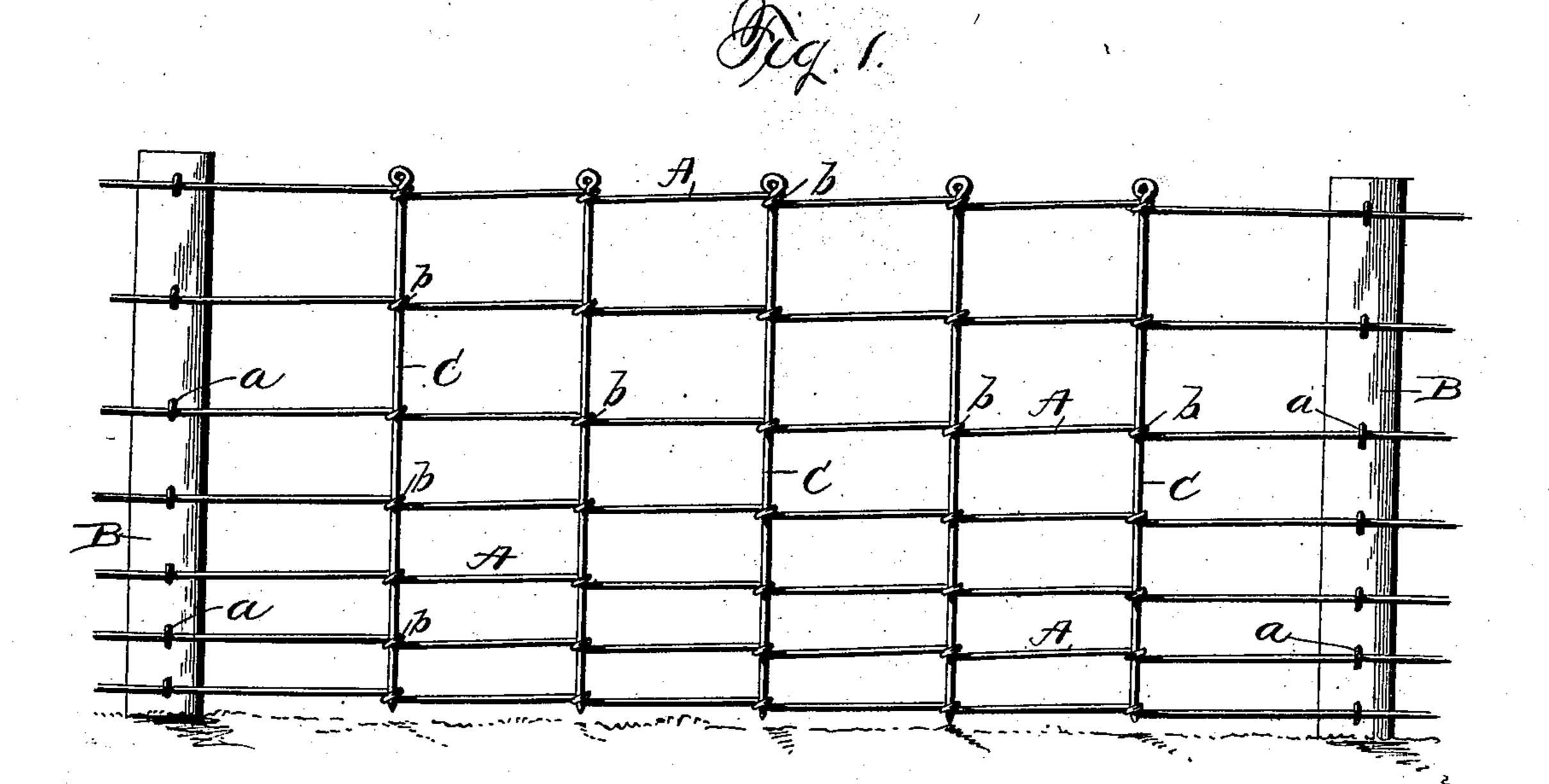
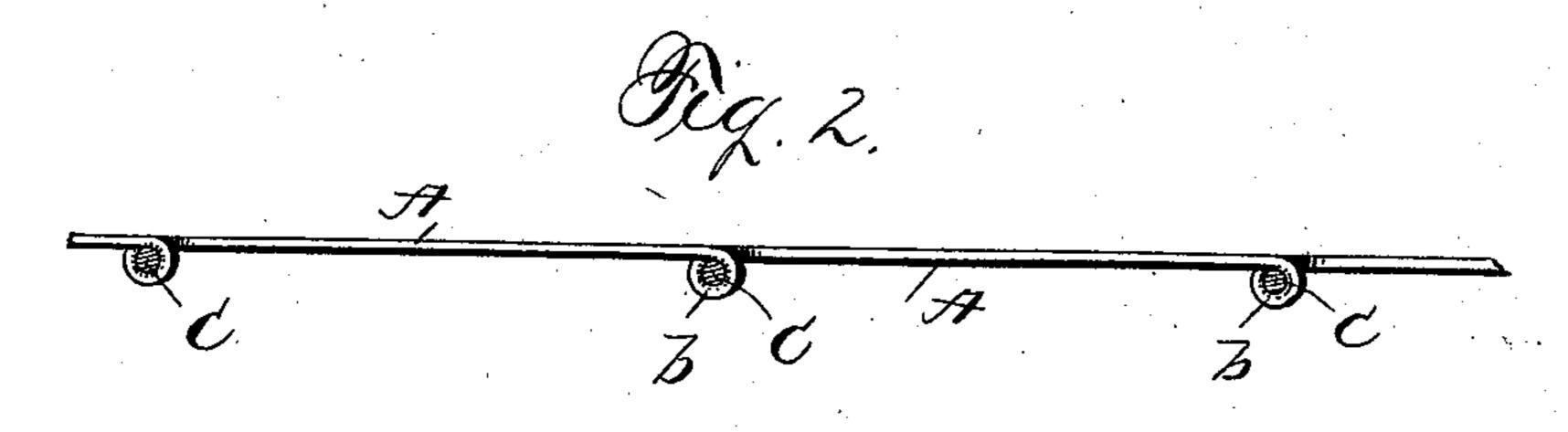
