No. 658,671. Patented Sept. 25, 1900.

S. NORTHRUP.

WIRE FENCE TIGHTENER.

(Application filed June 28, 1900.)

(No Model.)

Fig. 1.

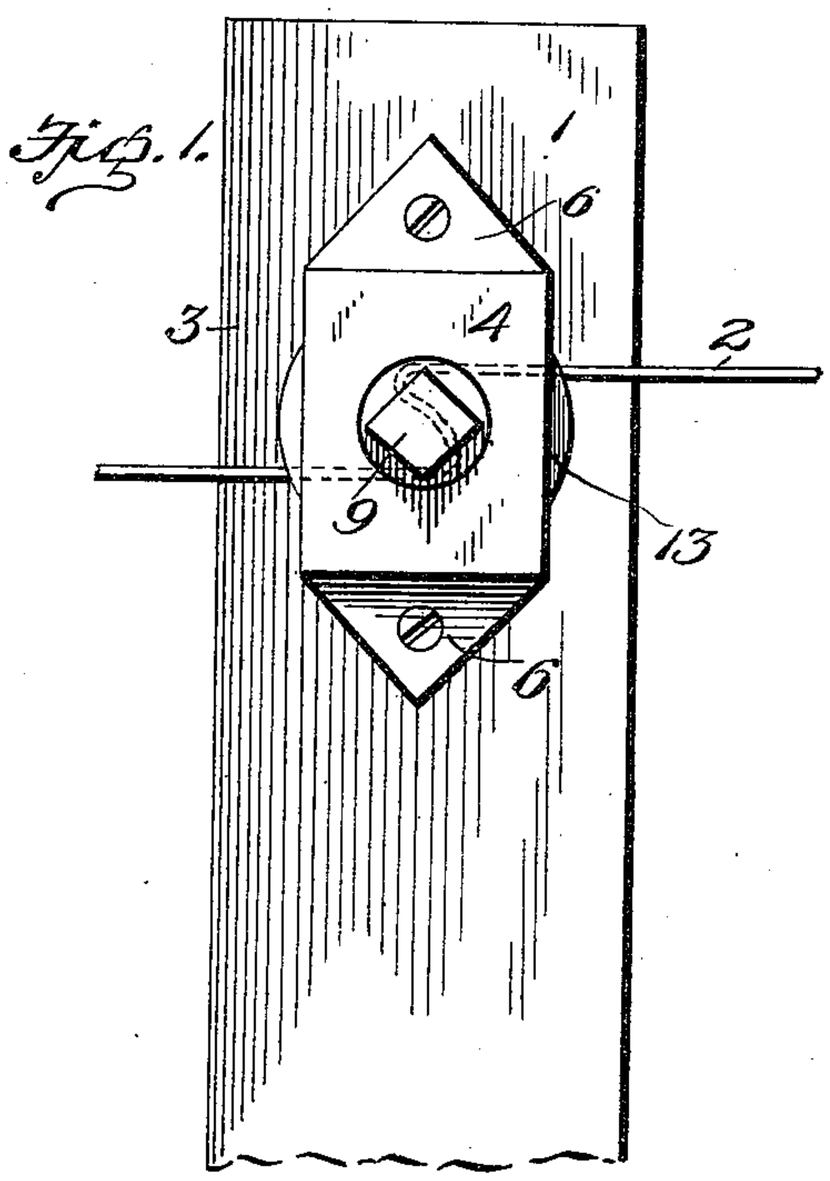

Fig. 2.

