

(No Model.)

J. S. LOCKE.

MACHINE FOR MAKING WIRE AND SLAT FENCES.

No. 364,120.

Patented May 31, 1887.

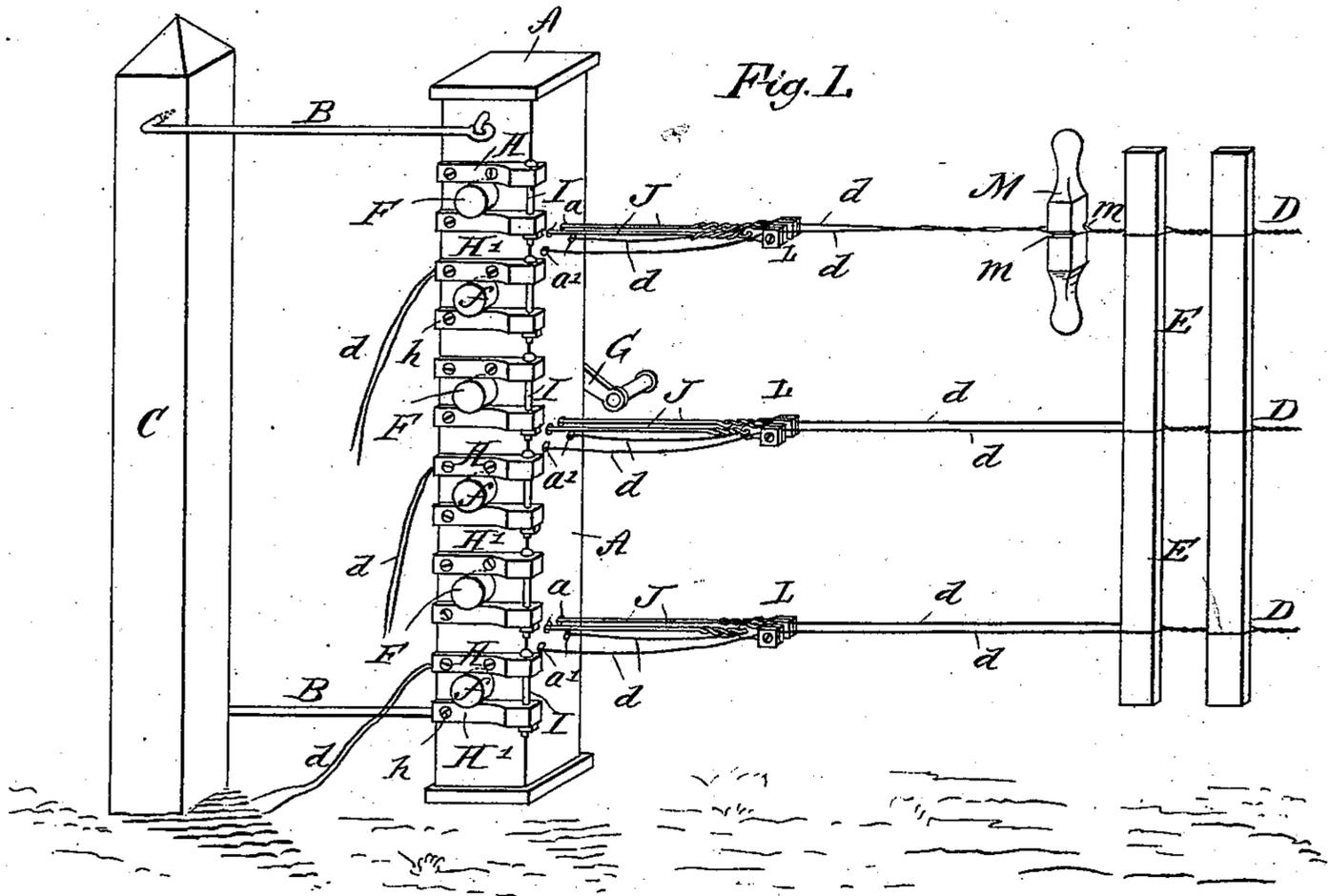


Fig. 2.

