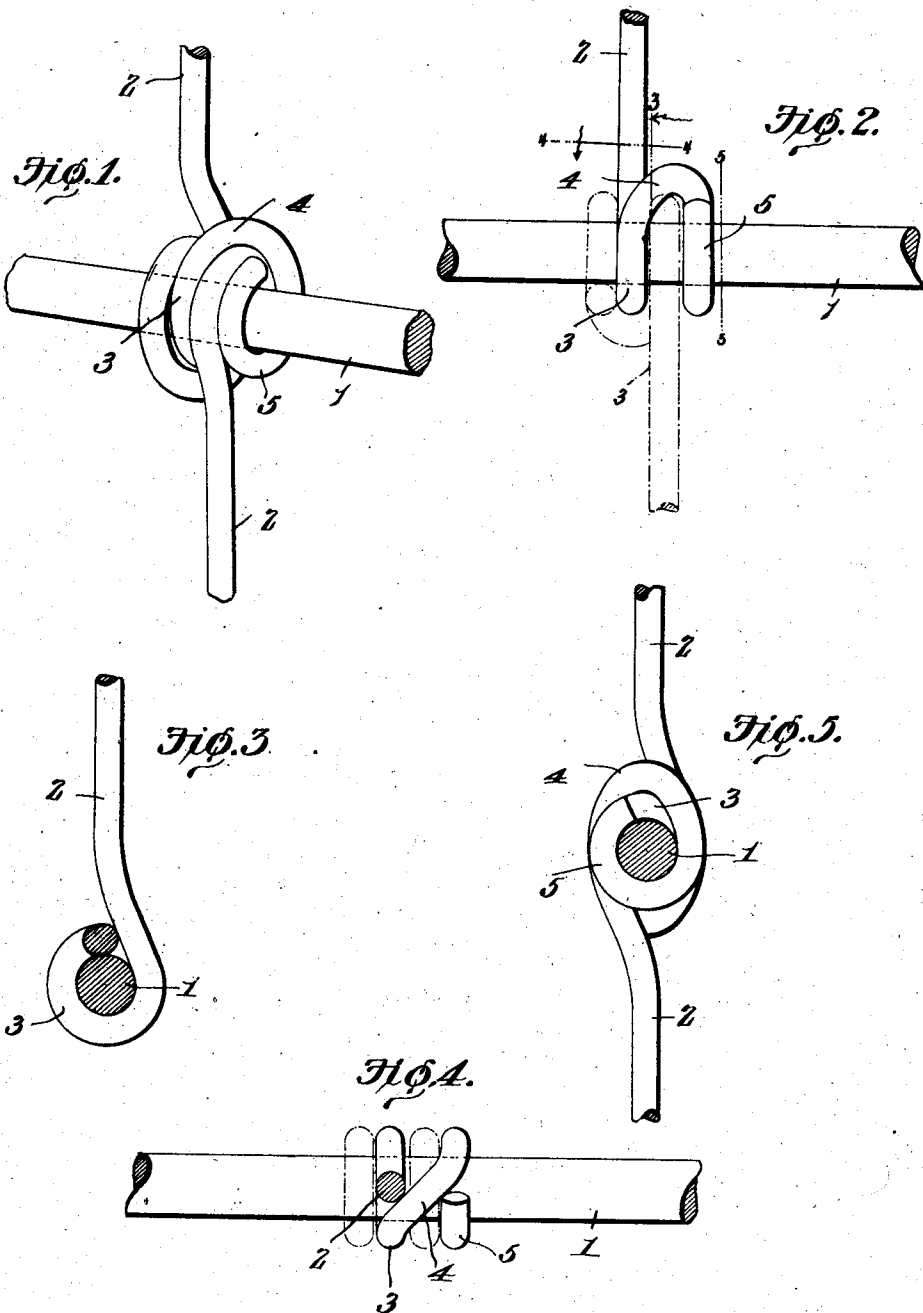


No. 834.662.

PATENTED OCT. 30, 1906.

A. B. CRITCHFIELD.
FENCE TIE.
APPLICATION FILED MAY 24, 1906.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALPHEUS B. CRITCHFIELD, OF MONTPELIER, OHIO.

FENCE-TIE.

No. 834,662.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed May 24, 1906. Serial No. 318,565.

To all whom it may concern:

Be it known that I, ALPHEUS B. CRITCHFIELD, a citizen of the United States, residing at Montpelier, in the county of Williams and State of Ohio, have invented a new and useful Fence-Tie, of which the following is a specification.

This invention has relation to fence-ties; and it consists in the novel construction and arrangement of its parts, as hereinafter shown and described.

The object of the invention is to provide an effectual tie by means of which the stay-wires of a fence may be secured to the line-wires of such a construction in a manner as to afford an effectual brace and support for both the stay-wires and the line-wires. The stay-wires are formed in sections which join together with each other at the line-wires and form the continuous stays which extend vertically with relation to the line-wires. The said stays interlock with each other in the peculiar manner as will be hereinafter explained, and at the same time they are firmly attached to the line-wires.

In the accompanying drawings, Figure 1 is a perspective view of the fence-tie. Fig. 2 is a side elevation of a section of the line-wire, showing one end of one of the stay-sections in heavy lines and the adjacent end of another stay-section in dotted lines. Fig. 3 is a transverse sectional view of Fig. 2 cut on the line 3 3 thereof. Fig. 4 is a top plan view of the line-wire and a sectional view of the stay-wire cut on the line 4 4 of Fig. 2, and Fig. 5 is a vertical sectional view of the line-wire cut on the line 5 5 of Fig. 2.

In applying the tie the line-wire 1 is not materially altered or bent out of shape. The stay-wires 2 2 are made in sections which extend from line-wire 1 to the next adjacent line-wire. The said stay-wires are adapted to interlock with each other at the line-wires 1 and also lock upon the said line-wires. In forming the interlocking coils the ends of the stay-wire sections 2 2 are given similar twists, and a description of one will answer for all.

At the end of the vertical portion of the stay-wires 2 the non-volute loop 3 is formed, which receives the line-wire 1. Said loop 3 is

in the same vertical plane as the stay-wire 2. At the completion of the loop 3 the wire is carried across in a diagonal direction, forming the volute section 4, and at the end of said section 4 the vertically-disposed non-volute loop 5 is formed. Said loop also receives the line-wire 1 and is arranged parallel to the loop 3. (See Fig. 4 of the drawings.) The loops 3 3 of the adjacent tie-sections 2 2 in forming the tie are located directly opposite each other and are in contact laterally; but the loop 5 of one tie-wire 2 is against the side of the loop 3 of the other tie-section—that is to say, that the loops 3 3 form the middle portion of the tie, while the loops 5 5 form the ends of the tie. The loops 3 and 5 are described as being non-volute, for the reason that they are devoid of spiral inclination.

A tie thus formed between the line-wires and the stay-wires in fencing braces the structure and adds material at the tying-points, so that the structure will retain its shape. Furthermore, the end of the wire which forms the loop 5 is turned over the line-wire 1 and is disposed toward the side of the said loop at its point of beginning. Consequently there are no projecting ends or barbs to injure cattle or stock.

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

In combination with a line-wire, stay-wire sections locked to the line-wire, each of the stay-sections having at its end a non-volute loop which passes around the line-wire, a volute section at the terminus of said loop which crosses the line-wire, and a non-volute loop formed at the end of said volute section, the last said loop also passing around the line-wire and lying in a plane parallel with the first said loop and being spaced by the volute section from the first said loop.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALPHEUS B. CRITCHFIELD.

Witnesses:

E. E. BECHTAL,
JOS. STROH.