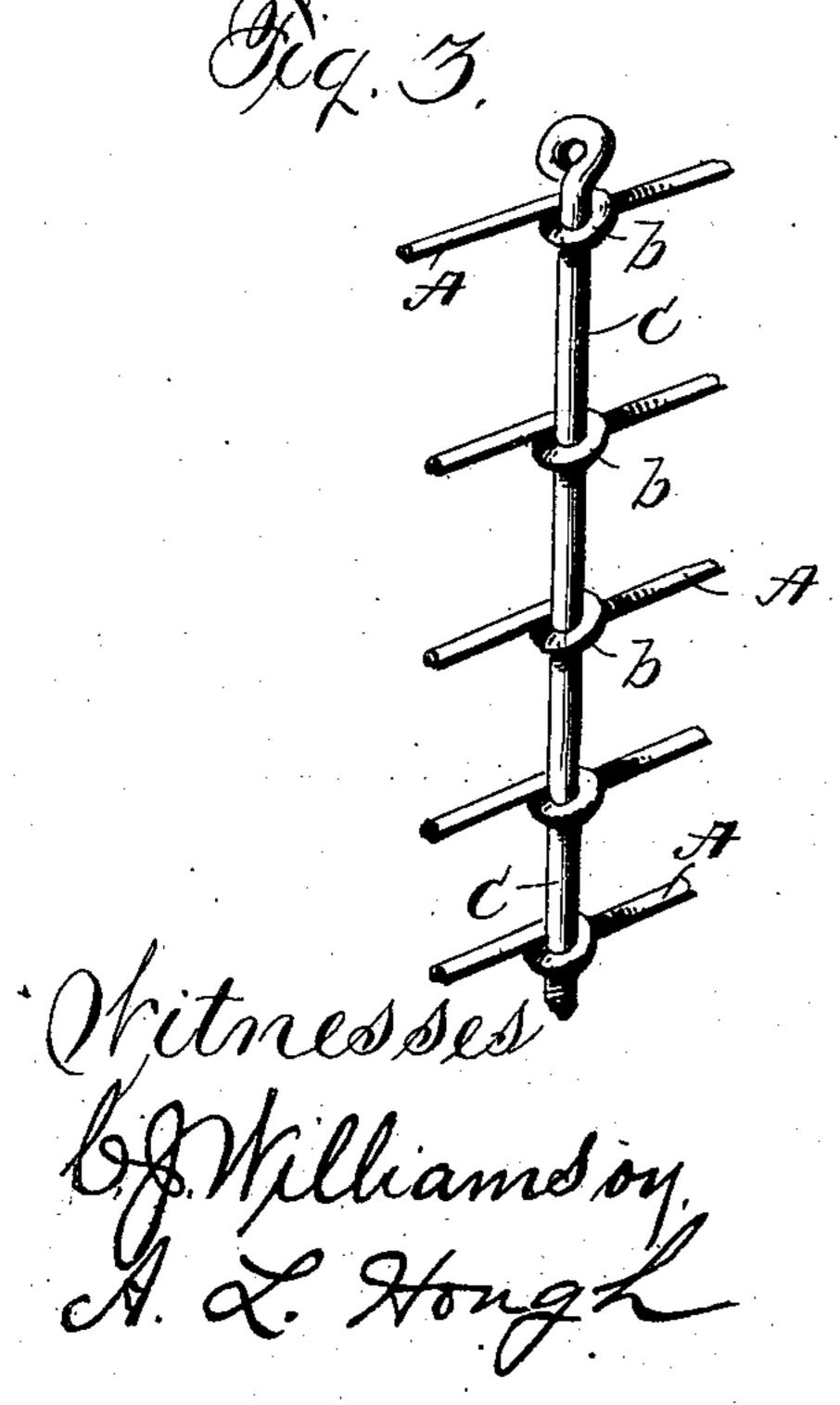
## W. TIBBALS. WIRE FENCE.