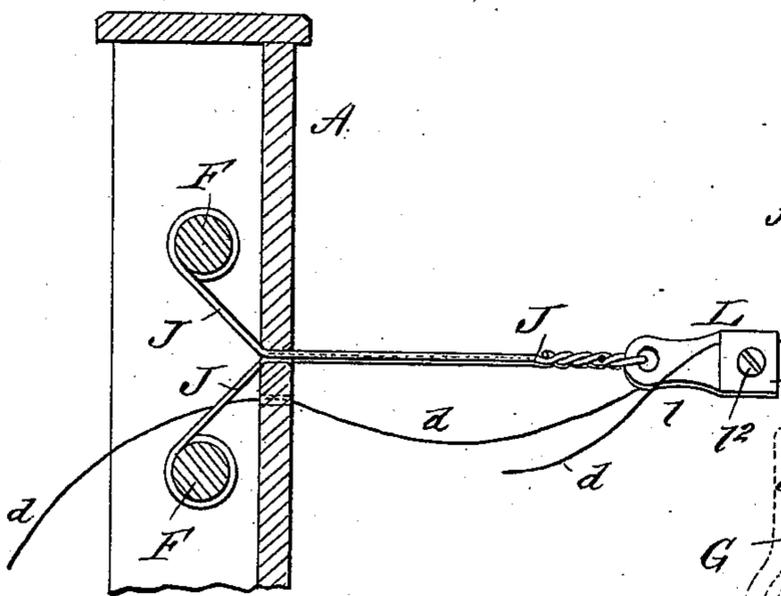


Fig. 3.

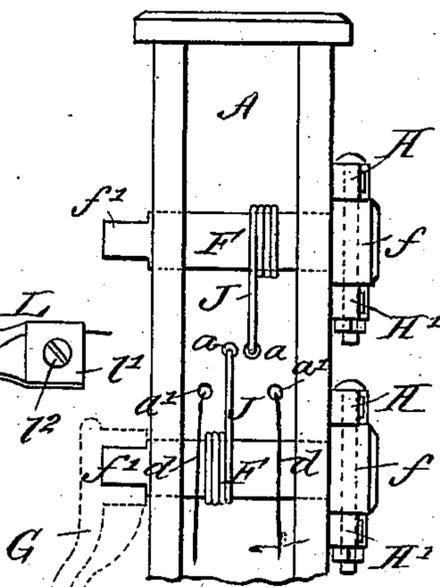


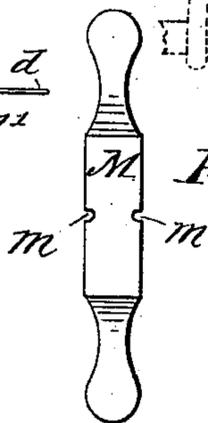
Fig. 4.



Fig. 5.



Fig. 6.



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JOSEPH S. LOCKE, OF SPARTANBURG, INDIANA.

MACHINE FOR MAKING WIRE-AND-SLAT FENCES.

SPECIFICATION forming part of Letters Patent No. 364,120, dated May 31, 1887.

Application filed September 17, 1886. Serial No. 213,813. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH S. LOCKE, of Spartanburg, in the county of Randolph and State of Indiana, have invented new and useful Improvements in Machines for Making Wire-and-Slat Fences, of which the following is a full, clear, and exact description.

My invention relates to wire-and-slat fences, and has for its object to provide an improved machine for making fences of this character.

The invention consists in certain novel features of construction and combinations of parts of the fence-making machine, all as hereinafter fully described and claimed.

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 my improved fence-machine as anchored to a post and as applied to use in making a fence. Fig. 2 is an enlarged detail vertical sectional elevation of the standard of the machine and a wire-tension device attached thereto. Fig. 3 is a view of the head part of the machine-standard at its outer side. Fig. 4 is a view of the head of the standard, taken at right angles to Fig. 3, or at the rear face of the standard; and Figs. 5 and 6 are detail views of the wire clamp and twister, respectively.

The post or standard A of the machine is provided with a couple of heavy hooks, B, which are to be driven into a ground-post, C, which may be one of the fence-posts, to which the wire-and-slat fencing D E is to be secured. These hooks B steady the standard A in position on the ground and anchor the standard securely in position; but any other devices may be used for this purpose.

In fences of this character three parallel lines of double or twisted wire stringers, D, with interwoven slats E, are considered amply strong, and I show the fencing made in this way.

In the standard A are journaled at right angles to the line of the finished fencing pairs of rollers or spools F F—one pair for each set of the strands *d d* of each of the twisted fence-wires D. One end, *f'*, of each of these spools F is shaped to receive a crank, G, by which the spool may be turned to put the strands of

the fence-wires in tension, as presently explained, and the other ends, *f*, of the spools F are preferably enlarged to serve as friction drums or heads.

