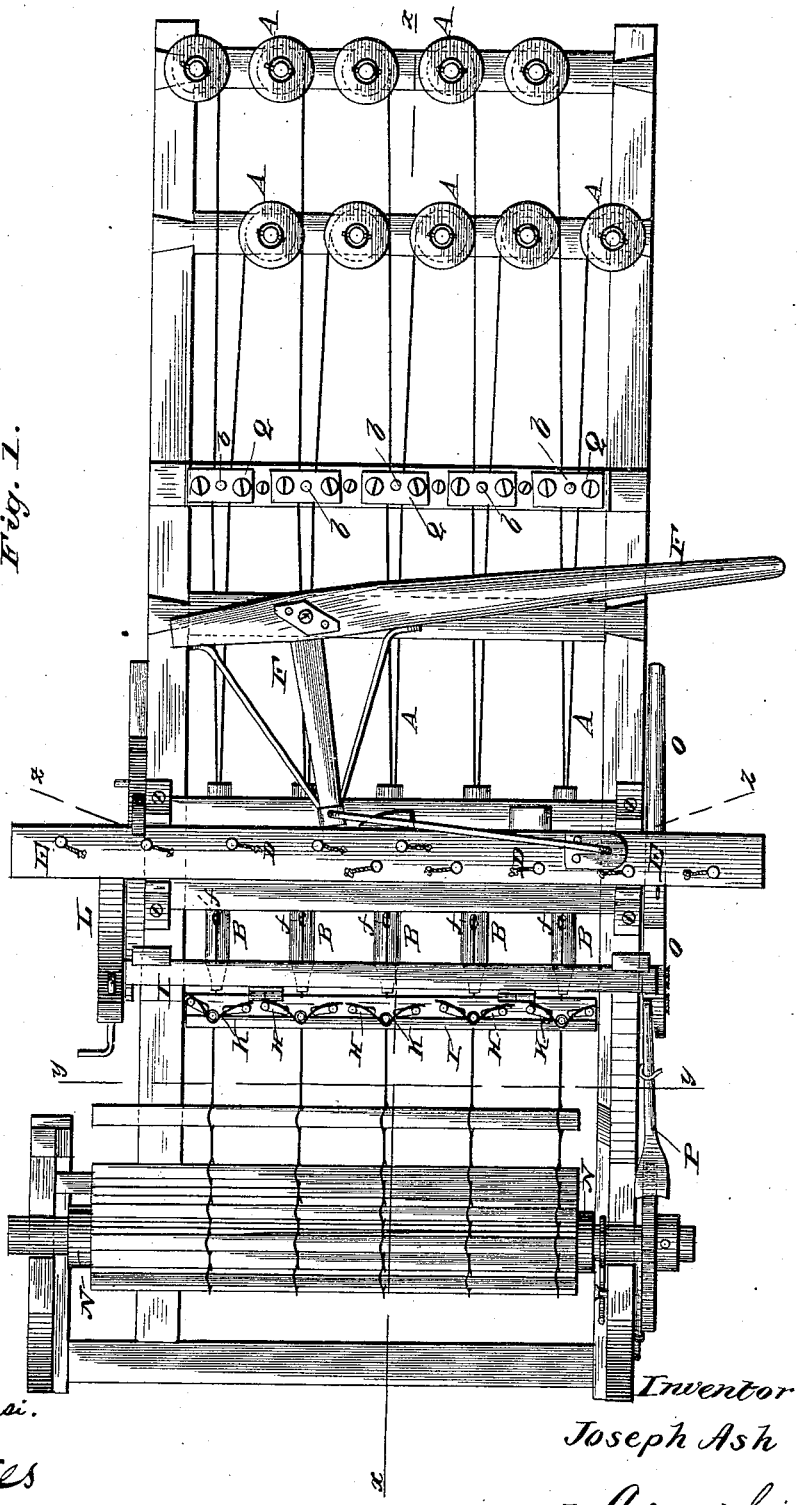
(No Model.) 4 Sheets—Sheet 1.

