

(No Model.)

2 Sheets—Sheet 1.

L. B. GANDY.
WIRE FENCE MACHINE.

No. 462,898.

Patented Nov. 10, 1891.

Fig. 1.

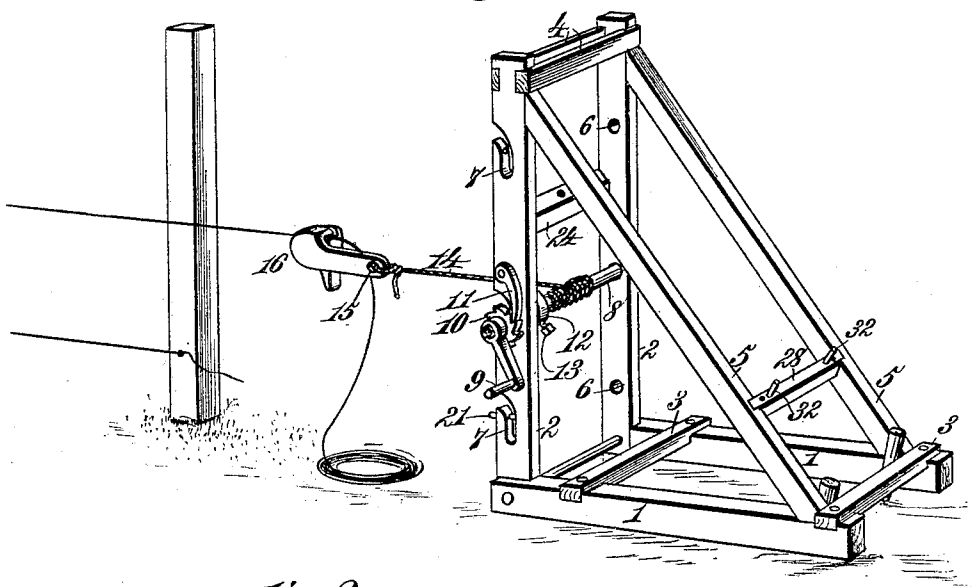
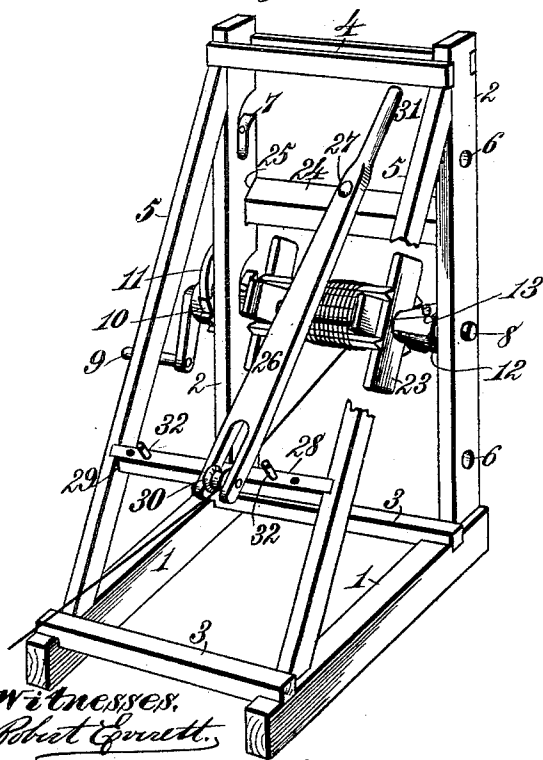
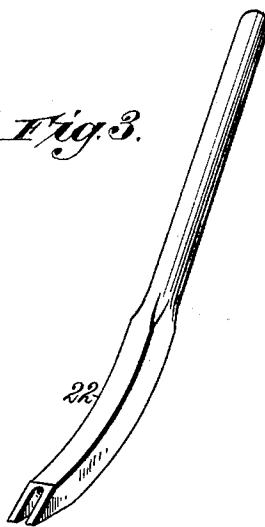


Fig. 2.



Witnesses:
Robert Emmett.
Dennis Sumbly.

Fig. 3.



Inventor:
Larkin B. Gandy.
By James L. Norris
Atty.

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Fig. 4.

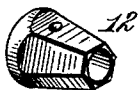


Fig. 5.

