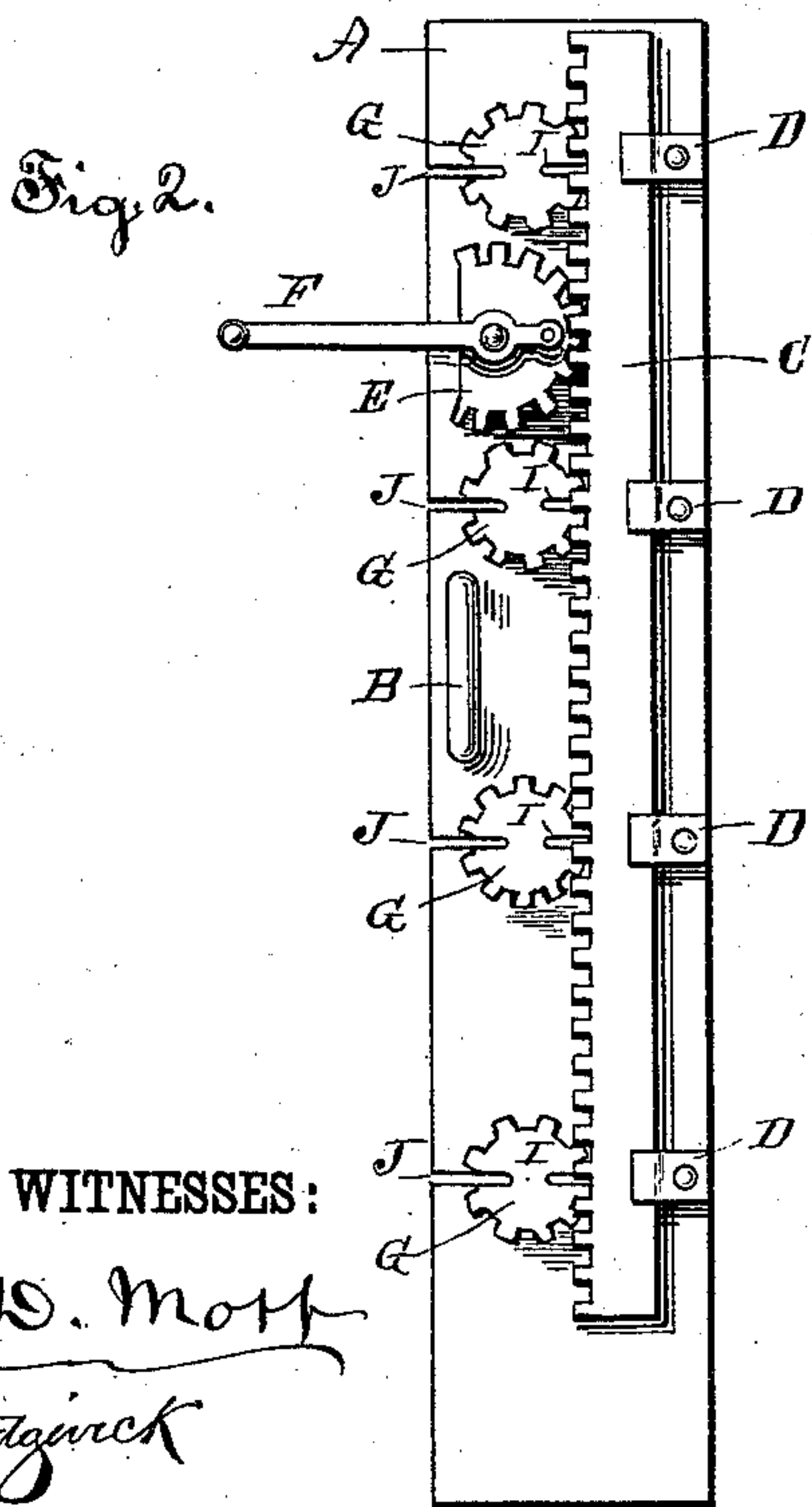
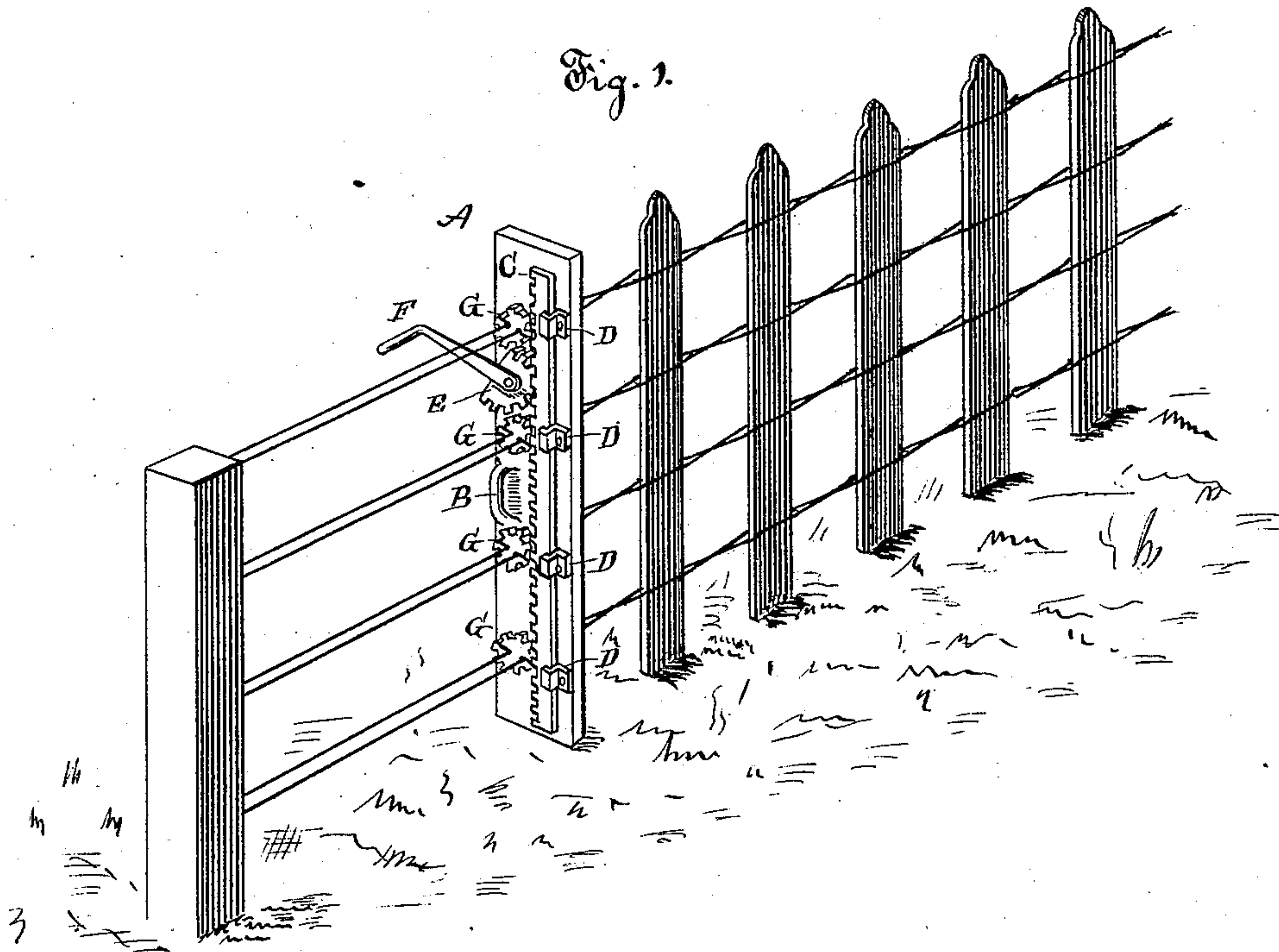