J. ASH.

WIRE FENCE MACHINE.

No. 266,072. Patented Oct. 17, 1882.

Fig. 1.



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his Attorneys.

(No Model.) 4 Sheets—Sheet 2.

J. ASH.

WIRE FENCE MACHINE.

No. 266,072. Patented Oct. 17, 1882.

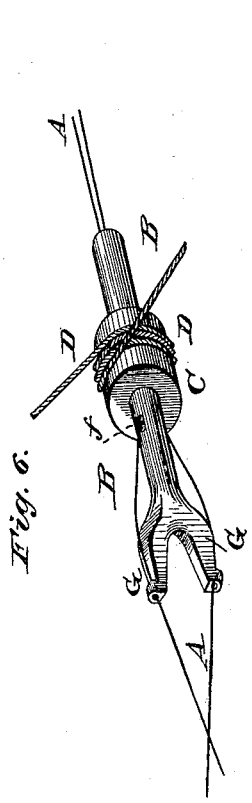

Fig. 6.

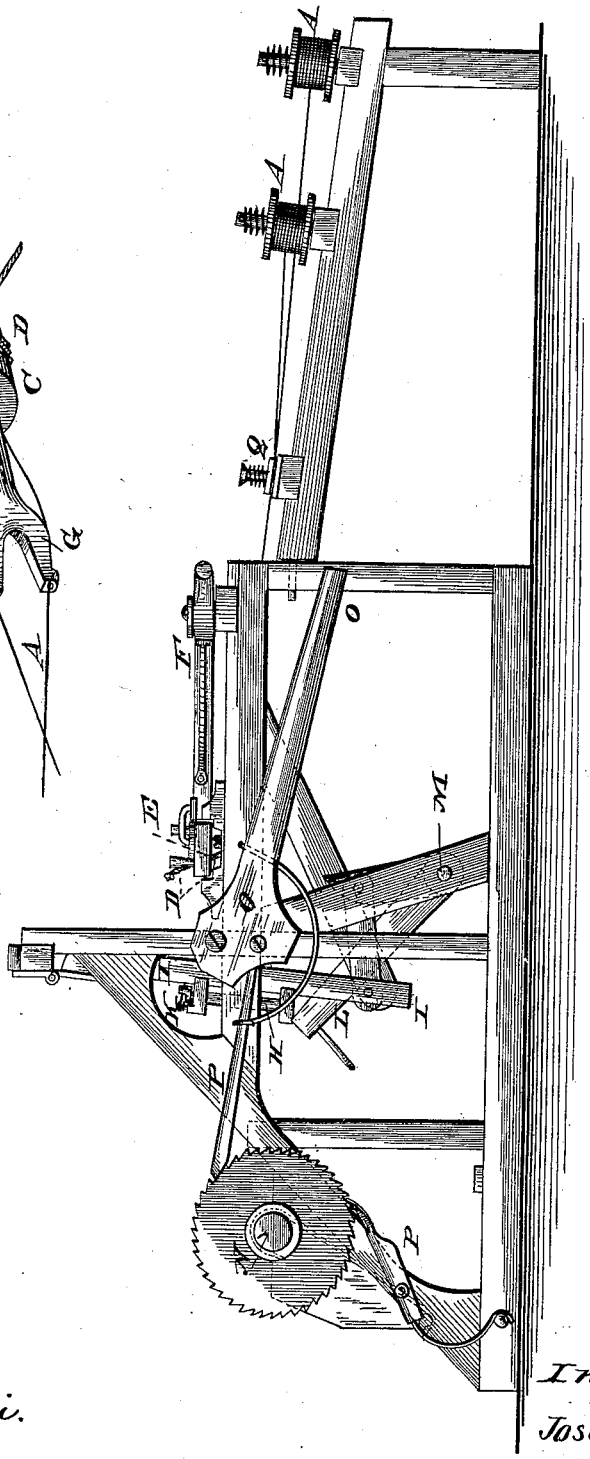

Fig. 2.

