

D. H. MILLER.
WIRE FENCE.
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1,019,071.

Patented Mar. 5, 1912.

Fig. 5.

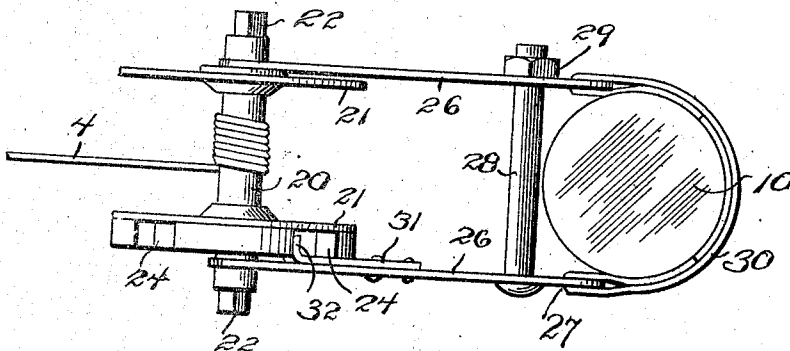


Fig. 1.

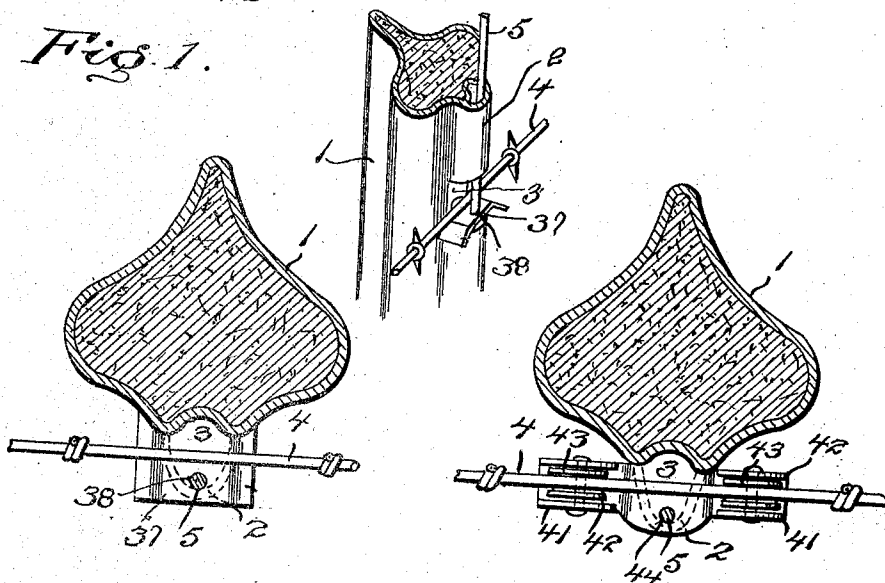
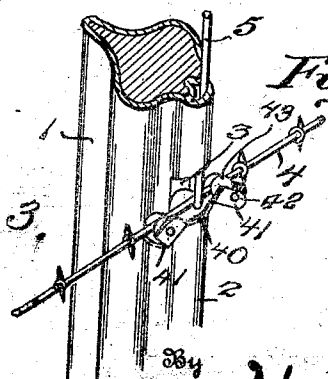


Fig. 2.

Fig. 4.

Fig. 3.



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WIRE FENCE.

1,019,071.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DANIEL H. MILLER, citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Wire Fences, of which the following is a specification.

My invention relates generally to wire fences of the character described in my Patent No. 951,958, of March 15, 1910, and has particular relation to means for tightening the wires of such fences and for so supporting the wires thereof in the notches of the fence post that when barbed wire is used the wires may be drawn taut without damaging the material of the fence post and without tearing off or otherwise damaging or bending the barbs.

The invention comprehends the provision of fence posts each having a longitudinal opening and a series of transverse recesses intersecting the opening, and a locking rod adapted to be inserted in said opening across the recesses for locking the wires in place within the notches or recesses, and in the combination with such fence posts of a corner post and tightening devices mounted on the corner post and connected thereto, and deflecting protector plates supported in the notches or recesses of the posts and acting to prevent the engagement of the barbs on the line wires with the walls of said recesses or with the locking rod.

For a full understanding of the invention reference is to be had to the following description and accompanying drawing, in which:—

Figure 1 is a perspective view of a portion of a fence post with a barb protector applied thereto. Fig. 2 is an enlarged cross sectional view of the fence post shown in Fig. 1 with the protector applied thereto. Fig. 3 is a perspective view of a portion of a fence post with a modified form of protector applied thereto. Fig. 4 is an enlarged cross sectional view of the fence post shown in Fig. 3 and with the modified form of protector shown in said Fig. 3. Fig. 5 is a cross sectional view of one of the posts of the fence showing the means for tightening the wires of the fence.

Corresponding and like parts are referred

to in the following description and indicated in all the views of the accompanying drawing by the same reference characters. 51

In the drawings the numeral 1 designates the main posts of the fence, these posts forming the subject-matter of the Patent No. 951,958, before referred to.

