No. 644,495. Patented Feb. 27, 1900.

L. P. BROWN.

FENCE MACHINE.

(Application filed Mar. 5, 1898.)

(No Model.)

FIG. 1.

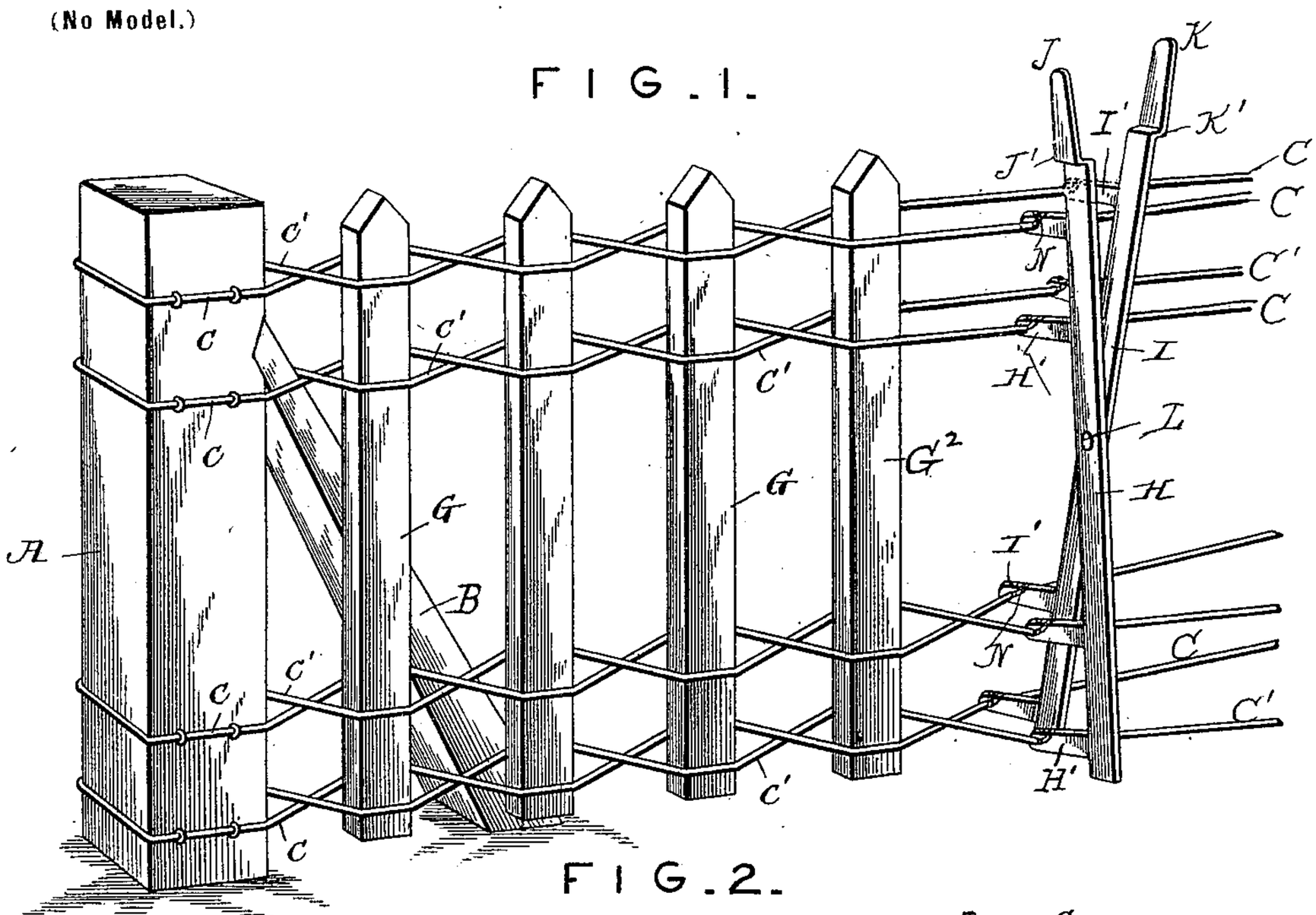


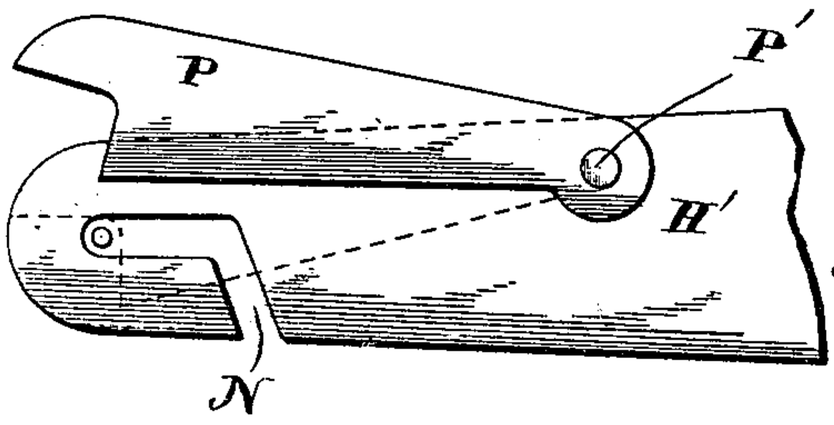
FIG. 2.

FIG. 3.

FIG. 4.

FIG. 5.

FIG. 6.



Witnesses
Harry L. Amer.
C. R. Hauger

Inventor
Leonidas P. Brown,
by D. Brasher Jr.
Attorney

UNITED STATES PATENT OFFICE.

LEONIDAS P. BROWN, OF CENTRALIA, MISSOURI.

FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 644,495, dated February 27, 1900.

Application filed March 5, 1898. Serial No. 672,683. (No model.)

To all whom it may concern:

Be it known that I, LEONIDAS P. BROWN, a citizen of the United States, residing at Centralia, in the county of Boone and State of Missouri, 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.

My invention relates to fence-machines, and particularly to that class of machines for inserting pickets in wire fences.

The general object of my invention is to provide a simple, cheap, durable, and easily-operated machine for inserting pickets in wire fences, with which pickets may be inserted in a fence provided with double lines of wire, or with top and bottom double lines and intermediate single lines, or with single line-wires, or on both sides of line-wires of rod or stiff wire interlaced with ordinary wire, the same machine to be capable of use backward to remove the pickets.

With these objects in view my invention consists in a fence-machine comprising the improved construction, arrangement, and combination of parts hereinafter fully described, the particular points of novelty in which will be specifically set forth in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of a fence-machine constructed in accordance with my invention in position on a partially-picketed fence with double-line wires. Fig. 2 is a horizontal section through the same on the horizontal plane of the upper line of wires. Fig. 3 is a similar view showing how my machine may be used to picket single-line-wire fences or fences with double wire top and bottom lines and single intermediate lines. Fig. 4 is a similar view showing the manner of picketing a fence with double lines, each line consisting of a stiff wire or rod and a flexible wire. Fig. 5 is an enlarged view in side elevation of the outer end of one of the arms of the machine provided with a retaining-latch.

