

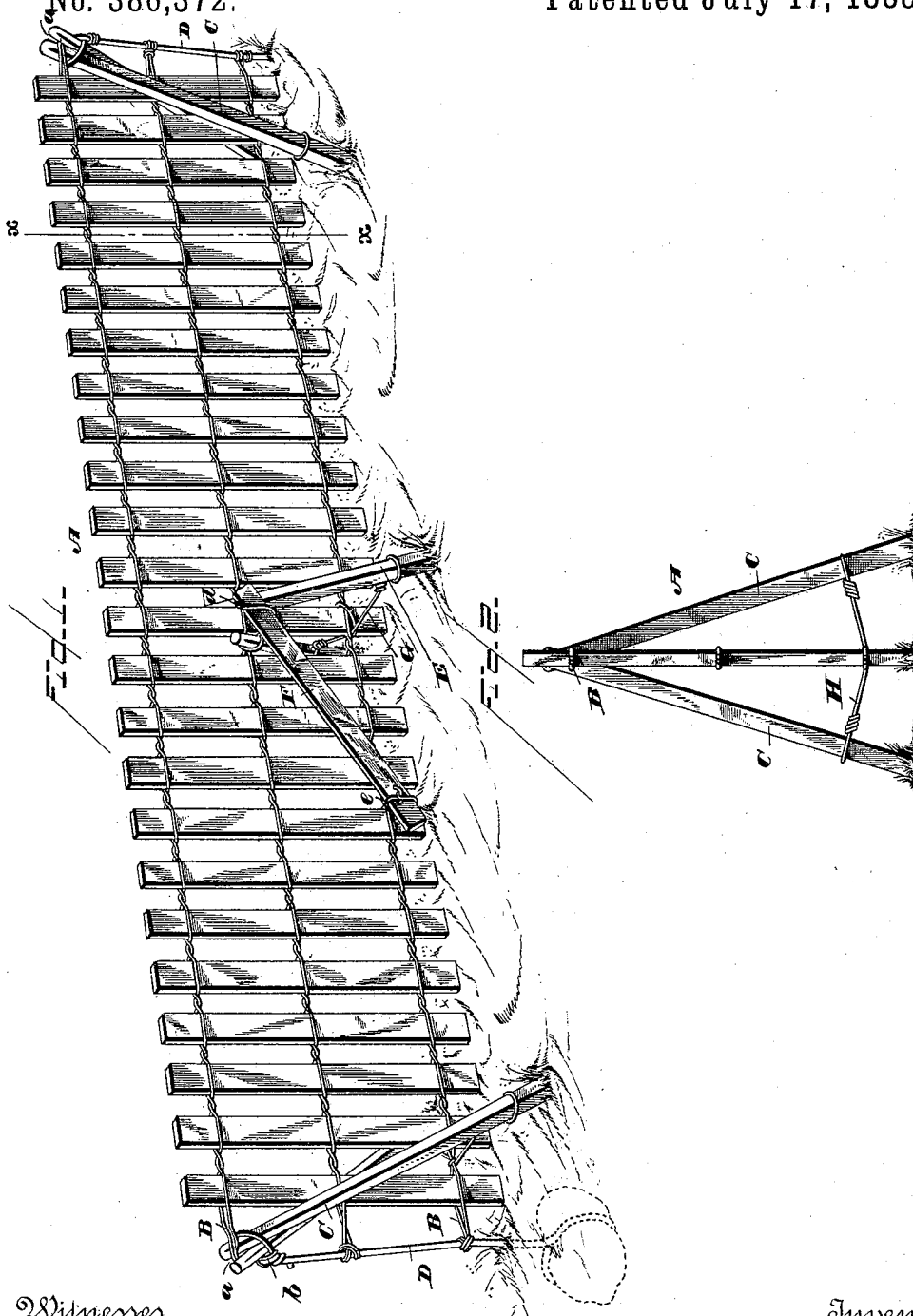
(No Model.)

E. T. ALBER.

FENCE.

No. 386,372.

Patented July 17, 1888.



Witnesses

*W. Ashwell*  
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# UNITED STATES PATENT OFFICE.

ERHARD T. ALBER, OF LODI, MICHIGAN.

## FENCE.

SPECIFICATION forming part of Letters Patent No. 386,372, dated July 17, 1888.

Application filed April 12, 1888. Serial No. 270,580. (No model.)

*To all whom it may concern:*

Be it known that I, ERHARD T. ALBER, a citizen of the United States, residing at Lodi, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Fences; and I do 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.

This invention has relation to improvements in that class of fences in which the usual posts are dispensed with and stakes and braces are employed in connection with wires bent so that the parts will co-operate in resisting both longitudinal and lateral strain, the wires being carried around the parts and the stakes so arranged that they will be firmly held in the ground.

