

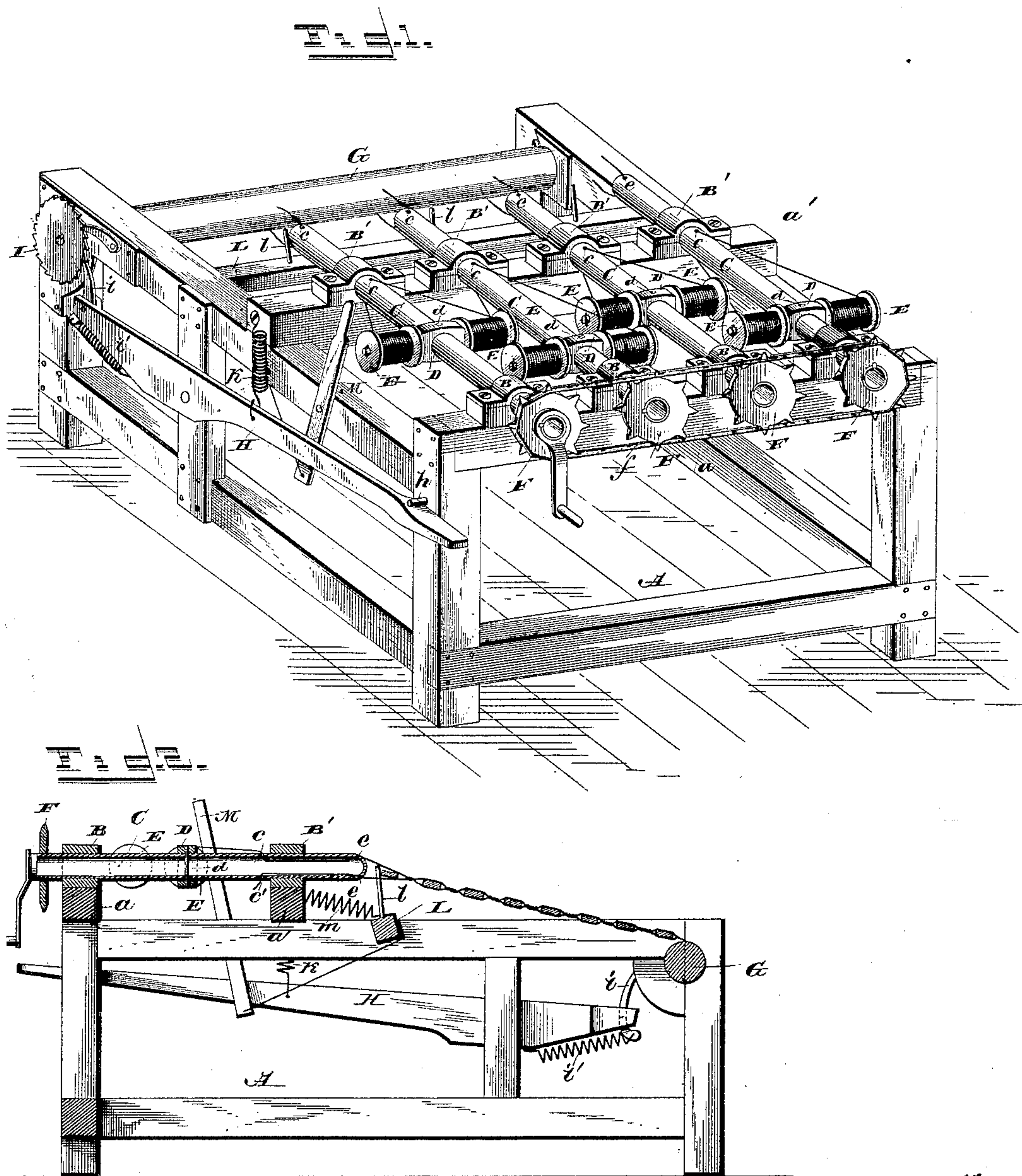
(No Model.)

