(No Model.)

A. BOGGS.

WIRE FENCE MACHINE.

No. 347,562. Patented Aug. 17, 1886.

Fig. 1.

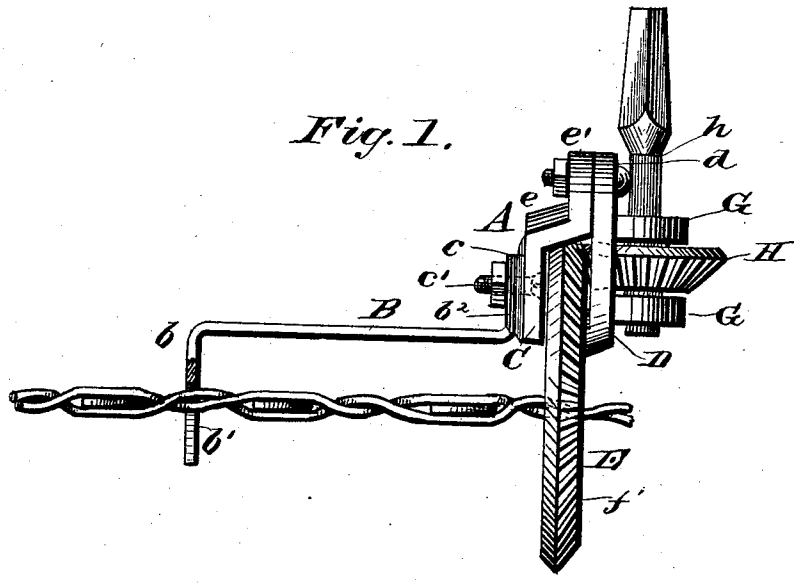


Fig. 2.

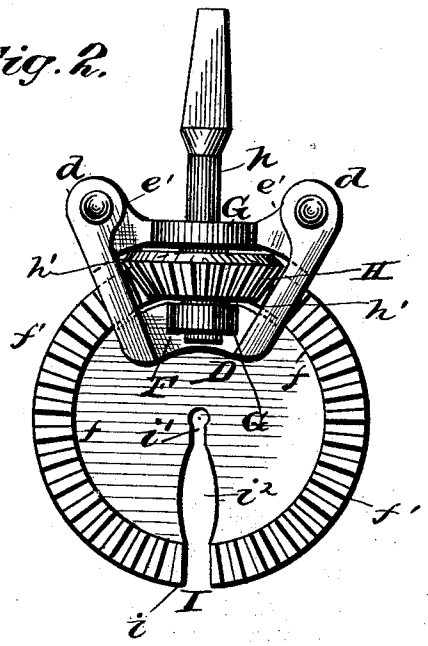
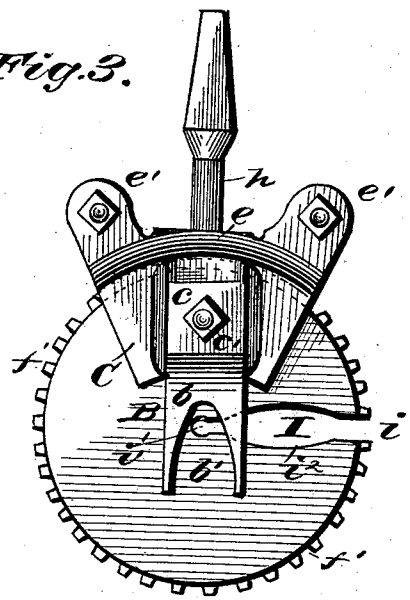


Fig. 3.



WITNESSES

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WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 347,562, dated August 17, 1886.

Application filed June 3, 1886. Serial No. 203,997. (No model.)

To all whom it may concern:

Be it known that I, ALDEN BOGGS, of Covington, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Wire-Fence Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 represents a plan view of a picket fence with the device attached thereto in position for constructing the same. Figs. 2 and 3 respectively represent views of the front and rear sides of the device.

This invention relates to improvements in machines for making the class of fences composed of slats connected and held in place by lines of twisted wire; and it consists in the construction and novel arrangement of parts, hereinafter described, illustrated in the drawings, and pointed out in the claims hereto appended.

Referring to the accompanying drawings, A designates the frame of the machine, which frame is composed of the supporting-bar B and the plates or blocks C and D, which hold the twisting-wheel, hereinafter described, in place.

