E. L. WARREN.

Nail for Wire Fences.

No. 228,236. Patented June 1, 1880.

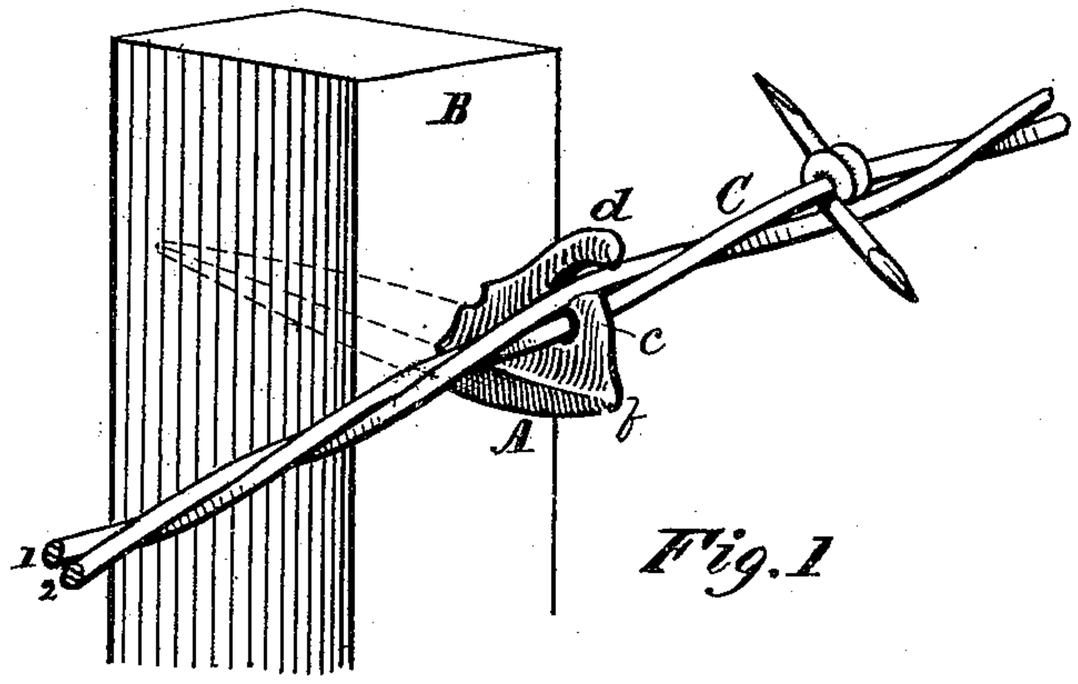

Fig. 1

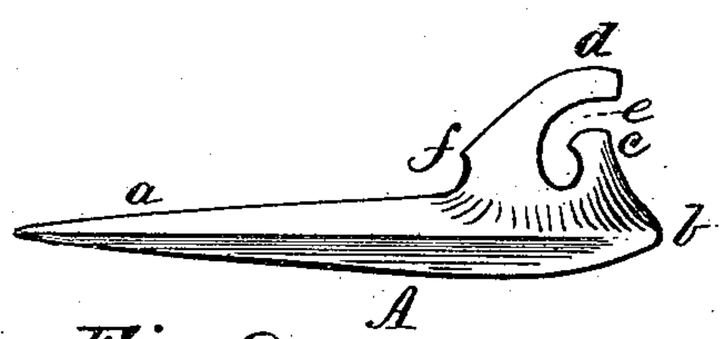

Fig. 2

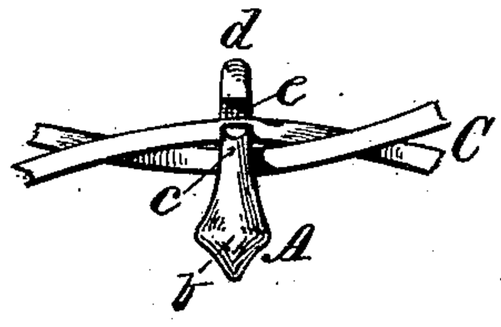

Fig. 3

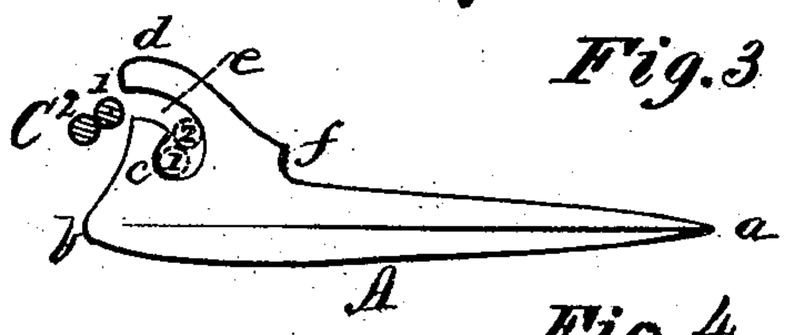

Fig. 4

Witnesses

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Inventor

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Att'y.

UNITED STATES PATENT OFFICE.

EDWARD L. WARREN, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO THE WASHBURN & MOEN MANUFACTURING COMPANY, OF SAME PLACE.

NAIL FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 228,236, dated June 1, 1880.

Application filed January 26, 1880.

To all whom it may concern:

Be it known that I, EDWARD L. WARREN, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Nails for Wire Fences; and I declare the following to be a description of my said invention sufficiently full, clear, and exact to enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved nail for wire fences as applied to use. Fig. 2 is a side view of said nail. Fig. 3 is a front view of the same; and Fig. 4 is a side view, illustrating the method of connecting the wires thereto.

The object of my invention is to provide a simple, convenient, and serviceable device for attaching wire fencing to posts; and my invention consists in an improved nail, constructed and adapted for use substantially as hereinafter described.

In the drawings, A denotes the nail, B the post, and C the fence-wires. This nail is preferably cast from malleable iron, or it may be made from other suitable metal. It is formed with a pointed shank, *a*, to be driven into the post B, its outer end being provided with a projection, *b*, to receive the blow of the hammer when driving it in. On the upper part, near the outer end, is an upward-projecting lug, *c*, having a slight backward curve at its rear edge, and in rear of said lug *c* is a finger, *d*, that curves upward and forward over the end of the lug *c* in the manner shown, so as to leave a space, *e*, slightly greater than the diameter of one of the strands of wire between the under side of the finger *d* and top of the lug *c*, which space terminates in a circular recess at the back of the lug, within which the wires are retained.

