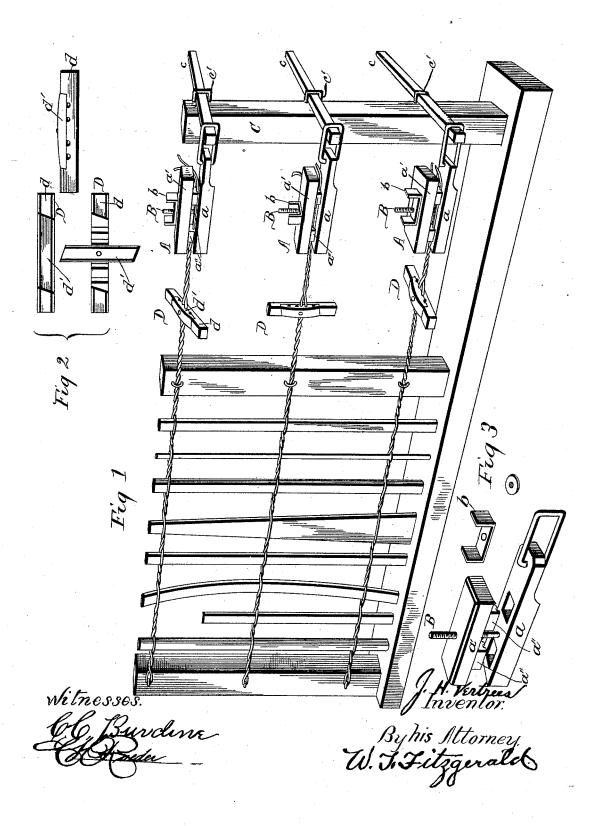
(No Model.)

## J. H. VERTREES. FENCE MACHINE.

No. 422,267.

Patented Feb. 25, 1890.



## UNITED STATES PATENT OFFICE.

JOSEPH H. VERTREES, OF LA PRAIRIE, ILLINOIS.

## FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 422,267, dated February 25, 1890.

Application filed November 29, 1889. Serial No. 331,903. (No model.)

To all whom it may concern:

Be it known that I, Joseph H. Vertrees, a citizen of the United States, residing at La Prairie, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Fence-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the

My invention relates to certain new and useful features in the construction of a fence-weaving machine, the object being to enable the operator to give varying degrees of tension to the wires, and also to twist each strand of double wire as many times between each paling as may be preferred. This result I secure by means of the following described device, reference being had to the accompanying drawings, in which similar letters of reference designate corresponding parts in all the views.

Figure 1 is a perspective view of my dez5 vice as applied to use. Fig. 2 is a detail view of the shuttles open and closed, while Fig. 3 shows the parts of the clutch separated from each other.

Referring to the several parts of my in-30 vention, A is the clutch, consisting of the base a, provided with two or more rectangular or cylindrical holes intended to receive corresponding projections on the clamp a'. Such projections a'' a'' are provided at their 35 free ends with holes or grooves intended to receive the wires, as shown. The clamp a' is placed in position above the base a, so that the projections a'' a'' will enter the holes provided in said base, and may be rigidly se-40 cured in this position by the screw B, passing upward from the base through the clamp a' and secured by the lever-nut b, as shown, when any desired degree of pressure may be brought to bear upon the wires, thereby seto curing the same. This clutch in practice
will be secured to the tension-post, and any desired means may be employed to secure them. I prefer, however, to use levers, which can be used in the usual manner for giving 50 tension to the wires, and have indicated such an arrangement in the drawings, the ends of the levers being secured against retrograde movement by any suitable means.

Referring now to the twisting device or shuttle D, attention is called to the drawings, 55 where it will be observed that said shuttle consists of the body proper d, properly cut away upon one side, so as to receive the clamp d', the ends of which are properly beveled and inclined, so as to fill the recess pro- 60 vided in said body, to which it is pivotally attached at its middle by means of a bolt or rivet, so that said clamp may be brought to a position at right angles with the body. The body d is further provided with transverse 65 grooves of a proper depth to receive the wires to be twisted, which are secured therein by the clamp d', as shown. As each strand, composed of two wires is provided with one shuttle, it will be observed that all the strands 70 may be twisted simultaneously or independently, thus enabling the operator to take up slack in the wires when palings having ends of unequal size are used, or it will also permit the use of an alternate short paling when 75 so desired. Believing the advantages of my invention are sufficiently obvious, further description is deemed unnecessary.

Having thus described my invention, what I claim as new, and desire to secure by Letters 80

Patent, is—

1. As an attachment for fence-weaving machines, the shuttle D, consisting of the body d and clamp d', pivotally secured thereto and embedded in the side of the body, while 85 such body is further provided with transverse grooves for receiving the wires, as set forth.

2. As an attachment for fence-weaving machines, the clutch consisting of the base 90 provided with a series of holes or openings in its upper side, the clamp provided on its under side with depending projections having grooves in their lower ends and adapted to enter the openings in the body, the screw 95 secured in the body and passing upward through the clamp, and the lever-nut mounted on said screw above the clamp, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH H. VERTREES.

Witnesses:
I. A. McClellan,
Ed. J. Drake.