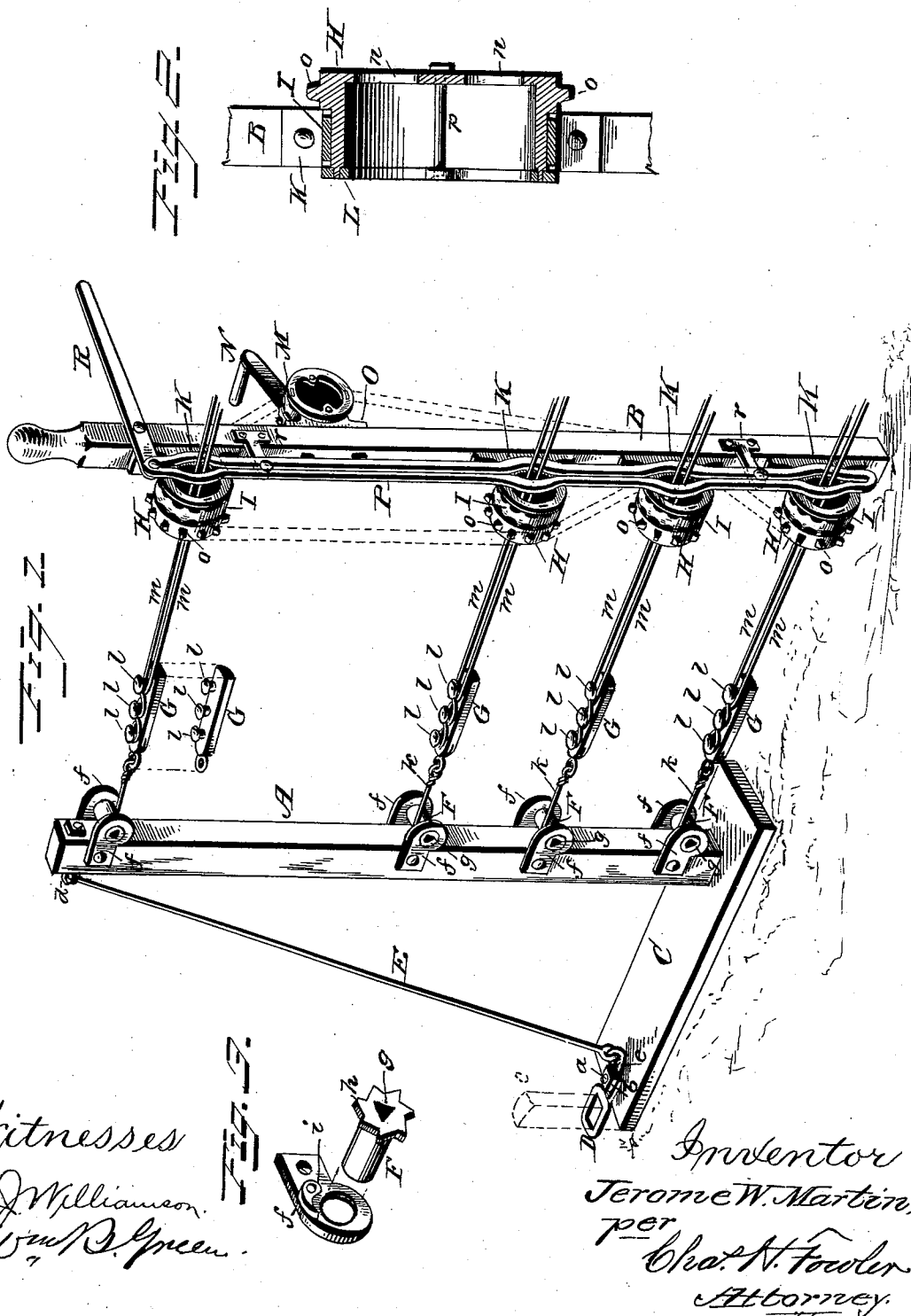


(No Model.)

J. W. MARTIN.
WIRE AND PICKET FENCE MACHINE.

No. 506,826.

Patented Oct. 17, 1893.



UNITED STATES PATENT OFFICE.

JEROME W. MARTIN, OF KANSAS CITY, MISSOURI.

WIRE-AND-PICKET-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 506,826, dated October 17, 1893.

Application filed June 6, 1893. Serial No. 476,780. (No model.)

To all whom it may concern:

Be it known that I, JEROME W. MARTIN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Fence-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has relation to that class of fence machines in which suitable means are provided for twisting the strands of wire between which the wooden pickets are held, and the object of the invention is to improve this class of machines in the several details of construction whereby greater effectiveness is obtained and a more perfect operation of the machine is secured and consequently a perfect, strong and durable picket fence is expeditiously constructed. These several objects are attained by the machine constructed substantially as shown in the drawings and herein described and claimed.

