

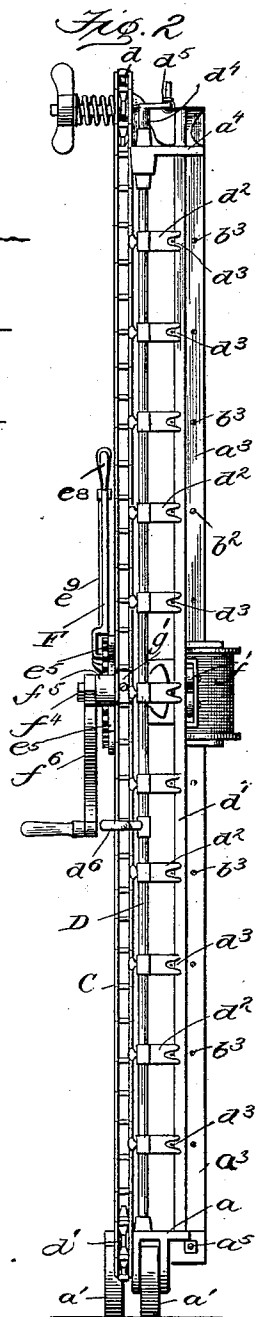
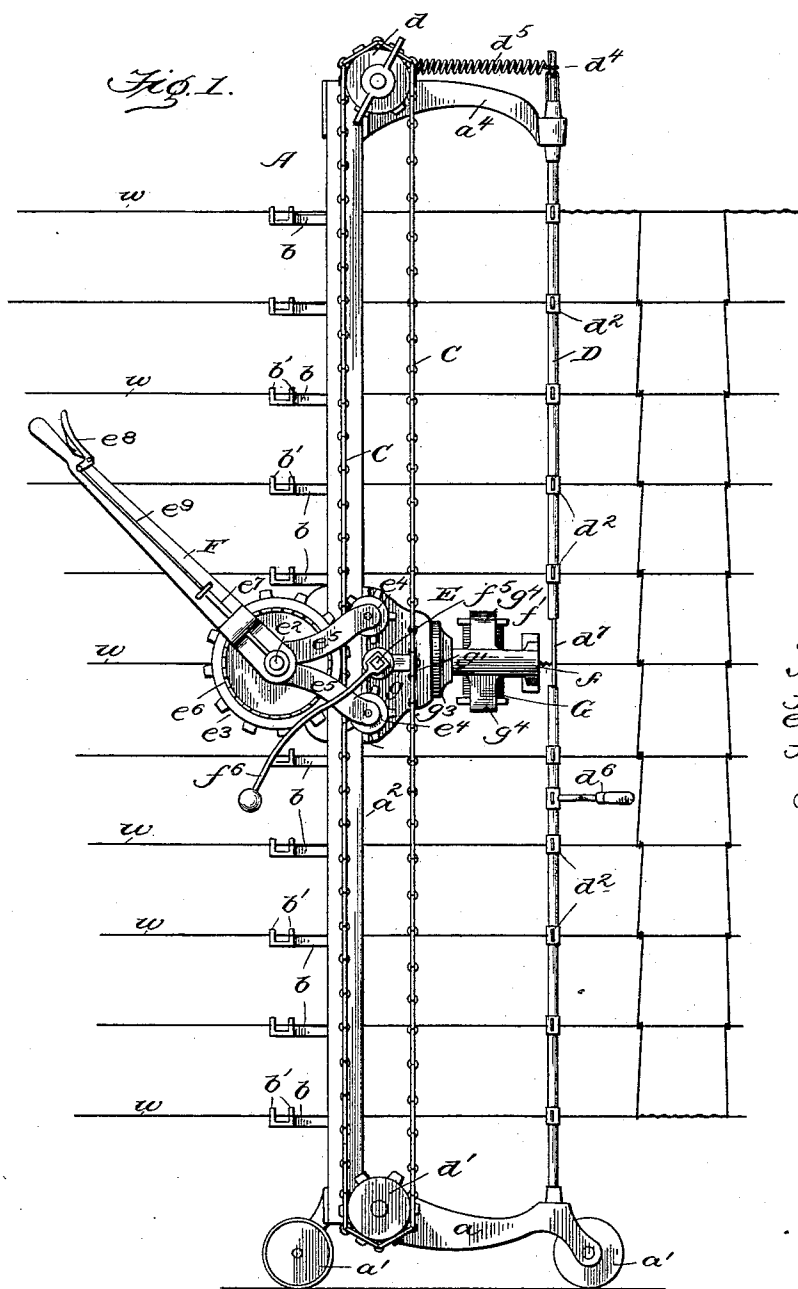
(No Model.)

