(No Model.)

J. McCLINTOCK.

WIRE FENCE.

No. 472,585. Patented Apr. 12, 1892.

Fig. 2

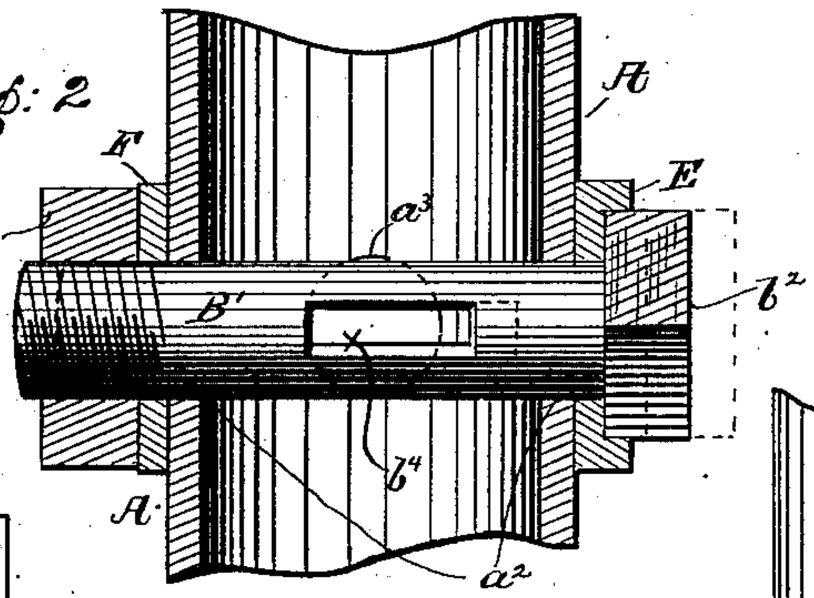


Fig. 5.

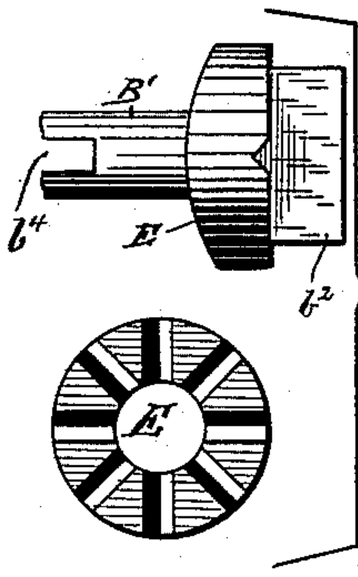


Fig. 3.

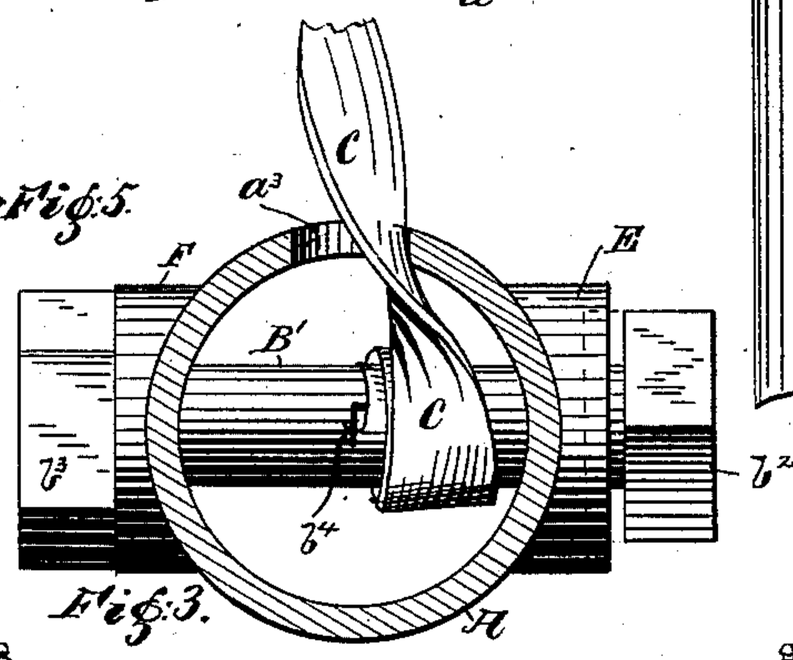


Fig. 4.