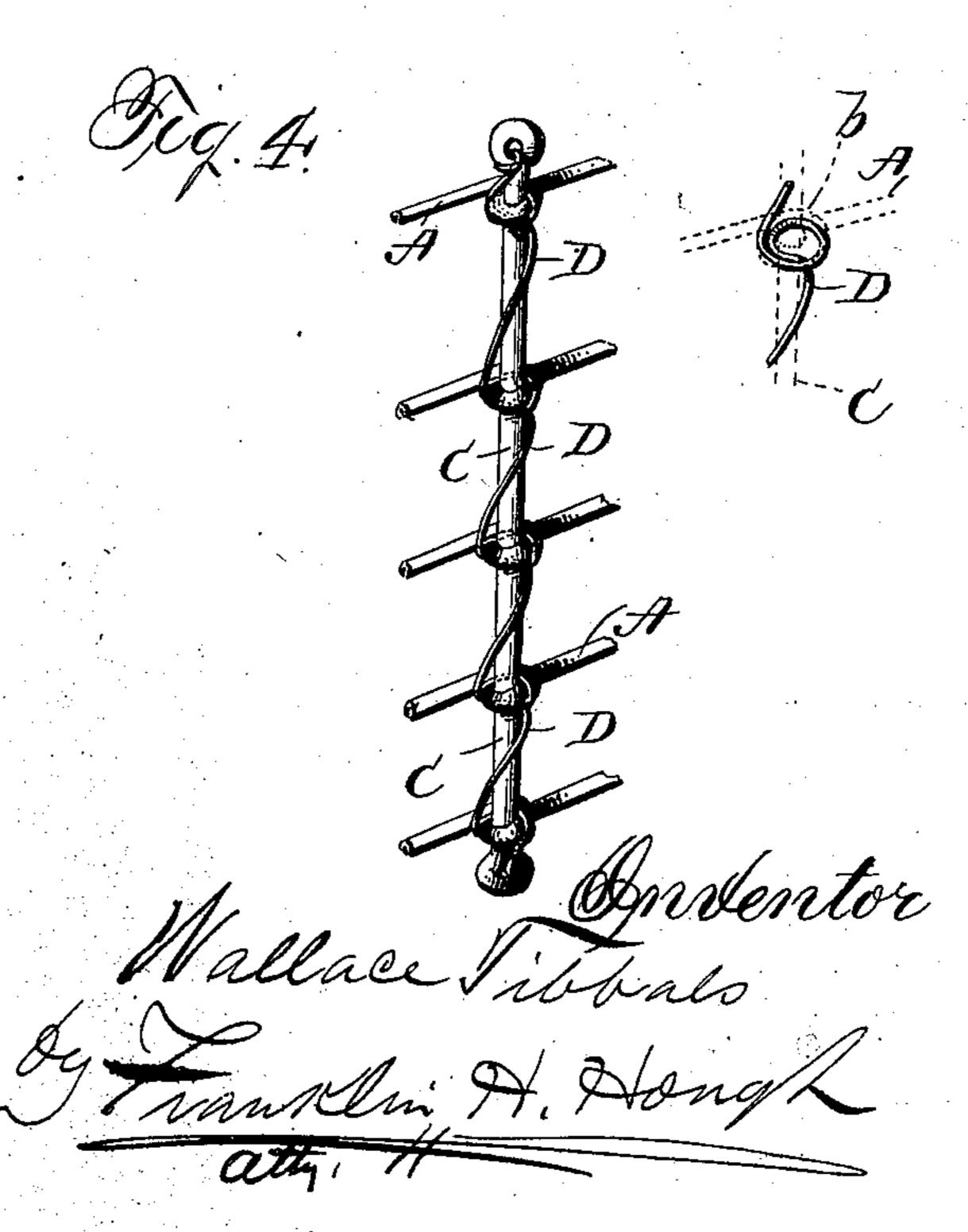
No. 504,057.