2 Sheets—Sheet 1.

W. F. DOBBS.
WIRE FENCE MACHINE.

No. 569,487.

Patented Oct. 13, 1896.



WITNESSES:

WITNESSES:
John Irvine
Wm. S. Hodges.

INVENTOR

William F. Dotto,
BY *John W. Tipton* and
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ATTORNEYS.

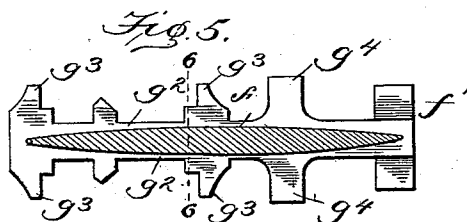
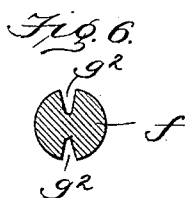
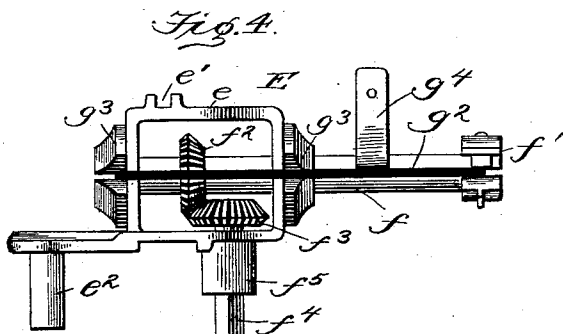
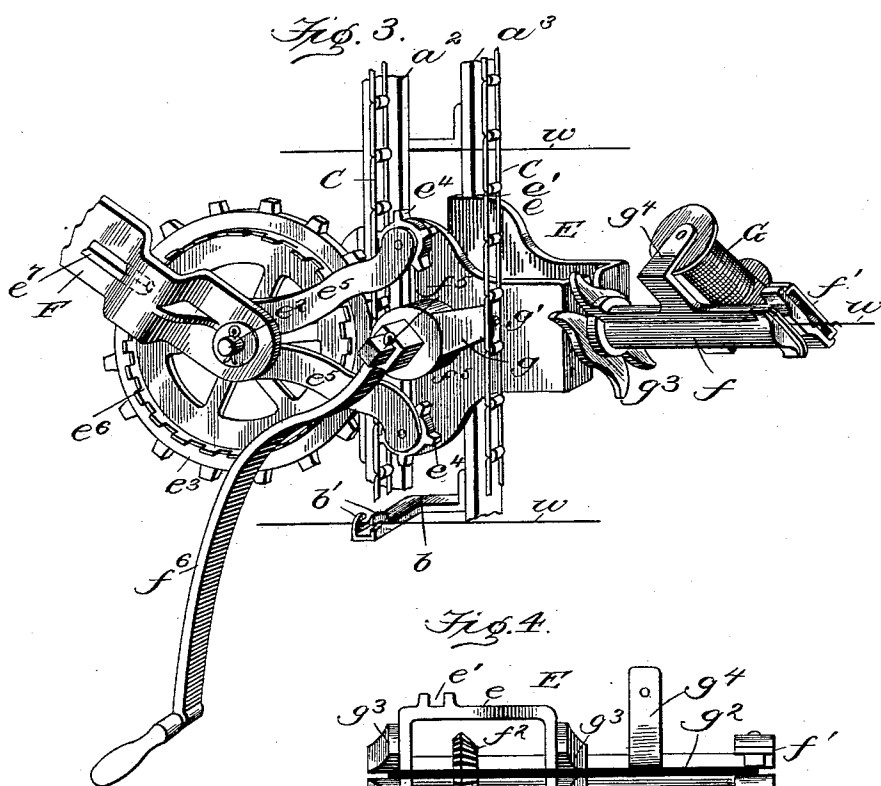
(No Model.)