Figure 1 of the drawings represents a perspective view of the machine showing the sprocket-chain in dotted lines; Fig. 2 a detail sectional view on an enlarged scale of one of the twisting devices and its connections; Fig. 3 a detail perspective view on an enlarged scale of the tension device.

In the accompanying drawings A and B represent two upright posts to which the operating parts of the machine are connected, the former having a base or support C, to one end of which is suitably connected by bolt *a* and nut *b*, a link D, through which may be driven a stake *c* into the ground, said stake being shown in dotted lines. The stake securely holds the base or support C in position on the ground and to form a connection between it and the post A, a brace rod E is provided, which rod at its upper end is connected to an eye-bolt *d* and at its lower end to an eye-plate *e* formed with the link D.

The above described means provides a perfect and strong support for the post and also holds it firmly in position on the ground, the square or rectangular form of the link with

the correspondingly formed stake preventing the base or support from moving laterally.

To the sides of the post A are suitably secured a plurality of bearing-plates *f* for supporting the spools F, said spools having at one or both ends a flat sided opening or socket *g* to receive a suitable crank-handle for turning them. The spools F at one end have ratchets *h* with which engage pawls *i* pivoted upon the outer side of the plates *f*, as shown in Fig. 3 of the drawings. The spools F have a short wire *k* suitably connected thereto and to the outer ends of the wires are secured tension heads G which are provided upon their upper sides with buttons *l* around which are looped the wires *m* between which the pickets are held. These wires *m* extend through the twisting cylinders H which cylinders are supported in bearing-rings I, said rings being preferably cast with brackets K for attaching them to the side of the post B. The twisting cylinders H have slots *n* through which the fence-wires extend and also sprocket teeth *o* with which engages a suitable sprocket chain, shown in dotted lines, Fig. 1. A rim L is connected to the cylinders H by means of bolt *p* so as to provide a circumferential flange to hold the cylinder in engagement with the bearing-ring I.

In order to operate the several twisting devices through the medium of the sprocket-chain, a supplemental sprocket-cylinder M is provided which has a suitable crank-handle N for turning it and is supported in a suitable bracket O secured to the post B.

Any suitable and well known means may be provided for operating the sprocket chain and twisting cylinders, and therefore I do not wish to confine the invention to any special form of mechanism. The bearing rings I as will be noticed are scalloped on their edges or a portion of their edges cut away so as to reduce the frictional surface thereof when coming in contact with the twisting cylinders, thereby rendering the twisting cylinders more easily rotated. The looping of the wires *m* over the buttons *l* upon the tension heads G, holds the wires to a certain tension and when the wires are being twisted around the pickets a sufficient slack is left necessary to pro-

vide for the twist in the wires and which is taken up as the wires are twisted. A sliding-bar P is provided which may be slotted its entire length or at intervals to allow the wires 5 *m* to pass through as shown, which bar is supported on the post B by suitable hangers *r* or by any other preferred means that will allow the vertical movement of the bar when the lever R to which the bar is pivoted, is depressed. The hand-lever R is pivoted to the 10 post B and by depressing the lever the slotted bar P is raised which brings the narrow portion of the slot in contact with the wires and forces them together while the wires are being 15 twisted, thereby facilitating the proper twisting of the wires when the twisting-cylinders are being operated. The collars or rings L are detachably connected to the twisting cylinders H by means of the bolts *p* so 20 as to admit the ready removal of the cylinders from the bearing-rings I by first removing the collars.

Having now fully described my invention, what I claim as new, and desire to secure by 25 Letters Patent, is—

1. In a fence machine, a plurality of wire twisting devices, consisting of suitable twisting cylinders having slots for the wire to pass, removable rings or collars connected to the 30 cylinders, stationary bearing rings for the cylinders, said rings having scalloped edges,

and suitable means for operating the cylinders, substantially as and for the purpose specified.

2. In a fence machine, the combination with 35 suitable wire twisting devices, of a vertically movable slotted bar and lever for operating it to force the wires together while being twisted, substantially as and for the purpose described. 40

3. A fence machine, consisting of a suitable post, a base or support to which it is connected, a square or rectangular shaped link connected to the base or support to receive 45 a stake, a brace-rod connecting therewith and with the post, a plurality of tension devices connected to the post and consisting of a plurality of spools, pawls and ratchets, and tension-heads having buttons thereon, a post, 50 a plurality of wire twisting devices connected thereto, and a vertical movable slotted bar for forcing the wires together while being twisted, substantially as and for the purpose set forth.

In testimony that I claim the above I have 55 hereunto subscribed my name in the presence of two witnesses.

JEROME W. MARTIN.

Witnesses:

W. F. JACKSON,
H. S. DOWNEY.