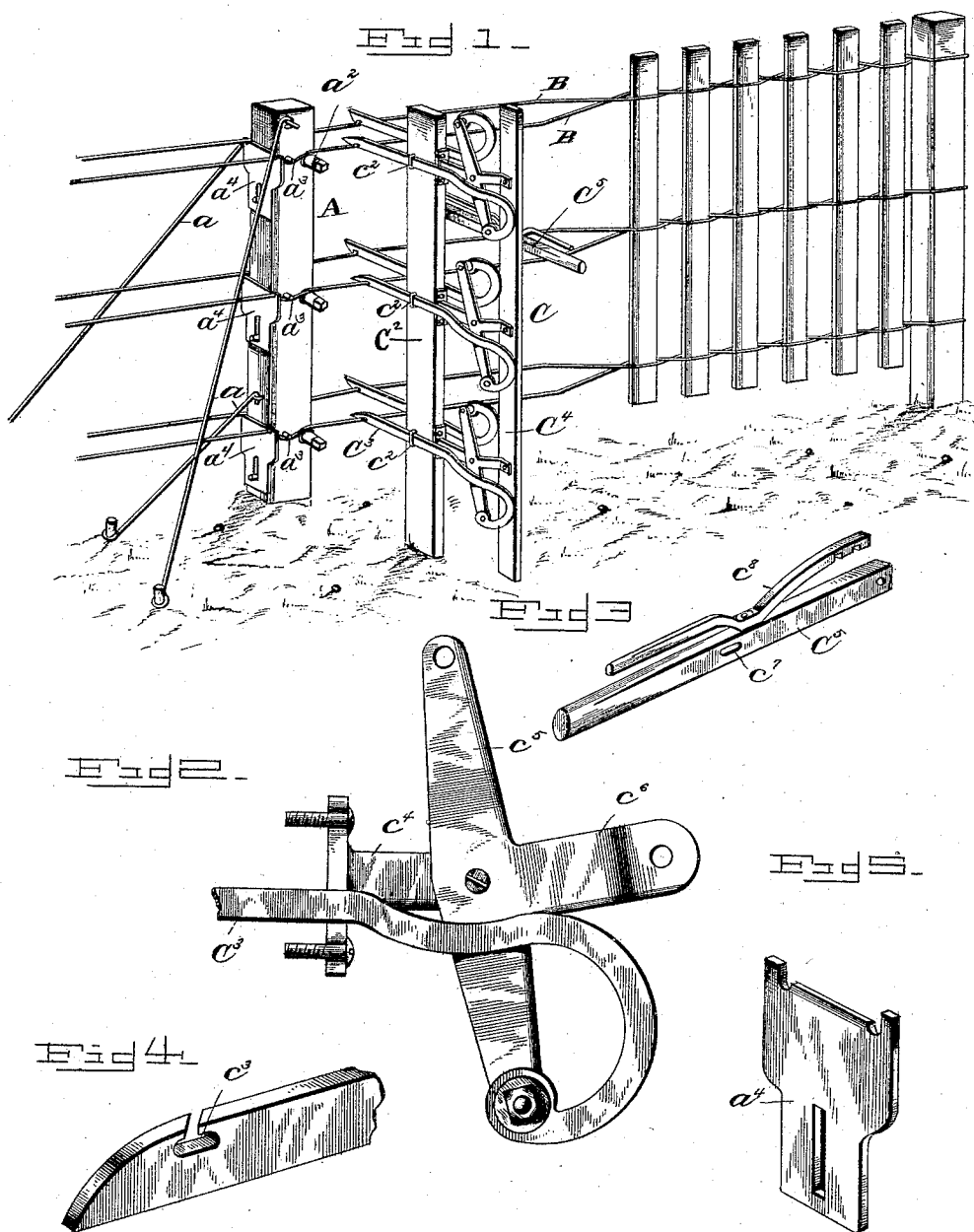


(No Model.)

J. H. MORRIS.
FENCE MACHINE.

No. 474,179.

Patented May 3, 1892.



Witnesses
 Lantth Stevens
Barnitt Mead.

Inventor
John H. Morris.
By A. S. Dyke New York.
his Attorney

UNITED STATES PATENT OFFICE.

JOHN H. MORRIS, OF MAQUOKETA, IOWA.

FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 474,179, dated May 3, 1892.

Application filed January 26, 1892. Serial No. 419,277. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. MORRIS, a citizen of the United States, residing at Maquoketa, in the county of Jackson and State of Iowa, have invented certain new and useful Improvements in Fence-Machines; 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.

This invention relates to fence-machines.

The object of the invention is to produce a fence-machine of simple and cheap construction, easily and quickly set up, whereby fences of wires and pickets may rapidly be made at the place where the fence is to be used or at other desired or convenient places.

