

No. 696,727.

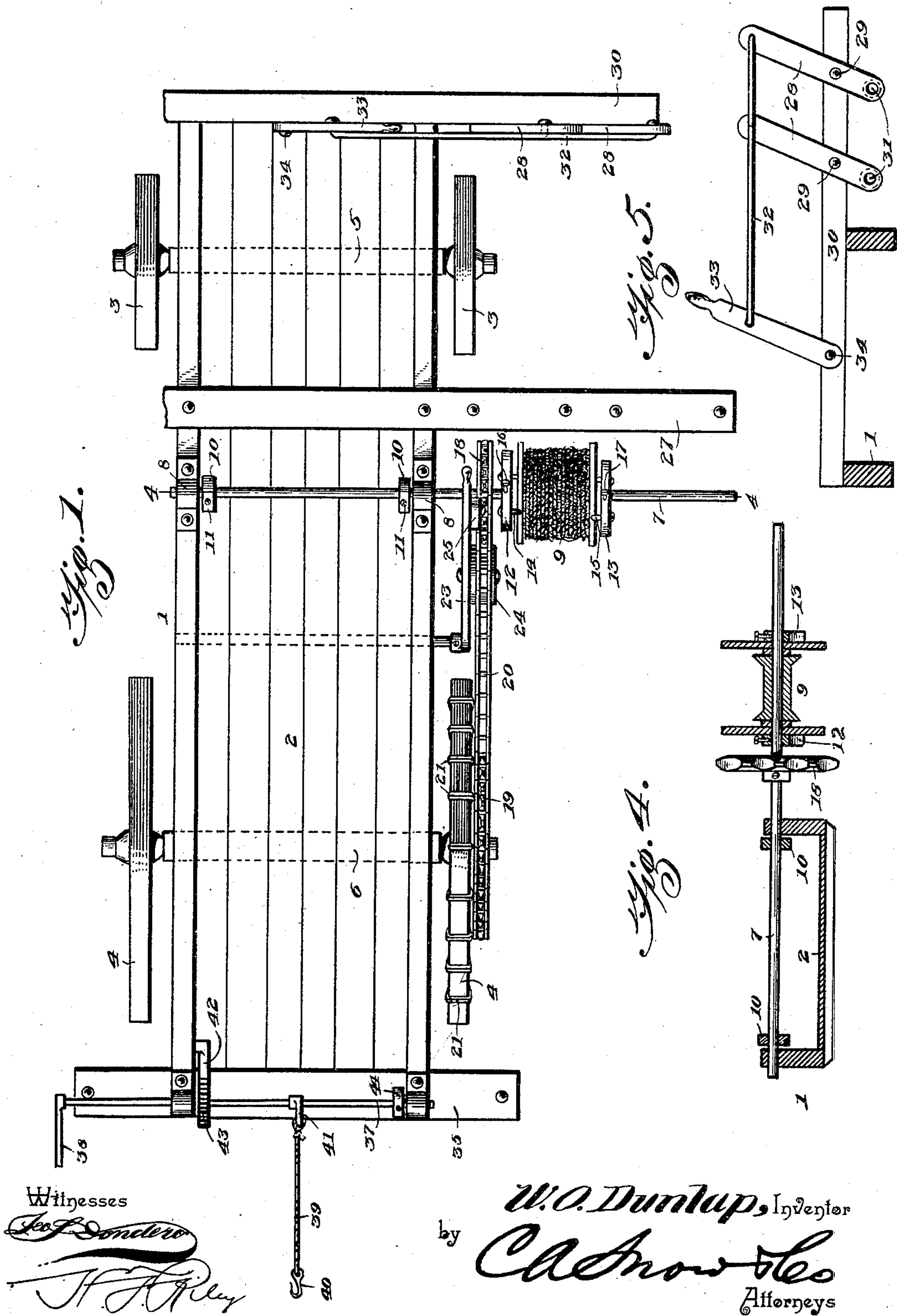
Patented Apr. 1, 1902.

