

No. 681,767.

Patented Sept. 3, 1901.

I. WOMACK.
FENCE MACHINE.

(Application filed Apr. 23, 1901.)

(No Model.)

Fig. I.

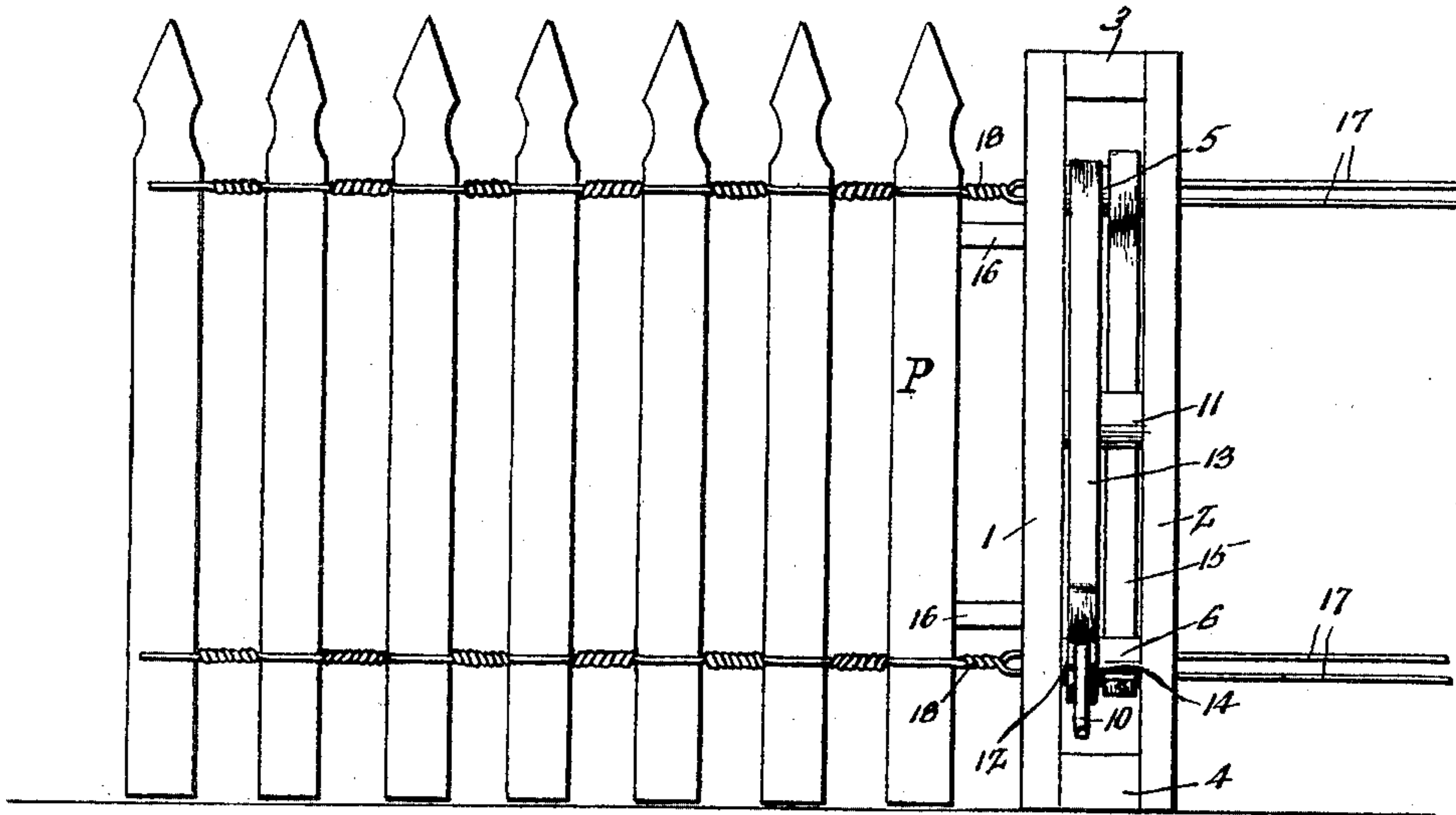


Fig. II.

