(No Model.)

E. F. ST. JOHN.

WIRE STAY WEAVING DEVICE.

No. 567,053. Patented Sept. 1, 1896.

Fig. 1.

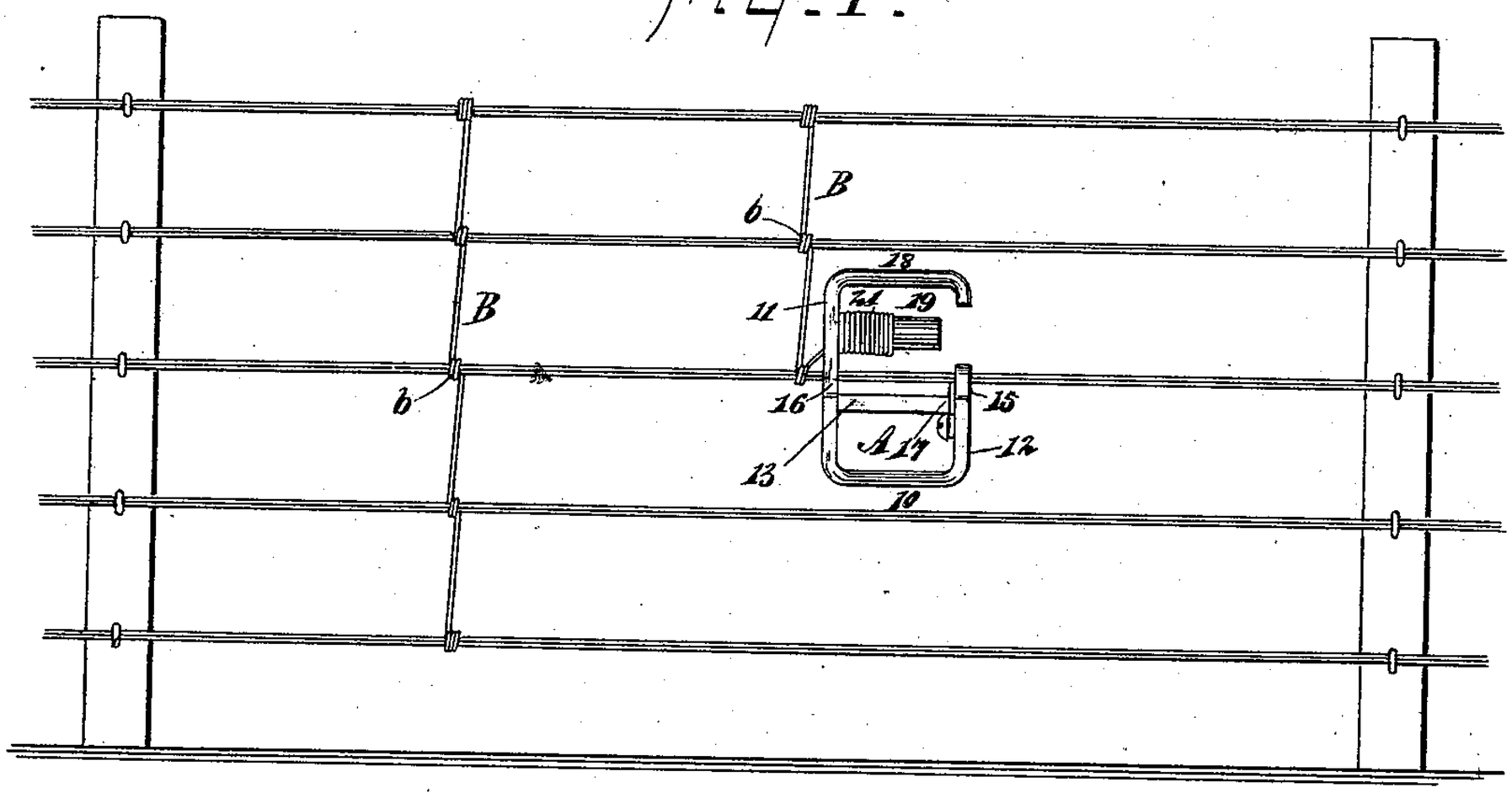
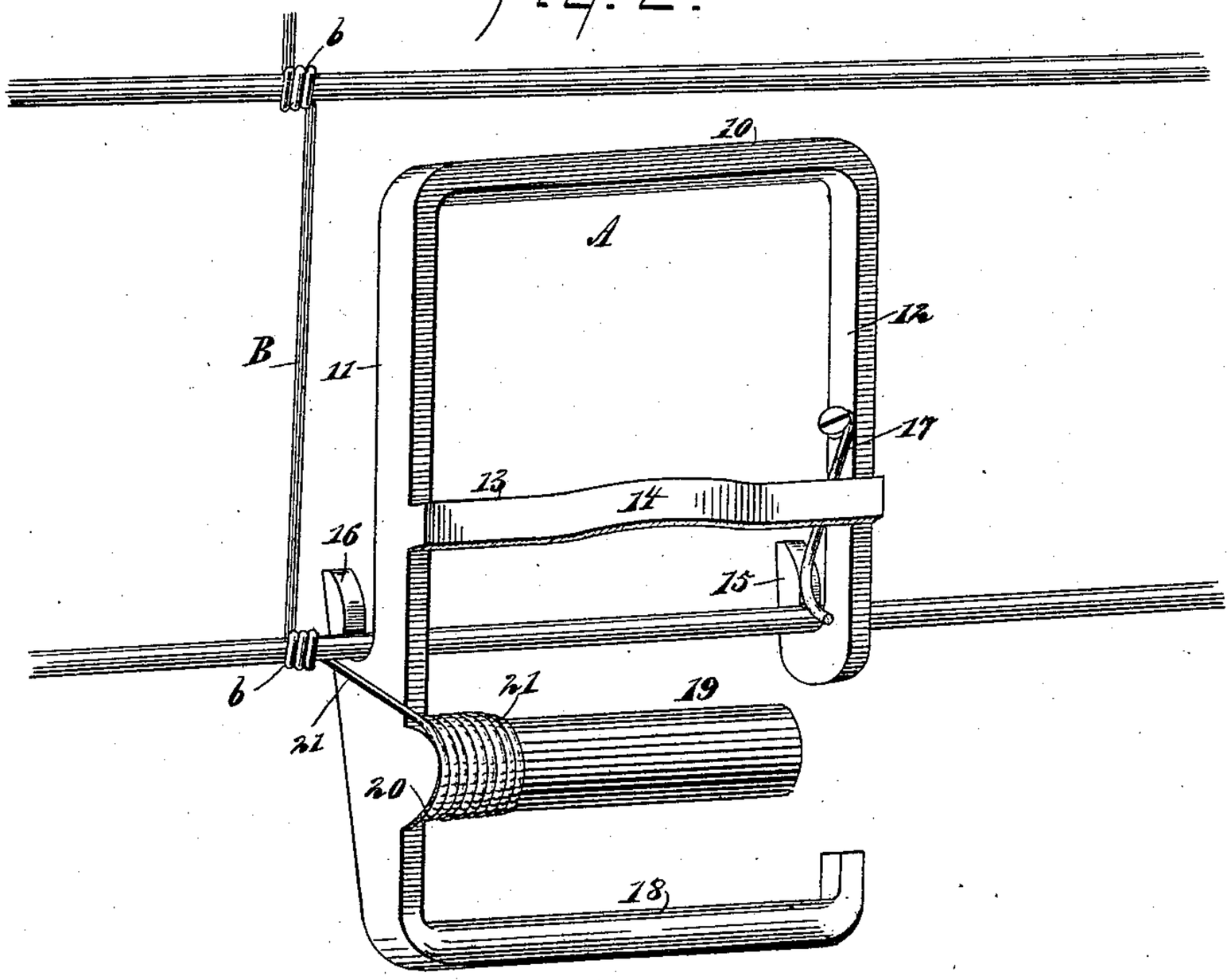