W. O. DUNLAP.  
WIRE REELING MACHINE.

(Application filed Apr. 30, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses  
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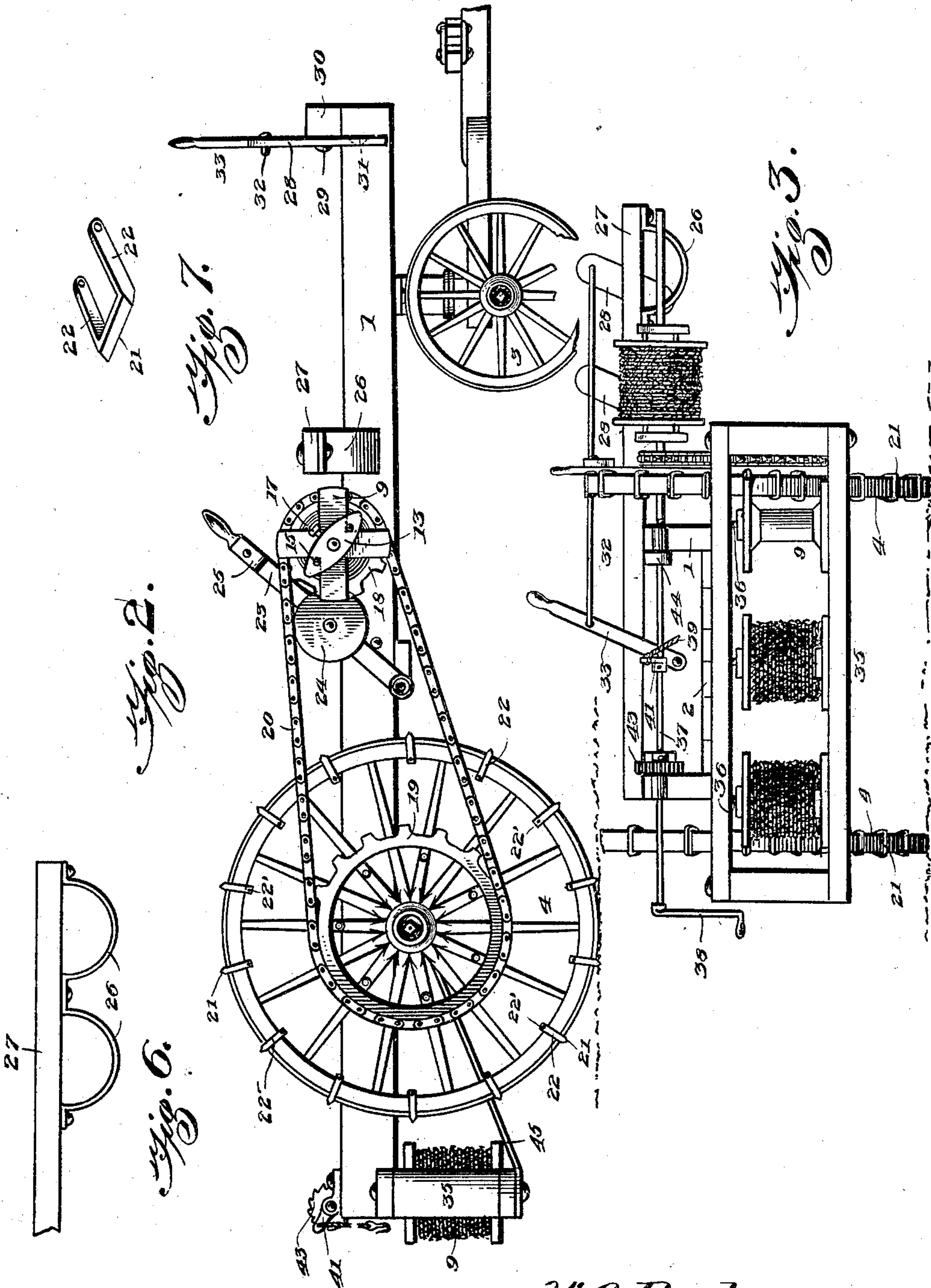
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# UNITED STATES PATENT OFFICE.

WILLIAM OCY DUNLAP, OF PORTALES, TERRITORY OF NEW MEXICO.

## WIRE-REELING MACHINE.

SPECIFICATION forming part of Letters Patent No. 696,727, dated April 1, 1902.

Application filed April 30, 1901. Serial No. 58,167. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM OCY DUNLAP, a citizen of the United States, residing at Portales, in the county of Chaves and Territory of New Mexico, have invented a new and useful Wire-Reeling Machine, of which the following is a specification.

