

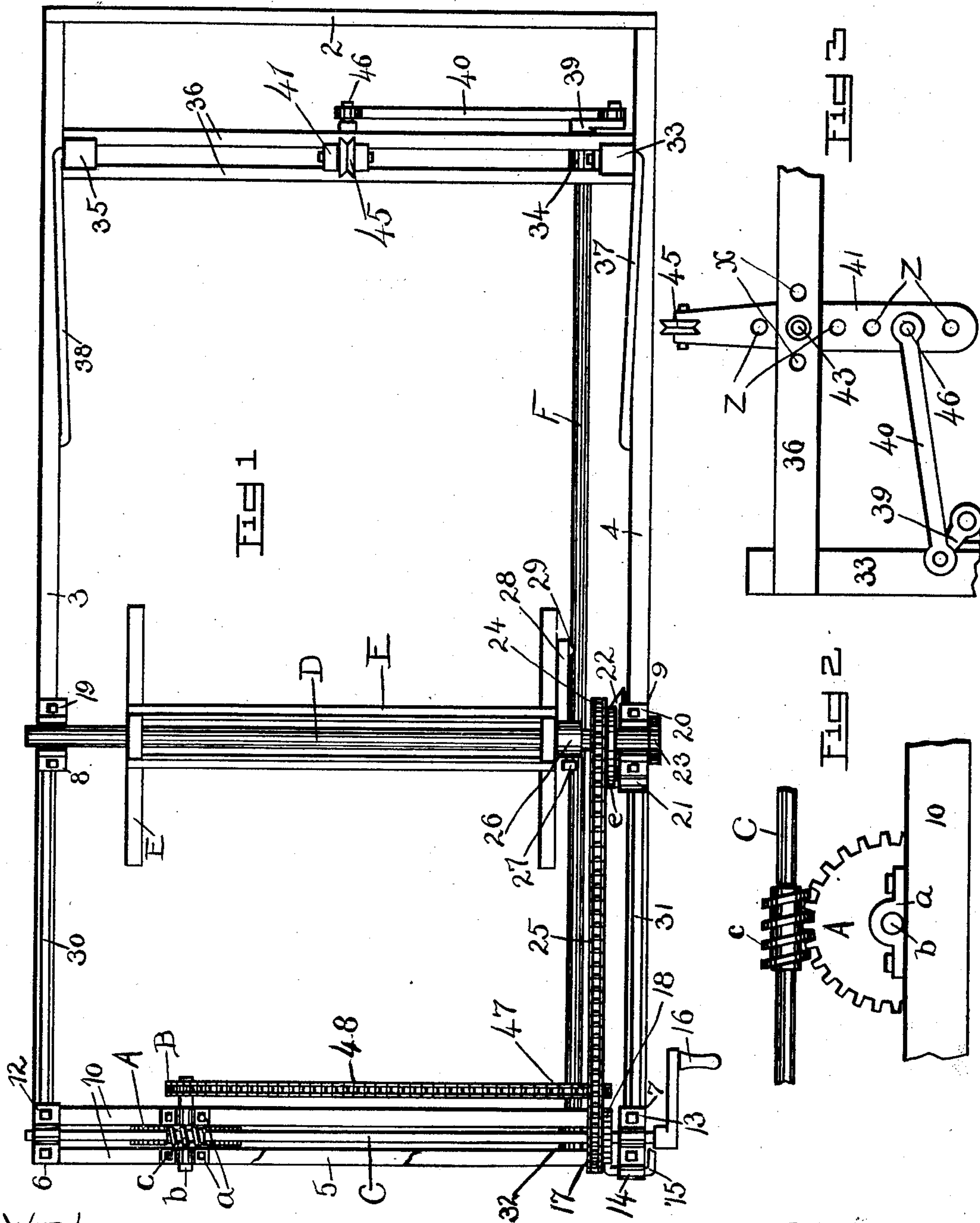
No. 692,314.

Patented Feb. 4, 1902.

A. LANDGREEN.
WIRE MACHINE.

(Application filed July 5, 1901.)

(No Model.)



WITNESSES

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WIRE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 692,314, dated February 4, 1902.

Application filed July 5, 1901. Serial No. 67,257. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR LANDGREEN, residing at Wilsonville, in the county of Furnas and State of Nebraska, have invented certain useful Improvements in Wire-Machines; and I do hereby declare that the following is 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, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to an apparatus to wind and unwind wire.

The object of my invention is to provide a simple device adapted to be placed in an ordinary farm-wagon and used to reel or unreel fence-wire.

In the accompanying drawings I have shown, in Figure 1, a top view of my apparatus, while Figs. 2 and 3 show broken enlarged detached details of the mechanism.

My invention embodies, essentially, a rectangular frame comprising the forward sill 2, the side sills 3 and 4, and the rear sill 5, forming a rectangular frame. Extending upward from the end sill 5 and the side sills 3 and 4 are the corner-posts 6 and 7, while the side sills are further provided with two intermediate posts 8 and 9, which extend upward a suitable distance. Uniting the upwardly-extending posts 6 and 7 above are the two transverse bars 10 10 to strengthen these two posts, as shown. The transverse bars 10 10 are provided with two bearings *a a*, through which extends a stub-shaft *b*, which stub-shaft is provided with the worm-gear A and the chain-sprocket B, as is shown more clearly in Fig. 2.

