

(No Model.)

J. H. PIVONKA.
HAND FENCE MACHINE.

No. 508,836.

Patented Nov. 14, 1893.

Fig. 1.

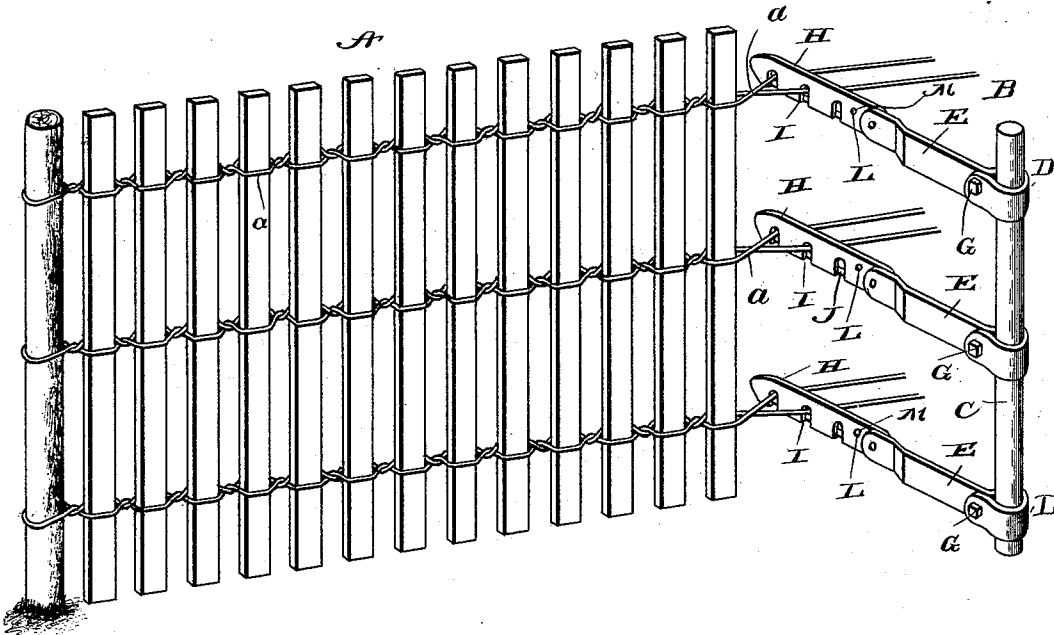
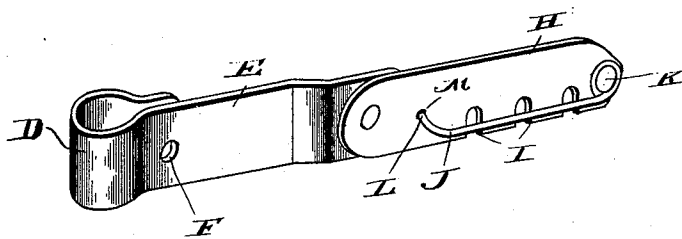


Fig. 2.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

JACOB H. PIVONKA, OF RYAN, KANSAS.

HAND FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 508,836, dated November 14, 1893.

Application filed June 30, 1893. Serial No. 479,308. (No model.)

To all whom it may concern:

Be it known that I, JACOB H. PIVONKA, a citizen of the United States, residing at Ryan, in the county of Rush and State of Kansas, have invented a new and useful Hand Fence-Machine, of which the following is a specification.

This invention relates to hand fence machines; and it has for its object to provide certain improvements in hand operated devices for twisting the strands of wires about each picket, during the operation of constructing a wire-picket fence.

To this end the main and primary object of the present invention is to simplify the construction of hand fence machines, while at the same time providing for an efficient operation thereof, whereby a full twist of the wires is secured.

With these and other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a portion of a picket fence, showing my improved hand fence machine connected with the stretched wires. Fig. 2 is an enlarged detail perspective view of one of the shuttle arms and a swinging shuttle bar at the extremity of such arm.

