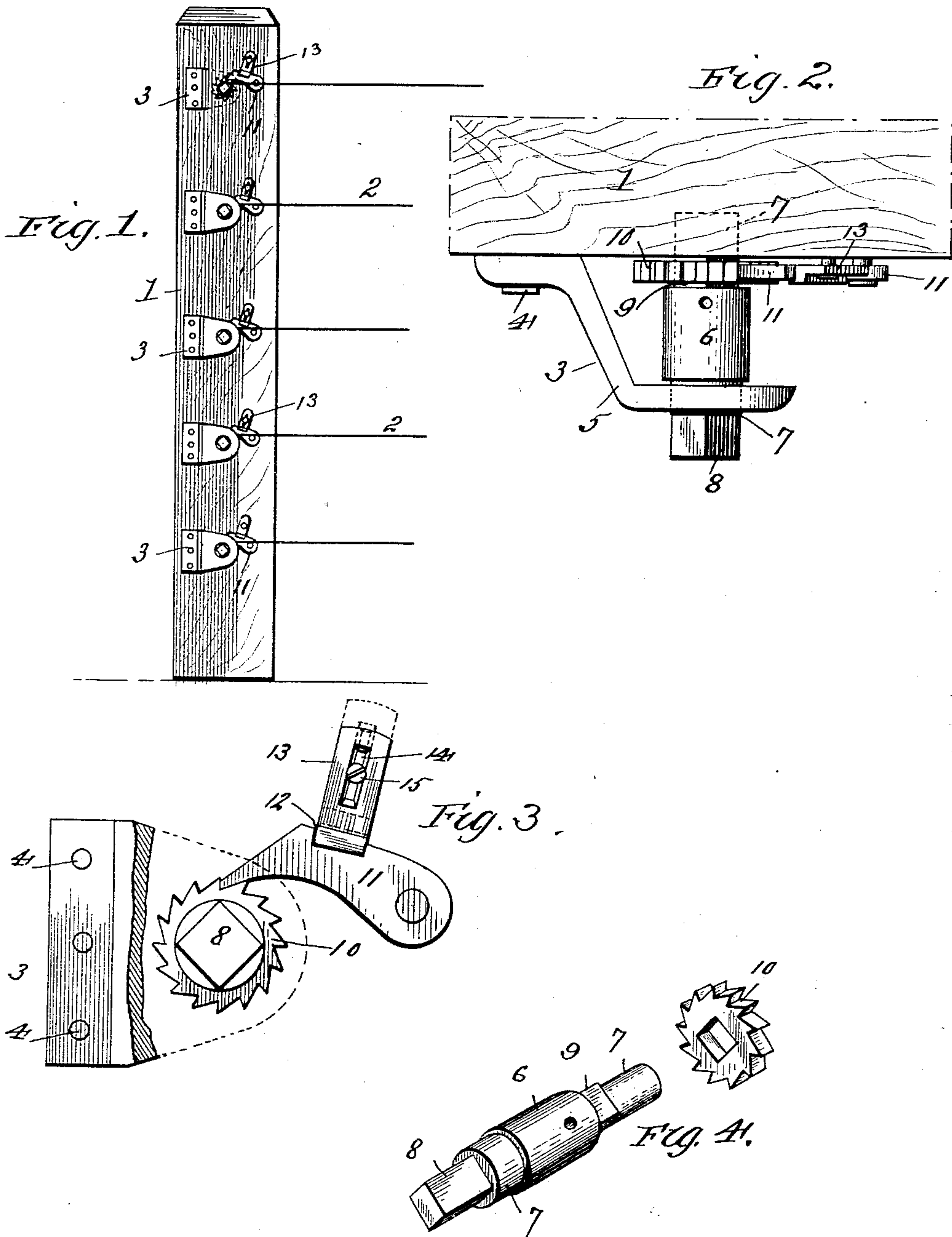


(No Model.)

L. J. MICHAELS.
FENCE WIRE TIGHTENER.

No. 520,325.

Patented May 22, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

LEROY J. MICHAELS, OF TIFFIN, OHIO.

