(No Model.) 2 Sheets—Sheet 1.

J. T. LUCAS.

FENCE.

No. 484,158. Patented Oct. 11, 1892.

FIG. 1.

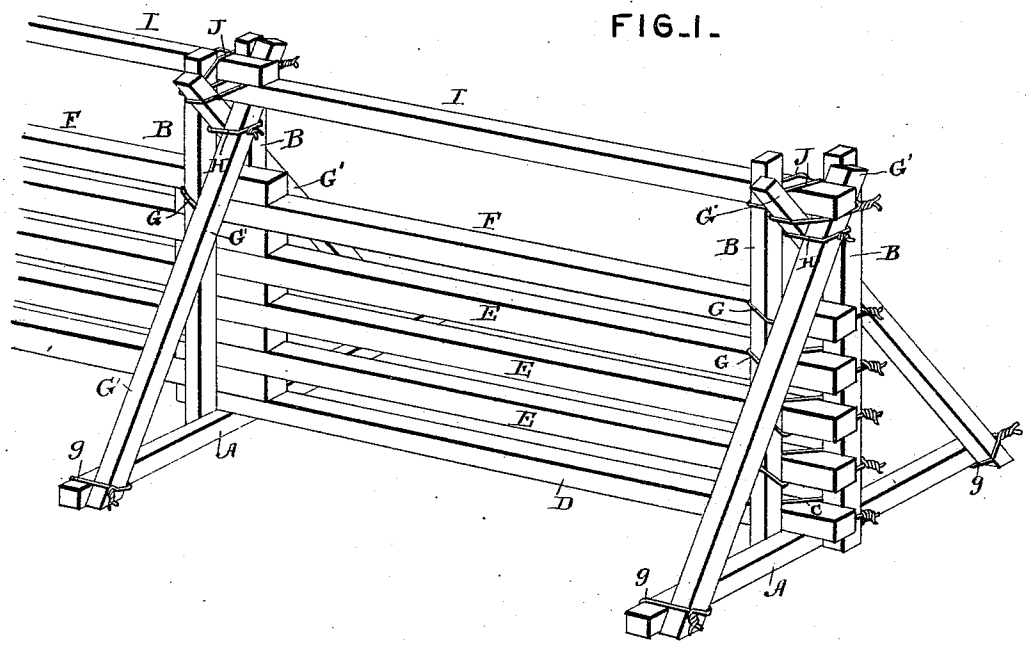
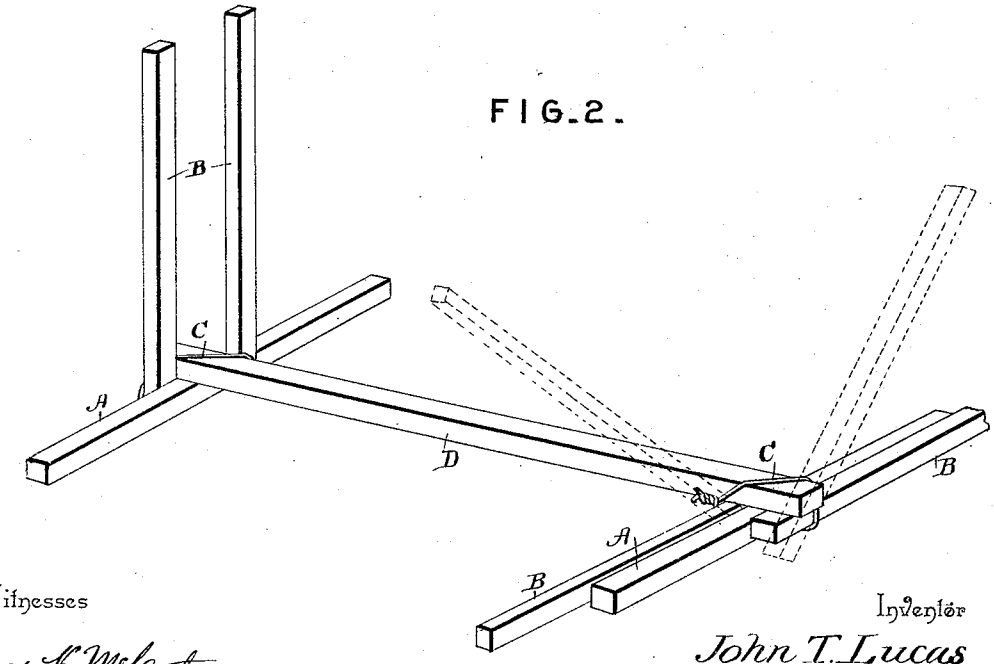


FIG. 2.