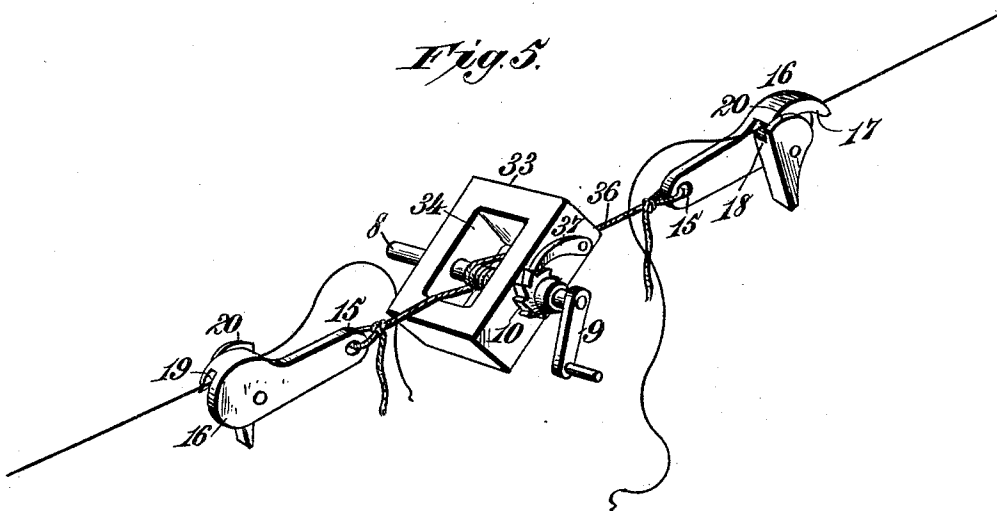
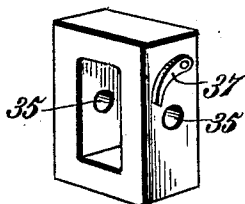


Fig. 6.



Witnesses,
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UNITED STATES PATENT OFFICE.

LARKIN B. GANDY, OF NETTLETON, MISSISSIPPI.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 462,898, dated November 10, 1891.

Application filed July 11, 1891. Serial No. 399,198. (No model.)

To all whom it may concern:

Be it known that I, LARKIN B. GANDY, a citizen of the United States, residing at Nettleton, in the county of Lee and State of Mississippi, have invented new and useful Improvements in Wire-Fence Machines, of which the following is a specification.

This invention relates to an improved wire-fence machine adapted for convenient and efficient use in the building, repairing, and taking down of barbed and unbarbed wire fences; and to these ends my improvements consist in the construction, combinations, and relative arrangement of devices in a wire-fence machine, as hereinafter more fully described, and then set forth in the claim at the end of this specification.

In the annexed drawings, illustrating the invention, Figure 1 is a view of my improved wire-fence machine arranged for use in constructing a wire fence and stretching the wires thereof. Fig. 2 is a view of the machine as arranged for use in reeling the wire or winding it evenly onto a spool in the operation of taking down a wire fence. Fig. 3 is a view of a claw adapted to the pulling or extraction of the staples that confine the wire to the fence-post. Fig. 4 is a view of a nut for preventing longitudinal movement of the windlass or of a reel or spool mounted thereon. Fig. 5 is a view of the windlass with repairing-block mounted loosely thereon to assist in splicing the ends of a broken wire. Fig. 6 is a perspective of the slotted and perforated repairing-block.

Referring to the drawings, the numeral 1 designates the sills of the machine-frame, and 2 are uprights that are rigidly secured to said sills at one end of the machine. The sills 1 are securely braced by cross bars or ties 3, and the uprights 2 are connected by cross-bars 4 at their upper ends. From the upper ends of the uprights to the farther ends of the sills are extended diagonal braces 5, that serve to further secure the uprights 2 and maintain them in a vertical position against any strain to which they may be subjected. The two uprights 2 are respectively provided with a series of transverse perforations 6 and diagonal or curved notches 7 to form journal-bearings for a removable windlass 8, that is provided at one end with a suitable crank-

handle 9, or other means of rotation. The windlass 8 is also provided with a ratchet-wheel 10 for engagement of a pawl or catch 11, pivoted to the outside of one of the uprights to steady the windlass and prevent backlash. In order to prevent or limit longitudinal movement of the windlass and hold it in its bearings, a movable or adjustable nut 12 is fastened by means of a set-screw 13 or otherwise onto the windlass 8, adjacent to the ratchet-wheel 10, but on the inner side of the upright.

In the operation of putting up a fence and stretching the wires thereof the machine is set in proper position in line with and between two fence-posts, and is secured to the ground by means of suitable stakes driven in contact with the cross-bars 3 of the machine-frame. The windlass 8 is placed in position in one of the several sets of bearings 6 and 7 at a suitable height to correspond with the elevation of the wire to be stretched and which has already been suitably secured at one end to one of the fence-posts. One end of a rope 14 is secured to the windlass 8 in any suitable manner, and the other end of said rope is fastened in an eye 15, formed in one end of a wire-clamping device 16, that is provided with a curved lip 17 and a cam 18, between which the fence-wire may be securely held. At one end of the lip 17 is a slot 19, that serves as a guide for the fence-wire, and the cam 18 is provided with a flange 20, that also serves as a guide, and thus prevents accidental disengagement of the clamp from the wire. When the clamp 16 is placed on the fence-wire and tightly engaged therewith by means of the cam 18, the windlass 8 may be rotated so as to wind the rope 14 thereon and thereby stretch the wire to the required degree of tension, as shown in Fig. 1, before it is secured in any well-known manner to another post of the fence. By successively arranging the windlass 8 in the several series of bearings provided in the uprights 2 the several longitudinal wires in a fence can be stretched and secured one after another, or by the use of several similar clamping and stretching devices all the wires might be properly stretched and fastened at the same time. To assist in holding the windlass in the notch 7, that forms one of its bearings, a