Fig. 2.



WITNESSES:

Henry A. C. Kellyer.

J. Fredericks.

INVENTOR

E. F. St. John.

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ENOS F. ST. JOHN, OF HIGHLAND STATION, MICHIGAN, ASSIGNOR OF ONE-HALF TO GEORGE HOMER BANCROFT, OF SAME PLACE.

WIRE-STAY-WEAVING DEVICE.

SPECIFICATION forming part of Letters Patent No. 567,053, dated September 1, 1896.

Application filed May 11, 1896. Serial No. 591,086. (No model.)

To all whom it may concern:

Be it known that I, ENOS F. ST. JOHN, of Highland Station, in the county of Oakland and State of Michigan, have invented a new and Improved Wire-Stay-Weaving Device, of which the following is a full, clear, and exact description.

The object of my invention is to provide a wire-stay-weaving device which will be exceedingly simple, durable, and economic in its construction and expeditiously and conveniently applied to any strand of a wire fence, the device being furthermore so constructed that it will weave or coil the stay on the fence-wire upon which it is placed.

A further object of the invention is to provide a means whereby any size coil-wire may be employed in connection with the device and the wire drawn directly from the coil when the device is in operation without interfering with any of its parts.

A further object of the invention is to so construct the device that it will have practically a double crank, thereby obviating the necessity of the operator passing his hand through parallel fence-wires to grasp the machine for the purpose of turning it.

Another object of this invention is to provide a simple and expeditious means for attaching the machines upon or removing them from the fence-wires.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation of a panel of a wire fence, illustrating the application of the device thereto, showing one position of the device; and Fig. 2 is an enlarged perspective view illustrating the device in reverse position and applied to a fence-wire.

In carrying out the invention the frame A of the device consists, preferably, of an end cross-bar 10, side bars 11 and 12, the side bar 11 being much longer than the opposing bar 12, and an intermediate cross-bar 13, which connects the two side bars at a point between the free end of the shorter side bar and its center. The intermediate cross-bar 13 is provided with an arched portion 14 in order that the said bar shall not interfere with the barbs on wire fences.

