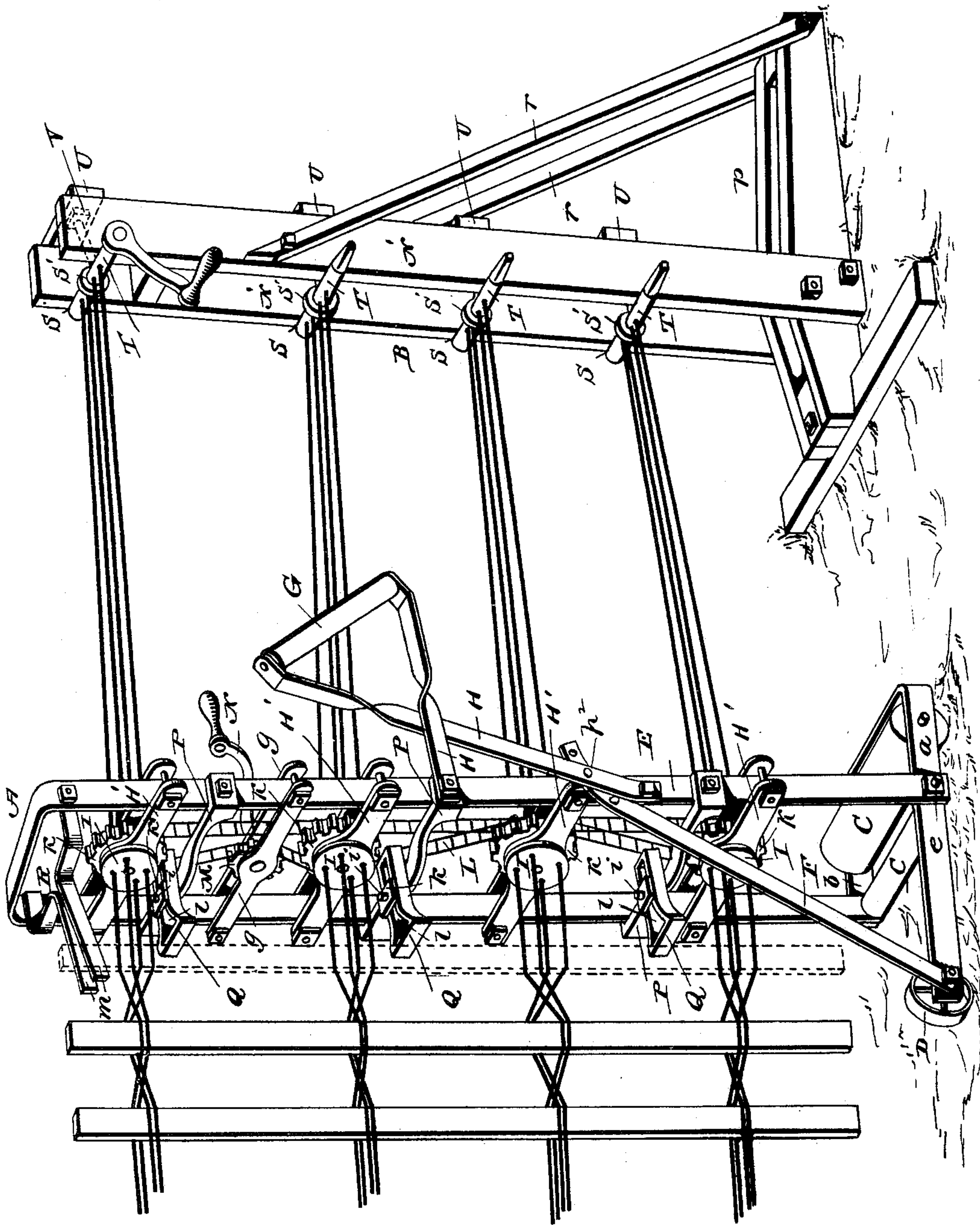


(No Model.)

G. J. CLINE.  
FENCE MACHINE.

No. 407,061.

Patented July 16, 1889.



Witnesses

*J. R. Deshille*  
*J. O. Gumpie*

Inventor  
*George J. Cline.*

By his Attorneys

*Smith & Shuey*



# UNITED STATES PATENT OFFICE.

GEORGE J. CLINE, OF GOSHEN, INDIANA.

## FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 407,061, dated July 16, 1889.

Application filed April 26, 1889. Serial No. 308,693. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE J. CLINE, a citizen of the United States, residing at Goshen, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Fence-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 the art to which it appertains to make and use the same.

This invention has relation to machines for wiring pales or pickets such as used in the manufacture of picket fences, and is designed as an improvement upon the devices shown and described in the Letters Patent granted to me February 26, 1889, No. 398,377.

The novelty will be fully understood from the following description and claims, taken in connection with the annexed drawing, in which the figure is a perspective view of my improved machine, showing the same in an operative position, together with the improved tension device.

