

(No Model.)

J. N. PARKER.
WIRE TIGHTENER.

No. 447,436.

Patented Mar. 3, 1891.

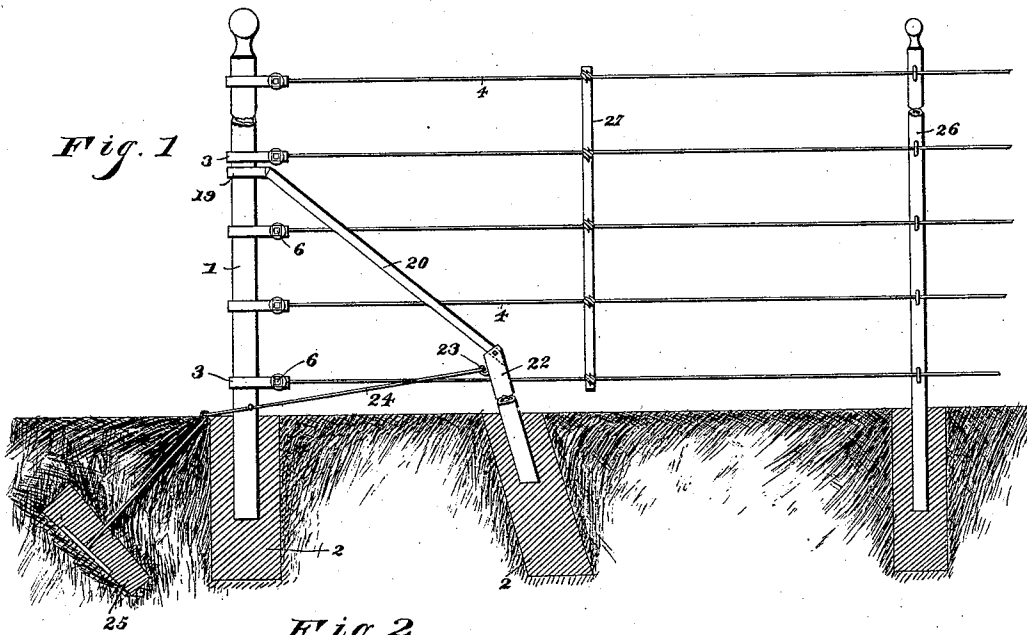


Fig. 1.

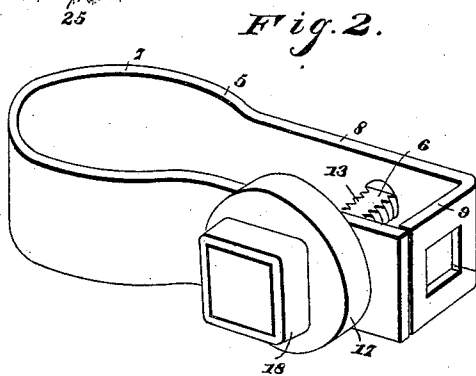


Fig. 2.

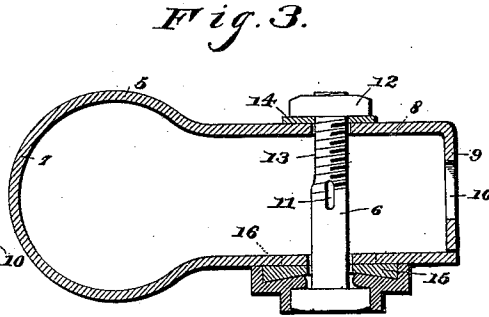


Fig. 3.

Fig. 6.



Fig. 4.

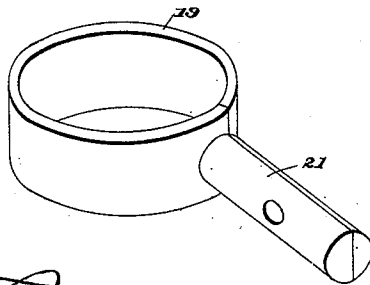
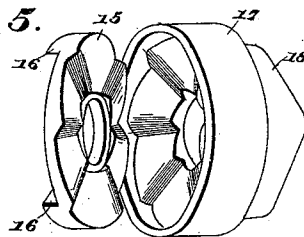


Fig. 5.



Witnesses,

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UNITED STATES PATENT OFFICE.

JOHN N. PARKER, OF COLDWATER, MICHIGAN.

WIRE-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 447,436, dated March 3, 1891.

Application filed December 6, 1889. Serial No. 332,760. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. PARKER, a citizen of the United States, residing at Coldwater, in the county of Branch and State of Michigan, have invented a new and useful Wire-Tightener, of which the following is a specification.

The invention relates to improvements in wire fences.

The object of the present invention is to produce a wire fence of simple, inexpensive, and durable construction, in which the parts are securely braced, and in which the wires of the fence may be tightened and held at any desired tension.

