(No Model.)

W. H. SMITH.

FENCE MAKING MACHINE.

No. 429,655. Patented June 10, 1890.

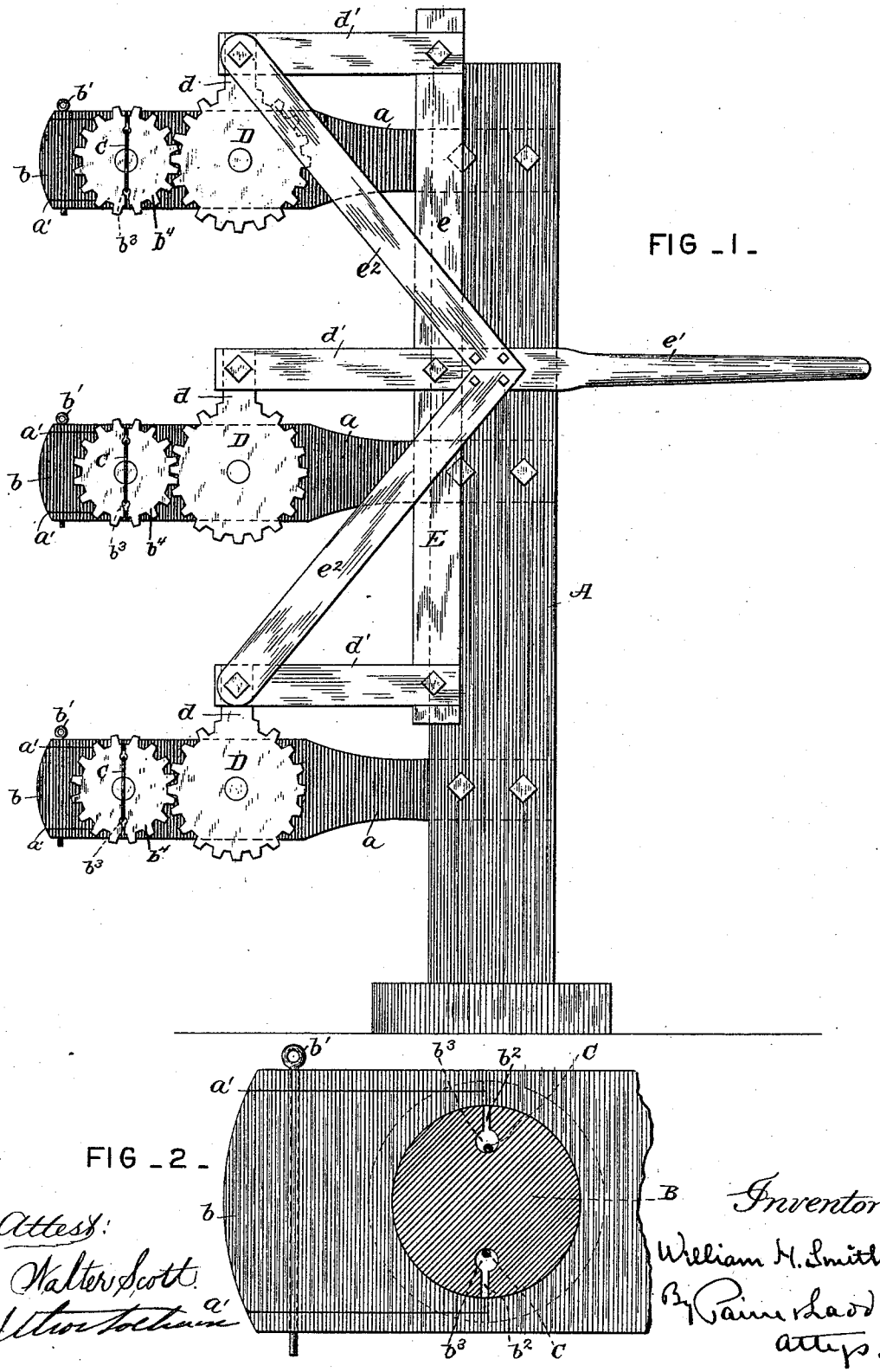

FIG _1_

FIG _2_

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UNITED STATES PATENT OFFICE.

WILLIAM H. SMITH, OF FAIRFIELD, NEBRASKA.

FENCE-MAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 429,655, dated June 10, 1890.

Application filed October 19, 1889. Serial No. 327,516. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SMITH, a citizen of the United States, residing at Fairfield, in the county of Clay and State of Nebraska, 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention pertains to certain new and useful improvements in fence-making machines, having for its object the production of a simple and inexpensive device of this class whereby the wire strands of a fence can be readily and easily crossed in alternate opposite directions on either side of a panel, substantially as hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a front elevation showing my invention as used in practice. Fig. 2 is an enlarged detail view.

Referring to the drawings, A designates the supporting post or frame, from which project three (more or less) lateral arms *a*, having grooves or recesses *a'* in the outer ends. Within each of these grooves or recesses *a'* is disposed a twisting-head B, having a central reduced portion fitting snugly such groove or recess, wherein the twisting-head is firmly held by a removable block or section *b*, through which a securing-pin *b'* is passed.

In each twisting-head are formed opposite slits b^2 b^2, terminating at their inner ends in circular openings or apertures b^3, through which the strands of wire C C are extended, said wires being forced through the slits when the securing blocks or sections are removed. These twisting-heads are each provided at one end with a toothed portion b^4.

To each lateral arm is secured a gear-wheel D, intermeshing with the toothed portion b^4 of the adjacent twisting-head. From each of these gear-wheels D projects a short stud *d*, and to these studs are secured the arms *d'* of a movable frame E. These arms *d* are secured to a perpendicular bar *e*, from which extends a handle *e'*. The end arms *d* are additionally braced or strengthened by divergent bars e^2, secured thereto and to the bar *e*, as shown.

In practice the strands of wire are first inserted in the twisting-heads, which are firmly secured by the blocks or sections *b* and pins *b'*. The operator, by grasping the handle *e'*, can move the frame E up and down, imparting motion to the gear-wheels and causing the turning of the twisting-heads and consequently the coiling or twisting of the wires. Each movement is in alternating opposite directions, and thus the wire strands are twisted in a reverse direction on the opposite sides of each panel.

I claim as my invention—

1. The herein-described fence-making machine, comprising a series of twisting-heads having the toothed portions, and the gear-wheels engaging therewith and provided with short studs projecting therefrom, and the movable frame having arms connected to said studs, substantially as set forth.

2. As an improvement in fence-making machines, the twisting-heads having toothed portions and opposite slits or openings in combination with the gear-wheels in engagement therewith and the movable frame connected to said gear-wheels, substantially as set forth.

3. The herein-described fence-making machine, comprising a series of twisting-heads having toothed portions and opposite slits or openings, the gear-wheels engaging therewith and provided with short studs projecting therefrom, and the movable frame connected to said studs, substantially as set forth.

4. The combination, with the frame having the lateral arms provided with end grooves or recesses, of the twisting-heads having central reduced portions in said grooves or recesses and the removable blocks or sections securing said twisting-heads in place, substantially as set forth.

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

W. H. SMITH.

Witnesses:
W. G. SHERMAN,
S. A. BOYNTON.