(Model.)

J. B. BARRON.

WIRE FENCE TOOL.

No. 314,779. Patented Mar. 31, 1885.

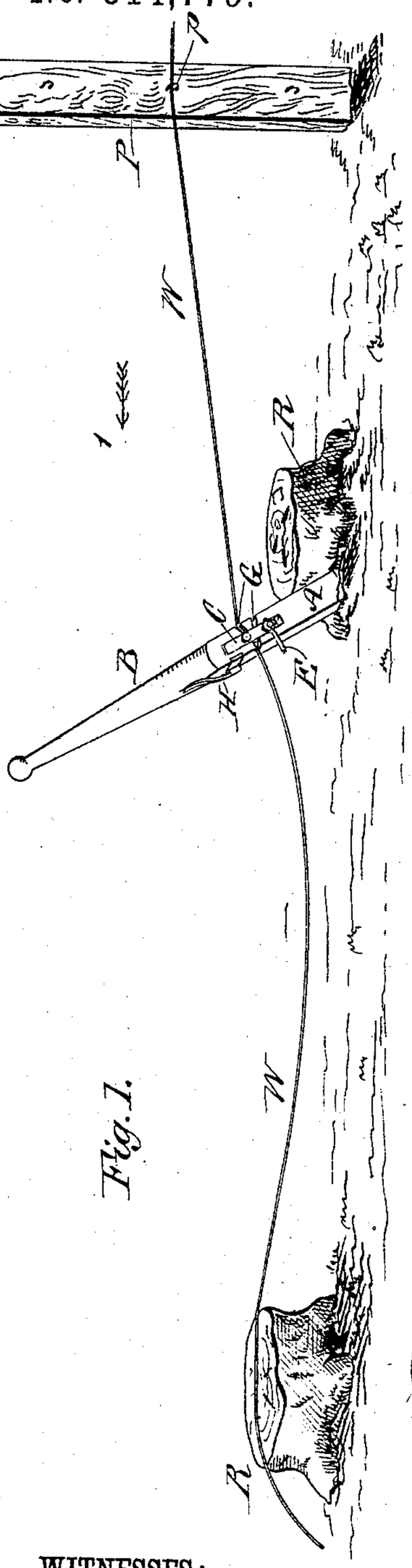

Fig. 1.