The invention consists in the construction and novel combination and arrangements of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a side elevation of a fence constructed in accordance with the invention, showing the ends of the posts and the anchor-pieces in section. Fig. 2 is a detail perspective view of the wire tightener and fastener. Fig. 3 is a longitudinal sectional view of the same, the bolt being shown in elevation. Fig. 4 is a detail perspective view of one of the collars or bands to which the brace-rods are attached. Fig. 5 is a detail perspective view of the cap and ratchet-plate. Fig. 6 is a detail view of the washer.

Referring to the accompanying drawings, 1 designates the end or corner post of a wire fence, which is preferably constructed of tubular metal and has its lower end inserted into an artificial-stone base 2. The artificial-stone base 2 is formed by boring a hole into the ground and filling the same with a mixture of cement and sand or gravel and inserting the end of the post 1 before the cement hardens. By this construction a cheap and substantial base is formed which will last for a long time. The post 1 being tubular, the cement enters at the lower end and fills the latter, and is thereby enabled to obtain a firm hold. The post 1 is provided at suitable intervals with wire tighteners and fasteners 3, to which the wires 4 are connected, and which consist of a metallic strap or band 5 and a bolt 6, which is provided with ratchet mechanism. The strap or band 5 has a cylindrical portion 7,

which surrounds the tubular post 1, and a rectangular portion 8, whose end piece 9 bears against the side and is provided with a central rectangular opening 10, through which passes the wire to prevent the latter becoming tangled during winding upon the bolt 6. The bolt 6 is journaled in the rectangular portion 8 of the metallic strap or band 5 of the wire tightener and stretcher and extends transversely therethrough, and is provided at a point about midway its length with a transverse slot 11, by means of which the end of the wire is secured to the bolt and is enabled to be wound thereon without slipping. The bolt is secured in the strap or band 5 by a nut 12, and in order to swivel the bolt in the strap or band and prevent the nut being unscrewed while the bolt is being turned to tighten the wire one side 13 is flattened and the bolt is provided with a washer 14, whose central opening conforms to the configuration of the bolt, and the washer is interposed between the nut and the band or strap 5 and prevents the former from unscrewing. Upon the opposite end of the bolt is a ratchet-plate 15, which is contiguous to the side of the strap or band and is provided with flanges 16, that project over the top and bottom of the side of the strap or band and prevent the rotation of the ratchet-plate, and the ratchet-plate is engaged by ratchet-teeth of a collar or cap 17, whose annular flange lies flush with the inner edge of the ratchet-plate, thereby preventing dust and paint getting in between and interfering with the operation of the ratchet-teeth. The cap 17 is provided on its outer face with a rectangular flange 18, which forms a recess to receive the head of the bolt and cause the same to turn when the cap is turned by a wrench which is designed to engage the rectangular flange. By turning the cap with a wrench the wire can be tightened to any desired tension and the engaging teeth of the ratchet-plate and cap will prevent its unwinding; but it is preferable after tightening the wires to screw the nut 12 a little tighter and cause a closer engagement of the teeth of the ratchet mechanism.

The corner-post is provided near its upper end with a band or collar 19, constructed of iron and provided with a projection or pin that is secured to an inclined brace-rod 20.

The collar or band is split at some convenient point, preferably through the pin or projection 21, to enable it to be sprung on the end of the post, and the brace 20 is constructed of tubular metal and has its upper end suitably secured to the pin or projection 21 and its lower end attached to a short brace-post 22, whose upper end is beveled, and the post is slightly inclined to facilitate attachment to the inclined tubular brace 20. The lower end of the brace-post is inserted in a cement base 2, similar to that already described, and the upper end of the post is provided with a hook or projection 23, to which is secured a cable 24, that is secured to the corner-post 1 at a point just above the ground and has its end secured to a T-shaped anchor that is embedded in an inclined cement base 25, which is constructed similarly to the bases 2 of the corner-post and the brace-post. By this construction the corner-post is securely braced and the wires may be drawn to any tension without liability of canting the corner-post.

The wires 4 are connected to intermediate posts 26 by staples whose ends are clinched upon the opposite side of the post, the staples forming eyes or loops which permit the wire to be drawn freely through them. The wires may be maintained at regular intervals and

prevented from sagging between the posts by a vertical brace 27, provided at intervals with suitable wire ties, by means of which the wires are secured to the brace.

Having thus described my invention, what I claim is—

In a fence, a wire fastener and tightener comprising the metal strap or band having a cylindrical portion to receive a tubular post and a rectangular portion having the end piece 9 bearing against the side and provided with a central opening, the bolt passing transversely through the rectangular portion of the strap or band, the ratchet-plate provided with flanges adapted to engage one side of the strap or band and hold the ratchet-plate stationary, and the cap having an annular flange inclosing the ratchet-plate and provided with a rectangular flange forming a recess adapted to receive the head of the bolt, said flange being designed to be engaged by a wrench, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN N. PARKER.

Witnesses:

C. C. CARTRIGHT,
J. F. GILLET.