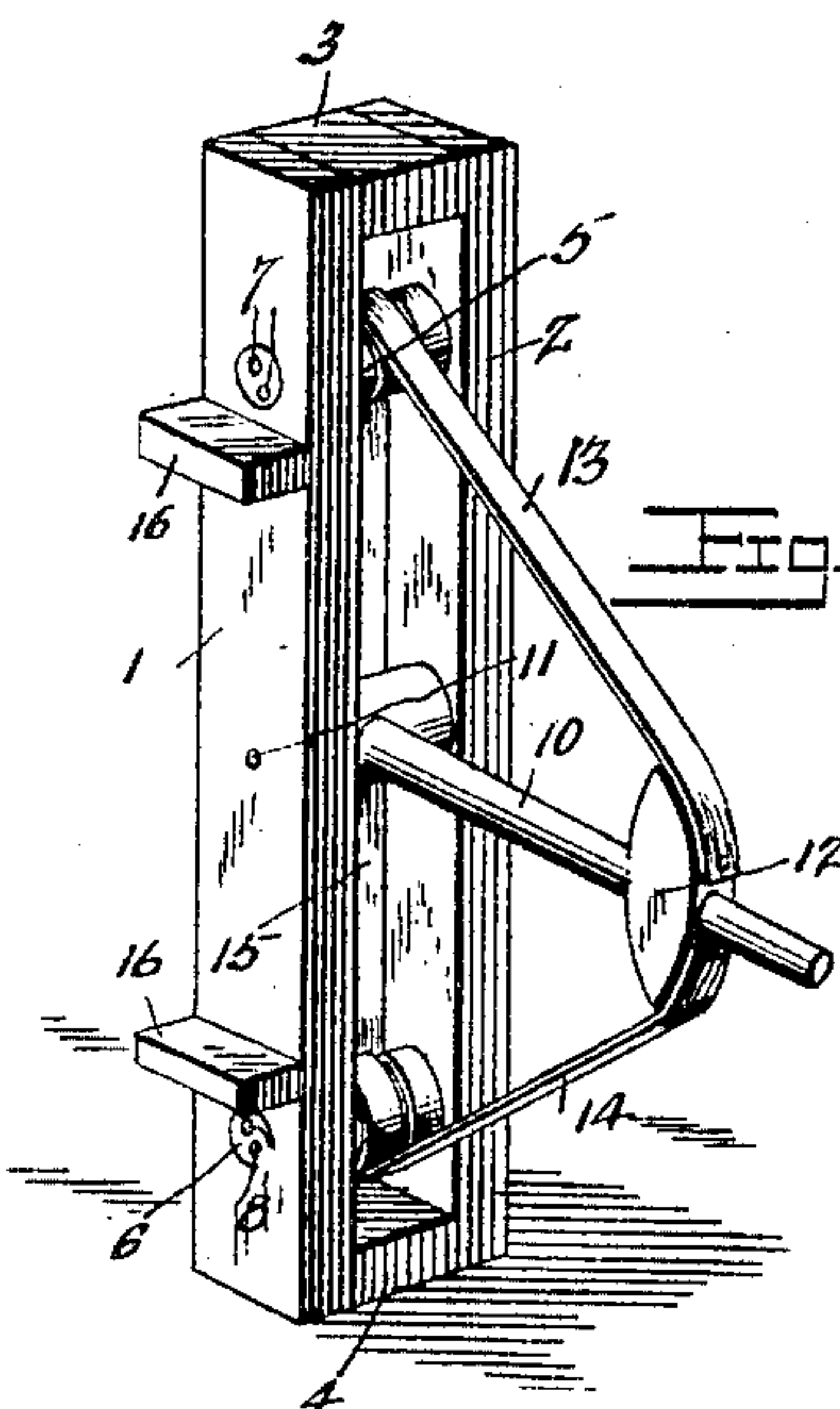


Fig. III.

