(No Model.)

M. L. JONES.

WIRE FENCE MACHINE.

No. 471,978. Patented Mar. 29, 1892.

Fig. 1.

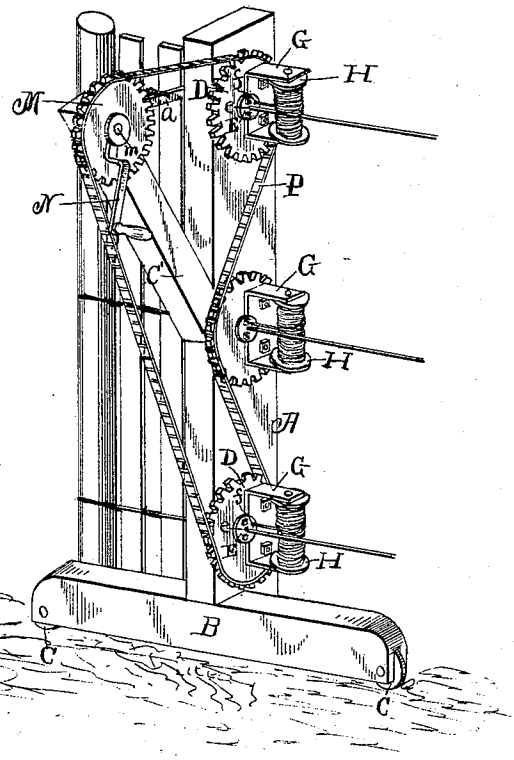


Fig. 3.

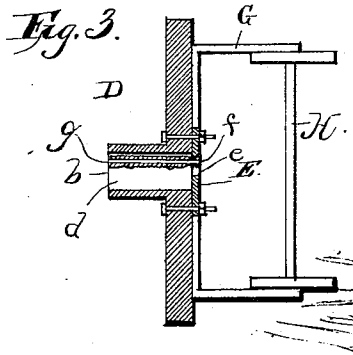
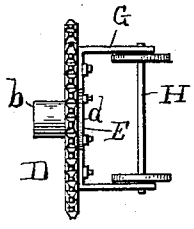


Fig. 2.



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UNITED STATES PATENT OFFICE.

MELVIN L. JONES, OF YORKTOWN, INDIANA.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 471,978, dated March 29, 1892.

Application filed October 27, 1891. Serial No. 409,983. (No model.)

To all whom it may concern:

Be it known that I, MELVIN L. JONES, a citizen of the United States, residing at Yorktown, in the county of Delaware and State of Indiana, have invented certain new and useful Improvements in 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.

My invention has relation to improvements in fence-building machines; and it has for its general object to provide such a machine of a construction adapted to fasten the pickets of a fence to a line-wire, bar, pipe, or the like by passing another wire over the pickets and twisting it around the line-wire or the like between the pickets.

To the attainment of this and other objects the invention consists in the peculiar construction, certain novel combinations, and the adaptation of parts hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is a perspective view of a section of fence, together with my improved machine, in an operative position. Fig. 2 is a view of one of the twisting-wheels and the reel carried thereby removed from the machine; and Fig. 3 is an enlarged diametrical section of one of the twisting-wheels, together with the reel carried thereby, which latter is shown in side elevation.

In the said drawings similar letters designate correponding parts in the several views, referring to which—

A indicates the supporting-upright of my improved machine, which is fixedly mounted at its lower end upon a carriage-bar B, which is disposed at right angles to the plane of said upright, and is provided adjacent to its free ends with traveling wheels C, by reason of which the machine may be readily moved. Fixedly connected to the main upright A and extending laterally oblique therefrom is a supporting-arm C′, which is preferably braced by a strap, as *a*, connected at one end to the main upright.

D indicates the sprocket twisting-wheels of my improved machine, of which any suitable number may be employed. These wheels D, as better illustrated in Fig. 1 of the drawings, are arranged one above the other, and they are respectively provided on one of their sides with a central trunnion *b*, which bears in and extends through the main upright A, and is suitably secured therein and insured against casual displacement.

Detachably connected to the face of the respective wheels D, which are provided with a central aperture *d*, is a disk E, which is preferably of a proportional size or diameter, as illustrated. Formed in the center of the respective disks E is an opening *e* of sufficient size for the loose passage of the line-wire when such is employed, and also formed in said disk at a suitable point from the center thereof is an opening *f*, which is designed to register with an opening *g* in the respective twisting-wheels to afford a passage for the fastening-wire, whereby it will be seen that when the wheels are rotated the wires carried thereby will be twisted around the line-wire, bar, pipe, or the like.

When a line pipe or bar is employed in the construction of the fence, the disks E are removed from the twisting-wheels and the pipes or bars are simply passed through the central apertures of the said wheels and the fastening-wires through the apertures *g* thereof.

Suitably connected as by bolts or the like, to the face of the respective wheels D, is an angle-iron G, in the branches of which are journaled the shaft or trunnions of the reel or spool H, upon which is wound the wire that is to be twisted.

By mounting the reels carrying the wire to be twisted upon the faces of the twisting-wheels, it will be readily perceived that not only is the said wire carried by the machine, but by the rotation of the twisting-wheels it is caused to feed evenly and the several wires to be twisted are prevented from tangling, &c.

Loosely mounted upon a suitable shaft *m*, extending laterally from the arm C′, adjacent to the outer end thereof, is a drive-wheel M, to which is fixedly connected a crank N, which serves to rotate said drive-wheel, and through the medium of the chain belt P to rotate the twisting-wheels in unison.

In operation, when large or line wires are employed for the attachment of the pickets

the said wires are first connected in a fixed manner to a post at the starting-point of the line of fence to be built, and the wires are then passed loosely through the central apertures in the twisting-wheels and disks. The smaller twisting or fastening wires are then passed through the apertures *f* and *g* in the disks and twisting-wheels, respectively, and are also fixedly connected to the post at the starting-point of the fence. The twisting-wheels are then rotated a few times to twist the fastening-wire around the line-wire, and then a picket is placed between the line-wires and the twisting-wires, and the twisting-wheels are again rotated to twist the fastening-wires about the line-wires and secure the picket in position. This operation is repeated until the section of fence is completed, the wire being twisted around the line-wire on both sides of the pickets, whereby it will be seen that said pickets will be firmly held in position and a cheap, strong, and durable fence afforded.

When iron piping, bars, or the like are employed for the attachment of the pickets, the disks E of the twisting-wheels are removed, the pipes or bars are passed through the central apertures in said twisting-wheels, while the fastening-wires are passed through the apertures *g*, and the operation before described is then carried out.

Although I have specifically described the construction and relative arrangement of the several elements of my improved machine, yet I do not desire to be confined to such exact construction, &c., as in practice such modifications may be made as fairly fall within the scope of my invention.

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

1. In a fence-building machine, the combination, with a twisting-wheel having a large central transverse aperture and a smaller transverse aperture off the center, of a disk having a small central aperture and an aperture off the center, a suitable means for detachably connecting said disk to the face of the wheel, and a suitable means for rotating the said wheel, substantially as and for the purpose set forth.

2. In a fence-building machine, substantially as described, the combination, with the main upright, of a twisting-wheel having a lateral trunnion journaled in said upright, a large central transverse aperture and a smaller transverse aperture off the center, a disk provided with a small central aperture and an aperture off the center, a suitable means for connecting said disk to the face of the wheel, and a suitable means for rotating said wheel, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

MELVIN L. JONES.

Witnesses:
HENRY J. DRAGOO,
FRANK JONES.