(No Model.)

W. J. BOWEN.

FENCE MAKING MACHINE.

No. 562,452. Patented June 23, 1896.

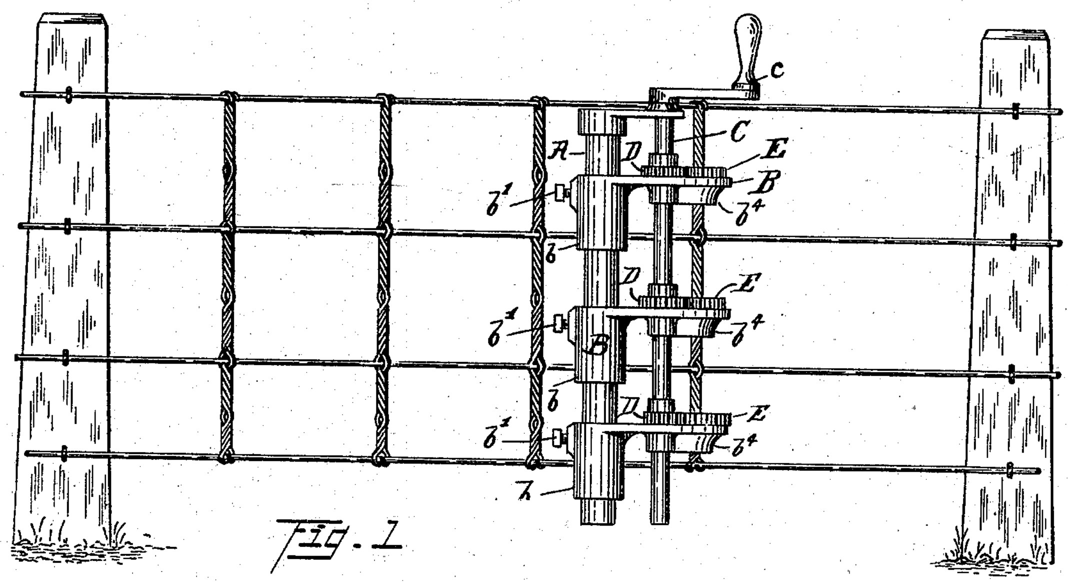

Fig. 1

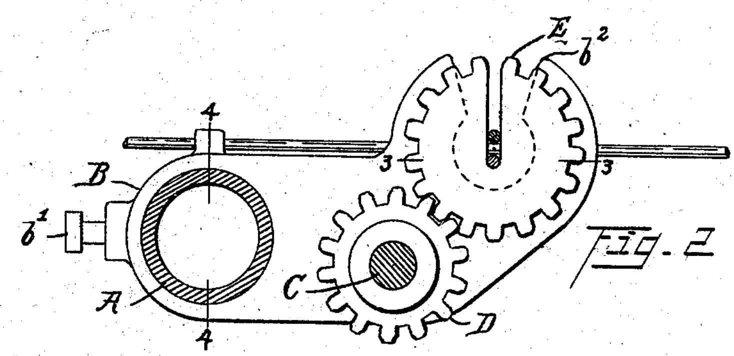

Fig. 2

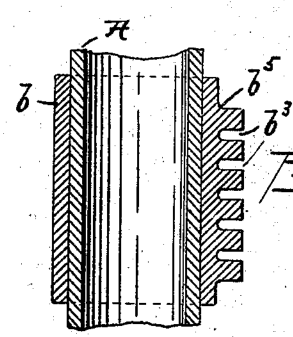

Fig. 4

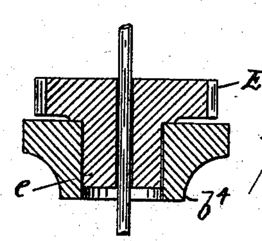

Fig. 3

Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM J. BOWEN, OF NORWALK, OHIO, ASSIGNOR TO JOHN P. SCHILTZ, OF FAIRFIELD, HURON COUNTY, OHIO.

FENCE-MAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 562,452, dated June 23, 1896.