Witnesses

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(No Model.) 2 Sheets—Sheet 2.

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FENCE.

No. 484,158. Patented Oct. 11, 1892.

FIG. 3.

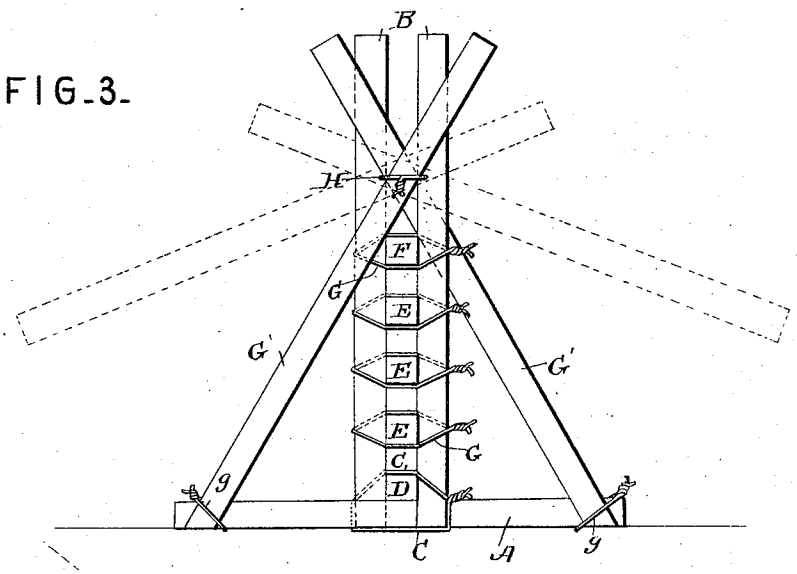
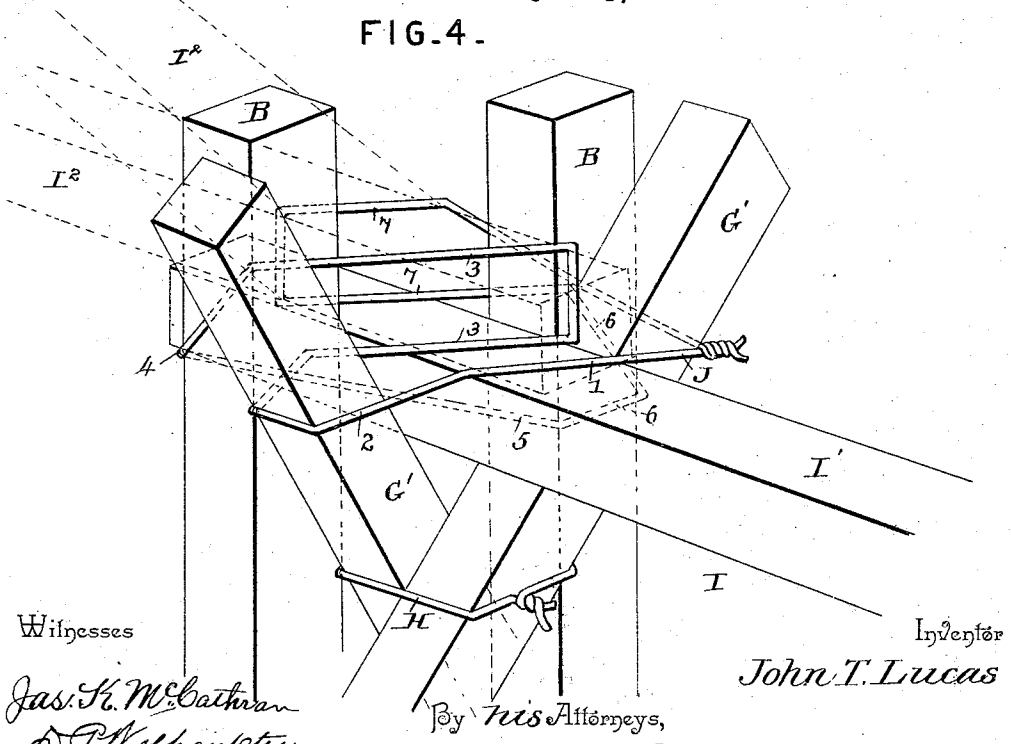


