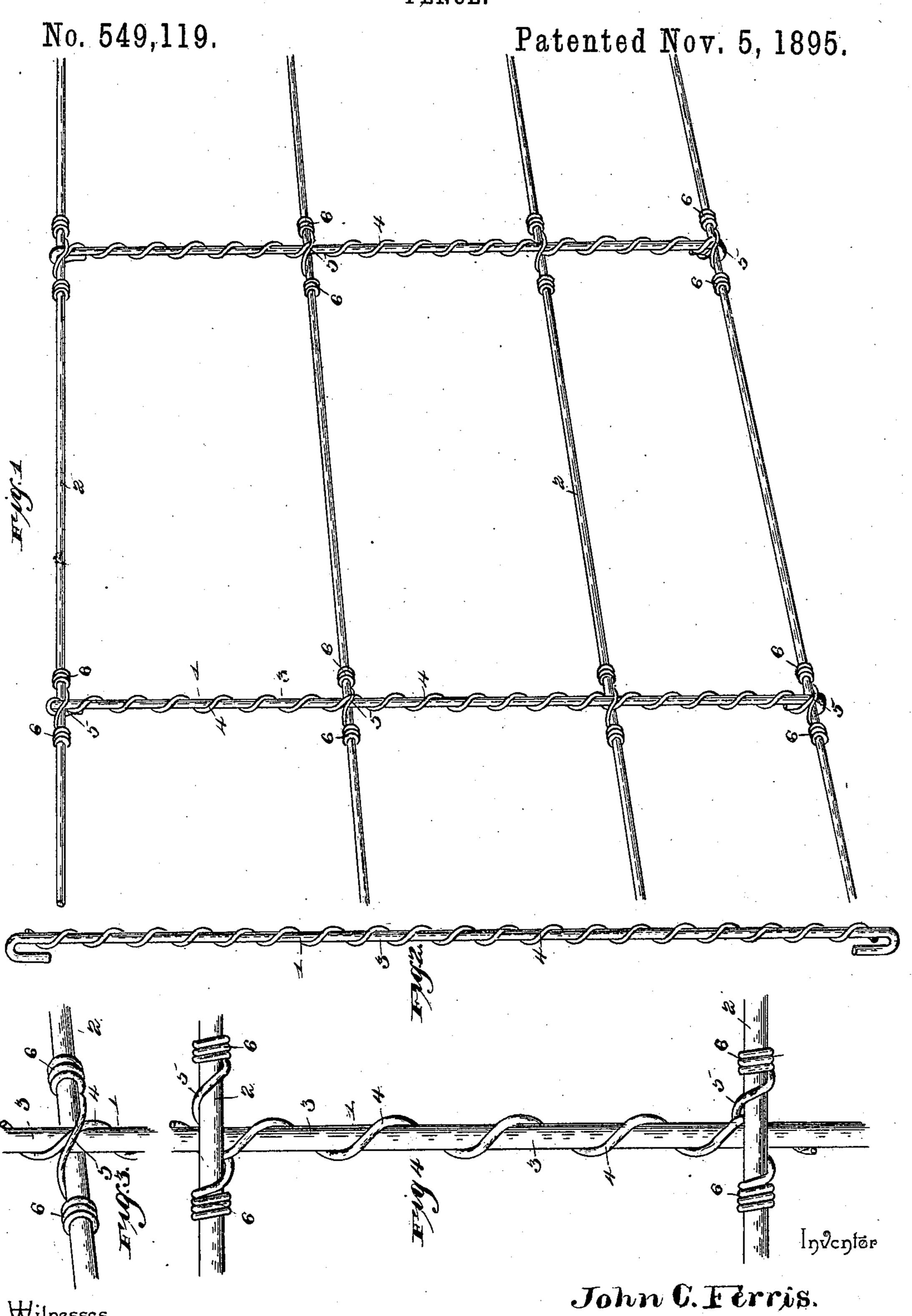
J. C. FERRIS. FENCE.



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United States Patent Office.

JOHN C. FERRIS, OF MILLVILLE, ASSIGNOR OF ONE-HALF TO JEFFERSON F. LEONARD, OF ALBION, NEW YORK.