Referring to the accompanying drawings, A represents a section of a picket fence, during construction, in which are arranged the longitudinal fence wires *a*, between which are adapted to be inserted the pickets, and which are adapted to be twisted at each side of each succeeding picket in order to construct a line of fencing.

In order to twist the pairs of fence wires *a*, at each side of the picket, I employ the hand fence machine B, constructed in accordance with this invention and provided with the main upright hand bar C. The upright hand bar C, is preferably tubular in cross section and is adapted to adjustably receive the inner loop clamps D, formed at the inner ends of the stationary shuttle arms E. The shuttle arms E, are arranged in a number to correspond to the number of pairs of wires em-

ployed in constructing the line of fencing, and said shuttle arms E, are further provided at their loop ends with the perforations F, adapted to receive the clamping bolts G, which clamping bolts, when tightened, bind the loop clamps D, securely on the hand bar C, so that the stationary shuttle arms are carried up and down and forward and backward, together with the upright hand bar as the same is moved by the operator. By thus clamping the shuttle arms adjustably to the hand bar, the said shuttle arms can be adjusted the distance apart from each other that the pairs of fence wires are arranged apart.

Pivoted at one end to the outer ends of the stationary shuttle arms E, are the swinging shuttle bars H. The swinging shuttle bars H, are provided in their under edges with a series of wire notches I, in which are adapted to be inserted the wires *a*, of the fence, so that such wires will be constantly held apart from each other to provide for the insertion of the pickets there-between, while at the same time, by the movement of the machine, the wires of each pair are twisted upon each other. By having a number of wire notches in the edges of the shuttle arms, the wires *a*, can be held as near to or as far apart from each other as may be necessary, according to the width of picket employed. The fence wires are securely locked in the wire notches of the shuttle bars by means of the spring locking arms J. The spring locking arms J, are pivoted at K, to the outer ends of the shuttle bars and are provided at their other free ends with the catch points L that are adapted to be sprung into engagement with the catch openings M, formed in the shuttle bars near their pivots. After the insertion of the pairs of fence wires in each shuttle bar of the machine, the locking arms are swung under the fence wires and sprung into engagement with the catch openings of the shuttle bars, thereby providing means for securely locking the wires in the bars to effectually prevent the same from being displaced when being twisted.

From the foregoing, it is thought that the operation and construction of the herein described hand operated fence machine will be readily apparent to those skilled in the art.

It is simply necessary to arrange and lock the fence wires in the shuttle bars of the machine in the manner just described, and then by grasping the hand bar C, and shoving the same forward and down and pulling it from the fence and up, the pairs of fence wires will be completely twisted at one side of each succeeding picket after the insertion thereof between the wires.

10 It will be apparent that slight modifications of the machine herein described may be employed without altering the principles of the invention in any particular, such for instance as employing any number of shuttle arms and bars, for it must be obvious that the number of shuttle arms and bars depends upon the height of fence and number of line wires used in such fence, and it has been found advisable to employ a shuttle arm and bar to every six inches in height of a fence.

20 Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a hand fence machine, an upright hand bar, a series of stationary shuttle arms adjustably clamped at one end to said hand

bar, swinging shuttle bars pivoted at one end to said shuttle arms and provided with a series of wire notches in one edge, and means for locking the wires in the wire notches of said bars, substantially as set forth. 30

2. In a hand fence machine, the combination of an upright hand bar, a series of shuttle arms having loop clamps at one end adjustably embracing the hand bar, swinging shuttle bars pivoted at one end to the outer extremities of said shuttle arms and provided at one edge with a series of wire notches and each having a single catch opening, and spring locking arms pivoted at one end to each shuttle bar and having at their other ends catch points adapted to be sprung into engagement with said catch openings, substantially as set forth. 35 40

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses. 45

JACOB H. PIVONKA.

Witnesses:

W. H. RUSSELL,
B. H. BUNN.