FIG. 4.



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JOHN THOMPSON LUCAS, OF GILLIVAN, OHIO.

FENCE.

SPECIFICATION forming part of Letters Patent No. 484,158, dated October 11, 1892.

Application filed February 1, 1892. Serial No. 419,905. (No model.)

To all whom it may concern:

Be it known that I, JOHN THOMPSON LUCAS, a citizen of the United States, residing at Gillivan, in the county of Madison and State of Ohio, have invented a new and useful Fence, of which the following is a specification.

This invention relates to fences; and it has for its object to provide an improved straight-panel fence constructed of comparatively few rails and easily built. The said fence also is designed to be so constructed that the various parts thereof will be intimately connected to produce a fence having exceptional strength and durability and which will not fall to pieces when one particular fastening or portion of the fence becomes displaced or broken.

With these and many other objects in view, which will readily appear as the nature of the invention is better understood, there exists a novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a fence constructed in accordance with this invention. Fig. 2 is a similar view illustrating the method of locking the vertical posts to the sills and bottom rails. Fig. 3 is an end view or vertical section in front of one of the rail-fastening posts and stakes, omitting the rider-rails and top fastening. Fig. 4 is an enlarged perspective view of a portion of the fence, showing the top locking-wire and illustrating the method of tightening and locking the same.

Referring to the accompanying drawings, A represents a series of groundsills located at regularly-spaced intervals to support the ends of the rails comprising the various panels and the locking devices securing the same together at such points. Extending up from either side of the groundsills A, at a central point therefrom, are the parallel vertical rail receiving and bracing posts B. The said vertical posts B are securely locked at the lower ends to each other and to the groundsills A by means of the diagonal locking-wires C. To lock said vertical posts B, the same are first laid in an approximately-horizontal position on each side of the groundsills, having their lower ends projecting slightly beyond the center of the groundsills. The wire C is passed diagonally under the center of the groundsills, around the uprights B, and then diagonally across the top of the lowermost rails D, which overlap each other at their ends between the posts and rest upon the groundsills. The outer ends of the uprights B, extending in opposite directions, are now raised until they stand in a perpendicular position nearly parallel with each other, in which position they are suitably held to receive the ordinary rails E, resting one upon the other between the parallel posts B. This movement tightens the locking-wire C and securely binds the groundsills, the parallel uprights, and the bottom rails D firmly together. As stated, the said rails E overlap each other between said parallel posts and are carried up to the desired height of the fence to be constructed. The upper rails F of the main body of the fence comprising the various panels formed by the rails E, according to the height of the fence constructed, are placed as far above the top rails E as desired, and the same are held in such spaced position by means of the securing-wires G, passing around their ends and the parallel posts B diagonally. Similar securing-wires hold the terminals of all the rails at the end of the fence between said upright posts, as illustrated in the drawings. Diagonal cross stakes or braces G′ are securely locked upon the upper rails F, between the vertical uprights B, and to the groundsills A, as will be described.