The rear part of the finger *d* is made with an offset or shoulder, *f*, at its junction with the shank *a*, to facilitate the withdrawal of the nail from the post, if required.

The wires C are attached to the posts when putting up the fence as follows: The nails A being first driven into place and the wires stretched along the line, that portion of the wire where it meets the nail is turned or twisted so as to impart a torsional strain on the strands C 2 1. (See Fig. 4.) Said strands are then slipped into the space *e*, where they are permitted to spring back toward their natural position, but are caught between the lug *c* and finger *d*, as indicated in dotted lines at 1 2, Fig. 4. The wires are thus locked into the staple so as to be securely retained under all ordinary circumstances of use without other fastening, the connection being sufficiently free and loose to allow of the wires being strained up or tightened without inconvenience, while the wires can readily be detached by twisting or turning them backward, and at the same time raising them from the space *e*, within which they are locked.

If desired, the fastening can be made permanent by clinching the finger *d* down upon the end of the lug *c*, so as to close the opening or space *e*. This, however, is not absolutely essential, since by simply locking the wires into the space by their torsional spring or elasticity a secure fastening is effected.

What I claim as of my invention, and desire to secure by Letters Patent, is—

The hook or nail for wire fences constructed, as hereinbefore described, with the lug *c* and curved finger *d* formed on the shank *a b*, with an intervening space, *e*, terminating in a circular recess adapted for receiving and securing the fence-wire strands C 1 2, substantially as set forth.

Witness my hand this 24th day of January, A. D. 1880.

EDWARD L. WARREN.

Witnesses:

CHAS. H. BURLEIGH,

FRANK. F. BULLARD.