

UNITED STATES PATENT OFFICE.

JAMES ALONZO MINNICK, OF ELWOOD, INDIANA.

FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 358,054, dated February 22, 1887.

Application filed November 20, 1886. Serial No. 219,506. (No model.)

To all whom it may concern:

Be it known that I, JAMES ALONZO MINNICK, a citizen of the United States, residing at Elwood, in the county of Madison and State of Indiana, have invented new and useful Improvements in Fence-Machines, of which the following is a specification.

My invention relates to improvements in tension devices for machines for making picket fences; and it consists of the peculiar combination and novel construction and arrangement of the various parts for service, substantially as hereinafter fully described, and particularly pointed out in the claims.

The invention is especially designed to be used in connection with the machine for making picket fences shown and described in a prior patent, No. 351,646, issued to me on the 26th day of October, 1886; and it has for its object to provide an improved tension device for each of the wires of the fence, so that the strain or pressure exerted on the wires shall keep them from becoming slackened between the pickets and the twisting mechanism.

I provide an improved tension device which serves to keep the wires separated from one another and in their proper positions, so that they will not become twisted or entangled together, and the tension devices are capable of a limited yielding movement, to permit an uneven or irregular portion of the wire to pass freely therethrough and still be held under proper strain.

In the accompanying drawings, which illustrate a tension device for picket-fence-making machines embodying my improvements, Figure 1 is a perspective view showing my invention and a portion of a fence. Fig. 2 is a vertical central sectional view through the tension devices, on the line *x x* of Fig. 1. Fig. 3 is an enlarged transverse horizontal sectional view on the line *y y* of Fig. 2. Fig. 4 is a detached perspective view of a portion of the tension-bar, showing one of the tension-blocks thrown out. Fig. 5 is a detail view showing more clearly the attachment of the straining-cord.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the vertical stand-

ard of a tension device of my invention, which is provided with a series of three or more horizontal threaded pins, B, on each side. These pins or bolts are provided with heads *b* at one end, which are fitted and secured in the vertical sides of the standard A so as to lie flush therewith and be thereby concealed from view, and the pins on each side of the said standard correspond in number with the number of strands of wires employed. Each two of the threaded pins are arranged in substantially the same horizontal plane, and they are arranged out of line with each other, preferably so that the heads thereof can be readily secured in the standard.

C C' designate a pair of guide-pins, a pair of these pins being provided for each of the threaded pins B. The guide-pin C is arranged on one side of its threaded pin B, and the other pin, C', is arranged on the opposite side of the said pin B. The said guide-pins are arranged in substantially the same horizontal plane, near the vertical side edges of the standard, and they are rigidly affixed or secured in place in the said standard.

D designates the pressure friction-block, one of which is provided for each of the threaded pins B and its fixed guide-pins C C'. This pressure-block is preferably made flat and rectangular in form, and at its middle it is provided with a transverse opening, *d*, through which the outer end of the fixed threaded pin B passes. The friction-block is adapted to bear against one of the vertical sides of the upright or standard A, and in the face of the said block which opposes or bears against one side of the standard is formed two recesses or notches, *d'*, which are arranged on opposite sides of the central opening, *d*, therein, and are adapted to receive the fixed guide-pins C C', so as to guide the block when it is adjusted and to cause it to occupy the same relative position to the standard at all times.

A nut, E, is fitted on the outer extremity of the threaded pin B to clamp the friction-block to the standard, and between this nut and the block is interposed a compressible washer, *e*, which is subject to compression between the block and the nut when any unevenness in the wire passes between the fric-

