(No Model.)

W. J. JACOBS.

DEVICE FOR ATTACHING STAY WIRES TO WIRE FENCES.

No. 555,914. Patented Mar. 3, 1896.

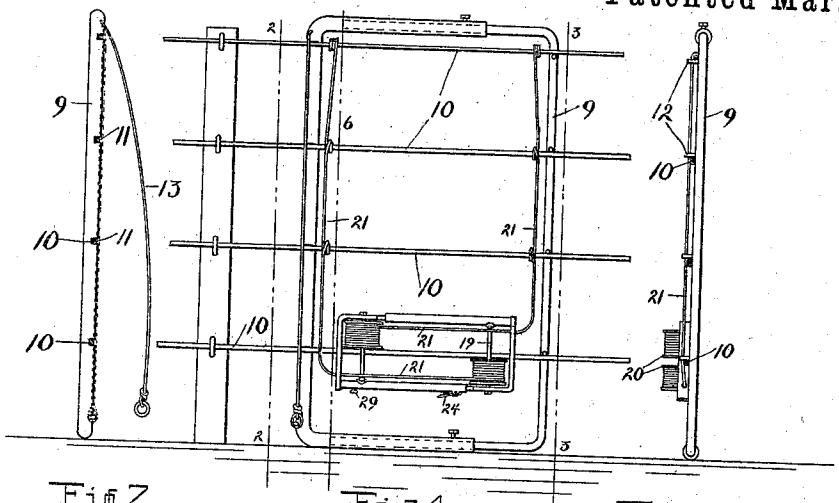


Fig. 2. Fig. 1. Fig. 3.

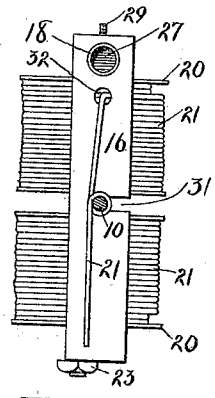


Fig. 5.

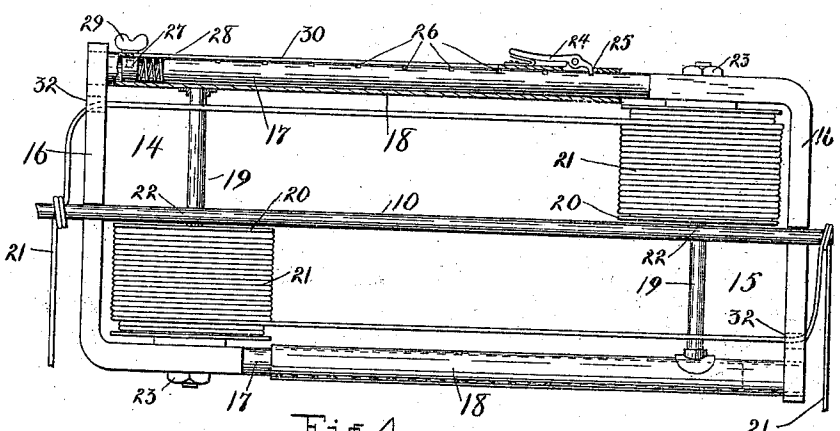


Fig. 4.

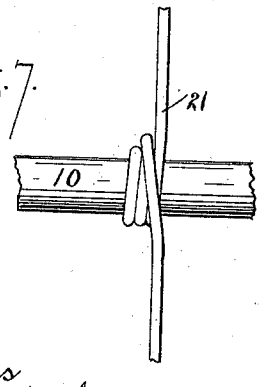


Fig. 7.

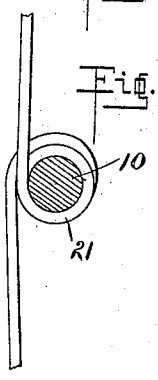


Fig. 6.

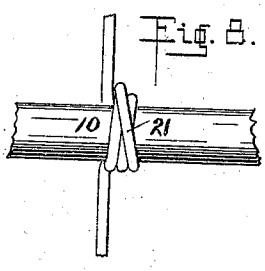


Fig. 8.

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UNITED STATES PATENT OFFICE.

WILLIAM J. JACOBS, OF BARGERSVILLE, INDIANA.

DEVICE FOR ATTACHING STAY-WIRES TO WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 555,914, dated March 3, 1896.

Application filed November 23, 1895. Serial No. 569,950. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. JACOBS, a citizen of the United States, residing at Bargersville, in the county of Johnson and State of Indiana, have invented a new and useful Device for Attaching Stay-Wires to Wire Fences, of which the following is a specification.

My invention relates to an improved device for attaching stay-wires to wire fences.

The object of my improvement is to provide a device for winding a pair of stay-wires simultaneously about the horizontal wires forming a fence-panel, all as hereinafter fully set forth.

The accompanying drawings illustrate my invention.

Figure 1 is a side elevation of my improvement in operative position on a fence-panel. Fig. 2 is an end elevation on line 2 2 of Fig. 1. Fig. 3 is an end elevation on line 3 3 of Fig. 1. Fig. 4 is an enlarged side elevation of the winding-reel, showing the face opposite to that shown in Fig. 1, a portion thereof being shown in section. Fig. 5 is an end elevation of Fig. 4. Fig. 6 is a partial enlarged section on line 6 of Fig. 1. Figs. 7 and 8 are side elevations of Fig. 6.

In the drawings, 9 indicates a rectangular frame formed of two parts which are longitudinally adjustable one upon the other, so that the frame may be longitudinally extended. The vertical sides of said frame are provided with stops, which register with and are adapted to engage the fence-wires 10, so as to prevent their being drawn out of line during the application of the stay-wires. Said stops may be formed of a series of notches 11 cut in the face of the frame or a series of pins 12 inserted in the face of the frame. For the purpose of holding said frame in engagement with the fence-wires a strap 13, formed preferably of wire, is permanently secured at one end to the frame, so as to extend across the several wires of the fence and to hold them in the notches 11 when the free end of the strap is also secured to the frame.

