(No Model.)

# E. S. LAFFERTY.

## FENCE MACHINE.

No. 455,627. Patented July 7, 1891.

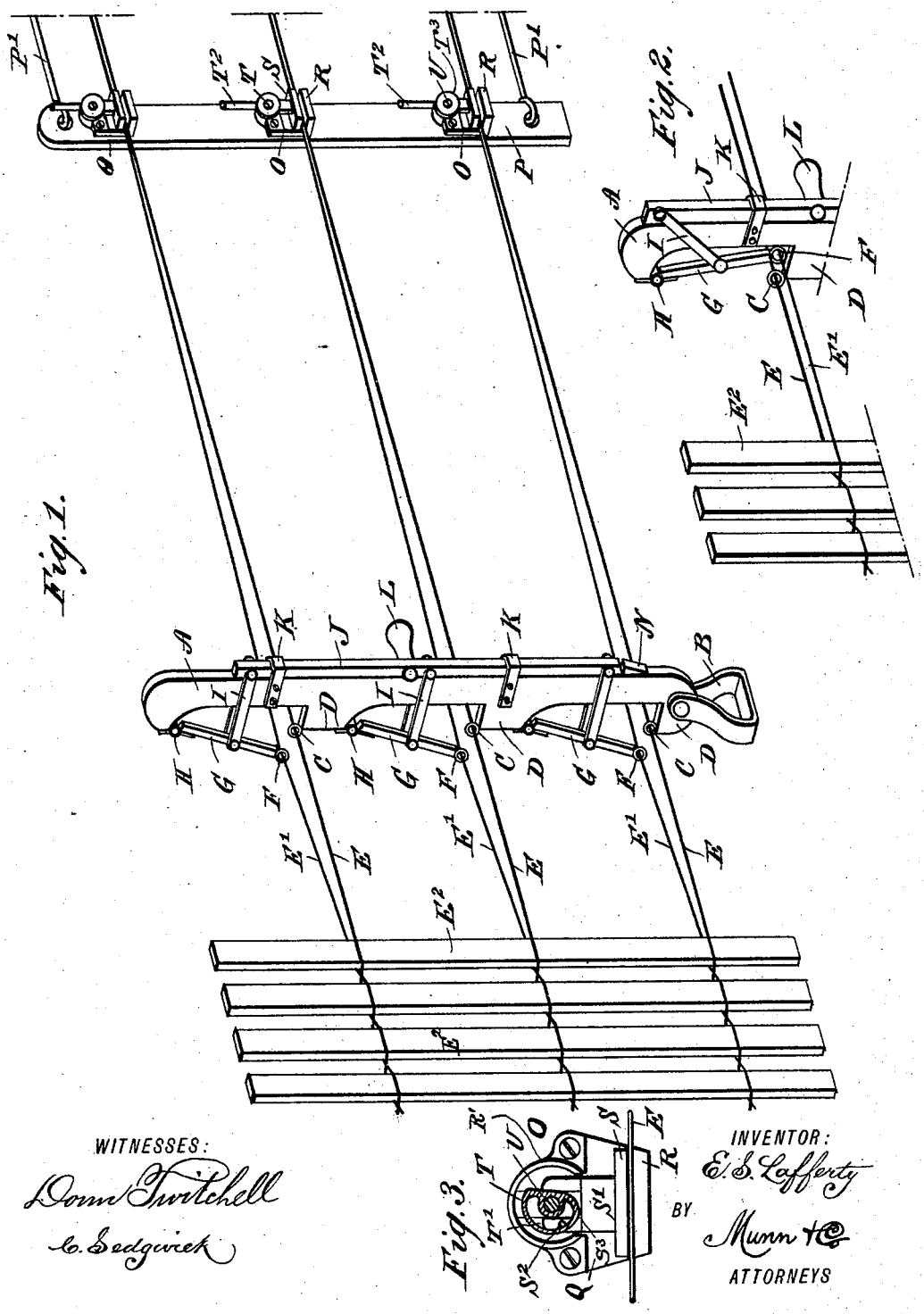

Fig. 1.



Fig. 2.



Fig. 3.

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ERASTUS S. LAFFERTY, OF INDIANA, ASSIGNOR TO L. H. SLAGLE AND JACOB SHEASLEY, BOTH OF FRANKLIN, PENNSYLVANIA.

## FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 455,627, dated July 7, 1891.

Application filed October 15, 1890. Serial No. 368,179. (No model.)

*To all whom it may concern:*

Be it known that I, ERASTUS S. LAFFERTY, of Indiana, in the county of Indiana and State of Pennsylvania, have invented a new and Improved Fence-Machine, of which the following is a full, clear, and exact description.

The invention relates to machines for wiring fence-pickets; and its object is to provide a new and improved fence-machine which is simple and durable in construction and in a very effective manner crosses the wires after the insertion of a picket, at the same time holding the wires under proper tension.

The invention consists in certain parts and details and combinations of the same, as will be described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement as applied. Fig. 2 is a similar view of the same in a different position; and Fig. 3 is an enlarged side elevation of one of the tension devices, the cam being shown in section.