Referring by letter to the said drawing, A indicates the twisting-machine, and B the tension device.

The twisting-machine A is composed of an upright frame of a loop form, and may be made from metal or other suitable material. This frame is mounted on a roller-base, which is of a form substantially as shown, having branches *a b*, in which are journaled rollers C, the branch *a* being of greater length than the branch *b* and carries at its outer end a roller D. This roller-base frame is pivotally connected with the upright frame E, as shown at *e*, so that they may be moved with respect to each other to accommodate the frame for the unevenness of the ground.

F indicates a brace-arm, which is pivoted at its forward end to the outer end of the arm *a* of the roller-frame, and its opposite end, which extends within convenient reach of the operator, is adapted to be connected with the upright frame E of the twisting-machine. This brace-arm F is curved at its upper part and perforated to receive a locking-pin *p*<sup>2</sup>, which attaches the arm to the said upright frame E, and admits, by a removal of the said pin, the proper adjustment of the parts to

maintain the desired position of the frame E with respect to the surface of the ground upon which the twister-carriage is supported. By this construction it will be seen that the twisting-machine or the upright frame thereof may be always held in a vertical position and the roller-base frame adjusted to accommodate the same. This upright frame is also provided with a handle G, which is connected by means of braces H, so that a convenient grasp for the operator may be had while operating the twisters, and by which the machine may be moved.

The twisting-machine may have its frame provided with cross-bars H' and twisting-heads I, secured or supported thereon similar to the cross-bars and spools of my patent above referred to. The spools have sprocket-wheels K secured to them, over which passes a sprocket-chain L.

*g* indicates two parallel cross-bars secured to the upright frame A in a manner similar to the cross-bars H', and in these cross-bars *g* is journaled a sprocket-wheel M, the shaft of which is adapted to receive a crank-handle N, and the said sprocket-wheel is designed to receive and impart motion to the endless sprocket-chain L.

Secured to the upright frame E, and at suitable altitudes, are cross-bars P. These cross-bars extend across the forward side of the twisting-machine, and are provided with apertures or means for receiving a bolt *i*, or the like, carrying a nut *k*'.

Q indicates picket-bumpers. These bumpers are adapted to be adjusted on the cross-bars P, secured to the main frame, and may be of a loop form or slotted longitudinally, as shown at *l*, for the passage of the bolt which secures them to the cross-bars P.

At the top of the main frame is a spring-catch and picket-evenner R. This catch and evenner comprise two spring branches *m*, which are of metal or other suitable material, having one end secured to the main frame, and their opposite ends terminating in jaws or clamps and arranged with a flaring entrance, whereby the pickets may be conveniently inserted and held in position.

The tension-machine B is composed of two



parallel uprights N', secured at their lower ends to the base *p* and braced in position by strut-bars *r*. The front edges of these upright bars N' are provided with notched bearings S 5 for the spindles T or bobbins, which are adapted to receive the fence-wires, as shown. These spindles are connected and held in their bearings by means of threaded eyebolts S', a cross-bar U on the rear side of the uprights 10 being adapted to receive the said bolts, and a nut V, employed for adjusting the same.

It will be seen by reference to the drawing that the spindles, key-posts, or bobbins T pass through the eyes of the bolts S', in which eyes 15 they are allowed to rotate, and that these spindles T, to which the fence-wires are attached, are held in their notched bearings S in the upright bars N' by means of the nuts V, which can be adjusted for fixing the spin- 20 dles when desired.

Having described my invention, what I claim is—

1. The combination, with the tension-device frame having notched bearings, of the bob- 25 bins arranged in said bearings, the eyebolts holding the bobbins in their seats, the cross-bars secured to the upright frame and receiving the threaded eyebolts, and the nuts on said bolts for adjusting the same, substan- 30 tially as specified.

2. The combination, with the twisting-machine, of twisting devices applied to trans-

verse bars secured to an inverted-U-shaped frame, the sprocket-wheel also secured to transverse bars of said frame, the adjustable 35 bumpers arranged in the vertical line of the twisters, a roller-base frame provided with long cylindrical rollers C and a guide-roller D, said base-frame being pivoted to the frame A, the brace-arm F, pivoted to the front arm 40 *e* of the base-frame and adjustably attached to frame A, and the handle G, secured to the latter by bars H, all as specified.

3. The combination, in a wood-and-wire-fence-making machine, of wire-twisting de- 45 vices, longitudinally-adjustable bumpers Q, vertically-adjustable supports H' therefor, and a main frame A, substantially as described.

4. The combination, with the frame A, bearing fence-wire twisters, and fence-panel bump- 50 ers, of a supporting-carriage to which said frame is pivoted, composed of the frame *a e b*, the long roller C, and a front guiding-wheel D, the said frame and carriage provided with 55 a bracing-arm F, pivoted to the latter and adjustably attached to the former, as specified.

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

GEORGE J. CLINE.

Witnesses:

HARRY C. WILSON,  
H. D. WILSON.