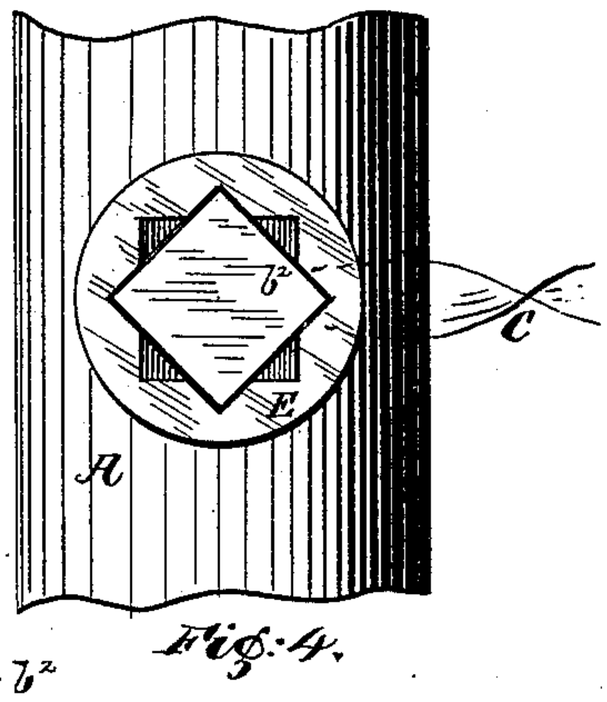
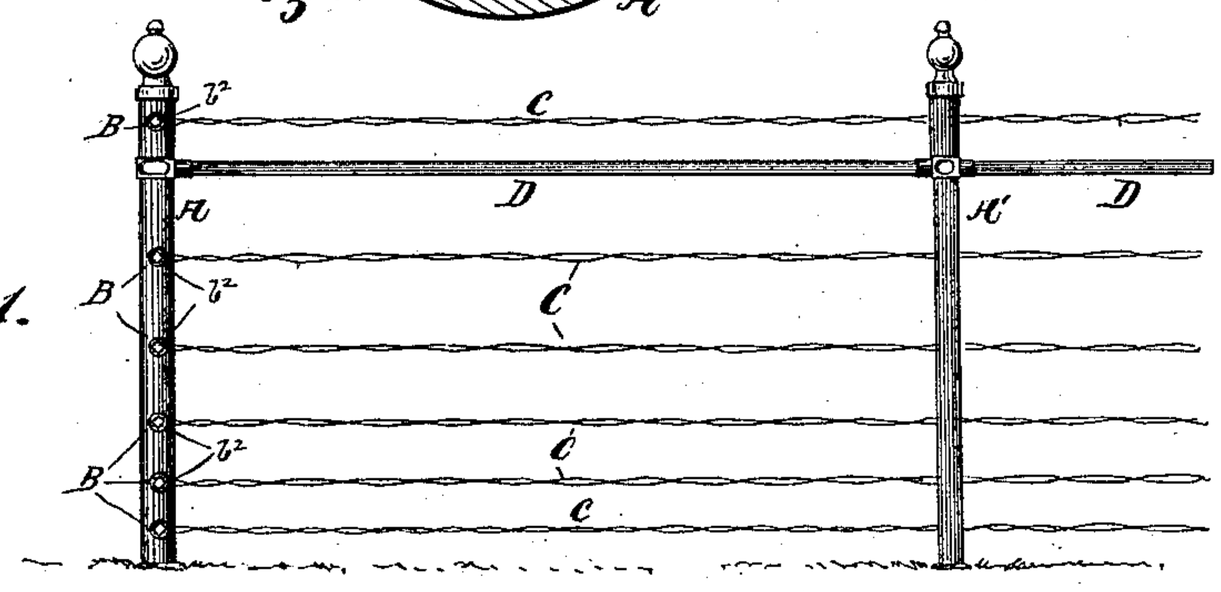


Fig. 1.



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UNITED STATES PATENT OFFICE.

JOSEPH McCLINTOCK, OF INDIANAPOLIS, INDIANA.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 472,585, dated April 12, 1892.

Application filed May 18, 1891. Serial No. 393,178. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH MCCLINTOCK, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Wire Fences; and I 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.

This invention relates to improvements in wire-fences having tubular posts to support the wires, and has special reference to the construction of the post and the tighteners for drawing the wires taut.

The object of the invention is to improve the construction of that class of posts and tighteners in which the tightener is a rotatable bolt which passes transversely through the tubular posts and around that portion of which lying within the post the wire is wrapped by simplifying and cheapening the construction thereof and providing a tightener the bolt of which will be securely locked in place against turning at an inopportune moment, but can be quickly and easily separated from its locking device without the necessity of removing any of the parts thereof from the post, and in which without adding to the expense of construction a means is provided whereby the bolt will be instantly locked if it should happen to slip out of the control of the operator in tightening.

With these objects in view the invention consists in certain peculiarities in the construction, arrangement, and combination of the several parts, substantially as hereinafter described, and particularly pointed out in the subjoined claims.