At one side of the head *f* of each spool F there is fixed to the rear face of the standard A, preferably by stout bolts or screws, a bar, H, and at the other side of the spool-head there is pivoted at *h* to the face of the standard a lever, H', both these parts H H' being preferably formed alike, or enlarged at one end to receive a draw-bolt, I, which has a head, *i'*, at one end outside of the bar H, and a nut, *i*, outside of the opposing lever-bar H', and whereby, when the nut *i* is screwed up on the bolt, the lever H' will be caused to clamp the head *f* of the spool F between it and the bar H with any required degree of force to maintain a proper tension on the fence-wires while the slats are being woven into the wires, as hereinafter described.

To each of the spools F there is attached one end of a heavy wire or band, J, which passes thence outward to the forward side of the standard A, and to the outer end of each wire or band J there is attached a fence-wire clamp, L, made, preferably, of a metal plate or fixed jaw, *l*, to which a movable metal plate or jaw, *l'*, is held by a set-screw, *l''*. (See Fig. 5.) When a strand, *d*, of the fence-wire D is placed between the clamp-jaws *l l'* and the set-screw *l''* is tightened, the wire strand will be securely held by the clamp. There are a pair of these spools F and draw wires or bands J and clamps L for each complete or twisted fence-wire D, or one for each strand of wire D, and the wires J J, leading from each pair of spools F F, are passed through guide eyes or holes *a a*, made in the forward side of the standard A about in the same horizontal plane, and the strands *d d* of the fence-wire D pass through holes *a' a'* below the holes *a a*, all as most clearly shown in Figs. 1, 2, and 3 of the drawings.

The wire-twister consists of a bar, M, having transverse grooves *m m* at opposite faces to receive the two strands *d d* of the wire. The twister-bar is shown in operative position in Fig. 1 and in enlarged edge view in Fig. 6 of the drawings.

The operation is as follows: After the stand-

ard A is anchored in position, the strands *d d* of the wires D, when passed through or along the standard, will be twisted a few turns and made fast at their ends to a fence-post or other suitable support, and at proper distances apart to accommodate the length of the slats E, and the wire strands *d d* will be made fast in the pairs of clamps L L, one strand being held in each clamp, and the strands will then be drawn up to an even tension, and the twister-bar M will be placed between the two strands *d d* of each fence-wire D, and will be turned, after each successive slat E is laid between the strands, to bind the slats securely to the twisted wire, as will be understood from Fig. 1 of the drawings.

It is obvious that by tightening or loosening the nuts *i* of the tension bolts I the pressure of the tension bars and levers H H' on the spools F of the tension devices may be regulated to give any required stretch or tension to the strands of the fence-wires, and as each strand of each wire has its own tension device, the two strands of each wire may be drawn up to have practically the same tension. Consequently, when the two strands are twisted by the bar M, each strand will take equal part or half of the complete twist of the finished wire, and excessive strain will not be brought on one of the strands, as occurs when one strand is not drawn up to the same or as high tension as the other strand and the looser strand receives all the twist and is wound or wrapped around the straight or nearly straight tighter strand, and as is liable to occur when both strands of the wire are held in the same clamp connected to one wire stretching or tension device; hence I claim that making this class of fence by twisting wire strands brought to like tension by independent tension devices for each strand of the finished wire produces a stronger and more reliable fence, and one in which the rigid parallelism of the fence-slats woven into or with the wire may be more easily attained and maintained.

The fencing D E may be made along the line of the fence-posts, to which it is to be secured by staples or otherwise; or it may be made in lengths suitable for rolling up for shipment, as required.

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

1. In a machine for making wire-and-slat fences, the combination, with a standard, as at A, of pairs of rollers or spools F F, draw wires or bands J J on said spools, and clamps, as at L L, attached to bands J J, and said spools, bands, and clamps relatively arranged to allow the strands of the finished fence-wire to be put in tension independently, substantially as described, for the purposes set forth.

2. In a machine for making wire-and-slat fences, the combination, with a standard, as at A, of pairs of rollers or spools F F, fixed and movable bars H H', and a bolt, I, forming a tension-brake to hold the spools, draw wires or bands, J J on said spools, clamps, as at L L, attached to said bands, and said spools, brakes, bands, and clamps relatively arranged to put the strands of the finished fence-wire in tension independently, substantially as described, for the purposes set forth.

3. In combination, a standard, A, pairs of rollers or spools F F, journaled thereon, draw wires or bands J J on said spools, clamps, as at L L, attached to bands J J, and said spools, bands, and clamps relatively arranged to put the strands of the finished fence-wire in tension independently, tension devices holding the spools F, for controlling the tension of the wire strands, and a twister-bar, M, having opposite edge notches *m m* engaging the strands of the wire to twist them between and around the slats, substantially as described, for the purposes set forth.

JOSEPH S. LOCKE.

Witnesses:

JNO. W. HILL,
JNO. W. TAYLOR.