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(No Model.) 4 Sheets—Sheet 3.

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WIRE FENCE MACHINE.

No. 266,072. Patented Oct. 17, 1882.

Fig. 7.

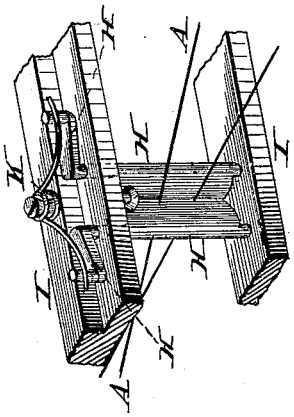
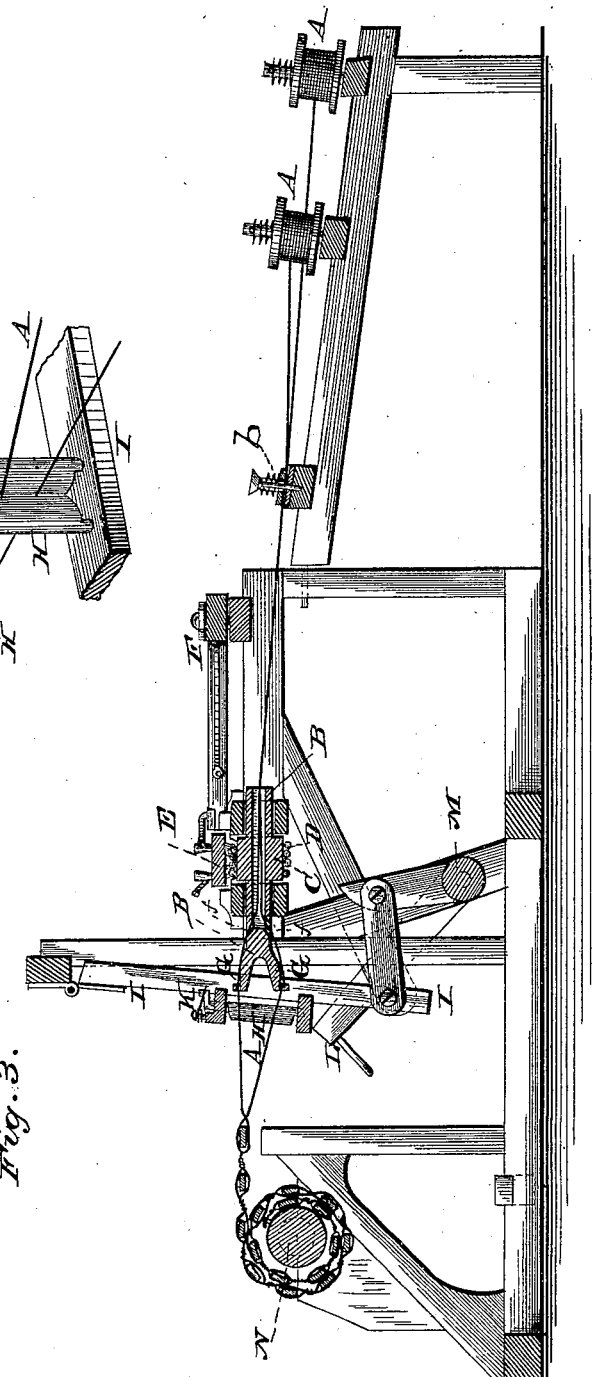


Fig. 3.



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(No Model.) 4 Sheets—Sheet 4.

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WIRE FENCE MACHINE.

No. 266,072. Patented Oct. 17, 1882.

Fig. 4.