pin 21 may be inserted in the upright 2 above said notch. By this arrangement of bearing the windlass can be quickly arranged or removed with ease. When it is desired to take down a wire fence, the staples that confine the wires may be drawn out by means of a claw 22, having a steel point of suitable curvature. The wire is then reeled onto an empty wire-spool 23, placed on the windlass 8, as shown in Fig. 2, where it may be held from longitudinal movement by means of a nut 12, fastened by a set-screw 13, as before described. In the operation of winding up or reeling the detached wire the windlass is preferably journaled in bearings located below a cross-bar 24, that is removably supported in inclined mortises 25, formed in the inner sides of the uprights 2 near their upper ends. To the center of the cross-bar 24 is detachably pivoted a guide-pole 26 by means of a removable pivot-pin 27. The guide-pole 26 is extended downward in a diagonal direction, and its lower portion is supported on a cross-bar 28, the ends of which are detachably inserted into inclined mortises 29, formed in the diagonal braces 5. In the lower bifurcated end of the guide-pole 26 is a guide-wheel 30, having a grooved periphery to receive and guide the fence-wire while it is being wound on the spool 23. The upper end of the pole 26 is extended beyond the cross-bar 24 and forms a handle 31, by which the guide-pole can be oscillated between pegs or stops 32 on the bar 28, and so cause the wire to be held evenly in the reel or spool 23 during the rotation of the windlass. For the purpose of facilitating the splicing of broken wires a slotted and transversely-perforated block 33 may be loosely mounted on the windlass, as shown in Fig. 5. The block 33 is provided with a slot 34 and with perforations 35 at right angles to said slot. By means of these perforations 35 the block is mounted loosely on the windlass. A rope 36 is tied to the windlass within the slot 34 of the block 33, so as to extend in both directions therefrom, as shown, or instead of tying said rope to the windlass it may be passed through a hole formed in the windlass. Each end of the rope 36 has secured to it one of the wire-clamping devices 16, hereinbefore described. These clamping devices are secured to the broken parts of the fence-wire at suitable distances from their ends to permit their ready splicing when brought together. By now rotating the windlass the rope 36 will be wound thereon within the slot 34 of the block 33, which meanwhile remains loose on the windlass without rotating therewith. During the rotation of the windlass in winding the rope 36 the ratchet-wheel 10, secured to the windlass, slips easily past a pawl or catch 37 on the block 33 without engaging therewith. By the winding of the rope

36 onto the windlass the opposite ends of the broken wire are readily and quickly brought together outside the block 33, and the rotation of the windlass will now be discontinued. When the windlass is no longer rotated and tends to react or turn backward, the ratchet-wheel 10 will come into engagement with the pawl 37 on the block 33, and thus throw said block into an inclined position, thereby causing the opposite ends of the slot 34 to bind tightly against the adjacent portions of the rope 36 and hold it securely, at the same time preventing any further backward turning of the windlass. While the rope and the windlass are thus prevented from slipping, the ends of the fence-wires that have been brought together outside the block 33 can be readily spliced or twisted together with the fingers or by means of suitable pliers in a well-known manner. In this operation of splicing a broken fence-wire the windlass may be conveniently journaled at a suitable height in the uprights 2 of the machine-frame, with the ratchet-wheel 10 and block 33 arranged in contact with each other between said uprights.

From the foregoing description and construction and operation of the various parts of the machine it will be seen that it may be conveniently employed in the building, repairing, and taking down of wire fences, either barbed or unbarbed. The parts of the machine are simple in construction and easily attached in proper position, according to the nature of the work to be done, and when taken apart the various devices composing the machine or apparatus can be packed in a small space for storage or transportation.

What I claim as my invention is—

In a wire-fence machine, the combination of a frame provided with uprights and diagonal braces, a windlass journaled in said uprights, a reel mounted on said windlass, a cross-bar supported between the uprights of the frame and above the windlass, a guide-pole pivoted to said cross-bar and extended diagonally downward between the diagonal braces of the frame, a guide-wheel mounted in the lower bifurcated end of the guide-pole, and a cross-bar supported between the diagonal braces of the machine-frame beneath the lower end of the guide-pole and provided with stops to limit the oscillation of said pole, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

LARKIN B. GANDY. [L. S.]

Witnesses:

C. L. WEST,
NORBIN JONES.