2 Sheets—Sheet 2.

W. F. DOBBS.
WIRE FENCE MACHINE.

No. 569,487.

Patented Oct. 13, 1896.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM FORESTER DOBBS, OF WINDHAM, OHIO.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 569,487, dated October 13, 1896.

Application filed December 3, 1895. Serial No. 570,911. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FORESTER DOBBS, of Windham, in the county of Portage and State of Ohio, have invented certain new and useful Improvements in Wire-Fence Machines; and I do hereby 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 contemplates certain new and useful improvements in wire-fence machines, and has for its objects to provide a light, portable device which can be easily and quickly moved along a line of stretched fence-wire, and also simple and highly-efficient means for twisting vertical strands of wire across the horizontally-stretched wires.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a front elevation. Fig. 2 is an end view. Fig. 3 is an enlarged perspective view of the twisting-head. Fig. 4 is a top plan view of the carriage. Fig. 5 is a longitudinal sectional view thereof. Fig. 6 is a transverse sectional view on line 6 6, Fig. 5.

Referring to the drawings, A designates the portable frame; a , a truck; a' , carrying-wheels therefor, and a^2 a^3 uprights secured at their lower ends to one end of truck a , the upright a^3 being parallel with and set at right angles to the upright a^2 . Between the upper ends of these uprights is secured an arm a^4 , which overhangs the truck. The upright a^3 is removably held at its ends by bolts a^5 . These uprights are located, in practice, on opposite sides of the horizontal fence-wires w . To the upright a^3 is secured a series of angular arms b , having opposite slotted lugs b' to grasp and accommodate the wires w . To permit of the adjustment of these arms on upright a^3 , the latter is provided with numerous holes b^2 , through the desired ones of which the holding-screws or bolts b^3 are passed.

C designates an endless sprocket-chain which engages upper and lower sprocket-wheels d d' , whose journals extend from arm a^4 and truck a , respectively. One portion of this chain travels at right angles to and parallel with the front face of upright a^3 .

D is an upright rod pivotally supported at its ends by truck a and arm a^4 . On this rod are adjustable gripping-arms d^2 , having slots d^3 to allow said arms to engage the wires w . To an angular arm d^4 , extending from the upper end of this rod, is connected one end of a coil-spring d^5 , the other end thereof being secured to the inner end of arm a^4 . This spring serves to hold the gripping-arms against the wire w or away therefrom when the rod is turned, so as to allow said arms to be thrown into a position opposite to that in which they are shown in the drawings. A handle-bar d^6 is secured to the rod D. A bar d^7 parallel with rod D is secured at its upper end to arm a^4 and at its lower end to the truck. The gripping-arms when in engagement with wires w bear against this bar, thereby preventing said wires from being disengaged from said arms while the twisting is being performed.

E is the carriage, which is vertically adjustable on upright a^3 . It comprises a frame e , having a groove e' to accommodate said upright. On a journal e^2 of this frame is mounted a sprocket-wheel e^3 , which meshes with one leg of the chain C, which is held in close engagement with said wheel by two lazy-wheels e^4 , journaled in the ends of two arms e^5 . On one side of this sprocket-wheel e^3 is formed a ratchet-wheel e^6 , with which engages a spring-pressed pawl e^7 , carried by an operating-arm F, mounted at one end on journal e^2 . A hand-lever e^8 on this arm is connected by a rod e^9 to the pawl e^7 . By operating this arm the carriage can be raised and lowered. Extending longitudinally through frame E is a shaft f of a twister-head f' , which is on the outer end of said shaft. On the latter, within the frame, is a bevel gear-wheel f^2 , with which engages a similar wheel f^3 on a short operating-shaft f^4 , extending through a tubular extension f^5 of one side of frame E, an operating-handle f^6 being attached to said extended end. From extension f^5 projects a lug g , which fits in one of the links of the sprocket-chain, said link being securely held by a cap-plate g' . By means of this connection the carriage is raised or lowered by the operation of said chain. Extending longitudinally on each side of the shaft f is a slot g^2 , each of which slots diverges from about its center toward

each end. In this way I avoid straining the wires *w* by the twisting operation. The outer ends of these slots are in close relation to each other and near the center of the twisting-head. Adjacent to these slots at the ends and center are placed jaws *g*³, which serve to direct the wires *w* into said slots. The spool *G* of wire is mounted between lateral arms *g*⁴, extending from shaft *f*. The wire is passed from this spool through a central opening in the twisting-head.

