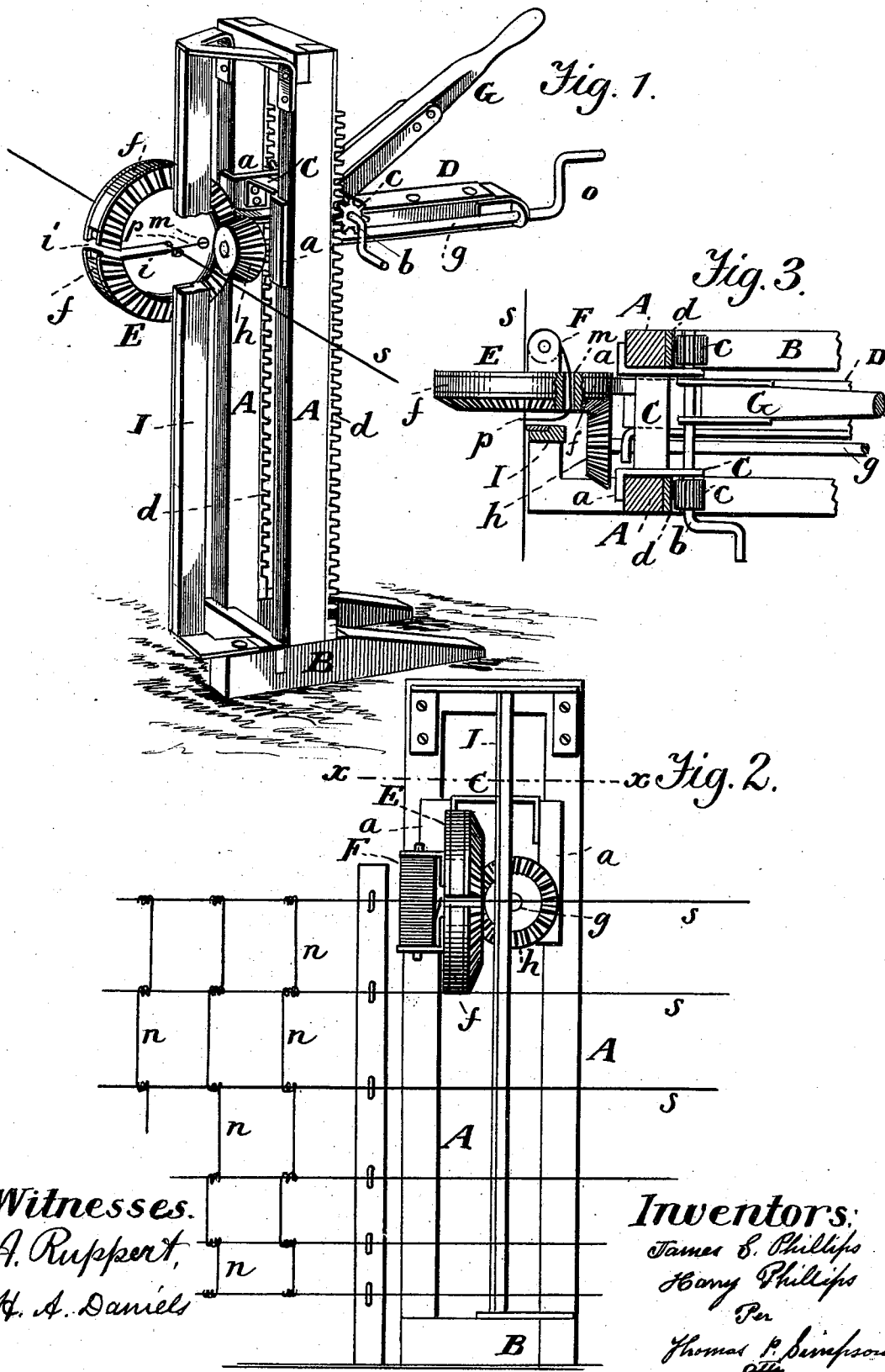


(No Model.)

J. S. & H. PHILLIPS.
WIRE FENCING MACHINE.

No. 510,704.

Patented Dec. 12, 1893.



THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES S. PHILLIPS AND HARRY PHILLIPS, OF HOPEDALE, ILLINOIS.

WIRE-FENCING MACHINE.

SPECIFICATION forming part of Letters Patent No. 510,704, dated December 12, 1893.

Application filed July 28, 1893. Serial No. 481,747. (No model.)