Like letters of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the drawings by letters, A is a fence-post of any ordinary form, construction, or material, and B a brace to stiffen it and prevent its being pulled over or out of the ground.

C C′ are double lines of ordinary flexible fence-wire.

G and G^2 are pickets of any ordinary form, construction, or material.

H and I are the uprights of my fence-machine, provided with suitable handles J K at the top, the uprights being pivoted centrally together by a pin L, passing through the uprights and a central separating-block M. The uprights are substantially parallel with each other, as are the handles, the latter being separated farther apart to give better room for operating them by means of the double bends J′ and K′ in the uprights H and I, as shown. Each upright is formed with or has secured to it a plurality of laterally-projecting arms corresponding in location and number with the line-wires of the fence, four being shown in this instance, (marked H′ and I′.) In Figs. 1 to 3 I have shown each one of these arms provided with a notch or open slot N, extending downward and forward from the upper edge of the arm to receive the wires, pins O being provided to prevent the wires from working out of the slots. In Fig. 5 I have shown the outer end of an arm, (marked H′,) in which a similar open slot extends inward and forward from the lower edge, a latch P, provided with an angular notch in its lower forward edge, being pivoted at P′ near the top of the arm.

In operating the machine the wires are put in a state of tension or are stretched from post to post and one of the wires of each line passed into the notch of each arm and secured against slipping out by either the pin O or latch P.