In some sections of the country, where some kinds of timber are scarce, the saving of posts is an important item in the construction of fences, and by my construction I utilize one post to make at least four cross-stakes, as it is not necessary that these stakes should be stout and heavy when arranged and wired in the manner hereinafter more fully set forth and claimed.

The invention will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of a fence constructed according to my improvements; and Fig. 2 is a cross-sectional view of the same, taken on the lines *xx* of Fig. 1.

Referring by letter to the said drawings, A indicates a section of fence formed from pickets secured by longitudinal wires B. These wires, after being carried around the pickets, are twisted at opposite sides thereof, and the ends are secured to stake or anchor wires, as will be presently explained. These longitudinal wires B, which I have shown as doubled, are mainly of the form usually employed in wiring the pickets, but have their opposite ends passed over the fork of diagonal cross-stakes and united to the anchor-wire, as more fully shown in Fig. 1 of the drawings.

C indicates diagonally-arranged inclined cross stakes or braces, which I employ at each end of a section of fence. These cross-stakes,

being inclined in opposite directions, as shown, are crossed at their upper ends for the passage of the main fence-wire, as shown at *a*, which is secured to the anchor-wire below its loop, as shown at *b*.

The anchor-wires D have their upper ends looped around the forked portions of the cross-stakes at the ends of the fence, and, being weighted at their lower ends, will have a tendency to draw the said stakes or braces downwardly and outwardly, while the main wire at the top of the fence, connected with the pickets, being passed through the fork of the said braces and secured to the anchor-wires, will have a tendency to counteract the downward pull of the said anchor-wires and serve as an opposite brace or tightener in holding the stakes in their seats in the earth.

It should be here observed that from the arrangement of these wires and their connections by the stakes being inclined and crossed they will be firmly held to the fence, and also to the ground, so as to resist downward, upward, longitudinal, and lateral strain.

In the construction illustrated I have shown three sets of longitudinal wires, although it is obvious that the central one might be dispensed with, and braces, which I shall next describe, be extended to the top wire of the fence instead of to the central or intermediate one.

E indicates inclined cross-braces, which I arrange at suitable points along the line of fencing, their lower ends being seated in the ground in a manner similar to the stakes at the ends of the fence, and their upper ends are crossed on opposite sides of a picket, so as to embrace the latter. The upper ends of these cross-braces E are secured by a wire loop, *d*, which is passed over one picket above the main longitudinal wire of the fence and under the other picket beneath the said main wire, as seen in Fig. 1. After this loop has been made and the ends united by twisting, I place therein one end of a binding-lever, F, the opposite end of which is brought down to the base of the fence and united to the lower longitudinal main wire by a loop, *e*. It will thus be seen that the loop uniting the upper ends of the cross-braces E is tightened, and has within it, in a twisted manner, the said braces, the binding-lever, and one of the pickets, the said

parts being so united that while they will prevent the fence from moving laterally they will also support it at a proper elevation above the ground.

5 G indicates a cross-wire, which is secured at opposite ends to the lower portion of the cross-braces E, and is wound around one of the pickets and above and below the lower longitudinal wire of the fence.

10 H indicates cross-wires for the end cross-stakes, which are also secured to the lower portions thereof, and are looped around the said lower fence-wire.

The vertical wires D at the end of the fence 15 may be secured in the ground by any suitable weights or stakes, a stone being shown in the present illustration of the invention, and each end of the longitudinal wires of the fence is secured to this vertical or anchor wire D.

20 I am aware of the patent granted to B. A. Rogers, May 18, 1886, for a fence composed of pickets secured to an upper and lower wire and a crown-barbed wire anchored in the ground at opposite ends and sustained above the 25 top of the fence by cross-braces, the top wire of the fence being connected with the barbed-crown wire by hook-links and the lower wire of the said fence secured to the ground by stakes, and I therefore do not wish to be understood as claiming such devices or combination of devices.

30 Having described my invention, what I claim is—

1. The combination, in a fence, substantially as described, of the main longitudinal wires, 35 the end stakes inclined and crossed to receive the ends of the top main wire, the anchor-wires, also secured to the crossed ends of the inclined end stakes, the said top main wire having its ends secured to the anchor-wires, 40 the lower loop-wires for the stake-post and the intermediate cross-stakes embracing one of the pickets and bound by a loop-wire at their crossed portions, a loop-wire securing their lower ends to the fence, and a binding-lever 45 having its upper end in the loop of the wire uniting the said intermediate stakes, and the opposite ends of this binding-lever secured to the lower portion of the fence, substantially as specified. 50

2. The combination, with a fence, substantially as described, of longitudinal wires, end stakes crossed and inclined, anchor-wires secured to the upper crossed ends of the said stakes and also to the ends of the fence-wires, 55 and the brace-wire connecting the lower ends of the said stakes with the lower portion of the fence, substantially as specified.

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

ERHARD T. ALBER.

Witnesses:

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