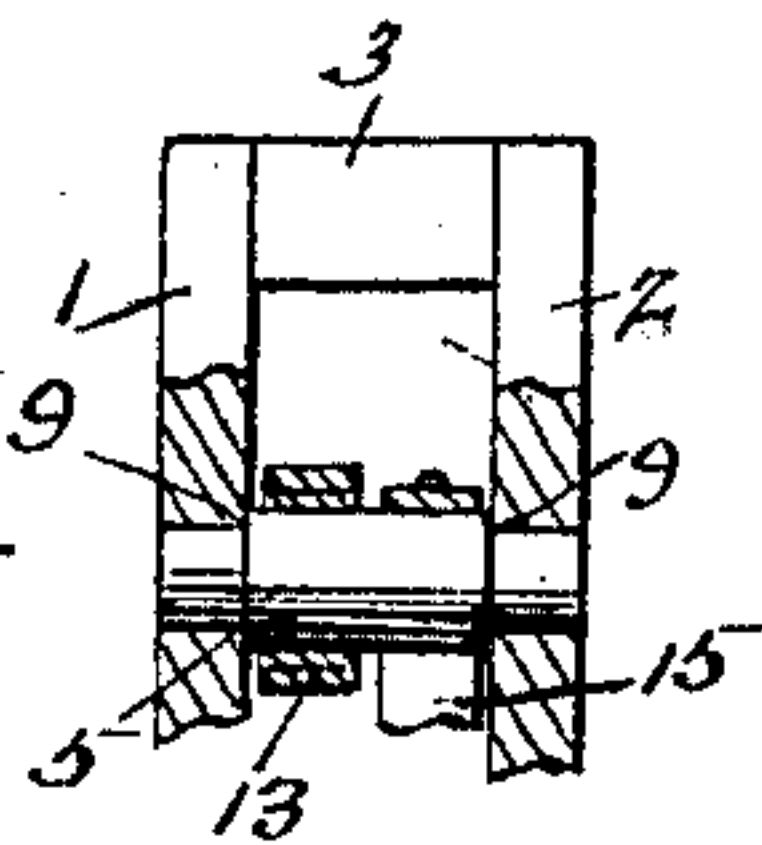
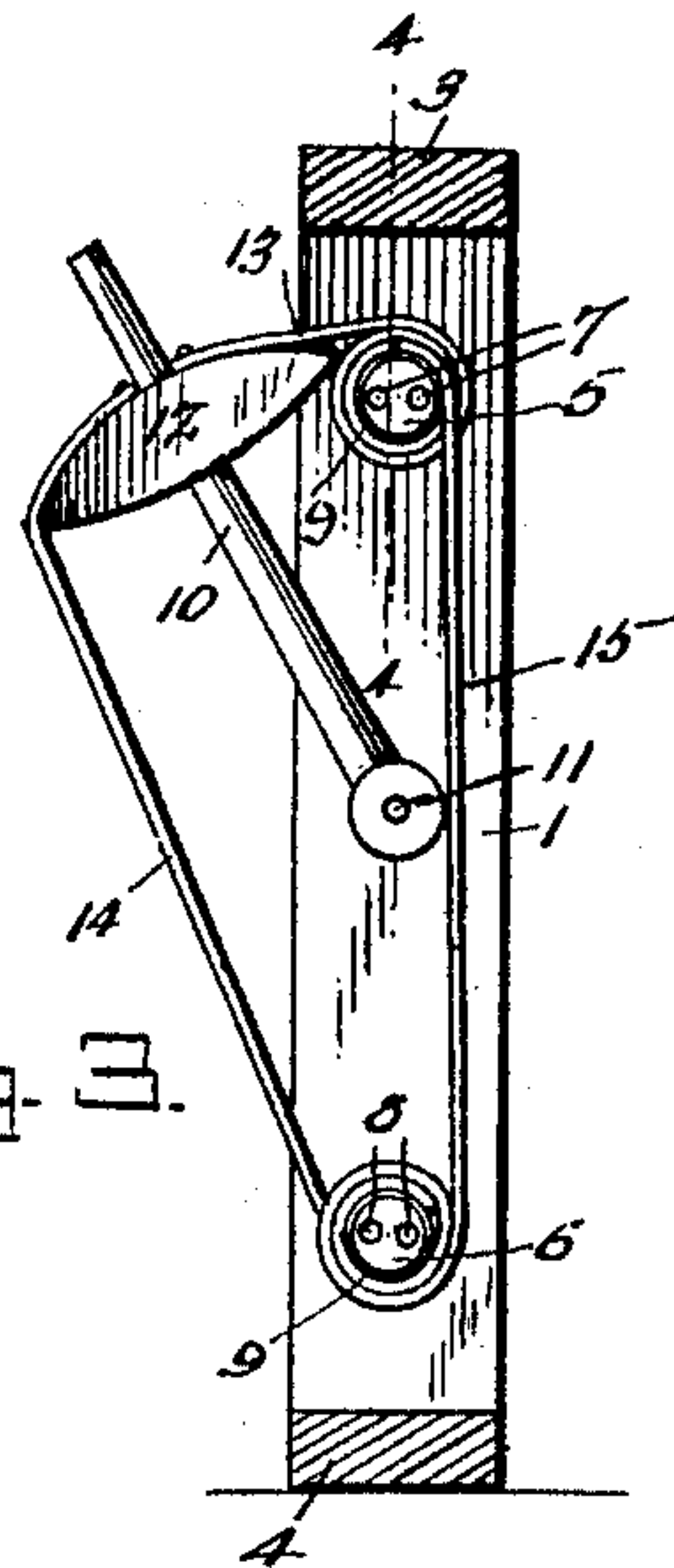