With this object in view the invention consists in a fence-machine comprising a tension device of novel construction and a crossing device whereby the sets of wires used in the manufacture of the fence are alternately separated and crossed and whereby pickets may be placed between the sets of wires and retained firmly in place, the crossing device consisting of a post or standard, suitable arms sliding in guides or ways on the post or standard engaging the sets of wires and pivoted to levers which are connected to the posts, and an operating-bar connected with the levers and capable of an up-and-down motion, whereby by the movement of the bar the arms engaging the wires are caused to reciprocate. Furthermore, the invention consists in various novel details of construction whereby the objects of the invention are attained.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the improved machine, being shown in use for forming the fence at the point where it is to be used. Fig. 2 is a detail view of the pivoted ends of the fingers whereby the wires are engaged, the projection from the post, and the lever by which motion is imparted to the fingers. Fig. 3 is a detail view of the lever whereby the movable bar is given motion. Fig. 4 is a detail perspective view of the under side of one of the engaging-fingers, and Fig. 5 is a detail view of a portion of the tension device.

In the drawings, A represents a post, which

forms the support for the tension device and is secured in position by means of guy-rods a . The tension device consists, essentially, of the studs a^2 , provided with square outer ends for the engagement of a wrench or other tool by which they are turned, pins a^3 , under which the wire is passed, and holders a^4 , consisting of notched plates secured to the side of the post A.

The wires B of the fence pass from the studs a^2 any suitable distance to a post of the fence or to any retaining device when the fence is not made at the point where it is to be used.

C represents the wire-crossing device, which is designed to form a fence composed of slats and any desired number of sets of wires twisted about the pickets to retain them in position, the construction of the crossing device being such that a simple crossing of the wires is afforded between each picket.

C² represents a post or standard forming the support for the working parts of the crossing device. Upon this post or standard is mounted a suitable number of guyways or staples c^2 , through which pass wire-crossing arms C³. The outer ends of these arms C³ are notched and have formed therein an eye c^3 , extending from the notch for the reception of the wires B B, the notch being formed diagonally across the face of the end of the arm, in order that the wire may be retained against falling from the eye.

Attached to the rear end of the post C² are projecting supports c^4 , of a number corresponding to the number of sets of wires employed in making the fence, and pivoted in the ends of these supports are the levers c^5 . Pivotally attached to these levers c^5 , at the opposite ends thereof, are the arms C³, so that as the lever c^5 is rocked on its pivot the arms C³ will be made alternately to move backward and forward. Motion is imparted to the levers c^5 through a bar C⁴, to which the extensions c^6 of the levers c^5 are pivoted. For convenience in giving an up-and-down motion to the bar C⁴, I provide a handle C⁵, pivotally connected to both the post C² and the bar C⁴, the handle being provided with an elongated opening c^7 for the reception of the pin attaching it to the bar C⁴ to permit proper sliding movement of the bar while in operation. The lever c^5 is provided with a retain-

ing-lever c^8 , notched at one end, the notches being designed to engage a projection (not shown) on the post C^2 to retain the operating-lever at the limit of either its up or down movement.

In the operation of the device the wires are arranged in sets of two by stretching them from a beginning post to the tension device, after which the crossing device is placed in position and the wires passed through the eyes in the arms of the crossing device after proper tension has been put on the wires by turning the studs a^2 . When the device is in position, the operating-lever c^5 is moved either up or down, according to the position in which it is found, thus moving the bar C^4 in a corresponding position. The lever c^5 being pivoted to the bar, the same will be rocked, resulting in pushing one of each set of arms and drawing in the other member of each set, separating the wires. After this is done a picket is introduced between the separated wires and a reverse movement given to the bar C^4 , resulting in withdrawing the arms formerly projected and the moving out of those formerly drawn in, thus crossing the wires. This operation is maintained until the desired length of fence is formed, the crossing device being preferably kept a short distance from the beginning post and afterward a short distance from the last picket introduced.

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

1. A fence-machine comprising a tension device and a wire-crossing device, the latter consisting of a post, supports secured thereto,

levers pivoted at their center to the supports, wire-crossing arms pivoted to the levers and having their free ends provided with eyes, a bar pivotally connected to each of the levers, and a handle connected to the bar, substantially as described.

2. A fence-machine comprising a tension device and a wire-crossing device, the latter consisting of a post having guideways, supports secured to the posts, three-armed levers pivoted centrally to the supports, wire-crossing arms pivoted to two of the lever-arms and working in the said guideways, the free ends of the said arms being provided with eyes, a bar pivotally connected to each of the three lever-arms, and a handle secured to the bar, substantially as described.

3. A fence-machine comprising a tension device consisting of a post provided with revoluble studs, pins under which the wires are to be passed, and holders attached to the post and provided with notches for the reception of the wires, and a crossing device consisting of a post, reciprocating arms provided with eyes for receiving wires, levers to which the arms are attached, and a bar attached to the levers, whereby by the up-and-down movement of the bar a reciprocating movement is imparted to the arms, substantially as described.

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

JOHN H. MORRIS.

Witnesses:

FRANK DOUBRAWA,
G. L. JOHNSON.