

(No Model.)

2 Sheets—Sheet 1.

G. W. BEGOLE.
FENCE MACHINE.

No. 419,175.

Patented Jan. 14, 1890.

FIG. 1-

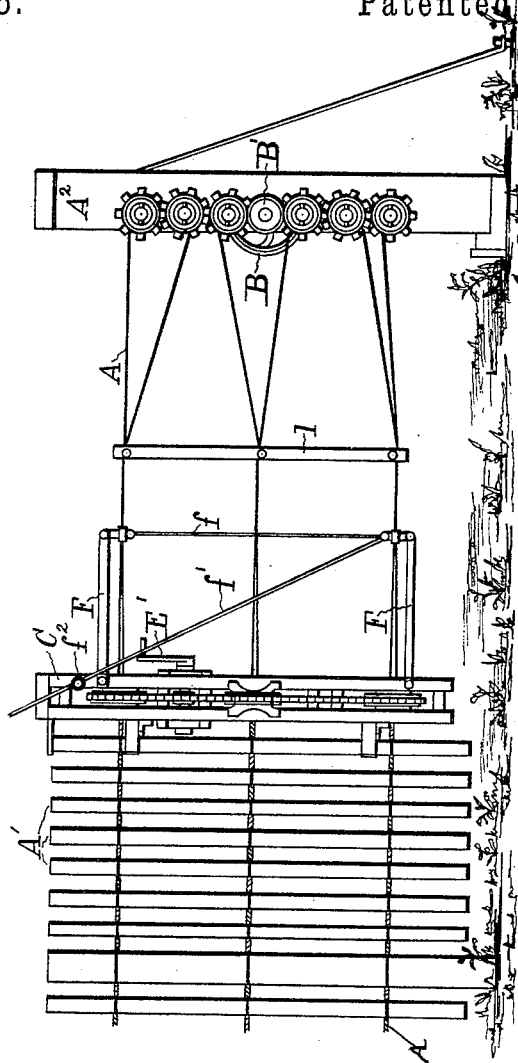
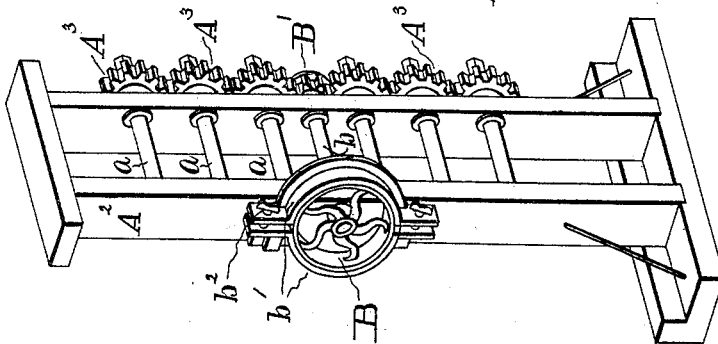