Secured to the top of the posts 6 and 7 are the bearings 12 and 13. The bearing 13 is provided with an ear 14, through which extends the pawl 15, as is shown in Fig. 1. Working within the bearings 12 and 13 is a shaft C, which shaft is provided with the worm *c*, as is shown in Fig. 2, and this worm meshes with the pinion A. At the end this shaft C is provided with an operating-handle 16, so that this shaft may be revolved. Secured to the shaft C near the post 7 is a chain-sprocket 17, to which is secured a ratchet-wheel 18, which ratchet-wheel is engaged by the pawl 15, so

that this shaft C can only be turned in one direction.

Secured to the top of the intermediate posts 8 and 9 are the bearings 19 and 20, which are saddle-bearings, so arranged that the shaft D can be easily lifted into and out of these bearings. The bearing 20 is provided with an ear 21, adapted to hold the end of a U-shaped brake-bar *e*. Secured to the post 9 is a catch 22, into which the pendent end of this brake-bar is locked whenever it is desired to check the speed of the shaft D. This shaft D is provided at the end with a cap 23, which prevents the shaft D going in one direction, while adjacent this cap 23 is a brake-wheel, over which extends the brake-bar *e*. Secured to this shaft D is a chain-sprocket 24, over which extends a chain 25, which chain upon the opposite end passes over the chain-sprocket 17. Secured to this shaft D is a hub 26, provided with a set-screw 27, and from this hub 26 extends an arm 28, provided with a pin 29, so that this arm 28 may be secured to one of the arms of an ordinary reel E, upon which the wire is wound or from which it is unwound.

In order to strengthen the upward posts 8 and 9, a bar 30 extends from the post 6 and the post 8, while from the post 7 extends the bar 31, secured to the post 9 to strengthen the framework.

Secured to the post 7 is an extending bearing 32, within which bearing is held a shaft F, which shaft upon the opposite end works within the bearing 34, secured to the post 33, which post 33 is pivotally secured to the side sill 4. At a point opposite I provide a second pivotally-supported post 35, and uniting these posts 33 and 35 are the transverse bars 36. To hold these posts 33 and 35 in an upright position, I use the pivoted arms 37 and 38, secured to the side sills 4 and 3, respectively.

A shaft F at the end is provided with a crank 39, to the extending pin of which is secured a pitman 40, which pitman in turn is secured to a pivoted arm 41, swinging between the transverse bars 36, as is shown in Fig. 3. The swinging arm 41 is supported upon a pin 43. Above, this swinging arm 41 is provided with a sheave 45, which is suitably supported. The pitman 40 is secured by means of the pins 46 to the swinging arm 41. This

swinging arm is provided with a plurality of openings z , so that the swing of the same may be regulated. In order to further regulate the position of this arm 41, I provide the bars 36 with openings x , through which the pin 43 passes.

For the sake of convenience the frame holding the swinging arm 41 may be folded down upon the framework proper.

Secured to the shaft F, near one end, is the chain-sprocket 47, over which passes the chain 48, in turn working over the chain-sprocket B.

When all the instrumentalities have been properly arranged, the operation of my device would be as follows: Should it be desired to reel and collect barb-wire, taking it from the field, for instance, the operator would place an ordinary reel E upon the shaft D. This would be accomplished in lifting the brake-bar e from over the brake-wheel, disconnecting the chain 25, when the shaft D could be easily carried through the reel. The reel would then be lifted into the bearings 8 and 9 by means of the shaft D. The chain 25 would then be connected to the brake-bar and placed in position. The operator would then turn the crank 16, which would rotate, by means of the worm-gear, the chain-sprocket B to rotate the shaft F, and this by means of the pitman would slowly carry the sheave 45 from side to side, so that the wire would be nicely and evenly reeled layer upon layer upon the reel E. The revolving of the shaft C would, by means of the chain 35, revolve the shaft F, which, by

means of the arm 28 and pin 29, has been secured to the reel E, so that the wire would be nicely wound upon the reel. Should it be desired to unreel the wire, the apparatus, which would be carried in a wagon, would be moved forward, while the operator would grasp the brake-bar e and control the unwinding action of the shaft D in unwinding the wire off of the reel. In unwinding the wire, if desired, the rear frame 36 could be folded downward, the shaft F previously having been sprung out of its bearing 32.

The device is neat and simple in construction.

Having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

In an apparatus of the character described, the combination with a frame, of a worm-wheel secured to said frame, a driving-shaft supported by said frame, said shaft being provided with a worm meshing with said worm-gear, a reel-shaft, a brake to control the movement of said reel-shaft, said reel-shaft and driving-shaft being in sprocket connection, an auxiliary frame, a rocking arm held adjustably within said auxiliary frame, a shaft, said shaft being operated by said worm-gear, and means to connect said last-mentioned shaft to said rocking arm, as and for the purpose set forth.

ARTHUR LANDGREEN.

In presence of—

W. E. MOORE,
ED. PETERSON.