The invention relates to improvements in wire-reeling machines.

10 The object of the present invention is to improve the construction of wire-reeling machines and to provide a simple and comparatively inexpensive one designed for unreeling and laying out wire for fence construction and for rewinding fence-wire upon spools when taking down fences and capable of simultaneously reeling two or more wires and of arranging the same uniformly on the spools.

15 A further object of the invention is to provide a machine of this character adapted also for stretching fence-wires and capable of holding the same at the desired tension while the fence-wires are being stapled or otherwise secured to a fence-post.

25 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

30 In the drawings, Figure 1 is a plan view of a wire-reeling machine constructed in accordance with this invention. Fig. 2 is a side elevation of the same. Fig. 3 is an end elevation. Fig. 4 is a transverse sectional view on the line 4-4 of Fig. 1. Fig. 5 is a transverse sectional view illustrating the construction for uniformly feeding the wire to the spools. Fig. 6 is a detail view of the stationary guides. Fig. 7 is a detail perspective view of one of the blades or flanges for preventing the wheels from slipping.

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

45 1 designates a main frame, rectangular in plan view, designed to form a portion of a running-gear and provided with a bottom or floor 2, forming a platform for the operator and permitting him to readily pass from one end of the wire-reeling machine to the other. The frame is mounted upon front and rear wheels 3 and 4, which are arranged on the

spindles of front and rear axles 5 and 6, the front axle being pivotally mounted in the usual manner by means of a king-bolt and being connected with a tongue or other suitable means for connecting the draft-animals to the machine. Mounted upon the main frame at a point between the ends thereof is a transverse spool-shaft 7, journaled in suitable bearings 8 of the sides of the main frame and adapted to receive one or more spools 9 for rewinding fence-wire on the same. The transverse spool-shaft is illustrated in the accompanying drawings as extending only from one side of the frame for convenience of illustration; but it will be readily apparent that it may be extended from each side of the frame to increase its capacity, and the mechanism hereinafter described for operating the spool-shaft and for guiding the wire to the same may be duplicated. The shaft 7 is held against longitudinal movement by means of a pair of collars 10, provided with set-screws 11 and arranged at the inner sides of the bearings, as clearly shown in Fig. 1.

The spool, which may be of any desired construction, is detachably locked to the shaft by means of clamps 12 and 13, consisting of blocks or pieces provided with laterally-projecting lugs 14 and 15, and secured to the shaft by set-screws 16 and 17. The clamps are provided with central perforations for the reception of the shaft, and the set-screws engage the latter and hold the clamps rigid with the same. The laterally-projecting lugs of the clamps extend inward over the adjacent side edges of the arms of the spool, and the outer clamp 13 may be readily removed to permit a spool or spools to be taken off or placed on the shaft.

The transverse spool-shaft is driven by sprocket-gearing consisting of a pinion 18, mounted on the shaft, a sprocket-wheel 19, secured to one of the rear wheels 4, and a sprocket-chain 20, arranged on the sprocket-pinion and the sprocket-wheel, as clearly illustrated in Fig. 2 of the accompanying drawings.

In order to prevent the wheels 4 from slipping, they may be provided at intervals with blades or flanges 21, having sides 22, adapted to engage the sides of the wheels at the peripheries thereof and connected at the inner



ends of the sides 22 by suitable adjusting devices, such as bolts 22'. Each of the devices for preventing the wheels from slipping is approximately U-shaped and is adapted to straddle the rims of the wheels, and the projecting outer portions are oppositely beveled and are adapted to enable the wheels to obtain a firm hold on the ground. When only one set of sprocket-gearing is employed, only one of the rear wheels will be provided with the blades or flanges; but when such gearing is duplicated both of the wheels will be constructed as shown in Fig. 3.

The chain may be tightened by a lever 23, fulcrumed at its lower end on one side of the main frame and provided at its upper end with a handle and carrying a pulley 24. The lever may be provided with a weight 25, and it is adapted to be swung upward to tighten the chain. It may be held in its engaging position by hand, or any other suitable means may be employed for this purpose, and the weight is adapted to swing the lever downward to relieve the chain of pressure.

The wire passes through stationary guides 26, consisting of approximately U-shaped loops depending from a horizontal bar 27 and located in advance of the spool-shaft. The stationary guides, which are constructed of suitable metal, are of approximately the same width as the spools, and they are secured to the lower face of the horizontal bar 27. The bar 27 is mounted on and extends laterally from the main frame.