Fig. IV.



Witnesses
F. E. Alden.
H. J. Shepard.

I. Womack, Inventor.
by *Chas. H. Snow*
Attorneys

UNITED STATES PATENT OFFICE.

ISAAC WOMACK, OF EMMETT, IDAHO.

FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 681,767, dated September 3, 1901.

Application filed April 23, 1901. Serial No. 57,127. (No model.)

To all whom it may concern:

Be it known that I, ISAAC WOMACK, a citizen of the United States, residing at Emmett, in the county of Canyon and State of Idaho, have invented a new and useful Fence-Machine, of which the following is a specification.

This invention relates to fence-machines, and has for its object to provide an improved device for twisting wire strands about pickets and to arrange the device for giving a powerful operation thereto for quickly and tightly twisting the wires about the pickets. It is furthermore designed to facilitate the operation of the device, to arrange the parts in compact form within the frame of the machine, so as to be protected, and to provide for accurately spacing the machine from the adjacent picket, so as to maintain a uniform length of twist between the pickets, and thereby form a neat and attractive fence.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is an elevation of a portion of a picket fence having the present machine applied in operative position to twist the strand-wires upon the pickets. Fig. 2 is a detail perspective view of the machine removed from the fence. Fig. 3 is a side elevation of the machine with one of the sides of the frame removed. Fig. 4 is a detail sectional view taken on the line 4-4 of Fig. 3.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

