

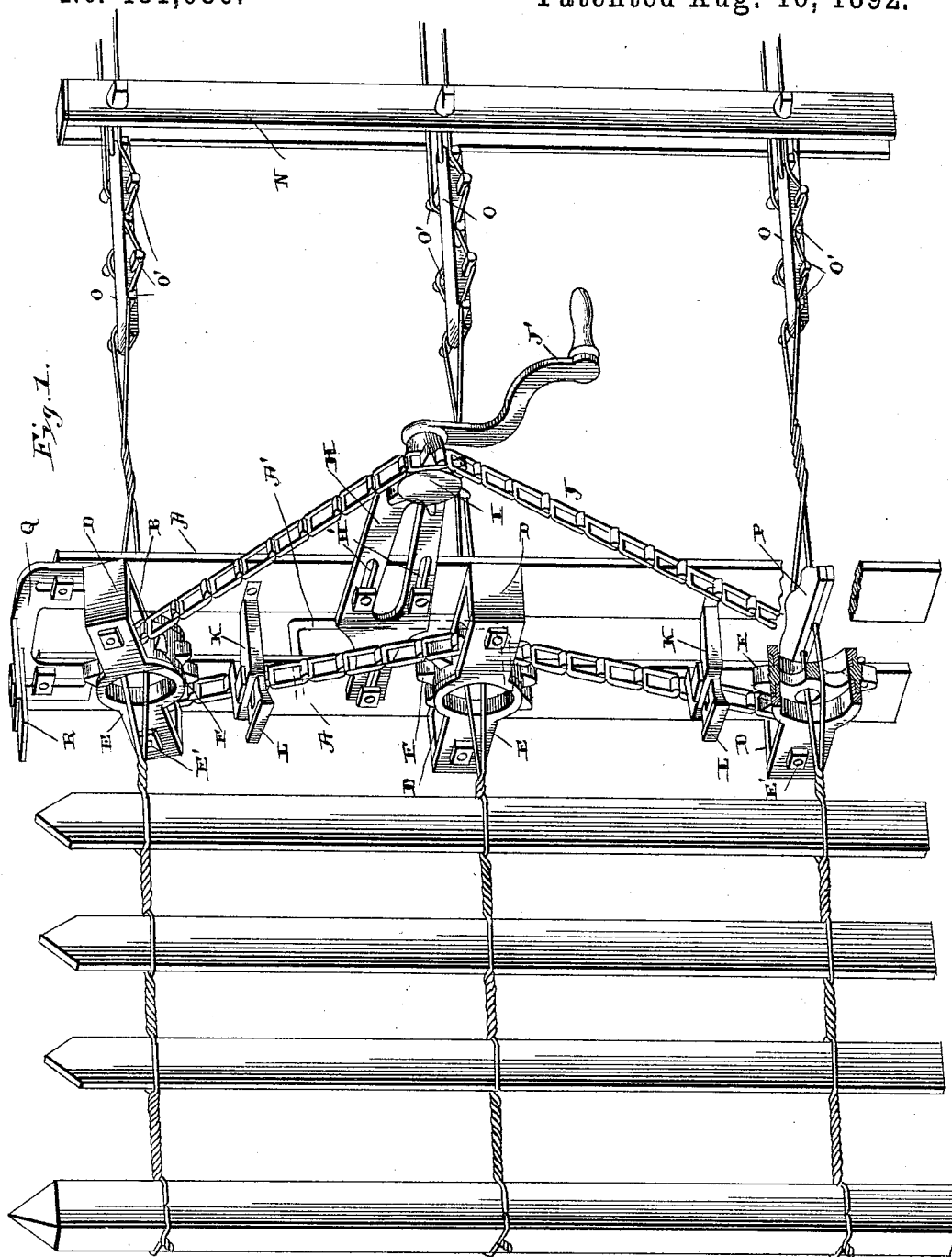
(No Model.)

2 Sheets—Sheet 1.

A. R. WELTY.
PICKET WIRING FENCE MACHINE.

No. 481,086.

Patented Aug. 16, 1892.