Referring to the accompanying drawings, Figure 1 represents a panel of wire fence constructed in accordance with this invention; Fig. 2, a detail in vertical section of a post, showing my improvements; Fig. 3, a top or plan view of the same; Fig. 4, a front elevation, and Fig. 5 a modification, showing a rib and grooves on the bolt-head and washer, respectively, to prevent the bolt from turning when the fence-wire is wound on it.

Similar letters of reference refer to like parts throughout the several views.

A represents the tubular iron corner-post to which the tighteners are applied, and A′ the intermediate or line post.

B are the tighteners, C the fence-wires, and D the horizontal braces between the posts, such as are used in lawn-fences, but are generally dispensed with in farm-fencing.

Through both sides of the post A the openings a^2, which are preferably round drill-holes, are made to receive the bolts B′. These holes are transverse with relation to the direction of the fence-wires. The bolts B′ are projected through the transverse openings a^2 and are of sufficient length to allow a suitable portion to extend on both sides of the post. A hood b^2 is formed on the outside end of the bolt, and interposed between the bolt-head and the post is a metallic washer E. This washer is concave on its inner face to correspond in curvature with the curvature of the post. The outside face is formed with a central depression to secure the bolt-head and form a lock to prevent the bolt from turning unless pushed back out of contact with the washer. A series of concentric angular depressions may be formed in the outer face of the washer to allow the locking of the bolt at shorter intervals, which is essential in a careful adjustment of the tension of the wires. The opposite or inner end of the bolt B′ is screw-threaded, and is secured by a correspondingly-threaded nut b^3. A plano-concave washer F is interposed between the nut and the post and affords a flat face against which to tighten the nut. An opening a^3, at right angles to the bolt B′ and directly opposite it, is made through the side of the post for the insertion of the end of the wire which it is desired to tighten, and a slot b^4 is formed through the bolt. Into this slot the fence-wire is threaded after its insertion through the opening a^3. By pressing the bolt-head out of its seat in the washer E the bolt may be turned with a wrench and the fence-wire wound on the bolt, which acts as a drum to receive it. By making the slot b^4 at one side of the vertical axis of the post and nearest the head of the bolt a slight side strain is acquired, which tends to pull the bolt longitudinally and to press the head constantly in toward its seat in the washer E. By this means the bolt will be instantly locked in case it

should slip out of the control of the operator in tightening. This is of very great importance, as there is great liability of the bolt's slipping out of the control of the operator, especially when the wire has been tightened to nearly the required degree, and in such case when, as heretofore, the opening in the bolt is in alignment with the opening in the post the tension of the wire causes the bolt to rotate backward and the wire is therefore loosened, thereby resulting in a great loss of time and adding to the work of the operator.

Instead of a depression to engage the entire bolt-head, as above described, a rib or a lug might be formed on the inner face of the bolt-head and a corresponding groove or depression made in the face of the washer to receive it, as shown in Fig. 5, without departing from the spirit of this invention.

The great advantages of my improvement are at once apparent from the description above given. I am able to dispense with the expensive and unsightly bands encircling the outside of the post, such as are commonly used. I am able to utilize the interior of the post and to place the winding-drum and its coil of wire where it will be out of sight and fully protected from molestation.

The beauty and symmetry of the job is greatly enhanced, as the only portion of my device that is visible is centrally located in a direct vertical line and has the appearance of a series of ornamental rosettes.

I claim—

1. The combination, with a tubular fence-post, of the herein-described tightening means, comprising a headed rotatable bolt projected through said post at right angles to the line of wire and formed with an opening for the wire, located at one side of the longitudinal center of the bolt and out of alignment with the opening in the post, through which the wire extends in its passage to the bolt, plano-concave washers located on said bolt on opposite sides of the post and having their concave edges in contact therewith, the outer side of one of said washers engaging the bolt-head and constructed to form a lock therewith, and a nut on the extremity of the bolt engaging the outer side of the other washer, all substantially as shown, and for the purposes specified.

2. The combination, with a tubular metallic fence-post, of a series of fence-wires and a corresponding series of bolts projected through said post in a transverse direction to that of the wires and having slots therethrough by which the wires are fastened to the bolts, the slots being at one side of the vertical center of the post and nearest the head of the bolt, for the purposes described, and plano-concave washers interposed between the heads and nuts of the bolt and the post, the washers next the bolt-heads having irregular surfaces to prevent the rotation of the bolts when the heads are in contact with said washers and openings being formed through the sides of the post to admit the wires to the interior of said post, substantially as and for the purposes specified.

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

JOSEPH McCLINTOCK.

Witnesses:

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