Referring at first more particularly to Figs. 1, 2, and 3 of the drawings, it will be seen that the present machine has a substantially rectangular frame, comprising opposite upright side pieces or standards 1 and 2, which are connected by the opposite terminal filling-blocks or cross-bars 3 and 4, which lie flush with the respective ends of the side pieces, so that both ends of the frame are free from

projections, and thereby may serve as the base of the machine to rest upon the ground during the operation of the machine. The upper and lower end portions of the side pieces are provided with corresponding circular openings for the reception of the opposite ends of the respective upper and lower rotatable cylindrical wire-twisters 5 and 6, which are provided, respectively, with pairs of parallel longitudinal perforations 7 and 8 for the reception of the strand-wires, as will be hereinafter explained. As shown in Fig. 4, it will be seen that the terminals of each wire-twister are reduced in diameter to form journal portions for engagement with the bearing-openings in the sides of the frames, the annular shoulders 9 forming stops for engagement with the inner faces of the respective side pieces, so as to prevent looseness of the twisters in an endwise direction. For rotating the twisters simultaneously in the same direction there is provided a lever 10, which has its inner end located between the sides of the frame substantially midway between the twisters and fulcrumed upon the frame, as indicated at 11. Adjacent to the outer end of the lever there is provided a cross-head 12, and to the outer faces of the respective end portions of this head there are connected the flexible strap elements 13 and 14, which have their opposite ends secured to and wrapped upon the twisters 5 and 6, respectively. The upper flexible element passes over the upper side of the upper twister, and the lower flexible element passes under the lower side of the lower twister, so that the upper twister may be rotated by a downward movement of the lever and the lower twister by an upward movement of said lever. In order that both twisters may be rotated simultaneously in the same direction, there is provided a connecting flexible cord or belt 15, which is applied to the rear sides of the twisters, its upper end being wrapped over the top of the upper twister and its lower end wrapped under the lower twister. By this arrangement one end of the connecting-belt is being wound upon the adjacent twister while the adjacent end of the actuating-belt is being unwound therefrom. Thus the unwinding of the actuating-belt rotates the said adjacent twister, and by the rotation of the

latter the opposite end of the connecting-belt is unwound from the opposite twister to rotate the same simultaneously and in the same direction with the first-mentioned twister.

5 Upon one or both sides of the frame there are provided the opposite transverse projections or shoulders 16, which are located adjacent to the inner sides of the respective twist-
 10 ers and are designed to bear against the adjacent picket P, as shown in Fig. 1 of the drawings, when the machine is applied in position for use. The strand-wires 17 are run through the respective longitudinal openings in the
 15 twist-ers, whereby the strands are twisted together, as indicated at 18, in the interval between the machine and the adjacent picket, and formed by the spacing-shoulders 16, whereby a constant interval is maintained
 20 between the adjacent pickets, and the strands are twisted uniformly throughout the length of the fence. After the wire has been twisted by throwing the lever to its limit in one direction the machine is moved laterally out-
 25 ward from the picket and along the strand-wires, the latter sliding freely through the twist-ers, after which a new picket is inserted between the spaced strands, and the lever is thrown to the opposite limit, thereby twist-
 30 ing the strands tightly about the picket. It will be observed by reference to Fig. 3 of the drawings that one end of the cross-head 12 strikes the adjacent twister at the opposite limits of the lever, whereby the cross-head

and the twist-ers coöperate to form a limiting- 35 stop for the lever, thereby limiting the number of rotations of the twist-ers and preserving a uniform twist between the pickets. Moreover, each actuating-strap wraps or coils upon itself in the plane of the vertical 40 movement of the lever, and the cross-head strikes the coiled portion of the respective straps, whereby the lever is cushioned and damage is obviated.

What is claimed is—

45 In a fence-machine, the combination with a frame, of opposite wire-twist-ers rotatably mounted thereon and having cylindrical portions, a flexible connecting element having its opposite ends wound upon the cylindrical 50 portions of the respective twist-ers, an operating-lever fulcrumed midway between the twist-ers and having a cross-head, the twist-ers being located in the paths of the opposite ends of the cross-head and forming stops 55 therefor, and opposite flexible winding elements having their opposite ends connected to the lever and the respective cylindrical portions of the twist-ers, the coiled portions of the winding elements upon the twist-ers form- 60 ing cushions for the ends of the cross-head.

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

ISAAC WOMACK.

Witnesses:

ALEXANDER WOMACK,
J. W. BARRETT.