Witnesses

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Inventor

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

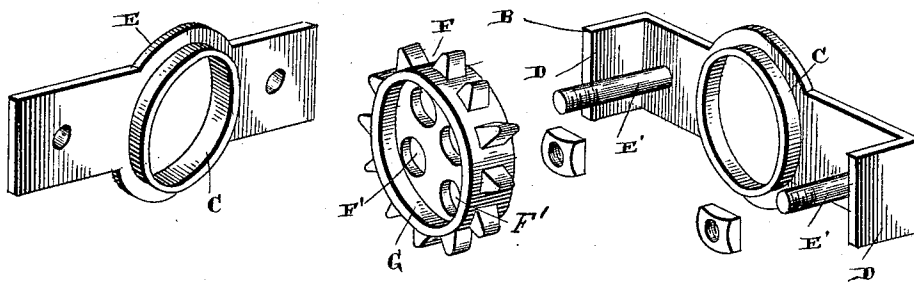


Fig. 3.

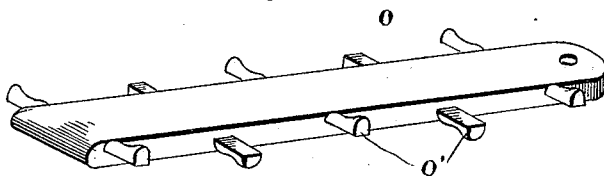


Fig. 4.

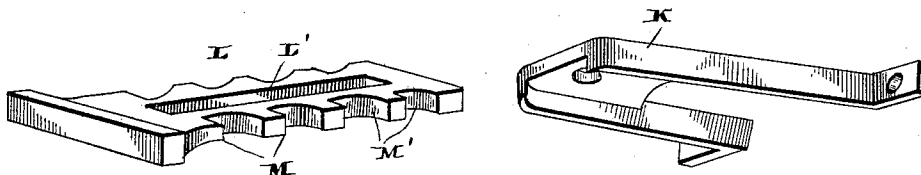
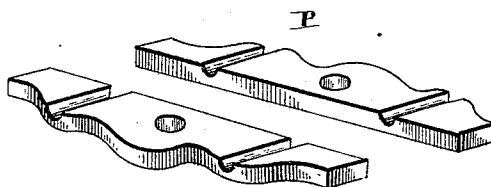


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALMOND R. WELTY, OF SHREVE, OHIO.

PICKET-WIRING FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 481,086, dated August 16, 1892.

Application filed April 29, 1892. Serial No. 431,150. (No model.)

To all whom it may concern:

Be it known that I, ALMOND R. WELTY, of Shreve, in the county of Wayne and State of Ohio, have invented certain new and useful
5 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 pertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in fence-machines; and it consists in the novel features of construction and in the combination and arrangement of parts which will be
15 fully described hereinafter, and more particularly referred to in the claims.

The object of my invention is to provide a machine whereby the pickets may be woven
20 into the wires with rapidity and with great accuracy and also to provide the same with an improved tension whereby wires of different weight may be fed to the machine with any desired degree of tautness.

Referring to the accompanying drawings, Figure 1 is a perspective view of my improved machine in connection with a section of fence. Fig. 2 is a detached view of one of the revolving twistors and its housing. Fig.
30 3 is a detached view of the tension device. Fig. 4 is a detached view of the adjustable stop. Fig. 5 is a detached view of the wire-spreader.

A represents the vertical standards of my improved machine, and secured at intervals
35 across the same are the castings B, having circular openings in their centers. Around these openings are formed the circular flanges C. The ends of the casting are turned outward to form the lugs D.

E represents the outer plate, which has a central opening and flange corresponding with those on the casting B, the said plate resting against the lugs D and secured thereto
45 by bolts E'. Between the said casting and the plate is the sprocket-wheel F, having circular peripheral flanges G on its opposite sides, which fit over the flanges on the adjacent sides of the plate and casting, which thus
50 form bearings for the said wheel around which it turns. Three or more of these wheel-supporting frames may be placed upon the

machine, the number varying according to the number of strands it is desired to weave into the fence.