In the present form of my construction each post is constructed of soft steel rolled or otherwise shaped into a round, square, or rectangular form, preferably tapering from its lower to its upper end. This hollow post may be filled with cement if desired. 60

Each post is preferably provided with a rounded edge, as indicated at 2, and this edge is formed with a series of transverse recesses 3 or notches of any desired number at any desired interval from each other. 65 The line wires 4 are passed through these recesses 3 and a locking rod 5 is passed downwardly into the post and across the slots in front of the line wires, thus locking the line wires in place. 70

In the operation of securing the line wires to the post, the main wires are put in place and locked in position by the rods 5, and the wires are then stretched. If these line wires were provided with barbs this stretching operation would tend to draw the barbs through the recesses 3, so that the barbs would be liable to catch upon the edges of the recesses and not only damage the metal of the fence, tearing the sheet metal off, but the barbs would also be liable to be bent. 75

To provide means for easily tensioning the wires, and holding them at any desired tension I provide the corner post 10, which may be of any suitable construction, but is shown as circular in form, and is preferably filled with concrete. This corner post extends as deep into the ground as may be desired. The post is braced against the strain of the line wires in any suitable manner. 80

There is a wire tightener for each of the wires 4 of the fence. Each line wire is attached to a spool 20 having lateral flanges 21, the spindle of the spool being formed at opposite ends with the square heads 22, whereby a crank may be applied to the spool. One end of the spool is preferably provided with a ratchet plate having a plurality of recesses 24 in its periphery, these recesses 85 90 95

having dove-tail shape as shown in Fig. 1 so as to provide the reëntrant shoulders 25 defining the ends of the recess. These recesses 24 provide means whereby a lever to rotate the spool may be used in place of a crank. The spool 20 is carried upon the oppositely disposed side-bars or pieces 26. These side bars at their other ends are slotted as at 27 and are held spaced from each other by means of a sleeve 28 through which passes a bolt 29, this bolt being located adjacent to the slots 27. Extending around the post 10 is a strap 30 of sheet metal, the ends of the strap being folded inward and extending through the slots 27 in the side-bars, the ends being then returned upon the strap so that the strain upon the tightening device will cause the main portion of the strap to hold the ends in tight contact with the post and thus prevent the strap from pulling out. It will be seen that this strap may be easily adjusted to suit any diameter of post and that in conjunction with the bolt 29 and sleeve 30 it will hold the device securely upon the post in its adjusted position when it is placed under strain.

Mounted on one of the side-bars is the pawl or dog 31, the free end of which is inwardly bent as at 32 and engages in the notches 24 formed in the periphery of the ratchet-wheel 23. The pawl is preferably mounted upon the side-bars 26 by means of a bolt 33, so that the dog may be easily removed and readjusted. Thus, the dog 35 may engage either above or below the ratchet-wheel 23.

In order to protect the edges of the recesses 3 from contact with the barbs of wires, and to prevent the barbs from catching upon the walls of the recess, or upon the operating rod 5, I provide the protectors illustrated in Figs. 1 and 3, which protectors consist of plates adapted to be inserted in the recesses and held in place by the locking rod 5.

In the form of protector plate shown in Fig. 1 the protector plate designated 37 is provided with a perforation 38 through which the locking rod 5 passes, and the ends of the protector plate are deflected downward, so that as the wire is drawn through the recess or notch 3, the barbs thereon will ride over the downwardly deflected extremities of the deflector plate and the deflector 55 will protect the lower edges of the recesses from engagement with the barbs.

In Fig. 3 I show another form of the protector, regarded as preferable, wherein the plate 40 is deflected at its ends, as at 41, these deflected ends 41 being each provided with ears 42 in which are mounted grooved rollers 43 over which the wire 4 passes. The protector plate 40 is also provided with a perforation 44 through which the locking

rod 4 passes so as to lock the protector plate 65 in place. While I have illustrated and described these protector plates as intended to be used where the wires 4 are provided with barbs it will be understood that the protector plates might be used for bare 70 wire, so as to prevent any cutting or deformation of the sheet metal forming the post and defining the walls of the recesses. Furthermore, these protector plates when used with bare wire permit the wire to 75 be more readily drawn through the recess than if the wire is allowed to scrape along the upper edges of the walls of the recess. The wire is thus less liable to cut and furthermore, these plates when in position tend 80 to prevent the entrance of moisture into the interior of the post, or into the projecting edge of the corner post.

I have found that my invention is very effective in practice and that it permits the 85 fence wires to be easily strung and tightened. My construction also permits the wires to be tightened up from time to time, as desired, so that slack may be taken up. It is also obvious that the wires may be 90 slackened at any time desired to permit the unstringing of the post or where it is desired to let down a certain panel of the fence, which would not be the case were the wires permanently attached to the corner post, 95 after having been fully tightened.

Having thus described the invention, what is claimed as new is:—

1. A fence post having a wire receiving notch, a line wire locking rod passing vertically through said notch, and a deflector supported in the notch and held in position by the locking rod, said deflector having downwardly extending inclined ends. 100

2. The combination with a fence post having a wire receiving notch and a wire locking rod passing vertically through said notch, of a deflector plate removably supported in said notch, said plate having downwardly extending terminal ends provided with wire supporting rollers. 110

3. The combination with a fence post having a wire receiving notch and a locking rod passing vertically down through said post and intersecting said notch, of a wire supporting deflector plate supported in the notch and through which said locking rod passes. 115

4. A fence, a series of posts each having wire receiving notches, and each provided 120 with a locking rod passing vertically through said notches, deflector plates removably supported in the notches, longitudinal wires passing over said deflector plates and through said notches, and means for tightening the wires. 125

5. A fence, a series of posts each having wire receiving notches, and each provided

with a locking rod passing vertically through said notches, deflector plates removably supported in the notches, longitudinal wires passing over said deflector plates
5 and through said notches, and means mounted on one of said posts for tightening the several wires.

In testimony whereof, I affix my signature in presence of two witnesses.

DANIEL H. MILLER. [L. s.]

Witnesses:

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