The improved fence-machine is provided with a post A, carrying at its lower end a stirrup B, adapted to rest on the ground and to be engaged by the operator's foot, so as to conveniently hold the post A in the proper position. On one side of the post are arranged a number of eyes C, located one above the other and formed on lugs or projections D, extending to one side of the post. Through the eyes C are adapted to pass the wires E of one set, the other set of wires E′, for holding the pickets $E^2$, being adapted to pass through corresponding eyes F, fastened at the lower ends of the levers G, fulcrumed at H to the lower ends of the lugs D on the post A. The levers G in swinging transversely move across the eyes C, so that the set of wires E′ passing through the eyes F of the said levers are carried alternately from one side to the other side of the eyes C. As shown in Fig. 1, the levers G are in their outermost position, and, as illustrated in Fig. 2, the said levers are in their innermost position.

Each of the levers G is pivotally connected by a link I with a bar J, mounted to slide vertically in suitable bearings K, formed on the front side of the post A. A handle L projects from the said bar J and is taken hold of by the operator to move the bar J up and down, so as to swing the set of levers G in and out simultaneously. A stop N secured on the lower end of the post A, limits the downward movement of the bar J, and consequently the outward swinging movement of the several levers G. The inward movement of the latter is limited by the eyes F striking against the edge of the post.

In order to hold the several sets of wires E and E′ at a proper tension, tension devices O are provided and held on the board P, which is connected by ropes P′ with a post or other support. The sets of wires E and E′ passing from the reels to the fence-machine first pass through the tension devices O, which latter are preferably of the construction shown, each being provided with a back plate Q, secured to the board P, and having at its lower end a fixed jaw R, over which pass the two wires E and E′. On the top of the latter is adapted to press a movable jaw S, provided with an upwardly-projecting extension S′, forked at its upper end, and having a shoulder $S^3$ at the lower end of the forked portion engaged by a cam T, fulcrumed on a stud U, projecting from the back plate Q. The extension S′ also carries a pin $S^2$, engaging a cam-groove T′ of the cam T. The cam T is provided with a suitable handle $T^2$, taken hold of by the operator, so as to conveniently move the cam T to raise or lower the movable jaw S to clamp or release the wires E and E′.

In order to protect the cam and the extension S′, the back plate Q is provided with a circular flange R′ to inclose the cam, cut away at its lower portion to permit the extension S′ to slide vertically.

The cam is provided with a flange $T^3$ on its outer portion, which overlaps the outer edge of the flange, and thus closes the space between the flange and the working edge of the cam. The cam bears on the shoulder $S^3$ to force the jaw S down, and the slot T′ and pin $S^2$ raise the jaw according to the direction in which the handle $T^2$ is swung.

The operation is as follows: When the sets

of wires pass through the respective eyes C and F, and a picket $E^2$ has been inserted between the open wires, as illustrated in Fig. 1, and the operator moves the bar J upward by pushing on the handle L, then the several levers G swing inward to the position shown in Fig. 2, thus crossing the wire E′ over the wire E at the picket $E^2$. The operator then inserts another picket between the open wires, and then passes the handle L downward, so that the several levers G swing outward simultaneously, again crossing the wires E′ over the wires E in front of the picket last inserted. The above-described operation is then repeated. When the pickets have been inserted close up to the post A, then the latter is shifted toward the board P and the tension devices O. The latter hold the sets of wires at the proper tension, so that the pickets $E^2$ are securely bound in place by the swinging of the levers G, as above described.

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

1. In a fence-machine, the combination, with a post provided with a series of eyes located one above the other, of levers fulcrumed on the said post and each provided at its free end with an eye adapted to swing across the corresponding fixed eye, links pivotally connected with the said levers, and a bar mounted to slide vertically on the said post and connected with the said links, substantially as shown and described.

2. In a fence-machine, the combination, with a post provided with a series of eyes located one above the other, of levers fulcrumed on the said post and each provided at its free end with an eye adapted to swing across the corresponding fixed eye, links pivotally connected with the said levers, a bar mounted to slide vertically on the said post and connected with the said links, and a stop for limiting the movement of the said bar, substantially as shown and described.

3. In a fence-machine, the combination, with a post provided with a series of eyes located one above the other, of levers fulcrumed on the said post and each provided at its free end with an eye adapted to swing across the corresponding fixed eye, links pivotally connected with the said levers, a bar mounted to slide vertically on the said post and connected with the said links, and a stirrup held on the lower end of said post, substantially as shown and described.

4. In a fence-machine, a tension device comprising the board P, having on one face clamping devices, each comprising a face-plate Q, provided with a transverse fixed jaw R, a circular flange R′ above said jaw and cut away at its lower portion, a vertically-movable jaw S, having a vertical extension S′ projecting through said cut-away portion and provided with a shoulder $S^3$ and a pin $S^2$ above the shoulder, and a pivoted cam T, inclosed by the flange to engage said shoulder and provided with a cam-slot T′, receiving said pin, a flange $T^3$, and a handle $T^2$, substantially as set forth.

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