(No Model.)

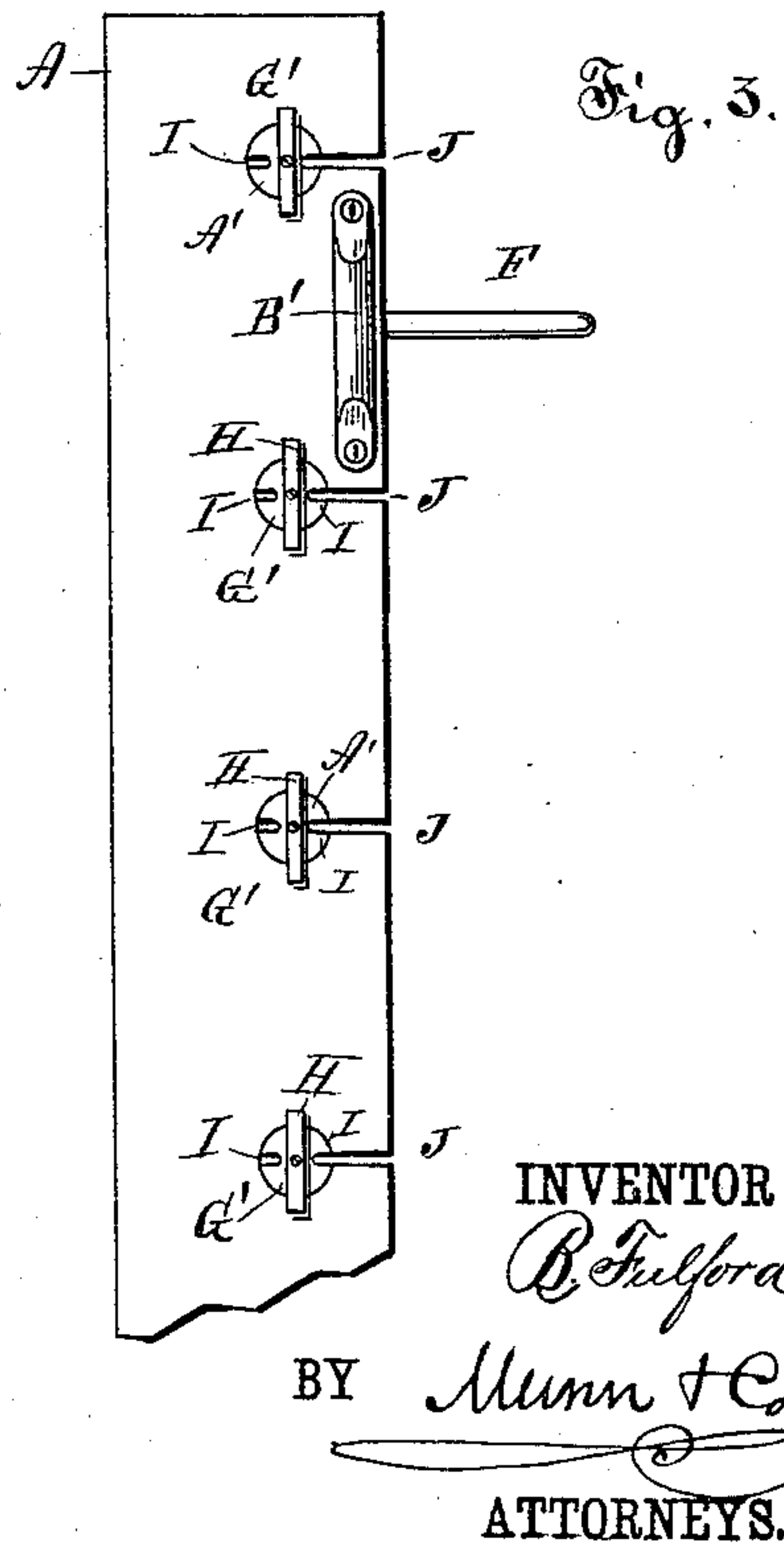
B. FULFORD.
WIRE TWISTING MACHINE.