Patented Aug. 29, 1893.









## United States Patent Office.

WALLACE TIBBALS, OF LYTLE, OHIO.

## WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 504,057, dated August 29, 1893.

Application filed April 13, 1891. Serial No. 388,735. (No model.)

To all whom it may concern:

Be it known that I, WALLACE TIBBALS, a citizen of the United States, residing at Lytle, in the county of Warren and State of Ohio, have invented certain new and useful Improvements in Wire 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in wire-fences, and it has for its object to provide a simple and easily constructed wire fence, in which provision is had for compensating for expansion and contraction due to changes in temperature.

The invention has for a further object to provide a fence of the character described, which will require posts or supports at long intervals only, which will not be liable to injury by heavy winds or storms, and in which the longitudinal wires of the fence will be effectually prevented from spreading.

To these ends and to such others as the invention may pertain, the same consists in the peculiar construction, and in the novel combination, arrangement and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, like letters of reference indicating the same parts throughout the several views, and in which—

Figure 1, is a front view of a section of fence constructed in accordance with my invention. Fig. 2, is a top plan view of a portion of the fence, and Figs. 3 and 4 are enlarged details in perspective, which will be more particularly hereinafter referred to.

The longitudinal wires A, A of the fence are passed loosely through staples a a, upon the posts B, and while the said wires are still slack, I provide the same at suitable intervals with loops b, b, the said loops being so arranged in each of the several longitudinal

wires of the fence, as to cause them together to form a series arranged in a true vertical line, extending from the top to the bottom of the fence, as shown in the drawings. Through 55 these loops I pass a wire or rod C and when all of the vertical wires or rods C in the particular section of the fence under construction, have been placed in position, the longitudinal wires A are tightened by the use of any of 60 the various forms of tension machines adapted to the purpose, and the loops b, b are thus tightened sufficiently to slightly crimp the vertical wires or rods C.

Ordinarily a fence constructed in accord- 55 ance with the above description will be found to be durable and strong, and the longitudinal wires will be found to hold their relative positions; but, in cases in which it is essential that absolute prevention of spread- 70 ing of the wires should be provided, I use a supplemental wire D, one end of which is secured to the upper end of the upright or vertical wire C, and the said wire is passed downward to the bottom of the fence, being passed 75 successively around the loops b, b, and the lower end of the wire is secured to the lower end of the vertical wire C, as shown. This supplemental wire D is of course placed in position before the longitudinal wires are 80 tightened, and when the wires are tightened, the said wire D will be bound firmly by the loops.

Ordinarily, and probably the most practical manner of constructing the fence, is to first 85 pass the longitudinal wires through the staples upon a post, the said staples being loose, so as to permit the wires to pass freely therethrough. A single vertical line of loops is now formed in the horizontal wires, and 90 through these loops the vertical stay wire is passed; then another vertical line of loops is formed and another vertical stay wire inserted. The contraction caused by the formation of this second line of loops serves to close the 95 loops in the first line formed.

In the construction of my fence I provide a substantial, economical and easily constructed wire fence, in which but ordinary tools are necessary, and no special degree of 100 skill is required upon the part of the person constructing the fence. Having thus described my invention, what I claim to be new, and desire to secure by Let-

ters Patent, is—

1. In a wire fence, the combination with the fence posts, the longitudinal wires A, A passed through staples upon the posts and provided at intervals with loops as described; the vertical wires passed through said loops and held therein by the tension of the wires, and the supplemental wires D, secured at one end to the upper end of the vertical wire, passed successively around each of the several loops in the vertical series, and having its lower end secured to the lower end of the vertical wire, substantially as and for the purpose described.

2. The herein described improved method of constructing a fence, which consists in erecting suitable uprights, arranging longitudinal wires, forming loops therein, inserting vertical wires in said loops, and finally stretching the longitudinal wires and tightening the loop, around the vertical wires, and crimping the same, substantially as shown and described.

In testimony whereof I affix my signature in

presence of two witnesses.

WALLACE TIBBALS.

Witnesses:
Daniel Hainer,
John E. Chenoweth.