To secure the cross-stakes G′ in position, one of the same is first placed between the upright posts, directly above and resting on the top rail F. The lower end of the cross-stake is now drawn down and over the ground sill A directly therebeneath. When throwing the lower end of the first cross-stake over the groundsill, the same necessarily spreads the vertical posts B to a spaced position, and at the same time necessarily securely holds itself in position. A wire fastening *g* is passed around the lower end of the diagonal stake first placed in position and one end of the groundsill to prevent displacement of said cross-stake. Now the cross-stake located on the opposite side of the fence is placed on one side of one of the vertical posts B between which its corresponding opposite stake is passed and clamped. A locking-wire H is passed around the cross-stakes G′ at the point

where they intersect, and the said opposite cross-stake, resting on one side of one of the vertical posts, is then forced down to the opposite end of the groundsill A on the opposite side of the fence and is secured thereto (although unnecessary) by means of the locking-wire *g*, as described. This causes the wire H to be tightened around the intersecting stakes and closely binds the same together, as well as binding the vertical post against which one of said cross-stakes rests therebetween. This construction comprises the essential portion of the fence and, as described, provides for clamping the posts, the diagonal cross-stakes, and rails of the panel securely together and firmly braced, the cross-stakes, as already noted, having their lower ends sprung against the groundsills, so that a separate fastening therefor is hardly necessary. Rider-rails I are now placed between the vertical posts B, with their ends overlapping each other and resting in the crotches of the intersecting cross stakes or braces at the intersection or commencement of each panel. The said overlapping rider-rails I, the upper ends of the intersecting cross-stakes, and opposite vertical posts are securely clamped together by means of the wire fastening or lock J. In placing the wire lock over the ends of said posts, stakes, and rider-rails one of said rider-rails is placed at an angle to the body of the fence, with only one end resting upon the end of the rail and between the posts and cross-stakes to which the same is to be locked. The locking-wire J, with the said unfixed rider-rail in such position, is first passed from the upper end of one cross-stake at 1 over the top of the fixed rider-rail (designated by I′) to and around the upper end of the opposite cross-stake at 2. From the upper end of said opposite cross-stake at 2 the wire is then passed around and over the end of the unfixed rider-rail I^2 at 3, which rider-rail is placed at an angle to the fence. From the end of the rider-rail I^2 at 3 the wire next encircles one of the upright posts at 4 and is returned under the end of the fixed rider-rail I′ at 5. Passing from under said fixed rider-rail at 5 the wire J is then passed around the opposite upright post B at 6, thence again under and around the rail I^2 at 7 and back to the original starting-point, where the ends of the wire are secured together. The unfixed rail I^2 is now raised, its outer end having been depressed, carried around, and placed between the next adjacent upright posts and intersecting cross-stakes. This serves to securely tighten the wire lock J and securely clamp the various portions of the fence around which it passes tightly together. It will be readily seen that the position of the wire J is such that it draws the rider-rails, upright posts, and cross-stakes tightly together, as stated, and also holds the ends of the rider-rails from slipping past each other in either direction, thus completing a fence which is rigidly clamped from end to end and which is impossible to be pulled apart or damaged by ordinary causes. By placing the locking-wire J twice around the end of the overlapping unfixed rider-rail I^2 a double draw on the wire is given, thus making it possible to use all the strength in the same to bind the various parts mentioned firmly together.

It is now thought that the construction and many advantages of the herein-described fence will be apparent without further description.

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

1. In a fence, the combination of the groundsills, opposite vertical spaced posts having their lower ends resting against opposite sides of the groundsills, the rails placed between said posts, the lowermost of which have their ends resting upon the groundsills and locked thereto and between the lower ends of said posts, locking-wires binding the uppermost rails to said spaced posts, and diagonal cross-stakes locked together at their points of intersection and having their lower ends sprung over and against the groundsills, substantially as set forth.

2. In a fence, the combination, with the vertical posts, the rails therebetween, and the diagonal cross-stakes locked between and against the upper ends of said vertical posts, of the rider-rails seated in the crotches of said cross-stakes between said vertical posts and having their ends overlapping in said crotches and the top wire lock clamping the various intersecting members together and passing from the upper end of one cross-stake over the top of the under rider-rail to and around the upper end of the opposite cross-stake, thence around and over the end of the upper rider-rail, (forming the locking-rail,) from said upper rider-rail around the upper end of one of the upright posts, back under the end of the under rider-rail to and around the opposite upright post, thence looped a second time under and around the upper locking rider-rail, and finally back to the original starting-point, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN THOMPSON LUCAS.

Witnesses:

LAURA TRAVIS,

NELLIE KEYSER.