

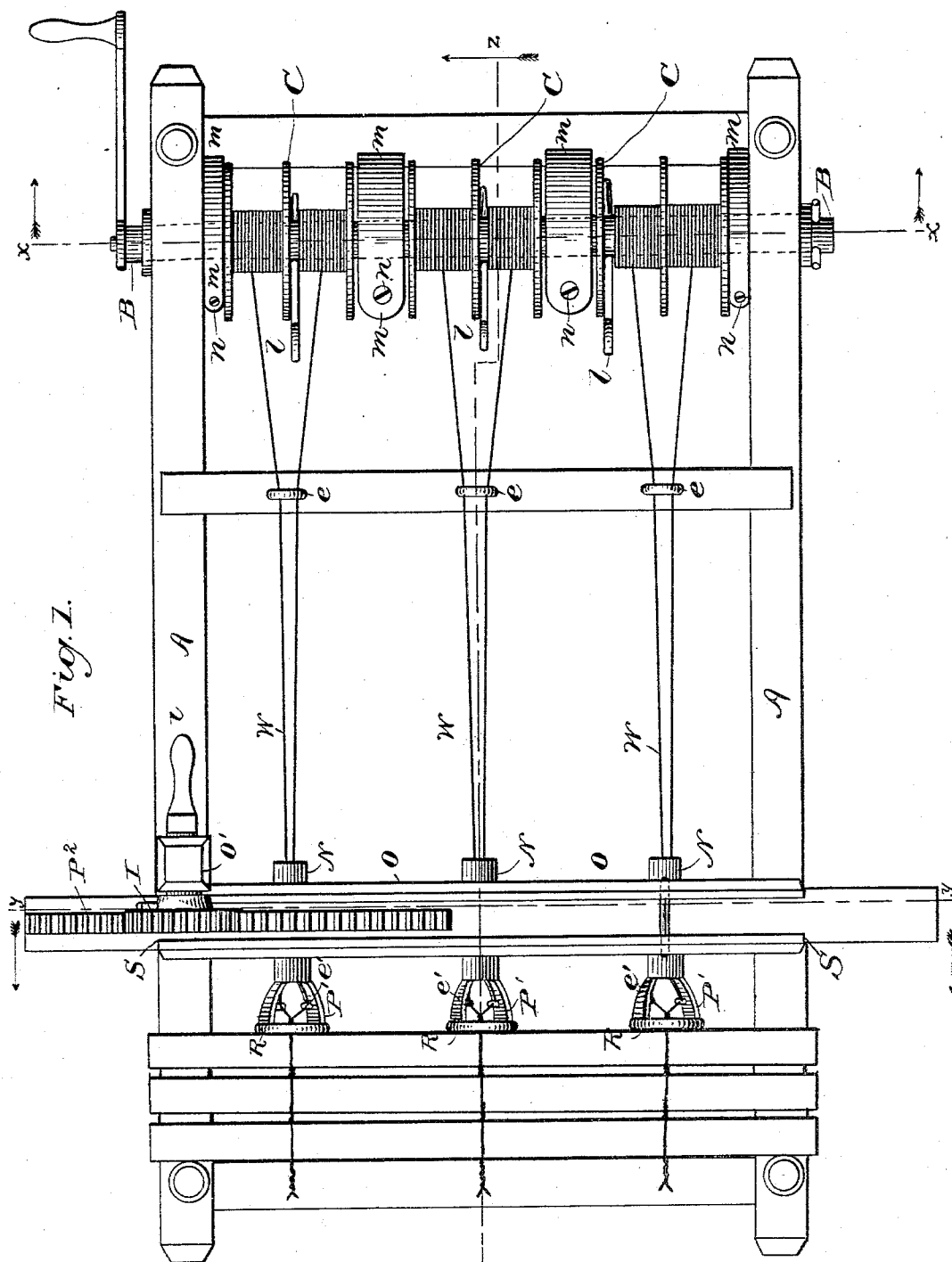
(No Model.)

3 Sheets—Sheet 1.

O. JACKSON.
WIRE FENCE MACHINE.

No. 323,423.

Patented Aug. 4, 1885.



WITNESSES

Wm. Panner.

H. W. Elmore.

INVENTOR

Oswald Jackson

By *C. H. Jackson & Co*

his Attorneys.