The wire, which may be smooth or barbed, is distributed evenly to the spools by means of movable guides consisting of levers 28, fulcrumed between their ends by suitable pivots 29 on a horizontal bar 30 and extending above and below the same. The lower ends of the levers 28 are provided with flared openings 31 to receive the wire, and their upper ends are connected by a rod 32 with an operating-lever 33, fulcrumed at its lower end 34 on the bar 30 and provided at its upper end with a suitable grip or handle. The operating-lever is arranged at the front of the machine and is adapted to be grasped by the operator, and it will not interfere with his management of the team, and it is capable of being oscillated to oscillate the movable wire-guides and to distribute the wire uniformly. The openings 31, which receive the fence-wire, are flared at the front faces of the movable guides and are adapted to permit barbed wire to pass freely through them.

The main frame is provided at its back with a transversely-disposed spool-frame 35, depending from the side bars of the main frame and provided with a series of vertical spindles 36, adapted to receive spools, as clearly shown in the accompanying drawings, and when it is desired to lay out the wire for fence construction full spools are placed in the frame 35, and the ends of the wire are suitably anchored, so that when the machine is

driven forward the wire will be unwound from the spools.

Located above the transversely-disposed depending spool-frame is a windlass-shaft 37, journaled in suitable bearings and provided at one end with a crank-handle 38. The windlass-shaft is provided with a short rope or cable 39, having a suitable wire-engaging device 40 at its outer end and secured at its inner end to an arm 41 of the shaft. The arm 41 of the shaft is preferably provided with a hub which is secured to the said shaft 37 by a set-screw or other suitable device, and when the windlass-shaft 37 is rotated the short flexible connection 39 will be wound up, whereby a fence-wire attached to the outer end of the connection will be stretched. The windlass-shaft is held against rotation while a fence-wire is being stapled or otherwise secured to a fence-post by means of a pawl 42 and a ratchet-wheel 43. The ratchet-wheel is mounted on the shaft at one side of the frame, and the pawl is pivoted to the latter adjacent to the ratchet-wheel. The ratchet-wheel is arranged at one side of the frame, and the windlass-shaft is provided at the other side of the frame with an adjustable collar 44, having a set-screw adapted to engage the shaft. By this construction the windlass-shaft is held against longitudinal movement. The depending frame 35, which may be constructed in any suitable manner, is supported by side braces 45, arranged at an inclination and extending from the bottom of the spool-frame to the side bars of the main frame.

It will be seen that the wire-reeling machine is exceedingly simple and inexpensive in construction, that it is adapted for rewinding wire on spools when removing fences, and that it is capable of unwinding the wire from a series of spools for fence-building. It will also be apparent that it is adapted to stretch wire to the desired tension and is capable of holding the same while the fence-wire is being secured to a fence-post. Furthermore, it will be clear that in rewinding the wire the machine travels in the direction of the wire or wires and that it moves in the opposite direction in paying out wires for fence construction.

What I claim is—

1. A machine of the class described comprising a running-gear having a frame, a shaft extending laterally from the frame and located in advance of the rear wheels and adapted to receive spools, gearing for connecting the shaft with one of the rear wheels, the bar 27 located in advance of the shaft and provided with depending approximately U-shaped guides, the bar 30 arranged at the front of the frame and extending laterally therefrom in advance of the said bar 27, the levers 28 pivoted between their ends to the bar 30 and extending above and below the same and provided at their lower ends with



wire-receiving openings, the operating-lever 33 fulcrumed at its lower end and arranged between the sides of the frame, and the connecting-rod 32 connected with the operating-lever and with the upper ends of the other levers, substantially as described.

2. A machine of the class described comprising a frame, a laterally-extending spool-shaft, a bar extending laterally from the frame, the levers 28 fulcrumed on the bar and extending above and below the same and provided at their lower ends with wire-receiving openings, the operating-lever arranged be-

tween the sides of the frame and fulcrumed at its lower end, and the rod 32 connected with the upper ends of the levers 28 and with the operating-lever, substantially as described.

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

WILLIAM OCY DUNLAP.

Witnesses:

CLAUDE BARNES,  
HENRY F. STOLDT.