To picket a fence in the manner illustrated in Figs. 1 and 2, the wire C′ of the upper line is strung in the notch N of arm I′ of upright I and the wire C in notch N of arm H′ of upright H. The wires are represented as strung around the pickets G and secured by partially stringing them around picket G^2. The method of stringing the wires around the pickets consists in using the two uprights as heddles and the single wires as warp-threads, the first ac-

tion at the post A being to push the handle J of upright H away from the operator and the handle K of the upright I toward him. This causes the wires of each double line to be crossed at the post, forming a shed, in which the first picket G is placed in position between the wires and between the crossing and the arms. The action is now reversed, bringing the handle J inward and pushing the handle K outward. This crosses the wires on the outside of the first picket G, firmly binding it in position between the wires and forming a shed to receive the second picket G. This operation is repeated with the rest of the pickets until the fence is completely picketed, the picket G^2 being shown as the one being inserted in the shed.

In Fig. 3 one of the wires of each line has been left out, so that the arms are only half in use, the first and third of one and the second and fourth of the other upright being idle. In this form the shed in which to insert the picket is formed of two wires of one upright and the alternating wires of the other. Otherwise the action of the machine with this form of fence is the same as that described with relation to Figs. 1 and 2.

In Fig. 4 the line-wires C are to be rods or stiff wires and the wires C′ of the ordinary flexible fence-wire as used with the constructions before described. This line rod or wire will not require to be strung on the arms, and the flexible line-wires will be strung and operated in the same manner as in the single line-wire form of fence shown in Fig. 3, the only difference in result being that the shed in which the picket is placed is formed alternately on opposite sides of the stiff rod or wire line, and the pickets are secured correspondingly in position, as clearly shown in Fig. 4.

It will be observed that when the two upper arms of either upright are in their outer positions the two lower arms, owing to their position on the opposite side of the pivot of the uprights, are in their inner positions and that the sheds formed by the top and bottom lines of wires must necessarily be much more open and wider than those of the two intermediate lines. By the arrangement of the pivot of the uprights centrally the top and bottom sheds are required to be made only half as wide as it would be necessary to make the top shed if the uprights were pivoted at their lower ends or the bottom sheds if the uprights were pivoted at their upper ends. This is a great advantage, as either of the latter forms would require gradually-increasing slack of wire from the pivotal point to the opposite end of the uprights, or the pickets would otherwise be irregularly secured. With either a top or bottom pivot such a regular tension as my construction admits of would be impracticable.

To take out the pickets with my machine, it is only necessary to reverse the action of the handles and thus open the wires apart instead of bending them across each other, when the pickets will almost drop out. In this operation of taking out the pickets it is practically only necessary to use the machine on a few pickets on each section, when the rest may be taken out by hand as fast as they can be reached.

It will be further observed that my machine when in operation is entirely supported on the wires, and all stands, foundations, trucks, or other supports are thereby dispensed with. I am also able to make the machine very simple, light, and portable, one which has been thoroughly tested and practically used weighing only ten pounds.

While I have illustrated simple and efficient means for carrying out my invention, I desire it to be understood that I do not restrict myself to the exact forms and constructions shown, but hold that any slight changes or variations therefrom, such as might suggest themselves to the ordinary mechanic, would clearly fall within the limits and scope of my invention.

Having thus fully described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a wire-fence-picketing machine, a pair of uprights centrally pivoted together side by side and provided with laterally-projecting arms having slots or notches to receive the line-wires of the fence, substantially as described.

2. In a wire-fence-picketing machine, a pair of uprights centrally pivoted together side by side and provided with laterally-projecting arms having slots or notches to receive the line-wires of the fence, and means for preventing the displacement of the wires, substantially as described.

3. In a wire-fence-picketing machine, a pair of uprights centrally pivoted together side by side and provided with laterally-projecting arms having slots or notches to receive the line-wires of the fence, and pivoted latches having angular notches on their forward lower edges to prevent displacement of the wires from said slots, substantially as described.

4. In a wire-fence-picketing machine, the uprights pivotally secured together at their mid-length and provided with suitable handles on their upper ends, and a plurality of arms projecting laterally from each upright at about right angles thereto and on the same side above and below the pivotal point, and means for stringing and securely holding the wires on the arms, all substantially as described.

5. The fence-machine herein described consisting of uprights H and I pivotally secured together at about their centers and provided with suitable handles and arms H′ and I′, pro-

jecting laterally from these uprights respectively on the same side, each arm being provided with a slot or open notch N leading inward and formed from one edge thereof, and means for securing the wires in the notches against displacement, all substantially as described.

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

LEONIDAS P. BROWN.

Witnesses:
D. N. NEWMAN,
T. E. NALL.