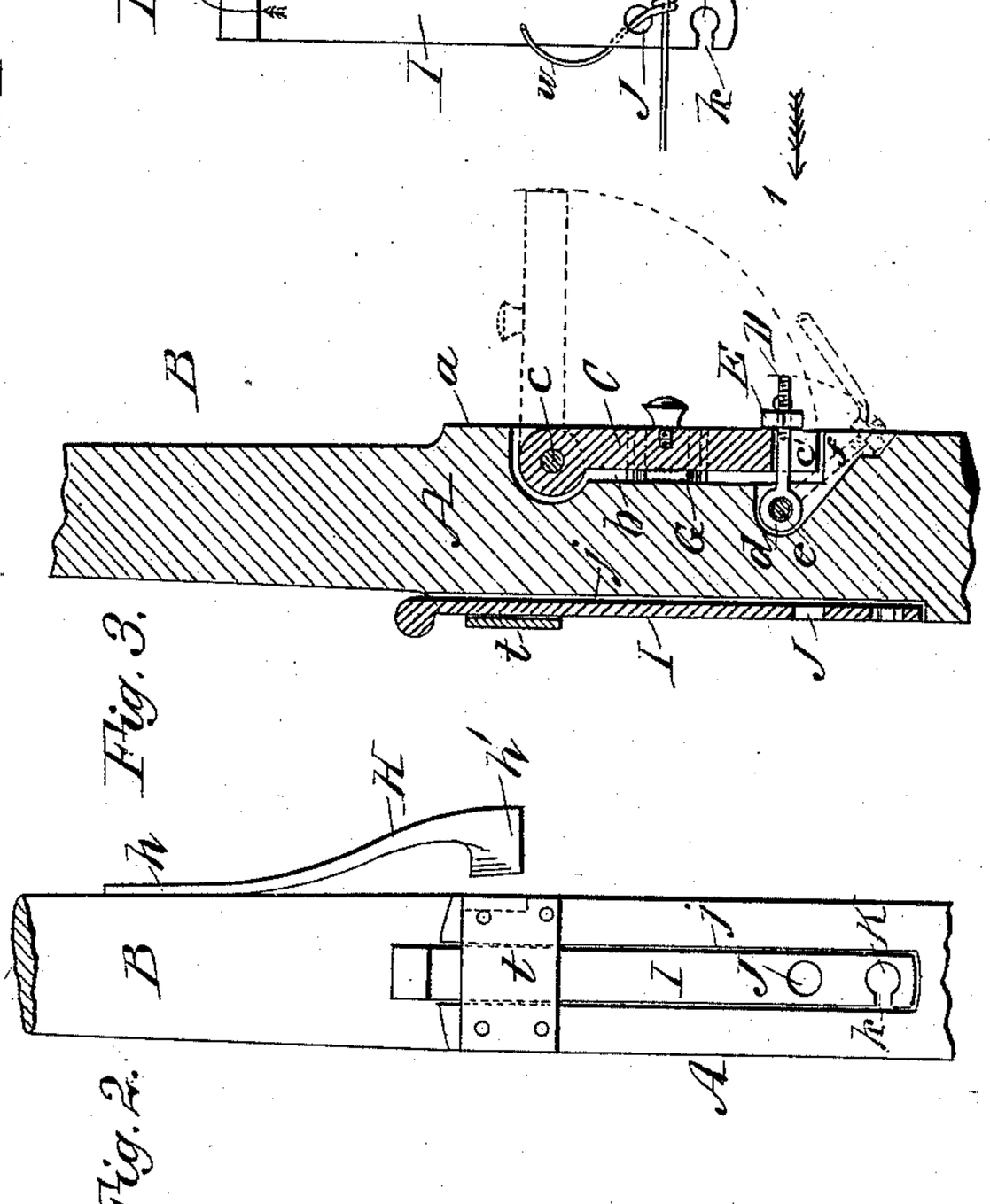

Fig. 4.

Fig. 5.

Fig. 3.

Fig. 2.

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UNITED STATES PATENT OFFICE.

JAMES BIRNEY BARRON, OF TOPSHAM, MAINE.

WIRE-FENCE TOOL.

SPECIFICATION forming part of Letters Patent No. 314,779, dated March 31, 1885.

Application filed June 27, 1884. (Model.)

To all whom it may concern:

Be it known that I, JAMES BIRNEY BARRON, of Topsham, in the county of Sagadahoc and State of Maine, have invented a new and Improved Wire-Fence Tool, of which the following is a full, clear, and exact description.

The object of my invention is to provide a simple, efficient, and inexpensive tool for use in stretching the wires along the posts in setting up wire fences.

The invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

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 showing my improved fence-tool as used in stretching the fence-wire. Fig. 2 is an enlarged rear view of part of the tool-stock, showing the wire splicing and cutting-off tools. Fig. 3 is a sectional side elevation taken at right angles to Fig. 2. Fig. 4 is a front view showing the wire grip or vise and the method of joining or splicing the wires, and Fig. 5 shows one of the joints of the fence-wires.

I make the fence-tool with a suitable heavy stock, A, extended to form the handle B, to serve as a lever by which to work the tool to stretch the fence-wires. The front side, *a*, of the stock A has a recess, *b*, formed in it, in which is pivoted at one end on a strong pin, *c*, the vise-jaw C, which is slotted at its other end, as at *c'*, for the passage of a screw-pin, D, which is pivoted by its eye *d* upon a pin, *e*, passed into or through the stock. The stock is slotted, as at *f*, to allow the screw-pin D to swing back clear of the end of the vise-jaw C, to allow the jaw to be opened to permit the fence-wire W to be passed between the jaw and the stock of the tool.