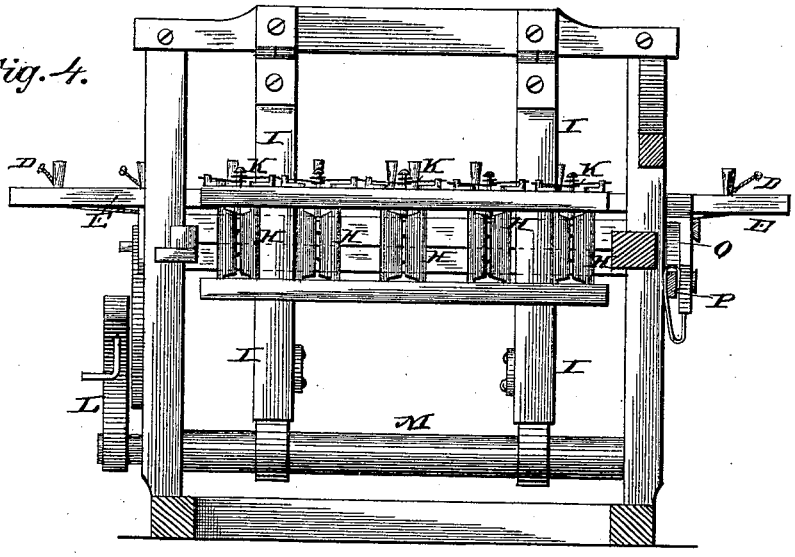


Fig. 5.

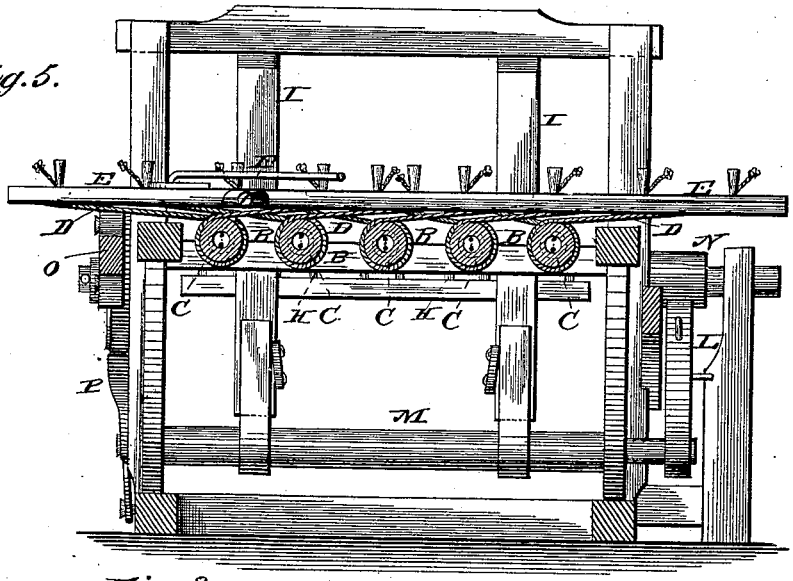
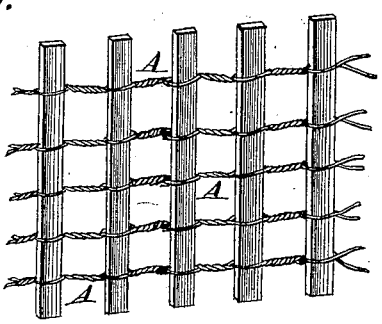


Fig. 8.



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UNITED STATES PATENT OFFICE.

JOSEPH ASH, OF QUINCY, ILLINOIS, ASSIGNOR OF FOUR-FIFTHS TO EDWARD E. MANSON, SANFORD C. PITNEY, J. M. HARROP, AND MONROE ROBERTSON, ALL OF SAME PLACE.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 266,072, dated October 17, 1882.

Application filed July 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ASH, a citizen of the United States, and a resident of Quincy, in the county of Adams and State of Illinois, have invented a new and valuable Improvement in Wire-Fence Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a plan view of my device. Fig. 2 is a side view of the same. Fig. 3 is a vertical sectional view. Figs. 4 and 5 are cross-sectional views taken at different points of the machine. Figs. 6 and 7 are detail views of parts of the machine, and Fig. 8 is a perspective view of part of the fence completed.