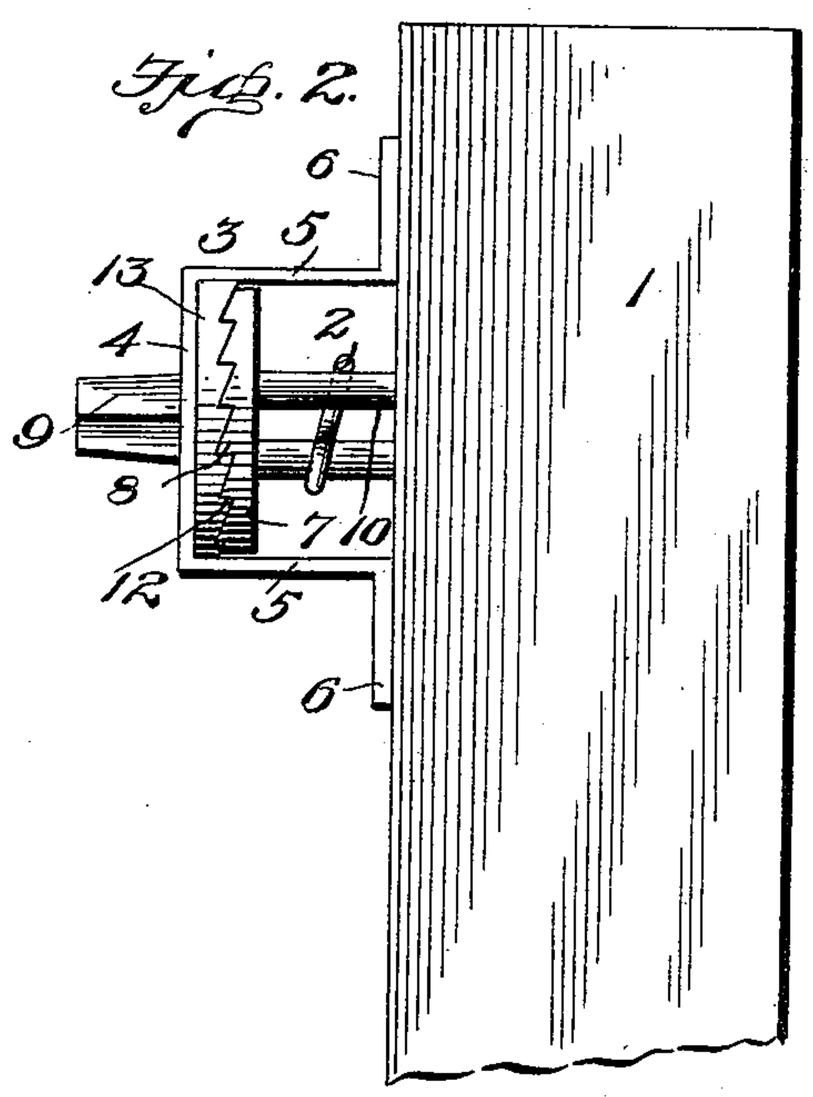

Fig. 3.

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UNITED STATES PATENT OFFICE.

SILENCE NORTHRUP, OF FRONTIER, MICHIGAN.

WIRE-FENCE TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 658,671, dated September 25, 1900.

Application filed June 28, 1900. Serial No. 21,908. (No model.)

To all whom it may concern:

Be it known that I, SILENCE NORTHRUP, a citizen of the United States, residing at Frontier, in the county of Hillsdale and State of Michigan, have invented certain new and useful Improvements in Wire-Fence Tighteners; and I do 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.

My invention relates to improvements in wire-fence tighteners, and has for its object the production of a simple, cheap, durable, and effective device for application to a fence-post and by means of which the line-wires may be readily and conveniently tightened up whenever desired.

With these and other minor objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a front elevation of a fence-post, showing the application of the invention thereto. Fig. 2 is a side elevation thereof. Fig. 3 is a vertical longitudinal section through the post and tightener on an enlarged scale.

Referring now more particularly to the drawings, wherein like reference characters designate corresponding parts throughout the several views, the numeral 1 represents a fence-post, and 2 one of the horizontal line-wires of the fence, to which my invention is shown applied. To the face of the post is applied a casing or housing 3, consisting of a strip of sheet metal bent into the desired form or of a casting having an outer vertical side wall 4 and top and bottom walls 5, said top and bottom walls being provided with right-angular projecting tongues or ears 6, perforated for the passage of screws or other suitable fastening devices for securing it to the post. The casing or housing thus constructed is closed at top and bottom and one side and open at the reverse side and at each end. The open side of the casing faces the post, which forms the closure therefor, while the sides of the casing are left open and free and unobstructed for the passage of the line-wire therethrough. Journaled in the outer side wall of the casing is a winding-key or twister-head comprising a disk 7, provided upon its outer face with ratchet-teeth 8. To the outer face of this disk is connected a head 9, which projects outwardly through an opening in the side wall 4 and is of rectangular form to permit of the application of a wrench or other suitable implement thereto for operating the winding-key or twister-head to tighten up the wire. From the inner face of the disk projects a bifurcated spindle consisting of a pair of lugs 10, spaced a slight distance apart and having their inner faces curved or of eccentric form to form a sinuous passage between them. Through this passage and about these lugs the line-wire 2 is threaded or roved in the usual manner, so that by turning the winding-key in the proper direction the wire may be drawn upon from opposite directions and the slack therein conveniently taken up. The inner end of the spindle—that is, the inner extremities of the lugs 10—extend inwardly beyond the face of the post and are seated within a socket 11 therein to assist in staying the winding-key and at the same time limit the play of the line-wire to prevent it from moving inwardly or laterally or working off the spindle, as will be readily understood. The ratchet-teeth 8 of the disk 7 are adapted to coöperate with ratchet-teeth 12, formed upon the inner face of a disk 13, secured to the inner side of the wall 4 of the casing, so as to allow the winding-key or twister-head to rotate freely in the direction for taking up the slack in the wire, but to prevent it from slipping or rotating in the reverse direction.

In the operation of the device it will be understood that it forms a permanent fixture of the post, and the line-wire is applied to the bifurcated spindle or spaced lugs, so that the slack in the wire may be taken up at any time by simply applying a wrench or other suitable tool to the head 9 and turning it to rotate the winding-key in the proper direction, the coacting ratchet-teeth of the disks 7 and 13 serving to hold the winding-key against retrograde rotation under the tension of the wire. The cost of manufacture of the winding device is comparatively small, and by making it a permanent fixture the line-wires may be tightened up much more readily

and quickly and maintained in a taut condition at all times, and the winding-key also serves the function of a fastener for the wire. The construction of the casing is such as to permit free movement of the wire during the operation of the winding-key and free access to said key, while at the same time forming a shield or housing which prevents injury to the winding-key and coöperating parts by casual extraneous shocks or blows.

Changes in the form, proportions, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a wire-fence tightener, the combination, with a fence-post provided in its front face with a socket, of a casing provided with an open side facing the post, open ends for the passage of the wire, a top, bottom and an outer side wall, said top and bottom walls being provided with projections for attachment to the post, a winding-key or twister-head comprising a ratchet-disk journaled in the outer side wall of the casing and provided with an exteriorly-projecting head and an inwardly-projecting winding-shank extending within the said socket of the post, and a ratchet-disk fixed to the inner face of the side wall of the casing and coöperating with the said ratchet-disk of the key to prevent retrograde movement of the latter, substantially as described.

In testimony whereof I have hereunto set my hand in presence of the subscribing witnesses.

SILENCE NORTHRUP.

Witnesses:
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