No. 349,251.

Patented Sept. 14, 1886.



WITNESSES:
D. W. Mott
C. S. Givens



INVENTOR:
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BY Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

BERTRAM FULFORD, OF SHELBYVILLE, INDIANA, ASSIGNOR TO HIMSELF
AND OSCAR HAND, OF SAME PLACE.

WIRE-TWISTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 349,251, dated September 14, 1886.

Application filed June 9, 1886. Serial No. 204,614. (No model.)

To all whom it may concern:

Be it known that I, BERTRAM FULFORD, of Shelbyville, in the county of Shelby and State of Indiana, have invented a new and Improved Wire-Twisting Machine, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved machine for twisting wire in making fences.

The invention consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improvement in operation. Fig. 2 is a front elevation of my improvement, and Fig. 3 is a rear elevation of the same.

The mechanism for twisting the wires is mounted on a board, A, of suitable size, and provided with a handle, B, on its front and with a handle, B', on its rear. A rack, C, placed on the front of the board A, slides in guides D, secured at suitable intervals to the board A. Into the rack C meshes a segmental gear-wheel, E, having its bearing on the board A, and being provided with the crank-arm F, by which the segment-gear E can be turned on its axis. Into the rack C also meshes any desired number of pinions, G, each provided with a hub, G', which has its bearing in a corresponding aperture, A', formed in the board A, and each hub is provided on the rear with a keeper, H, which holds the pinion in place in the board A. Any number of pinions G may be employed, according to the height of the fence to be constructed, and the pinions are placed vertically one above the other at certain heights, according to the desired distance between the longitudinal wires constituting the rails of the fence. Each of the pinions G is provided with two apertures, I, placed diametrically opposite each other, and also passing through the hub G'. From each aperture I leads a slot to the periphery of the pinion and of the hub, respectively. A corresponding slot,

J, is formed in the board A in a horizontal plane which passes through the axis of the respective pinion G, the said slot commencing at the edge of the board A and running inward to the aperture A', so as to establish communication with one of the apertures I in the pinion G when the same is in the horizontal position.

The operation is as follows: The two wires to be twisted by each pinion G are each fastened by one end to a fence-post, and then passed through the apertures I in the pinion G, and by then giving a half-turn to the crank-arm F the pinions will be caused to revolve by the action of the rack C, and the two wires in each pinion twisted over each other between the post and the rear of the board A. The operator then takes hold of the handles B B' and moves the apparatus forward on the wires, so as to permit of inserting a picket between the wires of each set. The crank-arm F is then turned in the reverse direction, which causes the pinions to revolve in a direction opposite to that in which they revolved before, and each set of wires for each pinion is again twisted. The apparatus is then moved again, a new picket is inserted, and the above-described operation is repeated. It will be seen that the two wires for each pinion form only one twist between the pickets, and thus avoid the necessity of forming a shoulder on the wire.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

A wire-twisting machine consisting of the board A, provided with the apertures A', the handles B B', the guides D, and slots J, the rack C, held on the board by the guides D, the pinions G, having hubs G', projecting into the apertures of the board and secured therein, and provided with the slots I, and the segmental gear E, pivoted to the board between two of the said pinions, and provided with the crank-handle F, substantially as described.

BERTRAM FULFORD.

Witnesses:

WILLIAM C. CLENDENING,
THOMAS B. ADAMS.