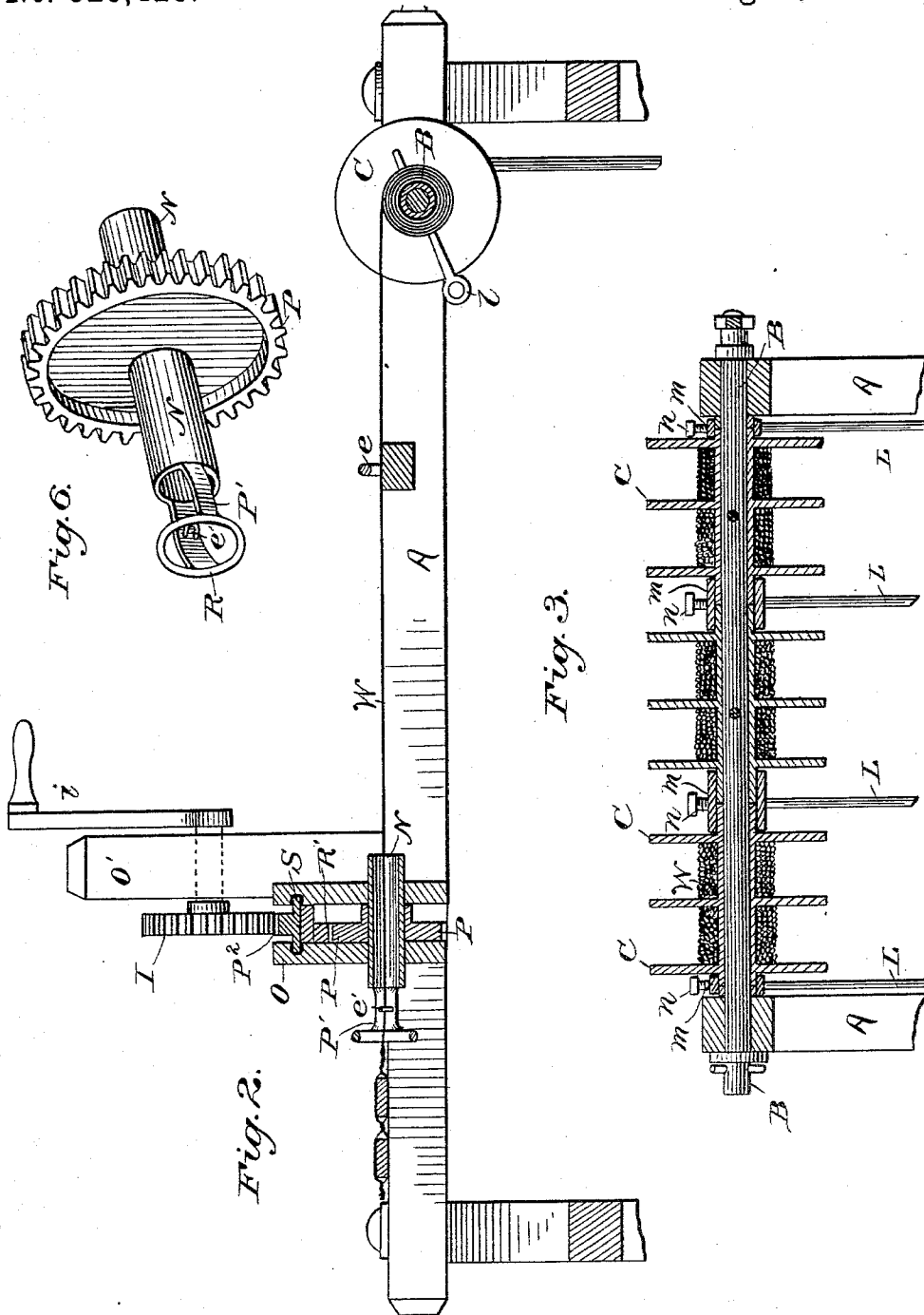
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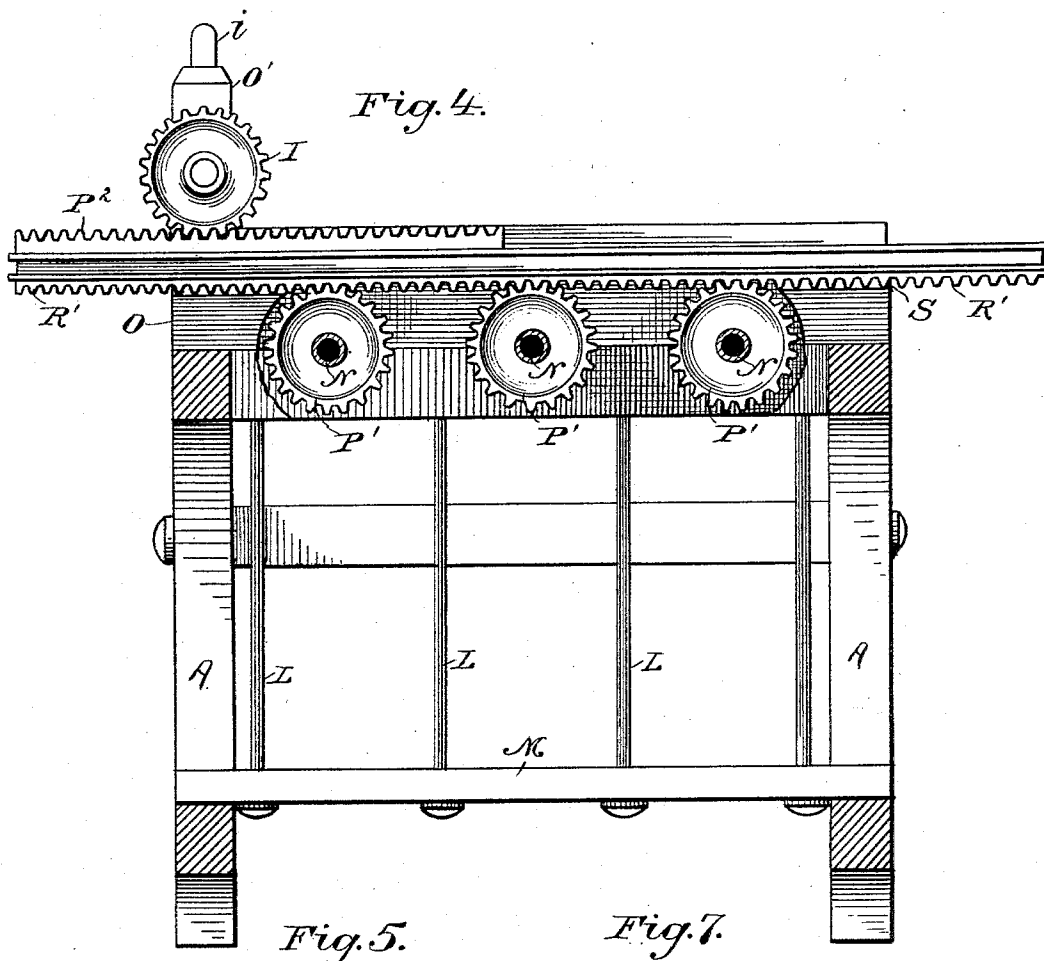
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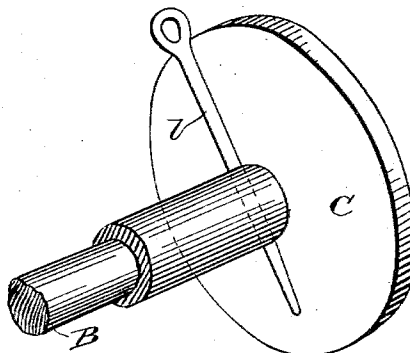
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WITNESSES

