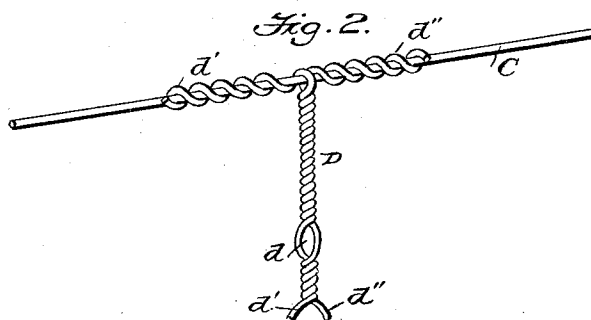
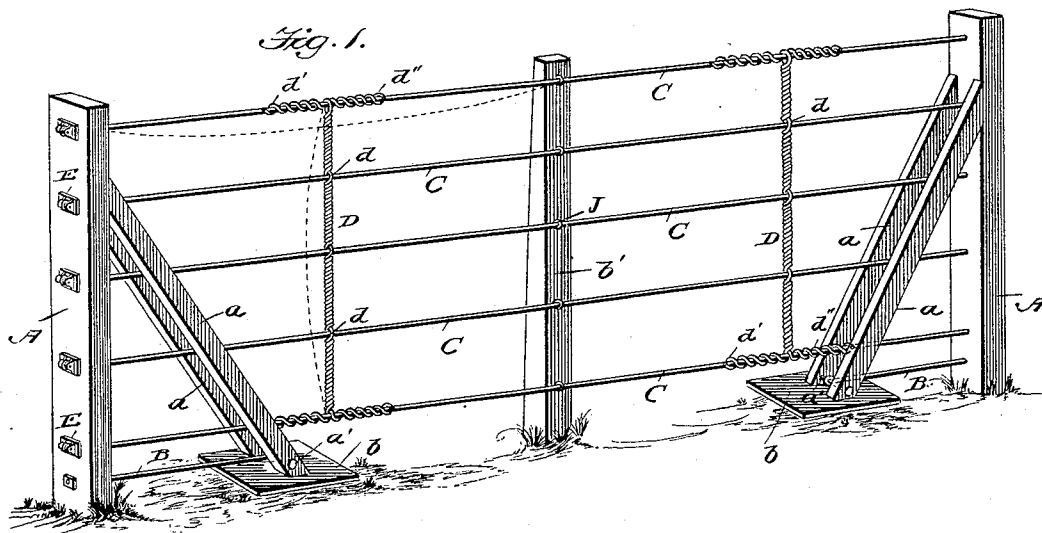


(No Model.)

V. ARNOLD & F. E. WETMORE.
WIRE FENCE.

No. 484,387.

Patented Oct. 18, 1892.



Witnesses:

Wm. O. Belt.
William O. Belt.

Inventors:
Vindex Arnold &
Frank E. Wetmore

By,

Edwin P. H.
Attorneys.

UNITED STATES PATENT OFFICE.

VINDEX ARNOLD AND FRANK E. WETMORE, OF MARSHALL, MICHIGAN,
ASSIGNORS OF ONE-THIRD TO HIRAM RYDER, OF SAME PLACE.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 484,387, dated October 18, 1892.

Application filed April 7, 1892. Serial No. 428,116. (No model.)

To all whom it may concern:

Be it known that we, VINDEX ARNOLD and FRANK E. WETMORE, citizens of the United States, residing at Marshall, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Wire Fences; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in wire fences; and its objects are to provide an improved stay-wire to support and strengthen the line-wires and a simple and efficient device for stretching and tightening the line-wires.

With these ends in view the invention contemplates a stay-wire composed of two strands tightly twisted together, forming apertures to loosely receive the intermediate line-wires, and the ends of said twisted strands of the stay-wire being wound around the top and bottom line-wires and secured rigidly thereto, and thus held from displacement thereon.

Our invention consists, further, of certain details of construction and arrangement of parts, as will be fully pointed out hereinafter. To enable others to more readily understand the invention, we have illustrated the same in the accompanying drawings, in which—

Figure 1 is a perspective view of a section of my improved fence. Fig. 2 is a detail enlarged view of the stay-wire.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the posts of the fence, which are firmly embedded in the ground, and suitable braces *a* are joined by a transverse bolt *a'* to a tension-rod B, secured at the bottom of said post A, by means of which the post is maintained in a rigid upright position. A plate *b* may be placed on the ground beneath the ends of the parallel braces *a* to protect them, as shown. These posts A are arranged at any convenient distance apart, and intermediate posts *b'* are provided to properly sustain the line-wires C of the fence. These line-wires C are run through staples J or apertures in said posts *b'*, and they may be of any number and form desired.

The stay-wires D are arranged on the line-wires at any suitable distance apart, and any number of such stays may be used, and I will particularly describe one of them.

Each stay-wire D is composed of two strands of wire, which are tightly and firmly twisted together, leaving at suitable intervals small openings *d*, through which the line-wires pass loosely. These two strands of wire are separated at each end of the stay-wire, and the ends thereof *d'* *d''* are wound tightly around the top and bottom line-wires, as shown in Figs. 1 and 2. It will be observed that the stay-wire is rigidly secured to the top and bottom line-wires, as described; but the intermediate line-wires pass loosely through the openings *d* in the stay-wire, and the stay-wire is thus caused to act as a spiral spring to hold the line-wires in their proper positions. If the stay-wire is moved laterally in either direction by extraneous force or pressure, as shown in dotted lines in Fig. 1, the top and bottom line-wires will be drawn out of their normal horizontal parallel positions, because the stay-wire is rigidly secured thereto, and when the pressure is removed from said stay-wire the line-wires will return to their normal proper positions, which straightens out the stay-wire and permits the same to assume its vertical position. As the stay-wire is loose on the intermediate line-wires and secured only to the top and bottom line-wires, we are able to withdraw any one or more of said intermediate wires to repair a break without interfering with the other wires, and also if any weight is imposed on the top line-wire to depress it the stay will bulge or move to one side, as shown in dotted lines in Fig. 1, and not depress or otherwise affect the other line-wires.

We are aware that changes in the form and proportion of parts and details of construction of our invention may be made without departing from the spirit or sacrificing the advantages thereof, and we therefore reserve the right to make such changes as fairly fall within the scope of our invention.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a wire fence, the combination, with the

line-wires, of a stay comprising two strands of wire twisted together and having openings for the free passage of the intermediate line-wires, and the ends of the strands of said stay-wire being securely twisted around the top and bottom line-wires in opposite directions, for the purpose set forth, substantially as described.

2. The herein-described stay-wire for wire fences, comprising the two strands of wire twisted directly together at intermediate points of their length and forming a series of spaced loops or eyes for the line-wires of the

fence, the ends of the stay-strands being free and extended in opposite directions from each other to adapt said strands of the stay-wire to be attached directly and rigidly to the top and bottom line-wires, for the purpose described.

In testimony whereof we affix our signatures in presence of two witnesses.

VINDEX ARNOLD.

FRANK E. WETMORE.

Witnesses:

OSCAR F. COLEMAN,
ALICE HADDEN.