Projecting from one side of the supports A, and secured thereto is the bearing-plate H, having horizontal slots H', whereby the plate is longitudinally adjustable on the said supports. Upon the outer end of the bearing-
60 plate is journaled the sprocket-wheel I, and around this wheel and the wheels F moves the drive-chain J, so that the last-named wheels are moved in unison, the motion being communicated thereto by the crank J',
65 secured to the axle of the wheel I. The plate H being adjustable across the supports A, it will be seen that the drive-chain may be loosened or tightened, as may be desired.

K represents brackets projecting outward
70 from the supports A immediately beneath the sprocket-wheel frames, and the under sides of these brackets are recessed, as shown in Fig. 4. The sides of the recesses converge toward the outer end of the brackets. Secured in the
75 recesses in the brackets are the stops L, having longitudinal slots L', through which the securing-bolts pass. A series of shoulders M is formed on each of the stop sides by means of the inward cuts M', which diverge toward
80 the rear ends of the stops. By means of these cuts the stops may be adjusted forward between the converging sides of the recesses on the under sides of the brackets K, with two of the shoulders M resting against the outer
85 end thereof. Thus it will be seen that all the stops may be adjusted with uniformity, and the pickets which bear against them when inserted between the wires are thus evenly spaced.

Secured to the rear side of one of the up-
rights A is the handle A', which is grasped by one hand of the operator, while the crank J' is turned by the other hand.

N represents a post ahead of the weaving-
95 machine and secured thereto, in line with the several sprocket or weaving wheels, are the tension devices O, which consist of bars having each a series of projecting arms O' on each of its sides or edges. The under and
100 upper sides of these arms are alternately rounded and flattened, and passed above and below the said arms around the curved sides are the wires, which are fed from the supply-

reels through the said tension devices to the twisting or weaving wheels. The wires may be passed around a greater or less number of arms to secure the desired tautness, according as the wire is light or heavy, and by means of this it will be seen that the desired tension may be secured no matter what weight of wire is employed. The post N may be put in position at the end of the fence and need not be removed until it is completed.

Placed upon the wires just before they enter the weaving-wheels are the spreaders P, which consist of two plates having registering grooves on their adjacent faces, through which the wires pass, the plates being secured together by bolts. By employing these spreaders the wires are prevented from twisting immediately ahead of the said wheels when they are twisting the wires around the picket.

In operation the picket is inserted between the wires forming the several strands and is forced back against the twists immediately ahead of the preceding picket. The machine is then moved up against the picket, the stops L bearing against it. The drive-chain is then set in motion, revolving the sprocket-wheels and twisting the wires. This twisting of the wires pushes the machine away from the picket, and the movement is continued until the desired number of twists are given the wires, when another picket is inserted and the operation repeated, only that the wheels are revolved in the opposite direction from what they were in the preceding operation, reversing the direction of the twist between the adjacent pickets. The sprocket-wheels F are preferably formed with four openings F', arranged around their centers, and through two of these openings pass the wires to the pickets.

Upon the upper ends of the supports A is placed the gage Q, which may be adjusted ver-

45 tically, as shown, and which is provided with the horizontally-adjustable lip R on its horizontal arm, and by means of this device the pickets may be brought to a uniform height.

Having thus described my invention, I claim—

1. In a fence-machine, the combination, with a vertical support, frames secured thereto, sprocket-wheels journaled in said frames, and a means for operating said wheels, of brackets projecting from said support and which are recessed on one of their sides, and stops which are adapted to be inserted in the said recesses, and laterally-projecting shoulders on the sides thereof, which are engaged by the ends of the brackets, substantially as shown and described.

2. In a fence-machine, in combination, a vertical support consisting of two members, castings secured across them, having central openings and flanges around the openings, lugs projecting from the castings, plates having central openings and which are secured against the said lugs, flanges on the inner sides of the plates around their openings, sprocket-wheels between the said plates and castings, which revolve on the flanges of the said members, a laterally-adjustable arm secured to the vertical support, a sprocket-wheel journaled thereto, a drive-chain which moves around said sprocket-wheels, a spreader on the wires which pass through the machine and which is adjacent thereto, a post, and a tension device secured thereto, consisting of a center bar and laterally-projecting arms thereon, over which the wires pass, substantially as shown and described.

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

ALMOND R. WELTY.

Witnesses:

CHRISTOPHER H. HAMLIN,
JOSEPH DANIEL BARCUS.