E is a handle-nut, which is screwed onto the end of the pin D, and when the pin is swung into the slot *c'* of the vise-jaw C the nut may be turned down tightly on the top of said jaw to bind the fence-wires, so that they will not slip while being stretched along the fence-posts P. I arrange the vise-jaw C at about the transverse center of the face *a* of the stock A, and beneath the lengthwise center of the jaw, or thereabout, I cut into the face of the stock the <-shaped groove G, so that when the fence-wire is to be drawn in the direction of the arrow 1 in Figs. 1 and 4 the wire will be passed into the upper side or half, *g*, of the groove G, and so as to draw over the corner *g'* of this part of the groove, and when the fence-wire is to be drawn or stretched the other way the wire will be passed into the lower side or half, g^2, of the groove G, to draw over the corner g^3 at the other side of the stock. With this arrangement of reversely-inclined wire-grooves in the stock the wires will be much less liable to slip through the vise than would be the case were the wire-grooves cut straight across the stock, and when one of the wires of the fence is stretched the next wire may be stretched or drawn in the reverse direction, thus enabling the workman to work both ways in stretching the fence-wires, which economizes time, and is less liable to loosen the fence-posts by the pull of the wires than when the wires are all stretched in one direction.

I propose to insert or apply metal wear plates or blocks *i* at the corners $g' g^3$ of the slots over which the wires draw, to insure a better hold of the wires and save the tool, and the opposing faces of the vise-jaw C and stock between which the wire is gripped may be faced with any suitable roughened metallic grip and wear plates.

H is a cutter fixed at one end, *h*, to the stock or its handle, and having a cutting-head, *h'*, which normally springs out from the side of the tool sufficiently to admit the fence-wire between its edge and a suitable plate, h^2, let into the stock, and so that a blow of a hammer on the head *h'* will cut off the wire.

I is a wire joining or splicing bar which I hold in a socket, *j*, of the stock A by a strap or plate, *t*, which crosses the slot outside of the bar. (See Fig. 2.) This bar I has a hole, J, through which the end *w* of one of the fence-wires W may be passed, whereupon the bar is placed against the other wire and then turned to twist or coil the end *w* around it to form the coil *l*, the wires being held meanwhile by the vise-jaw. When the coil *l* is finished, the end of the wire around which the said coil is made is twisted around the other wire to form the coil *l'*, (see Fig. 5,) the wires being shifted in the vise and the bar I worked at the other side of the stock while making the second coil quite close to the first one. The splicing-bar

I has another hole, K, with a side opening, *k*, through which the barbs of barbed fence-wires may pass as the said wires are passed sidewise into the hole K to make the joint, as will readily be understood. The wire cutting and splicing implements thus are always ready to hand for use when required.

The use of the tool in stretching the fence-wires is illustrated in Fig. 1, where the wire W is being drawn to the left through the partly-tightened staples *p* on the fence-post P while being held in the upper inclined groove, *g*, of the tool-stock, the wire resting on the corner *g'* of the groove. The end of the stock may be placed against a stump or root, R, or a stone, or other brace as a fulcrum, as will readily be understood. As the wires are stretched tight the staples *p* will be driven in hard upon them to hold them to place. The wire-clamping devices C D E will of course work well in fastening the fence-wire to a tool-stock having a single transverse groove for the wire, and the tool may be used to draw up the fence-wires when held in or near the horizontal plane and braced against a fence-post or other support.

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

1. The combination, with the stock A, extended to form a handle, B, and having a transverse groove across its face, of the jaw C, pivoted at *c* to the stock, and having a slot, *c'*, at its lower end, the screw D, hinged to the stock to enter the said slot *c'*, and a nut, E, adapted to clamp the jaw C over the wire-groove in the stock, substantially as set forth.

2. A combined fence-wire stretcher, cutter, and twister consisting, essentially, of the stock A, having a handle, B, and a transverse wire-groove in its side face, the jaw C, pivoted to swing over said groove and slotted at its lower end, the screw D, hinged to the stock to enter the slot, a hand-nut, E, adapted to clamp the jaw over the transverse groove, the spring-cutter *h h'* on the end face of the stock, the twisting-bar I, having holes J and K*k*, and the loop *t* over the stock for holding the splicing-tool in place, substantially as set forth.

JAMES BIRNEY BARRON.

Witnesses:
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