This invention relates to a machine for making slatted or picket fences, in which the slats or pickets are supported at regular intervals by means of wires twisted together, so as to bind upon the slats and hold the latter in place.

The improvement relates to mechanism for twisting the wires between the slats alternately in reverse directions; also, to mechanism for closing and tightening the wires upon the slats and for adjusting the slats in position between the wires; also, in certain features of construction and operation hereinafter described and claimed.

The wire coils A for supplying the wire are supported upon a frame or table at the feed end of the machine, and the wires carried forward to the delivery end of the same, where they pass in pairs through a series of rotary spindles, B, of the twisting mechanism. The wires are kept in pairs by means of the guide-pins *b*, and the said spindles are made tubular for a portion of their length, so as to afford a passage for the wires. Each spindle is journaled in the main frame of the machine, and carries a drum, C, upon which is wound a cord, D, having its outer ends carried in reverse directions to a longitudinally-movable bar, E, to which they are secured. The cord is secured at its middle to the drum, so that by shifting the bar E by means of a lever, F, connecting with the bar by a link or other connection, the drum and its spindle will be rotated to the right or left, according to the direction in which the bar is moved. The wires pass out from the spindles through openings *f*, formed in opposite sides of the latter, whereby the two wires passing through each spindle will be separated. The wires then pass over the hook-shaped prongs or jaws G, connected by their shanks with the tubular spindles, said wires being then carried forward between the pivoted jaws H of a device which I denominate the "clamp-shuttle." This clamp-shuttle comprises a vertical frame, I, hinged at its top and carrying the vertical jaws H, pivoted in pairs in the frame, and normally closed by springs K applied to their spindles. The forked ends of the spindles project between the jaws H of the clamp-shuttle, which latter is caused to swing forward at the proper moment by operating the lever L, fixed upon one end of a rock-shaft, M, which is connected by rods, links, or other suitable connections with the lower part of the clamp-shuttle frame.

N indicates a rotary drum, located at the delivery end of the machine for receiving the fence as the latter is perfected. This drum can be operated by a ratchet-lever, O, carrying a pawl, P, which engages a ratchet upon one end of the drum, or it can be operated in any other desired manner.

Q indicates a tension device, preferably consisting of a strip of wood or leather, arranged to bear upon the wires at a point between the coils and the twisting mechanism. It will be obvious, however, that a variety of spring-tension devices could be employed, so as to attain the required tension. The wires are drawn forward by the drum N and the slats passed between the wires at the forked ends of the tubular spindles. The clamp-shuttle is swung forward, so that its jaws will press the slats well up against the previous twists in the wires, and the twisting mechanism then operated so as to rotate its drums and thereby twist the wires up to the edge of the slat and cause the wires to firmly bind thereon. The clamp-shuttle will be then swung back and another slat inserted, as before, between the wires, after which the clamp-shuttle will be again swung forward and

the twisting mechanism operated so as to give a reverse movement to its drums, and hence a reverse twist to the wires.

A swinging shuttle and a sliding shuttle have both been used prior to my invention, and neither are broadly claimed herein.

Having thus described my invention, what I claim is—

1. The combination, with the twisting mechanism for twisting the wires between the slats, of the swinging clamp-shuttle provided with pivoted spring-actuated jaws between which the wires pass, substantially as described.

2. The combination of the rotary drum upon which the fence is wound, with the wire-twisting mechanism supporting the wires in pairs and spreading them apart, so as to allow the slats or pickets to be inserted between each pair of wires, and the swinging shuttle carrying pivoted spring-actuated jaws adapted to adjust the slats and bring the wires together thereon, substantially as described.

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

JOSEPH ASH.

Witnesses:
JOHN J. SIEPKER,
JOSEPH M. HERROP.