At the free end of the shorter side bar 12 a hook 15 is formed, which, when the frame is in its first position, extends downward at the front of the frame, or in direction of the end cross-bar 10, and a second hook 16 is correspondingly located on the longer side bar 11. The inner faces of the upright or tongue members of these hooks are preferably made somewhat semicircular or convexed, and a spring 17 is attached to the inner face of the shorter side bar 12 above the intermediate cross-bar, and the lower end of the aforesaid spring is curved in a downwardly and in a forwardly direction, its convexed portion being brought quite close to the corresponding portion of the hook 15. At the free end of the cross-bar 11 a crank-arm 18 is formed, which extends inward substantially parallel with the end cross-bar 10, which latter cross-bar serves also as a crank-arm or a handle for turning the frame.

A horizontal post 19 is formed integral with or attached to what may be termed the "rear" portion of the longer side bar 11, and this post 19 is located between the crank-arm 18 and the intermediate cross-bar 13, being also below the hooks 15 and 16. A flange 20 is formed at the outer end of the post 19, and at that portion of the post where the wire 21, which is normally coiled around the post, is to be drawn from said post the flange 20 is in a measure cut away, as shown in Fig. 2, in order that the aforesaid wire 21 may freely pass outside of the frame for attachment to the fence-wire upon which the device is placed.

In operation the stay-wire 21 is attached, for example, to the upper fence-wire by coiling it tightly around the same once or twice or by otherwise attaching it, and the crank-arm 18 of the device is brought uppermost and the frame is pushed downward until the fence-wire upon which the stay-wire is to be coiled enters and is locked in the hooks 15 and 16. The frame is free to be turned upon the fence-wire, and as it is revolved the stay-

wire will uncoil from the post 19 and will be coiled around the fence-wire. The machine is then removed from the uppermost fence-wire and placed upon the next one, and is turned upon this latter fence-wire to coil the stay-wire thereon. In this manner the device or machine is carried from one fence-wire to the other until the lowermost one is reached, whereupon the stay-wire is cut off and a commencement is again made at the top of the fence. In this manner a continuous stay B, provided with coils *b*, will be woven or formed on the fence-wire from the topmost strand to the bottom.

It is evident that the cross-bar 10 and the crank-arm 18 may either one be grasped to turn the device. Therefore it is not necessary to pass the hand through the space between the fence-wires in order to grasp a given handle portion of the device, and, furthermore, it is evident that the stay-wire will freely leave the post upon which it is coiled, and will not become in any manner tangled up with the frame of the device in its operation.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A wire-stay-weaving device consisting of a frame having end bars forming crank-arms, a side bar forming a complete closure at one side, a side bar at the opposite side shorter than the opposite side bar leaving an opening in front of said short side, a transverse post projecting from the continuous side bar toward the opening formed by the short side bar, and means for supporting the device on a fence-wire, substantially as described.

2. A machine for weaving stay-wires on wire fences and for analogous purposes, having a frame consisting of an end cross-bar, side bars projected therefrom, one longer than the other, each side bar being provided with a hook extending in the direction of the end cross-bar, a locking device adjacent to one of the hooks, an arm inwardly projected from the free end of the longer side bar, and a post also extending from said arm, forming a portion of the frame and provided with a guide-flange near its end for the outward conduct of the wire to be placed on the said post, as and for the purpose specified.

3. In a machine for weaving stay-wires on wire fences, the combination, with a frame consisting of an end bar, two side bars, one being longer than the other and the shorter side bar terminating in a hook extending in the direction of the end cross-bar, the opposite side bar having a corresponding hook, and a locking device attached to the said frame adjacent to one of the said hooks, of an arm inwardly projected from the free end of the longer side bar of the frame, a post horizontally located and secured to the longer side bar of the frame at a point between the arm and the hooks on the frame, the said post being adapted to receive the wire, and a guide device upon the said post, arranged to conduct the wire therefrom outward from the frame, as and for the purpose specified.

4. In a machine for weaving stay-wires on wire fences, the combination, with a frame consisting of an end bar, two side bars, one being longer than the other, the shorter side bar terminating in a hook extending in the direction of the end cross-bar, the opposite side bar having a corresponding hook, and a locking device attached to the said frame adjacent to one of the said hooks, of an arm inwardly projected from the free end of the longer side bar of the frame, a post horizontally located and secured to the longer side bar of the frame at a point between the arm and hooks on the frame, the said post being adapted to receive the wire, a guide device upon the said post, arranged to conduct the the wire therefrom outward from the frame, and an intermediate cross-bar connecting the side bars of the frame above the said post, the said intermediate cross-bar having an arched section to permit the clearance of barbs that may be on the fence-wire, as and for the purpose set forth.

5. A machine for weaving stay-wires on wire fences and for analogous purposes, having a frame consisting of an end cross-bar, side bars projecting therefrom, one longer than the other, each side bar being provided with a hook for grasping the fence-wire, a locking device adjacent to one of said hooks, an arm projecting from the free end of the longer side bar, and a post also extending from said arm for winding the wire upon, and a guide-flange at the base of said post for the outward course of the wire from the post, all as set forth.

ENOS F. ST. JOHN.

Witnesses:
I. ROY WATERBURY,
EMMA WATERBURY.