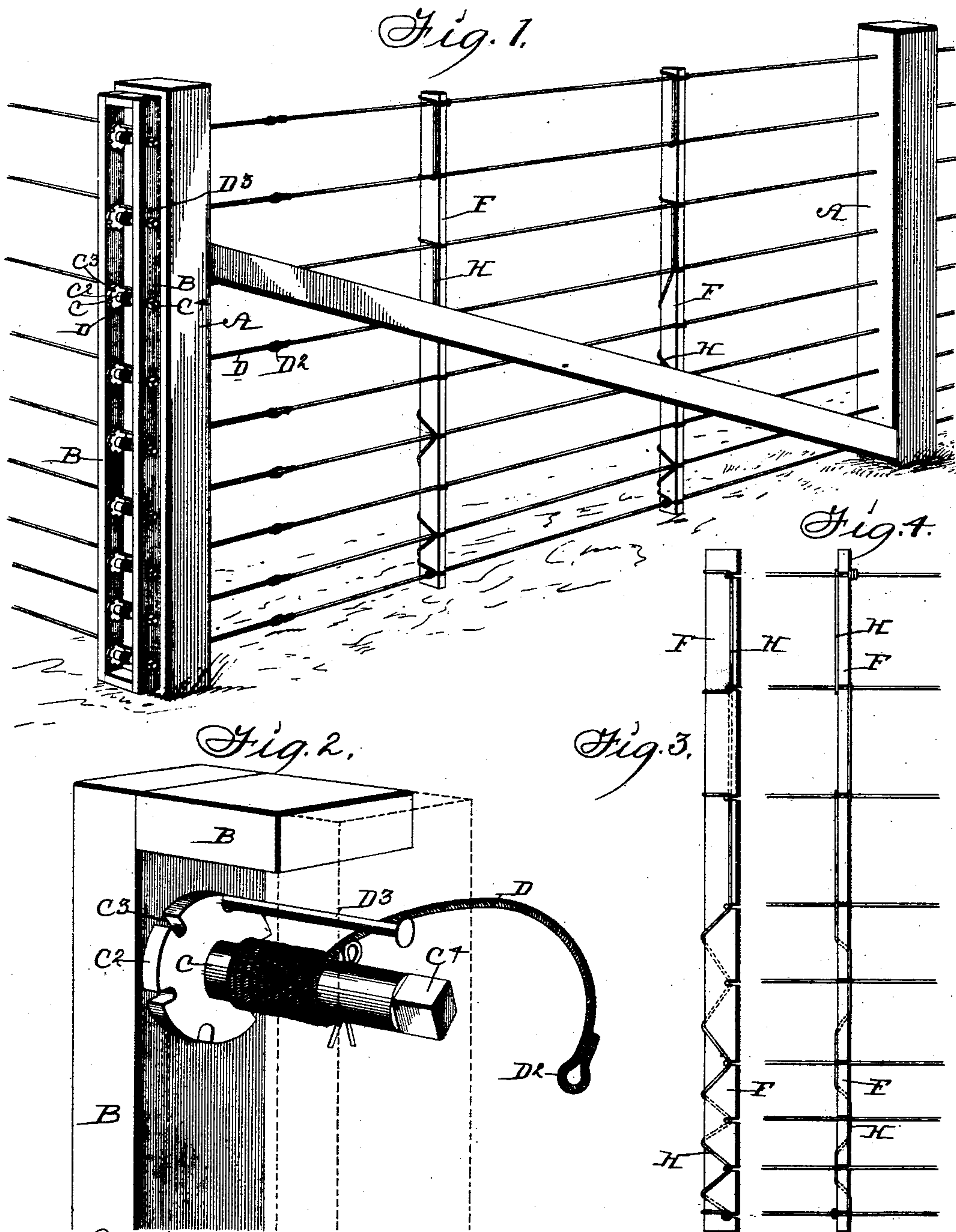


(No Model.)

I. F. EBERT.  
WIRE FENCE.

No. 541,154.

Patented June 18, 1895.



Witnesses:  
R. H. Orwig,  
W. J. Sankey.

Inventor: I. F. Ebert,  
By Thomas G. and J. Ralph Orwig, Attys.



# UNITED STATES PATENT OFFICE.

IRA F. EBERT, OF OSKALOOSA, IOWA.

## WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 541,154, dated June 18, 1895.

Application filed July 5, 1894. Serial No. 516,531. (No model.)

*To all whom it may concern:*

Be it known that I, IRA F. EBERT, a citizen of the United States of America, residing at Oskaloosa, in the county of Mahaska and State of Iowa, have invented an Improved Wire Fence, of which the following is a specification.