Application filed September 7, 1895. Serial No. 561,723. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BOWEN, a citizen of the United States, residing at Norwalk, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Fence-Making 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 relates to a portable machine for constructing the sort of wire fences which consist of horizontal strands of wire united at intervals by vertical stays or pickets made of two strands of wire twisted together for the purpose of strengthening them and holding the horizontal wires in fixed relation to each other, substantially as shown in Figure 1. Heretofore when fences of this character have been made in the field the two wires for the stay have been placed on opposite sides of the horizontal wires and then twisted together by a wrench or other hand-tool. The object of the machine embodying my invention is to cheaply and quickly twist such stays, thereby locking them upon the horizontal wires, and to hold said horizontal wires at any desired distance apart during the twisting operation.

The invention consists in the construction and combination of parts hereinafter described, and pointed out definitely in the claims.

In the drawings, Fig. 1 is an elevation of a machine embodying my invention in position for twisting the stays. Fig. 2 is a plan view of one of the brackets and the mechanism carried thereby. Fig. 3 is a vertical section on line 3 3 of Fig. 2, and Fig. 4 is a sectional view on line 4 4 of Fig. 2, viewed from the right.

Referring to the parts by letters, A represents a post for supporting the horizontal brackets B and parts carried thereby. This post may be of any suitable size and shape and may be made of any suitable material.

The brackets B, of which there may be any number, are provided each with a sleeve b, which embraces the post and is fixed at any elevation thereon by a set-screw b' or other suitable means. A vertical shaft C is journaled in the several brackets, and suitable means are provided, as, for example, the crank c, for turning said shaft.

Just above each bracket is a pinion D, which surrounds and is fastened to the shaft by any suitable means.

E represents a twisting-gear having on its under side a cylindrical hub e, which is journaled in a cylindrical hole or journal-box b^4, formed in the outer part of the bracket B. This gear rests upon the bracket and is in mesh with pinion D. A vertical slot, a little wider than the diameter of the wire to be used for the stays, is cut in this gear and hub extending from the outer edge to a point a little past the axis. A vertical slot b^2 is likewise formed in the bracket, through the journal-box b^4, to permit the stay-wires to enter the slot in the gear E.

On one side of each sleeve b is a vertical rib b^5, in which is cut one or more horizontal grooves b^3, the function of which is to receive the horizontal wires and hold them in fixed relation to each other while the stays are being twisted.

To use the above-described machine, the horizontal wires are first strung between the fence-posts. The brackets are then adjusted upon the post A so that each of the gears E will be about midway between two adjacent horizontal wires. The two wires for the stays are then placed on opposite sides of the horizontal wires, and passed through the slots in the gears E and their boxes. The horizontal wires are caused to enter the slots b^3, and then the shaft C is turned by the means provided for this purpose. This causes the gears E to revolve, and they twist the stay-wires as much as is desired, and substantially as shown, whereupon the brackets and gears E are withdrawn from the twisted stay. The ends of the stay-wires are preferably twisted around the upper and lower horizontal fence-wires to complete the stays.

It is often desirable that some of the horizontal wires (generally the lower ones) lie closer together than others; but in such cases (as in all cases) it is desirable to have the stay-wires twisted to an equal degree. To effect this result with the mechanism hereto-

fore described, the gears E and pinion D may be made relatively of different sizes. For example, when any two horizontal wires are nearer than common, the gear E on the interposed bracket should be larger and the driving-pinion smaller than the others, whereby the twisting-gear E will be revolved a proportionately smaller number of times.

Having described my invention, I claim—

1. In a fence-making machine, the combination of a post, and a series of brackets each having a sleeve which embraces and is adjustable upon said post, and a slotted journal-box, with a series of twisting-gears each having a hub which is mounted in one of said journal-boxes, and having a slot extending from the edge in past the axis of said gears and hub, a shaft mounted in said brackets, and pinions adjustably secured to said shaft, substantially as and for the purpose specified.

2. In a portable fence-making machine, in combination, a supporting-post, a series of brackets each having a sleeve which embraces and is adjustable upon said post, and a transverse groove in the side of said sleeve, a slotted journal-box formed in each bracket, twisting-gears mounted in said journal-boxes, each having a slot which extends from its outer edge to past its axis, a driving-shaft journaled in said brackets, and pinions secured thereto in mesh with said twisting-gears, substantially as and for the purpose specified.

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

WILLIAM J. BOWEN.

Witnesses:
WM. C. PENFIELD,
E. G. BOUGHTON.