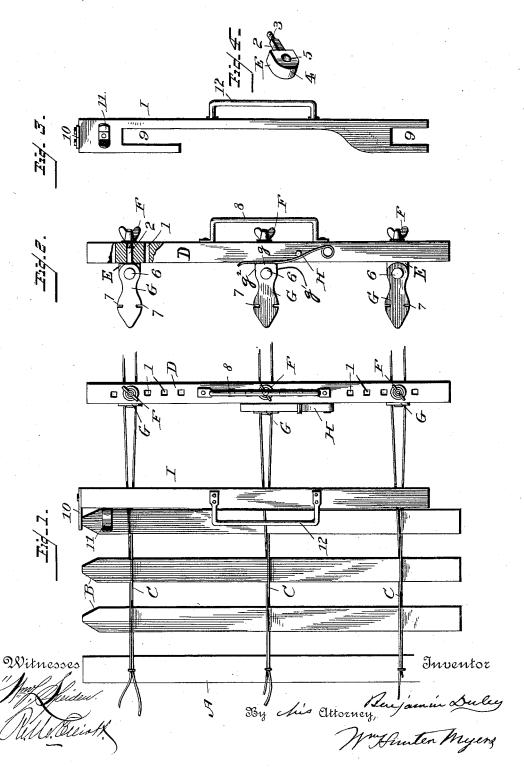
## B. DULEY. FENCE MAKING MACHINE.

No. 454,260.

Patented June 16, 1891.



## UNITED STATES PATENT OFFICE.

BENJAMIN DULEY, OF HUNTINGTON, INDIANA, ASSIGNOR OF TWO-THIRDS TO WILLIAM H. SMITH AND ELMER E. STULTS, BOTH OF SAME PLACE.

## FENCE-MAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 454,260, dated June 16, 1891.

Application filed March 3, 1891. Serial No. 383,536. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN DULEY, a citizen of the United States, residing at Huntington, in the county of Huntington and 5 State of Indiana, have invented certain new and useful Improvements in Fence-Making Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in 10 the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of fencemaking machines in which there is a bar provided with a series of pivoted wire-crossing fingers adapted by a vertical reciprocatory movement of the said bar to cause parallel pairs of wires to cross between palings or slats

inserted between the said wires.

The invention will first be described in connection with the accompanying drawings,

and then pointed out in the claim.

In the drawings, Figure 1 is a side eleva-tion of a section of fencing, showing my im-proved fence-making machine in operative connection with the parallel wires of the fence. Fig. 2 is a side elevation of the ma-30 chine removed from the fence, a portion of the bar being broken away to show the manner of securing the wire-crossing fingers in place. Fig. 3 is an elevation of a convenient form of spacing-bar. Fig. 4 is a perspective 35 detail view of one of the studs to which the wire-crossing fingers are pivoted.

Referring to the drawings, A designates a post, B a series of palings or slats, and C pairs of parallel wires secured to the said 40 post, all of which parts are of the ordinary

construction.

D designates a bar through which extends a series of openings 1, preferably rectangular in form, in which openings fit the squared shanks 2 of a series of studs E. The ends of the shanks are screw-threaded, as at 3, on which threaded portions fit thumb-nuts F, by means of which the studs are securely clamped in place. The enlarged ends 4 of the studs

are passed pins 6 for pivoting the wire-crossing fingers G to the studs. These fingers, which in this instance are three in number, are provided at their free ends with diametrically-opposite slots or recesses 7, in which 55 when the machine is in operation the wires C rest. The bar D is provided with an operat-

ing-handle 8.

In order that the fingers may be automatically held in a horizontal position to permit 60 them to be conveniently engaged by the wires, and also in a vertical position to overcome the tendency of the crossed wires to straighten out before another paling is inserted, I form the pivotal end of one of them, preferably the 65 central one, with three flat faces, (lettered, respectively,  $g g' g^2$ ,) and to the bar I secure edgewise one end of a leaf-spring H, the free end of which engages with the aforesaid flat faces of the finger with a force sufficient to 72 hold it and, through their connection with the bar, the other fingers in the desired position.

I designates a spacing-bar, the upper and the lower portions of which are bifurcated, as 75 at 9, so as to admit of the bar being placed over the wires C. The upper end of the bar is provided with an arm 10, designed to rest upon the top of the paling previously secured in place, whereby the said bar is held in ver- 80 tical adjustment, a spring-clamp 11, secured to the side of the bar, serving to hold the same in adjustment against lateral displacement. A handle 12 is also provided to assist

in handling the bar.

In operation the parallel series of wires are firmly secured to two posts (one only being shown in the drawings) in the ordinary manner. The spacing-bar is then placed against one of the posts and a paling is inserted in position between the wires. The wire-crossing fingers, which have previously been placed in position between the wires, are then given a half-turn by reciprocating the bar Deither up or down, as the case may be, thus securing 95 the first paling in place. The spacing-bar is then removed and is placed against the paling just secured, another paling is inserted, and the bar is reciprocated in the opposite 50 are provided with apertures 5, through which | direction, thereby securing the second paling 100

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in place, the same operation being repeated until the desired length of the fence is completed.

By means of the openings 1 in the bar D the wire-crossing fingers may be adjusted so as to admit of the wires being arranged at regular or irregular distances apart, or of three or more series of wires being crossed at one time, as, if desired, additional fingers may readily be secured in place to meet any requirement.

Having thus fully described my invention, I claim as new and desire to secure by Let-

ters Patent—

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In a fence-making machine, the combination, with a bar, of a series of studs adjustably

secured in said bar, a series of wire-crossing fingers, each having diametrically-opposite slots in one end and pivoted at its other end to one of the studs, one of said fingers having 20 a series of flat faces on its pivotal end, and a leaf-spring secured at one end to the bar and adapted to bear at its free end against either of said faces on the finger, for the purpose set forth.

In testimony whereof I affix my signature in

presence of two witnesses.

BENJAMIN DULEY.

Witnesses:
WILLIAM H. SMITH,
ELMER E. STULTS.