FENCE.

SPECIFICATION forming part of Letters Patent No. 549,119, dated November 5, 1895.

Application filed December 20, 1894. Serial No. 532,456. (No model.)

To all whom it may concern:

Be it known that I, John C. Ferris, a citizen of the United States, residing at Millville, in the county of Orleans and State of New York, have invented a new and useful Fence, of which the following is a specification.

The invention relates to improvements in fences.

The object of the present invention is to improve the construction of wire fences and to provide one possessing great strength and durability and capable of being readily and cheaply manufactured.

A further object of the invention is to enable vertical stays to be securely fastened to horizontal fence-wires and to prevent any vertical movement of the latter on the stay.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of a fence constructed in accordance with this invention. Fig. 2 is a detail perspective view of one of the stays. Fig. 3 is an enlarged detail perspective view illustrating the connection between a stay and a horizontal fence-wire. Fig. 4 is an element of a portion of the fence.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a fence-stay secured vertically 35 to a series of horizontal fence-wires 2 and arranged at suitable intervals to support and stiffen the fence.

The stay consists of a straight rod 3, preferably constructed of stout wire or similar material, and a spirally-coiled wire 4, disposed on the stay and extending the entire length of the same and forming at short intervals shoulders adapted to engage the fencewires to prevent any upward movement of the fence-wires on the stay. The spirally-coiled wire 4 forms these shoulders or stops at very short intervals to enable the fence-wires to be arranged at any desired interval.

The stay is secured to each fence-wire by a wire-tie 5, having a central portion located between two of the shoulders or stops formed

by the spirally-coiled wire 4, and this central portion of the tie confines the stay between it and the fence-wire. The tie 5 is horizontally disposed and the portion confining the 55 stay is spirally coiled and interlocks with the shoulders or stops formed by the wire 4. The terminals of the tie are coiled around the fence-wire to form eyes 6, which are located at opposite sides of the stay. The ends of 60 the stay are bent around the top and bottom fence-wires and prevent any turning or twisting of the stay.

As clearly shown in Fig. 2 of the accompanying drawings, the hooked ends of the stay 65 for preventing the latter from rotating and unscrewing itself from the ties are formed before the stay is applied to the fence. If the stay were free to rotate, the spiral wire might operate as a thread and facilitate acci-70 dental displacement.

By this construction the fence-wires are firmly secured to the stay and are prevented from moving vertically on the same, and the construction also permits the fence-wires to 75 be arranged at any desired interval, as the shoulders or stops of the stay are located at short intervals.

It will also be seen that a fence possessing great strength and durability may be quickly, 80 conveniently, and cheaply manufactured, and that the stays may be readily removed without injury to themselves or to the strands of wire forming the fence.

Changes in the form, proportion, and the 85 minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. In a fence, the combination of horizontal fence wires, a vertical stay comprising a heavy wire or rod provided at its terminals with hooks receiving and engaging the top and bottom fence wires, to lock the stay 95 against rotation, and thus prevent the same from unscrewing, and a spirally coiled wire wound around the heavy wire or rod and forming a series of shoulders or stops arranged at intervals and receiving and engaging the 100 fence wires, and the wire ties each composed of a single piece of wire and disposed hori-

zontally, and provided with opposite coils embracing the fence wire, and located at each side of the stay, said tie being sigmoidally curved and spirally bent between the eyes and engaging and fitting between adjacent shoulders or stops formed by the spirally coiled wire of the stay, whereby the latter is securely locked against accidental movement, substantially as described.

10 2. In a fence, the combination of longitudinal fence wires, a vertical stay comprising a heavy wire or rod, and a spirally coiled wire wound around the heavy wire or rod and forming by such coiling a series of shoulders or

stops arranged at intervals and interlocking 15 with the longitudinal fence wires at one side of the heavy wire or rod, and ties secured to the longitudinal fence wires and interlocking with said shoulders or stops at opposite sides of the heavy wire or rod, substantially as and 20 for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

JOHN C. FERRIS.

Witnesses:

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CHARLES WHEDON,
JOHN J. RYAN.