The supporting-bar B has its ends bent at right angles to its middle portion, the said ends standing in opposite directions. The outer end, *b*, is provided with a longitudinal notch, *b'*, in which the wires to be twisted rest when the device is in position. The inner end, b^2, has its edges beveled so as to slide between the clips or ridges *c c* on the rear side of the rear surface of the plate C, which clips have their edges correspondingly beveled. The said end, when in place, is secured by a screw or bolt, *c'*, and nut thereon, the screw passing through the plate C.

The twisting-wheel E lies against the front surface of the plate C, which extends inward for about one-half the radius of said wheel, and has both its inner and outer edges made on arcs of circles concentric therewith. The outer edge, *e*, of the plate C is flanged slightly outward with respect to the twisting-wheel and over the periphery of the same, and is provided at its ends or corners with the ears *e'*, standing directly outward.

The plate D has the same contour as the plate C. Its outer edge is not, however, flanged, but is provided with ears *d d*, similar to the ears *e' e'*, against which they lie, the two plates being secured together by bolts passing through proper openings in said ears, and nuts on the rear ends of the bolts. The inner edge of the plate D is flanged inward, the flange F having its edge resting against the front surface of the wheel E, and its outer side against the inner periphery of a flange, *f*, on the rim of the front surface of the said wheel. The flange *f* has standing from it the teeth *f'*, so that the twisting-wheel is a crown-wheel, and is held in place as it is rotated by the flange D bearing against the inner surface of the flange *f* and inner ends of the teeth *f'*.

The wheel E may, if desired, be a bevel-gear, both that and the crown-wheel being equally effective. If it should be a crown-wheel, the pinion, H, that drives it must not have beveled teeth. These, however, are but different forms of equivalent construction.

G G are bearing-lugs standing from the front surface of the plate D, and *h* is a shaft turning in said bearings and carrying between the lugs a pinion, H, which passes through a slot, *h'*, in the plate D and meshes with the wheel E. The outer end of the shaft *h* is squared, to be held and turned by a brace or wrench in the usual manner.

I is a radial notch in the wheel E, extending from center to circumference thereof. The outer end, *i*, of the said notch is wider than its inner end, *i'*, which is rounded, as shown, and its edges diverge from both ends to its central part, i^2, which is wider than its ends, as shown. The shape causes the notch to readily receive and hold the wire, and prevents its slipping off when twisting the same.

In making the fence, as many pairs of wires as are necessary are secured to and stretched between posts a suitable distance apart. These pairs are preferably equidistant from each other, though such an arrangement is not absolutely necessary. A suitable tension is then given the wires of each pair, and a slat is put between the same near one of the posts. The wires of each pair are then twisted or bent,

one over the other, between the post and the slat. The device is then placed successively on the wires of each pair on the side of the slat opposite that on which the post is situated, and the said pairs of wires are successively twisted, as shown in Fig. 1. A second slat is then placed between the wires beyond the twist thus made, and the twisting repeated, and so on till the spaces between the posts are provided with the proper number of slats. The notch b' is placed upon the wires so as to straddle them and partially support and steady the frame of the device. The rotation of the wheel E, by means of the pinion H and shaft h, twists the wires.

Some of the advantages of this machine are as follows: It is very light, the weight of a complete machine being under four pounds. It is very cheap, the cost being not over three dollars. The slats may be arranged and worked into the fence perpendicularly by this machine, however the ground may incline.

Should the wires sag on account of expansion in hot weather, one or more additional turns can be readily given them to obtain the proper tension.

Having described my invention, I claim—

1. The combination of the supporting-frame provided with a notched arm to rest upon the wires and partially support the device, the twisting-wheel notched radially from center to circumference and provided with teeth around one side adjacent to its edge, the pinion journaled upon the supporting-frame and meshing with the teeth of the twisting-wheel, and means, substantially as described, to rotate the pinion.

2. The combination of the crown-wheel E, provided with the notch I, extending from center to circumference, having the rounded inner end, i', and central portion, i^2, wider than the ends, the frame constructed substantially as described, the shaft h, journaled upon said frame, and the pinion H on said shaft and meshing with the wheel E, substantially as specified.

3. The combination of the twisting crown-wheel E, provided with the radial notch I, the frame A, composed of the bar B, having the notch b' in its inwardly-bent rear end, and the plates C and D, bolted together and retaining the wheel E, substantially as described, while permitting it to rotate, the shaft h, turning in bearings in the lugs G G of the plate D, and the pinion H on said shaft and meshing with the wheel E through the slot h' in the plate D, substantially as specified.

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

ALDEN BOGGS.

Witnesses:
C. C. STEVENSON,
THOS. L. PURDY.