J. F. RUSSELL.

MACHINE FOR MAKING WIRE AND PICKET FENCING.

No. 394,082.

Patented Dec. 4, 1888.



WITNESSES.

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MACHINE FOR MAKING WIRE-AND-PICKET FENCING.

SPECIFICATION forming part of Letters Patent No. 394,082, dated December 4, 1888.

Application filed May 3, 1888. Serial No. 272,631. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH FRANCIS RUSSELL, a citizen of the United States of America, residing at Banfield, in the county of Barry and State of Michigan, have invented certain new and useful Improvements in Machines for Weaving Wire Fences; and I do hereby 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in machines for making wire-and-picket fences; and it consists more particularly in the special construction and arrangement of the parts, which will be hereinafter fully set forth, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of my improved machine. Fig. 2 is a longitudinal section.

A refers to the main frame, provided on its upper edge with transverse beams *a a'*, which are provided with bearings B and B', in which the hollow shafts C turn. These shafts are arranged in parallel series and have mounted thereon, between their bearings, transverse arms D, which are suitably secured to the shafts by pins or bolts *d*. The ends of these transverse arms are rounded to receive spools E, which are retained thereon by pins. The arms D, which support the spools, are secured upon the shafts in such positions that they will not interfere with or abut against the spools adjacent thereto.

The hollow shafts C have keyed rigidly on their outer ends sprocket-wheels F, over which passes a suitable driving-chain, *f*, so as to rotate all in the same direction. One of the shafts is provided with a crank-handle for turning the shaft to which it is attached, and operating the drive-chain. The opposite ends of the shafts C from the sprocket-wheels are drawn together or closed, and on opposite sides of the bearings or boxes B' the shafts are provided with perforations *c c'* and *e e'*,

which are opposite each other, and the wires upon the spools are threaded through these openings. By this construction the shafts not only support the driving mechanism and spool-carrying arms, but dispense with separate twisting-heads, and render the construction much more simple.

At the rear end of the frame is journaled a removable roller, G, upon which the fence is wound after being made. This roller is rotated by a lever, H, pivoted to the main frame, and its upward movement is limited by a pin, *h*, as shown. The end of the lever H adjacent to the roller is bifurcated and carries a pawl, *i*, which engages with the ratchet-wheel I. This pawl *i* extends below the lever, a spiral spring, *i'*, being secured at its lower end and to the lever, to hold it in constant engagement with the wheel I, and with the ratchet-teeth of the roller I an ordinary gravity-pawl engages, which is pivoted to an angle-plate secured to the main frame, as shown. The lever H is normally held up against this stop-pin *h* by a spiral spring, K, which is secured to the lever and to the end of the cross-bar which carries the bearings B'.

In front of the ends of the hollow shafts C C is journaled a rock-shaft, L, provided at points between the ends of said shafts with upwardly-projecting pins *l*, which engage with the slats when it is desired to move them toward the roller G. These pins are held normally in a nearly-vertical position by a coil-spring, *m*, attached to the rock-shaft and to the cross-bar of the main frame, and they may be depressed by moving the upper end of the lever M rearwardly, which will not only push the fence forward, but will also release the pins, so they can be moved back in position. The pins *l* are located between the hollow shafts to not interfere with the wires while being twisted.

The number of twists or turns of the wires between the slats is determined by the revolutions of the crank-handle, so that the same machine, without adjustment of the parts, can be employed for forming either a tightly-woven fence, or one in which the slats are some distance apart.

I claim—

The combination, with a wire-and-picket-
fence machine, of a series of longitudinal
tubular shafts, C, mounted in front and rear
bearings, and having sprocket-wheels on their
5 ends geared together by a chain belt, and
transversely-arranged spool-carrying frames
D, with enlarged centers fitting over the tubu-
lar shafts, and having spool-bearings formed
therewith, the said spool-carrying frames be-

ing alternately arranged on the shafts, sub- 10
stantially as described.

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

JOSEPH FRANCIS RUSSELL.

Witnesses:

W. H. POWERS,
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