Wm. J. Pinner,

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UNITED STATES PATENT OFFICE.

OSWALD JACKSON, OF CARROLLTON, ILLINOIS.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 323,423, dated August 4, 1885.

Application filed November 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, OSWALD JACKSON, of Carrollton, in the county of Greene and State of Illinois, have invented certain new and useful Improvements in Wire-Fence Machines, of which the following is a full, clear, and exact description.

This invention has relation to improvements in a machine for manufacturing that class of fencing in which the pickets or slats are connected by wire runners composed of two strands twisted at suitable intervals around each picket; and the invention consists in the construction and arrangement of parts, as will be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a top plan view of my improved machine. Fig. 2 is a longitudinal section thereof. Fig. 3 is a section through line *xx*, Fig. 1. Fig. 4 is a section through the line *yy*, Fig. 1. Fig. 5 is an enlarged detail of one of the spool-clamps and its contiguous parts. Fig. 6 is an enlarged detail view of one of the twist-ers. Fig. 7 is a detail of one of the spools, showing the means for locking it to its shaft.

The letter A denotes the frame-work of the machine, within which the parts shown have support.

Upon a shaft, B, journaled in the sides of the frame are mounted any desired number of spools C, according to the number of wire strips employed in the manufacture of the fencing, each of said spools containing wire which is fed therefrom to the twisting devices. These spools are arranged side by side on the shaft, the ends of two wires from two of the spools passing through eyes *e*, secured to a cross-piece of the frame. Upon a beam, M, as shown in Fig. 4, arranged beneath and parallel with the spool-shaft, are secured the rods of the tension devices L, each rod having at its upper end a clamp, *m*, which is secured between each set of spools by means of screw-threaded bolts *n*.

It will readily be seen that when the spools are to be replenished with wire the tension devices are relaxed by unscrewing the bolts therefrom.

The bodies of the spools are provided with perforations, which communicate with per-

forations in the shaft, in which are inserted pins *l*. These pins and the construction of the spools and the shaft allow the operator to throw one or more sets of the spools in or out of operative connection with the shaft at will.

The wires W pass from the spools to the twisting devices. These consist each of a hollow shaft, N, having a pinion, P, rigidly mounted thereon. Upon the forward end of each shaft N is formed a wire-spreader, consisting of a fork, P', having eyes *e'*, which carry the wire, and provided upon its end with a ring, R, through which the ends of the wire pass. This ring not only serves to strengthen the fork P, but it forms a solid support for the pickets which rest against it as the twisting-shaft is operated. These several shafts are mounted in a frame, O, in front of the spools.

Supported in suitable bearings, S, upon the frame O is a rack-bar, R', arranged above and meshing with the pinions P upon the twisting-shafts. This rack-bar is also provided on its upper surface with a second rack, P², which extends from the central portion of the bar to the end thereof, and which engages a pinion or gear wheel, I, mounted on a post, O, and operated by a crank, *i*, by means of which the rack-bar is given motion to twist the wire to the pickets.

The operation of my invention is as follows: When the wire is fed from the spools to the twisting devices, the pinion-wheel being operated by the crank, said wheel operating the rack-bar in connection with the pinions of the shafts N, the rack-bar causes the twist-ers to revolve and twist the wire to the picket which abuts against the rings R. The rack-bar is then run back, which causes the picket to travel away from the ring, whereby another picket is substituted against the ring, and the same operation above described is repeated.

By my invention I am able to greatly simplify the mechanism in this class of machines. Moreover, by affording the pickets support upon the end of the twisting device, the wires are fastened more securely, being twisted more closely upon the picket.

By connecting the tension devices to the spools all wear of the wire is avoided, the danger of breaking is in great measure de-

creased, and the adjustment is more exact and more easily effected.

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

1. The combination, with the perforated shaft B, having the tension devices L at suitable intervals thereon, the perforated spools C on said shaft, provided with wires W, and the pins *l*, engaging the perforations of the spools and shaft, whereby one or more spools are thrown into engagement with the shaft, of the hollow shafts N, having the pinions P, forks P', having eyes *e'* and rings R, and means, as described, for operating the above parts, as and for the purpose set forth.

2. The combination, with the perforated shaft B, having perforated spools mounted thereon provided with wires, said spools keyed to said shaft by means of pins *l*, engaging the perforations of the spools and shaft, of the hollow shafts N, having the pinions P, forks P', provided with eyes *e'* and ring R, whereby the wires from the spools

are conveyed through the eyes *e*, shafts N, and eyes *e'*, and twisted to the picket which abuts against the rings R, and the double rack-bar R' P², engaging the pinions P', and a gear-wheel for operating the shafts N and their devices, as shown and described.

3. The combination, with the shaft B, having the wired spools C, each spool adapted to be keyed to the shaft by means of pins *l*, engaging perforations in the spools and shaft, the hollow shafts N, having pinions P, and forks P', having eyes *e'* and ring R, of the double rack-bar R' P², sliding in the bearings S on the frame O, to allow the pinions of the shafts N to engage the under side of the rack-bar operated by the gear-wheel I, which meshes with the upper rack to twist the wires to the picket, as shown and described.

In testimony whereof I have hereunto set my hand this 30th day of October, 1884.

OSWALD JACKSON.

Witnesses:

WM. L. ARMSTRONG,
ORNAN PIERSON.