The object of this invention is to provide a strong, cheap and durable fence in which the tension on each wire may be independently adjusted.

With these objects in view my invention consists in the construction of a frame adapted to be attached to the end post of a fence and in the construction, arrangement and combination therewith of a device for applying tension to each wire as hereinafter set forth, pointed out in my claim and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of the complete fence. Fig. 2 is a perspective view showing the tension device. Fig. 3 is a side view of one of the stays, showing the fence and binding wires in position therein, and Fig. 4 is a front view of the same.

Referring to the accompanying drawings the reference letter A is used to indicate the fence posts, anchored in the ground in any suitable way. To the outer face of the end post is secured a frame B composed of two parallel side pieces and cross pieces at their ends. A series of bores are made in the side pieces at the same distances apart as is desired to place the wires of the fence.

The tension devices are each cast complete in one piece and comprise a straight round shaft C, a circular flange C<sup>2</sup> near one end having a series of notches C<sup>3</sup> in its periphery and an angular formation C<sup>4</sup> on the opposite end of the shaft. The ends of this device are passed through the bores in the sides of the frame and the flange C<sup>2</sup> engages the inner face of one of the side pieces.

D indicates a section of wire cable, rope or other flexible material fixed to and wound upon the shaft and having a loop D<sup>2</sup> formed in its outer end. It has been found that when the galvanized wire used in fence construction is attached direct to the shaft that the coating thereon will crack when wound thereupon and the wire be weakened by rust; but by attaching a short flexible section of cable or

rope thereto, bending and unbending the fence wire when adjusting the tension of the fence, is rendered unnecessary. A bore is formed in the side pieces to coincide with the notches in the flange C<sup>2</sup> so that a nail or rod D<sup>3</sup> may be passed through the bore and the nearest notch, and prevent the rotation of the shaft.

It is one of my objects in providing means for adjusting the tension of the wires, to slacken them in cold weather so that the contraction of the metal will not break the wires and when they are slackened it has been found necessary to support the wires at their relative distances apart so that when slack they will still form a tight fence. For this purpose I have provided a wooden stay or strip F having kerfs or notches formed in one of its edges each adapted to receive a wire. These stays are placed at regular intervals on the wires between the posts and are secured in position thereon by means of a binding wire H secured to the top wire of the fence overlapping each successive wire and passed around the back of the stay. This may be done in several ways. First as shown at the top wires in the fence the binding wire is passed first downwardly along one side of the stay, then under the fence wire, then around the stay and finally over the wire and downwardly. The lower fence wires being much closer together may be secured by passing the binding wire over the fence wire, then around the stay and over the next wire below on the opposite side. The advantages gained by this form of stay, and method of fastening over stays in which the kerfs or notches are on opposite sides of the stay, are, that shallow kerfs may be used so that the stays are not weakened by cutting and the wires of the fence be kept in vertical alignment. To keep them in vertical alignment with the kerfs alternately on opposite sides would necessitate the cutting the kerfs to the center of the stay from each side so that even with straight grained wood a pressure on one of the wires would split the stay between two of the kerfs and with gnarled or knotted wood the liability of breaking would be still greater; but by placing all the kerfs on one side a stay is provided which may be easily placed in position from one side of the fence after the fence is set up without



weaving it in and out between the wires and a strong and durable stay be provided with one side not weakened by cutting.

5 In practical use, the posts are first set in position, the frame containing the tension device secured to the end post, the wires slid-  
ingly connected with the posts and attached to the cables, or ropes, secured to the tension devices when by applying a wrench to the  
10 angular formation on the end of each tension device the wire may be stretched taut, and secured by the nail or bar D<sup>3</sup>. When any wire becomes broken the tension device may  
be released, the ends brought together and  
15 the wire again stretched taut without bending the fence wire at its ends and thereby weakening or breaking the wire that has been previously weakened by cracking and rust-  
ing, &c.

20 Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent of the United States there-  
for, is—

An improved wire fence, comprising suit-

able posts, wires fixed to one end post and 25  
slidingly connected with the intermediate posts, a frame composed of two wooden side pieces with cross pieces at its top and bottom adapted to be secured to the face of the re-  
maining end post and having a number of 30  
transverse openings through the side pieces corresponding to the number of fence wires and smaller transverse openings above said openings and tension devices placed in said  
transverse openings consisting of a straight 35  
shank having one angular end and a flange near the opposite end having a series of notches in its periphery and adapted to be brought into alignment with the said smaller  
openings and a cable section secured to the 40  
central portion of each of said tension devices and to the end of each fence wire, substan-  
tially as and for the purposes stated.

IRA F. EBERT.

Witnesses:

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