A winding-reel for carrying and applying the stay-wires is constructed in the following manner: Two similar open-ended frames 14 and 15 are formed by the end bars 16, cylindrical side bars 17, and the hollow side bars 18, the hollow side bar of each frame being adapted to receive the cylindrical side bar of the other frame. Each frame carries near its closed end a cross-bar 19, on which is loosely mounted a bobbin 20 carrying a quantity of wire 21. Bobbins 20 are prevented from moving longitudinally along the cross-bar by means of stops 22 inserted therein, against which the bobbins may be clamped by nuts 23, so as to regulate the tension of wire 21. Mounted on said bar 18 of frame 14 is a spring-dog 24, the nose of which projects through slot 25 in said bar in a position to engage a series of notches 26 formed in bar 17 of frame 15 and thereby hold the two frames in any desired position of adjustment.

Mounted in bar 18 of frame 14, so as to move longitudinally therein, is a block 27, and between this block and the end of bar 17 of frame 15 is placed a spring 28. Block 27 may be secured at any point in the interior of bar 18 by means of a thumb-nut 29, mounted in screw-threads in said block and extending up through a longitudinal slot 30 formed in said bar. Extending from the middle of one edge of bar 16 of each frame to the center thereof is a notch 31, adapted to receive one of the fence-wires 10, and near one end of said bars 16, opposite the bobbin carried by the opposed frame, is a guide 32, through which is threaded the wire coming from said bobbin.

By threading the wire carried by the bobbin of one frame through the other frame said wire may be bent at right angles to the fence-wires in a curve of comparatively large radius owing to the considerable distance between the bobbin and the point of curvature. By this construction the bobbins may be placed very near the ends of the winding-reel, and said ends may therefore be brought closely together, thus allowing the stay-wires to be placed nearer together than heretofore.

In operation the fence-wires 10 are strung upon the posts in any well-known manner. The two parts of frame 9 are adjusted with relation to each other, so as to allow the stay-wires to be properly placed between them, and the frame is then placed in a position to be engaged by wires 10, said wires engaging

the pins 12 and resting in notches 11. Strap 13 is then pulled down across wires 10 and secured at its lower end to the frame. The free ends of wires 21 are next secured to the upper wire 10, one near each side of frame 9, and the winding-reel, the parts of which have been adjusted the proper distance apart, is placed on the next wire 10, said wire being received in notches 31. The winding-reel is then rotated about wire 10 as an axis until one or more turns have been made about said wire, thus twisting the stay-wires 21 about wire 10, as shown in Fig. 4. The operator then presses upon the free end of dog 24 and thereby releases frame 15, which is forced by spring 28 away from frame 14, in this way making the winding-reel wider. This increase of width of the winding-reel causes that part of each stay-wire which is carried by the winding-reel to be forced toward the coils of said wires which have been formed around wire 10, and a further movement of the winding-reel around wire 10 will cause wire 21 to overlap the coils of itself already formed, in the manner shown in Figs. 6, 7, and 8.

I claim as my invention—

1. In a device for attaching stay-wires to wire fences, a winding-reel composed of two open-ended frames adapted to telescope one within the other, a bobbin adapted to carry a supply of wire mounted near the closed end of each frame, a guide carried by each frame for engaging with the wire from the bobbin carried by the opposed frame, means carried by said frame for engaging a fence-wire so that said frames may be rotated about said wire, and means for holding the two frames in any desired relative position, substantially as and for the purpose set forth.

2. In a device for attaching stay-wires to wire fences, a winding-reel composed of two open-ended frames, each of said frames being provided with one side bar formed so as to receive the other side bar of the opposed frame, a bobbin adapted to carry a supply of wire mounted in each frame, means carried by the frames for engaging a fence-wire so that said frames may be rotated about said wire, a dog carried by one of the frames in a position to engage with the other frame, and a spring mounted between the two frames in such a way that it will change the relative position of the frames when the dog is released, substantially as described.

3. In a device for attaching stay-wires to wire fences, a winding-reel composed of two open-ended frames, each of said frames being provided with a hollow side bar formed so as to receive the other side bar of the opposed frame, bobbins adapted to carry a supply of wire mounted in said frames, means carried by the frames for engaging the fence-wire so that said frames may be rotated about said wire, a dog carried by one of the frames in a position to engage with the other frame, a block mounted in the hollow member of one of the frames and adjustable longitudinally therein, and a spring mounted between said block and the end of the opposed frame, whereby the said frames will be forced a short distance apart when the dog is released, substantially as set forth.

4. In a device for attaching stay-wires to wire fences, a winding-reel composed of two open-ended frames adapted to telescope one within the other, a bobbin adapted to carry a supply of wire mounted near the closed end of each frame, means for retarding the rotation of said bobbin, a guide carried by each frame for engaging with the wire from the bobbin carried by the opposed frame, means carried by the frames for engaging a fence-wire so that said frames may be rotated about said wire, and means for holding the two frames in any desired relative position, substantially as set forth.

5. In a device for attaching stay-wires to wire fences, a frame composed of two members longitudinally adjustable relatively to each other, one of said members having formed in its surface a series of notches adapted to receive the wires of the fence, a strap permanently secured at one end to said member in such a position that it may be drawn over the fence-wires after they have been received in said notches, means carried by the free end of said strap for securing it to the frame, and means carried by the other member of the frame for engaging the wires of the fence, substantially as and for the purpose set forth.

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