In practice, the frame is first properly positioned, one of its uprights having been removed and again secured in position on the side of the fence opposite the other upright. By operating the arm *F* and the wheel *e*³ the carriage, because of the engagement between lug *g* and chain *C*, can be moved to the top of the frame, so that the topmost wire *w* will be engaged by one of the slotted sides of the twisting-shaft. The wires *w* are grasped by the slotted arms *b*, and also the gripping-arms *d*² of rod *D*. Some of the wire off the spool is preferably twisted along part of the topmost wire, and then by turning the handle *f*⁶ the shaft *f*⁴ is rotated, causing wire from the spool to be twisted around one of the wires *w*. This being accomplished, the carriage is lowered to the next wire *w* and the above operation is repeated to and including the bottom wire. Around this wire some of the spool-wire is twisted, the same as at the top, and then the twisting around each wire *w* is repeated as the carriage is moved upward. The purpose of the vertical stay-wires and the winding of additional wire around the topmost and bottom wires *w* is to prevent the spreading of the fence-wire, so that animals cannot force their heads through the fence.

I claim as my invention—

1. A wire-fence machine, comprising a frame having uprights, sprocket-wheels on said frame, a chain engaging said sprocket-wheels, a carriage adjustable on said frame, a lug projecting from said carriage to which said chain is connected, a wheel on said carriage engaging said chain, means for moving said wheel, and a twister mounted in said carriage, as set forth.

2. A wire-fence machine comprising a frame having uprights, sprocket-wheels on said frame, a chain engaging said sprocket-wheels, a carriage adjustable on said frame, a lug projecting from said carriage to which said chain is connected, a wheel on said carriage engaging said chain, a ratchet-wheel, an operating-handle carrying a pawl engaging said ratchet-wheel, and a twister mounted in said carriage, substantially as set forth.

3. A wire-fence machine, comprising a frame having uprights, sprocket-wheels on said frame, a chain engaging said sprocket-wheels, a carriage adjustable on said frame,

a lug projecting from said carriage to which said chain is connected, a wheel on said carriage engaging said chain, means for moving said wheel, a twister having a shaft fitted in said carriage, an operating-shaft, and bevel gear-wheels on said shafts, substantially as set forth.

4. The combination with the frame, the sprocket-wheels and the chain engaging said wheels, of the carriage adjustable on said frame and to which said chain is connected, the wheel on said carriage engaging said sprocket-chain, the operating-handle, the twister having a shaft mounted in said carriage, said shaft having tapered slots in its sides, the twister-head on the outer end of said shaft, and the operating-shaft engaging said twister-shaft, substantially as set forth.

5. The combination with the wheeled truck, of the uprights removably secured thereto, the arm between the upper ends of said uprights, the sprocket-chain and wheels therefor, the carriage vertically adjustable on said uprights, the operating sprocket-wheel mounted on said carriage and engaging said chain, the arms having lazy-wheels holding said chain against said operating-wheel, the operating-handle for moving said latter wheel, the twister having a shaft in said carriage, and means for operating the same, as set forth.

6. A fence-machine having an upright frame and a vertically-adjustable carriage, a twister having a shaft provided with longitudinal slots in its sides, said slots tapering from their centers to the ends, a spool-holder formed on said shaft, a twister-head on one end of said shaft and guiding-jaws on the opposite end thereof, an operating-shaft, a bevel gear-wheel mounted on each of said latter shafts and meshing with each other, and an operating-handle for said operating-shaft, substantially as set forth.

7. The combination with the frame formed of two upright parallel bars, the vertically-adjustable carriage, and the twister, of the series of arms secured to one of said bars and having slotted ends to engage the fence-wires, and the series of arms secured to the other one of said bars and having oppositely-slotted lugs, as and for the purposes set forth.

8. The combination with the upright frame, the vertically-adjustable carriage, and the twister, of the pivoted rod, the gripping-arms extending therefrom having slotted ends, the spring acting on said rod, and the bar parallel with said rod, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WM. FORESTER DOBBS.

Witnesses:

JAMES NORTON,
EDWARD BELDEN.