FIG. 2-



WITNESSES

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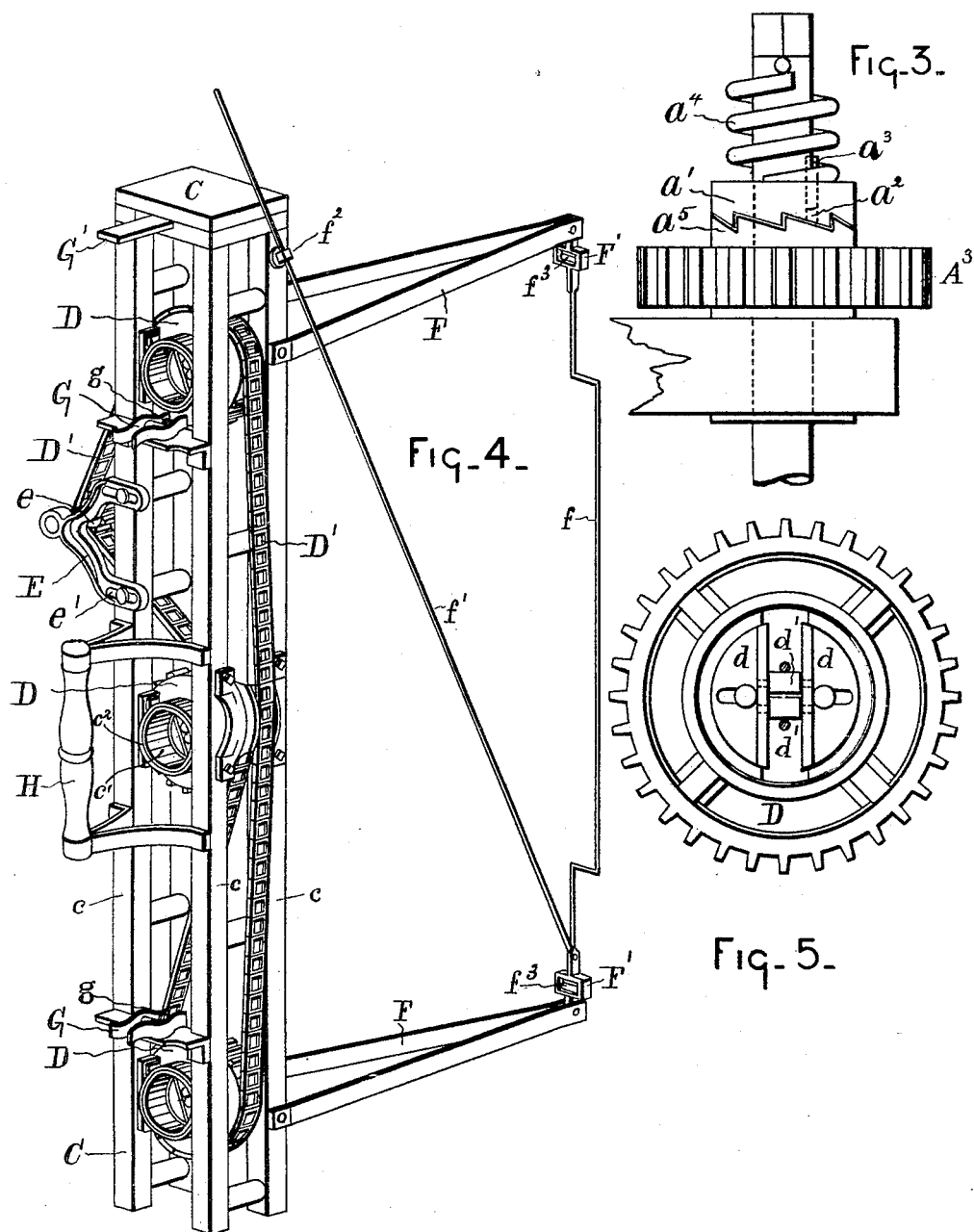
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UNITED STATES PATENT OFFICE.

GORDON W. BEGOLE, OF YPSILANTI, ASSIGNOR TO THE MILAN AGRICULTURAL COMPANY, OF MILAN, MICHIGAN.

FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 419,175, dated January 14, 1890.

Application filed May 18, 1889. Serial No. 311,212. (No model.)

To all whom it may concern:

Be it known that I, GORDON W. BEGOLE, a citizen of the United States, residing at Ypsilanti, county of Washtenaw, and State of Michigan, have invented a certain new and useful Improvement in Fence-Machines; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object the production of a machine for forming slat-and-wire fences; and it consists of a combination of devices and appliances hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of my apparatus. Fig. 2 is a perspective view of the tension device. Fig. 3 is a detail view of one of the pinions. Fig. 4 is a perspective view of the twisting mechanism. Fig. 5 is a detail view of one of the sprocket-wheels.

In carrying out my invention, A represents the wire, and A' the slats.

A² represents a suitable frame, in which are journaled the shafts or spools *a*, on which the wire is wound. Loosely journaled on the ends of these shafts are the pinions A³.

*a*¹ is a ratchet provided with a slot *a*², and keyed against revolution on the shaft by the pin *a*³, and free to move longitudinally thereof.

*a*⁴ is a spring adapted to keep the ratchet-face *a*¹ against the ratchet-face *a*⁵ of the pinion.