To all whom it may concern:

Be it known that we, JAMES S. PHILLIPS and HARRY PHILLIPS, citizens of the United States, residing at Hopedale, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in Wire-Fencing Machines; and we do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to wire fencing machines and consists in certain improvements in the construction of the same as hereinafter described and claimed, the device herein described being intended for securing the vertical wire ties to the horizontal wires after the latter have been secured to the fence posts.

In the accompanying drawings, Figure 1 represents a perspective view of a wire fencing machine provided with our improvements. Fig. 2 is a front view of the machine. Fig. 3 is a horizontal section taken on line *xx* of Fig. 2.

The supporting frame of the machine has two posts A with a suitable base B. Between the posts A is loosely fitted a carrier consisting of a frame C and a horizontal beam or bar D, connected therewith. The frame C has lugs *a*, which lap on the front surfaces of the posts A, and a shaft *b*, having a crank, is mounted in frame C, two pinions *c*, on said shaft, being in position to engage with the racks *d* on the rear surfaces of said posts; so that the said carrier is vertically adjustable on said posts.

E indicates a beveled gear wheel, having a groove in its periphery, said wheel being loosely held in position between two curved arms *f*, secured to and extending from the forward end of the bar D, said arms *f* fitting in said groove. *g* indicates a shaft which is mounted in bearings carried by the bar D, and on the forward end of said shaft is a beveled pinion *h*, in position to engage the gear wheel E which is free to revolve between the arms *f*. The wheel E is provided with a slot *i*, which extends from the periphery to the center of the wheel and, during operation, receives one of the horizontal wires *s* of the fence, as here-

inafter stated. An aperture *m* is made in the wheel E a short distance from the center, the wire to form the vertical ties, *n*, being passed through said aperture from a spool F which is journaled in bearings secured to one side of said wheel.

G indicates a hand-lever, connected with the carrier, by means of which the machine may be moved to and withdrawn from the fence during operation.

I indicates a vertical gage, located somewhat forward of the posts A, to indicate the positions of the horizontal wires *s*.

The machine being placed in position at right angles to the line of the fence, the carrier C, D, is raised by turning the shaft *b* until the center of the wheel E is opposite the uppermost wire *s* of the fence. The machine is then moved forward by means of the hand-lever G until said wire *s*, which is received in the slot *i* of wheel E, reaches the center of said wheel. The wire *p* which is wound on the spool F, is passed through the aperture *m* in the wheel E and is fastened to the uppermost wire *s* of the fence. The shaft *g* is then rotated several times by means of the crank *o*, and the beveled pinion *h*, engaging the wheel E, the latter is rotated, thus winding the wire *p* on the wire *s*. The machine is then withdrawn from the fence and the carrier is let down so that the wheel E is opposite the next wire *s* below. The machine is again moved forward, the wire *s* last mentioned being received in the slot *i*, and the wheel E is rotated and the operation continued as before.

We claim—

1. In a wiring machine, the combination, with a main frame, of a carrying device, provided with two curved arms, a wheel mounted in and carried by said arms, said wheel being provided with a slot, extending from its periphery to its center, and an aperture for the passage of wire, a spool mounted in bearings carried by said wheel, and mechanism for rotating said wheel, substantially as set forth and described.

2. The combination with a main frame, having two posts provided with racks, of a carrier adapted to move between said posts, pinions on a shaft mounted in said carrier, in position to connect with said racks, a horizontal bar

provided with two curved arms, a gear wheel, slotted and provided with an aperture, loosely supported between said curved arms, a crank-shaft mounted in bearings carried by said horizontal bar and provided with gearing to engage said slotted wheel, and a spool carried by said slotted wheel, substantially as set forth and described.

3. The combination with two posts of a frame, provided with racks *d*, of a frame C having vertical movement between said posts, a shaft *b* mounted in frame C, pinions *c*, connecting with racks *d*, a hand-lever connected with frame C, a horizontal bar D mounted in frame C, curved arms *f* connected with and

extending forward from said bar D, a beveled gear wheel E provided with slot *i* and aperture *m*, said wheel E being mounted in the arms *f*, which conform to the periphery of said wheel, a crank-shaft *g* in bearings carried by bar D, and a beveled pinion on shaft *g*, in position to engage the wheel E, substantially as set forth and described.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES S. PHILLIPS.

HARRY PHILLIPS.

Witnesses:

CARL JINGLING,
JAS. DONELSON.