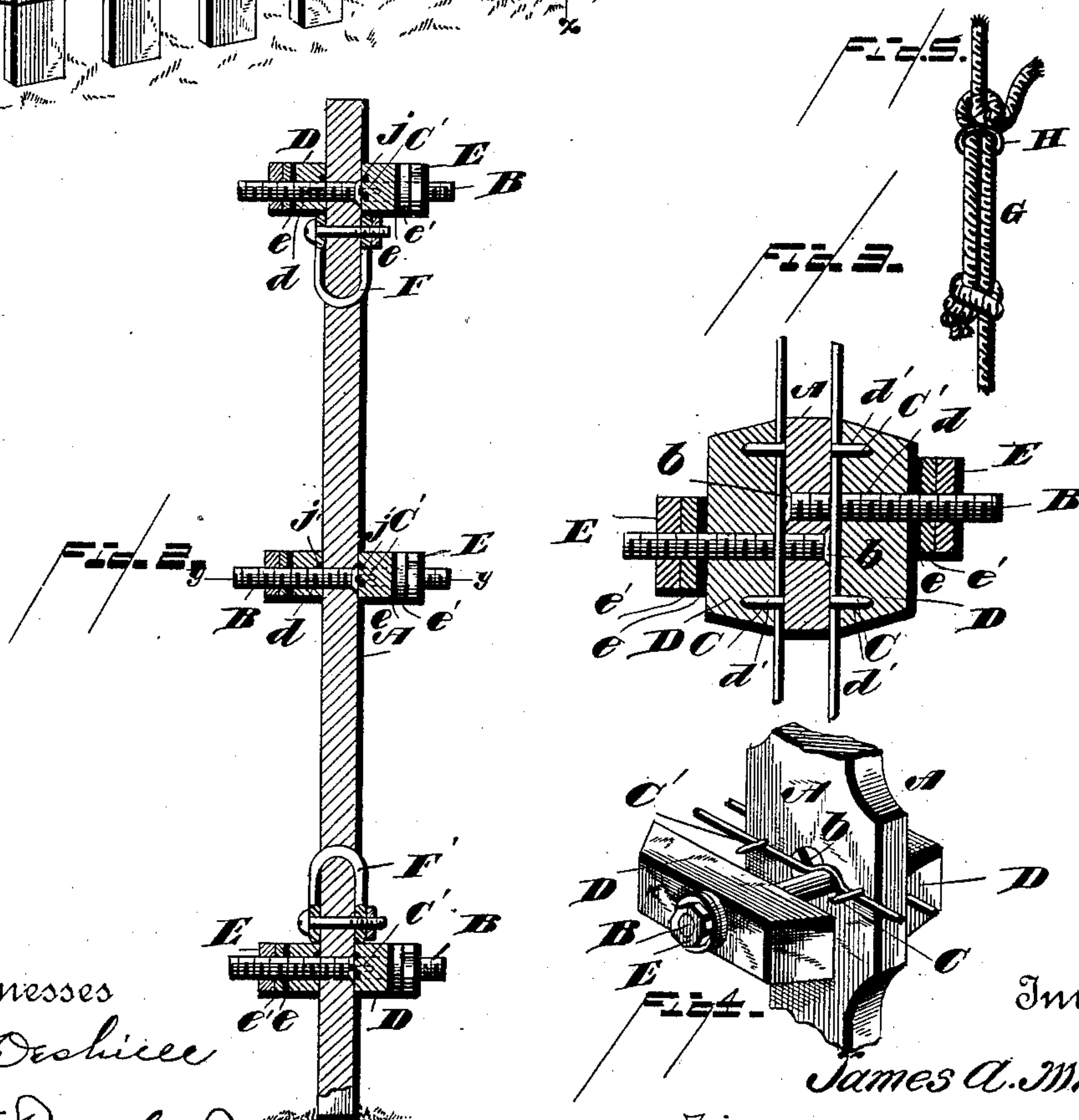
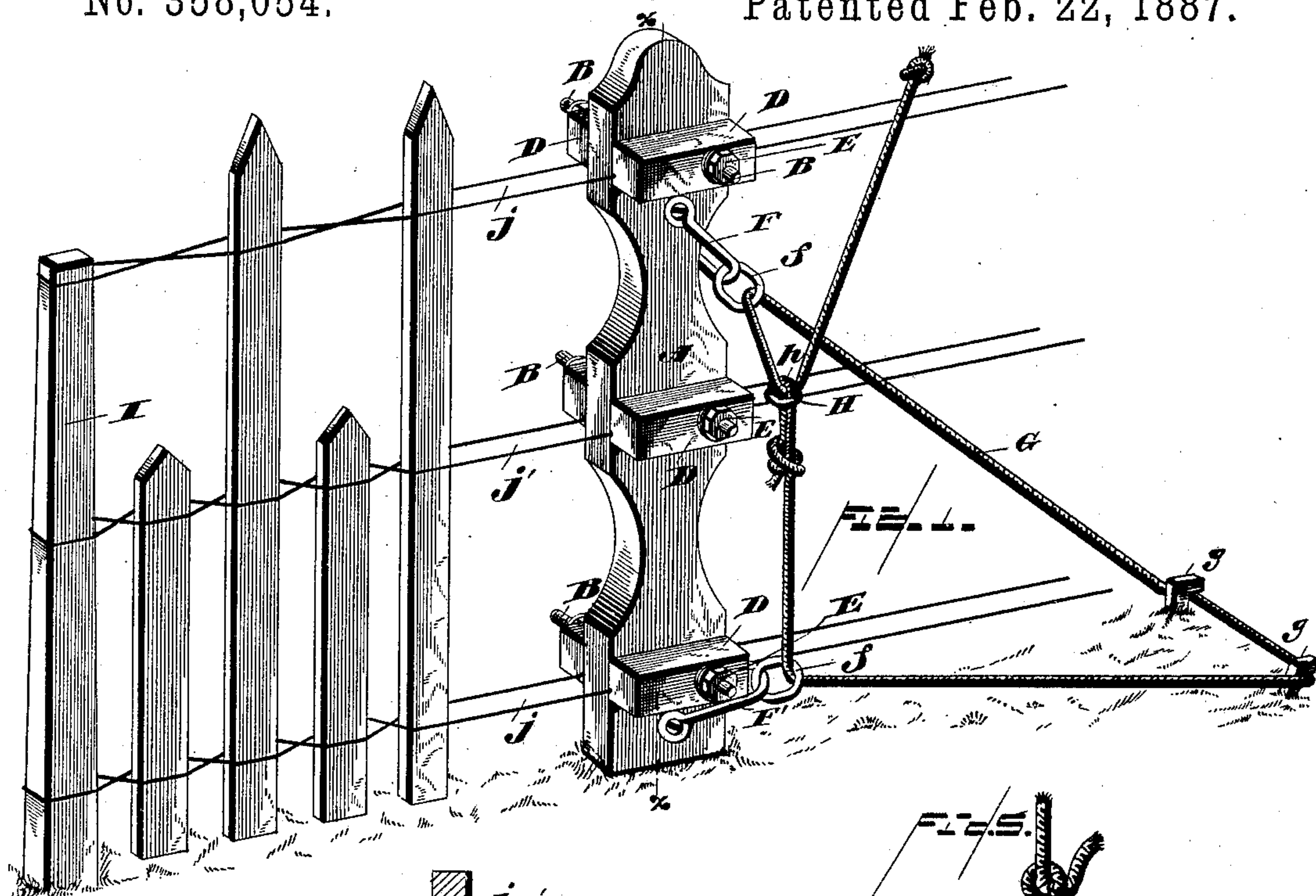
(No Model.)

J. A. MINNICK.

FENCE MACHINE.

No. 358,054.

Patented Feb. 22, 1887.



Witnesses
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3. The combination, with the standard carrying the tension devices for the wires, of the loops connected to the standard near the ends thereof, the fixed stakes, and the straining-
5 cord passed around the stakes and through the loops, one end of the cord having a loop and a sliding ring fitted over the loop and the other end of the cord passing through the said loop, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES ALONZO MINNICK.

Witnesses:

FRANK W. CALLAWAY,
ALLEN B. WILSON.