B is the tension-wheel keyed to the shaft *b*, and on the opposite end is the pinion B', which meshes with the pinions A³. Thus the pinions are all governed by the wheel B, and by means of the two-part rim *b*¹ and thumb-screws *b*² the friction on this wheel, and consequently the tension on the wires, can be regulated at will. By referring to Fig. 2 it will be seen that one part of the rim *b*¹ is secured to the frame A², while the other part is adjustably supported by the thumb-screws *b*², that connect it with the fixed part of the rim.

Each wire can, by a suitable crank attached to the shaft *a*, be wound up until a suitable

tension is attained, and it is then held against unwinding by the ratchets engaging with each other.

C is a suitable frame for supporting the twisting mechanism, and consists of the four uprights *c* bolted together.

D are sprocket-wheels, through which the wires pass, and D' is an endless chain or belt passing over the sprocket-wheels and adapted to revolve the latter. These sprocket-wheels are provided with tubular journals *c*¹, that are mounted in tubular bearings *c*², secured between the uprights *c* of the frame C.

E are brackets attached to the frame, and in these brackets the sprocket-wheel *e* is journaled.

*e*¹ are slots, whereby the brackets are made adjustable, thus allowing the tension on the chain to be regulated.

E' is a crank attached to the shaft, on which the sprocket-wheel *e* is keyed for turning the sprocket-wheel and chain.

d are angle-plates adjustably bolted to the face of the sprocket-wheels, and in these angle-plates are journaled the rollers *d*¹.

F are arms pivoted to the frame and extending at an angle therefrom, the outer ends being joined by the rod *f*, to which they are pivotally engaged.

*f*¹ is a rod pivoted to the outer ends of the lower arms and extending up to the frame, where it is adjustably secured by the thumb-screw *f*². By this construction the arms can be adjusted on their pivots to any angle desired, thus adapting the machine for hilly ground.

F' are small clips on the ends of the rod *f*, in which the rollers *f*³ are journaled, thus lessening the friction of the wires as they pass through.

G are pivoted grips or jaws extending from the frame for gripping and holding the slats by means of the contraction of the spring *g*, located between the jaws of the grip.

G' is a plate to regulate the height of the slats.

H is a handle for moving the twisting mechanism, as desired.

I are strips between which the wires are clamped, so that they are properly paired.

The operation will at once be seen. The tension device is set and the individual wires wound up to the proper tension. The rim b' is then screwed down, so that the tension-wheel will feed the wire at the desired rate. The wires are then paired by means of the strips I . A picket or slat is then placed in the jaws G , the mechanism is moved to the proper position, the crank E' revolved, and the wire twisted the desired number of times, the sprocket-wheels D revolving simultaneously. The mechanism is then moved back, a new slat is inserted, and the wires are again twisted. By arranging the sprocket-wheels as shown, and passing the chain over them in the manner shown, the middle sprocket-wheel is revolved in one direction and the upper and lower wheels in the opposite direction. Of course any number of the sprocket-wheels may be used, and any number of wires twisted simultaneously.

It will be seen that by the mechanism above described the twisting device is supported on the wires clear of the ground, thus facilitating the movement and operation of the same, and by means of the pivoted arms F the twisting mechanism may be adjusted to any angle desired.

The provision of the rollers d' in the sprocket-wheels greatly increases the facility with

which the mechanism may be operated, since it greatly lessens the friction.

What I claim is—

1. In the herein-described fence-machine, the sprocket-wheels D , journaled in the frame C , said wheels provided with the adjustable angle-plates d , having rollers d' , against which the wires bear in passing through the wheel, substantially as described.

2. The combination, with the frame C , of a tilting device consisting of the arms F , pivotally engaged to the frame, the rod f , joining the outer ends of the arms, and having passages for the wire, and the rod f' for securing the arms when at the desired angle, substantially as described.

3. In a fence-machine, the tension device consisting of the frame A^2 , shafts a , on which the wires are wound, pinions A^3 , engaging with suitable ratchets on the shafts and meshing with each other, and a single tension-wheel B and pinion B' for governing the tension on the wires simultaneously, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

GORDON W. BEGOLE.

Witnesses:

WM. M. STEUART,

W. H. CHAMBERLIN.