FENCE-WIRE TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 520,325, dated May 22, 1894.

Application filed March 2, 1894. Serial No. 502,108. (No model.)

To all whom it may concern:

Be it known that I, LEROY J. MICHAELS, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Fence-Wire Tighteners, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a side elevation of a fence post carrying a series of my devices; Fig. 2 a plan view of one of the devices attached to a post; Fig. 3 a detached side elevation, partly in section, and Fig. 4 a perspective view of the spool or drum and the removable ratchet-wheel.

This invention relates to that class of fence-wire tighteners which are adapted to be secured to the sides of the fence-posts at suitable distances apart and which are independently adjustable, so that the horizontal wires of the fence may be independently tightened, as occasion may require.

The object of the present improvements is to provide an extremely simple and practicable and durable device that shall be reversible and also positively locked against premature or mischievous disturbance, as is more fully hereinafter described and particularly pointed out in the claims appended.

Referring to the drawings, the numeral 1 designates an ordinary fence post, 2 the usual wires of the fence, and 3 my improved tightening devices, which are secured to the post by means of screws or nails 4, one of the devices being provided for each wire of the fence. Each device consists of an angular bracket 5 adapted to be secured to the post by means of the aforesaid screws or nails 4. The wire spool or drum 6 has its outer journal 7 journaled in an opening formed in the bracket 5 and its inner journal 7 journaled in the concentric bearing formed by boring a suitable hole in the adjacent face of the post. On the outer end of the outer journal 7 is an angular projection 8 for the reception of a wrench, this angular portion projecting beyond the bracket. Formed between the inner journal and the inner end of the spool is another angular portion 9, upon which is slipped a removable ratchet-wheel 10, with which engages a pawl 11 pivoted upon the adjacent face of the

post. Formed in the upper edge of the pawl is a rectangular recess 12, and in this recess the lower end of a locking plate 13 is adapted to rest when the pawl is locked in engagement with the ratchet-wheel. The plate 13 is provided with a longitudinal slot 14 and through this slot passes the securing screw 15 which has its head countersunk in the slot as shown. As will be seen to tighten a fence wire the spool is rotated by means of a wrench in the usual manner, and when sufficient tension on the wire is obtained the pawl is positively locked in engagement with the ratchet-wheel by simply tightening screw 15. Of course before turning the spool to tighten the wires the screw 15 must be loosened so that the pawl may readily slip over the ratchet teeth when the spool is rotated.

The object in making the ratchet-wheel removable from the spool shaft is to enable the device to be reversed on the post without having to carry it to the opposite side of the post. If the ratchet-wheel were solid on the spool shaft the device could only be made to draw the wires from the opposite direction to that shown by securing it on the opposite side of the post, as is obvious; but by making the ratchet wheel removable and reversible, it is evident that the device may be readily adjusted to draw the wires from either direction. Of course, when the ratchet wheel is reversed so as to turn its teeth in the opposite direction to that shown, it is necessary also to reverse the bracket and pawl, securing them on the opposite side of the spindle to that shown.

Having thus fully described my invention, what I claim is—

1. A fence-wire tightener, consisting of a bracket, a spool journaled therein and carrying a ratchet-wheel, a pawl pivoted adjacent to the ratchet wheel and adapted to engage the same, and a locking-plate adjustably secured adjacent to the pawl and adapted to bear upon the same and hold it in engagement with the ratchet wheel, and means for positively locking said plate, substantially as described.

2. In a fence-wire tightener, the combination of a support, a reversible bracket bolted thereon, a spool journaled in the bracket and the adjacent support and provided with an angular portion for the reception of a wrench,

a removable and reversible ratchet-wheel
mounted on the spool-shaft adjacent to the
support, a pivoted reversible pawl carried by
the support, an adjustable locking plate posi-
5 tively engaging the pawl, and means for posi-
tively but removably locking said plate, sub-
stantially as described.

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

LEROY J. MICHAELS.

Witnesses:

HARRY TAGGART,
GEORGE A. ROHN.