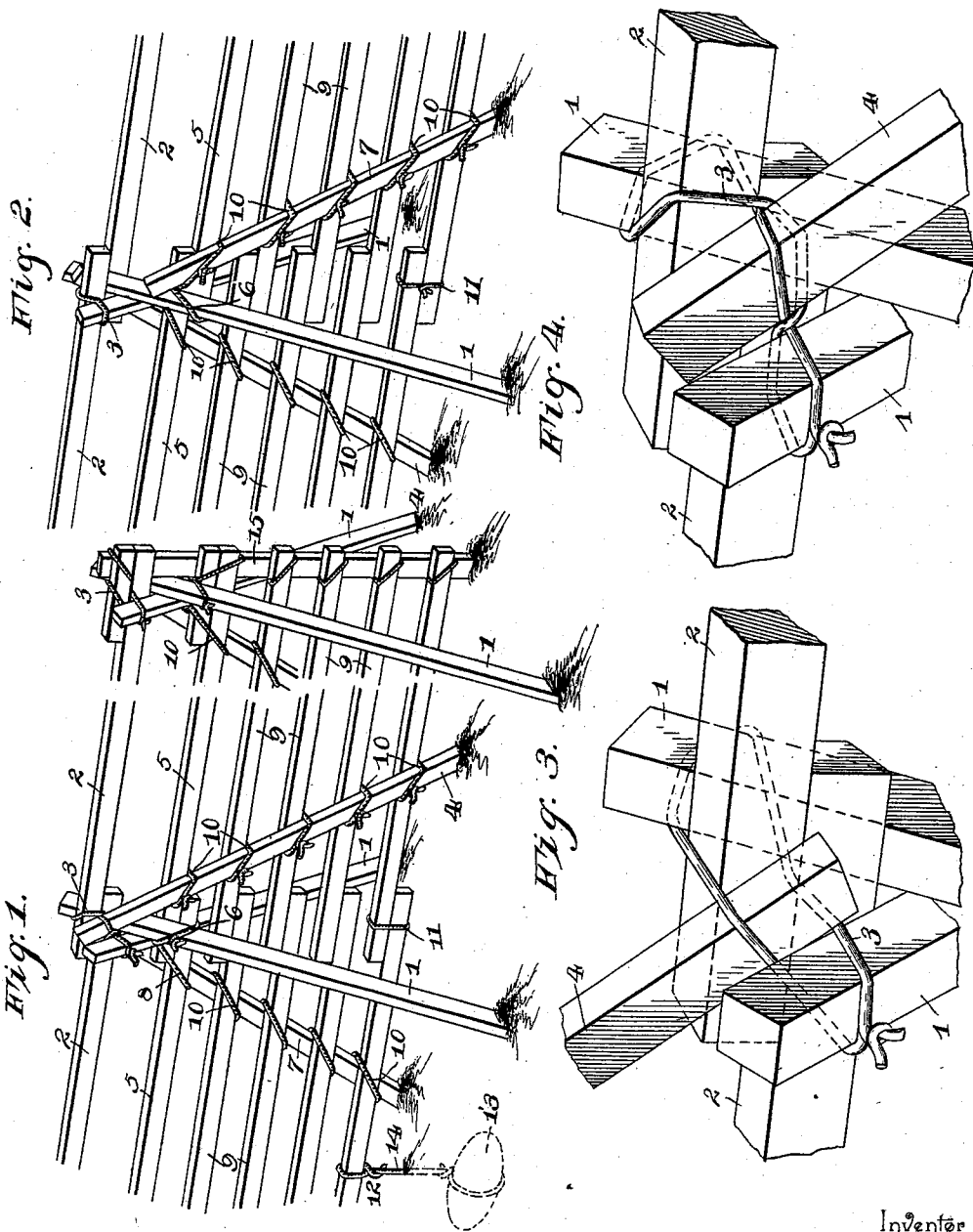


(No Model.)

J. W. WOLFE.
FENCE.

No. 539,498.

Patented May 21, 1895.



Inventor

James W. Wolfe.

By *his* Attorneys.

Witnesses

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JAMES W. WOLFE, OF HASTINGS, ASSIGNOR OF ONE-HALF TO GEORGE W. KELLER AND ABRAHAM EICHER, OF FAWN RIVER, MICHIGAN.

FENCE.

SPECIFICATION forming part of Letters Patent No. 539,498, dated May 21, 1895.

Application filed July 14, 1893. Serial No. 480,530. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. WOLFE, a citizen of the United States, residing at Hastings, in the county of Barry and State of Michigan, have invented a new and useful Fence, of which the following is a specification.

My invention relates to an improvement in fences, the objects in view being to provide a simple, inexpensive and durable structure fortified to resist the action of wind and flood and having its parts so arranged as to enable the ties or lashings to be tightened by the application of the several members of the fence.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of a fence embodying my invention. Fig. 2 is a similar view showing the opposite side. Fig. 3 is a detail view, in perspective, of the upper ends of the crossed stakes, the adjacent overlapping ends of the rider-rails, the rider tie-wire or lashing loosely connecting such parts, and the tension-bar, the latter being shown engaged with the tie-wire or lashing preparatory to depressing its free end to tighten such wire. Fig. 4 is a similar view showing the parts after adjustment.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1, 1, designate oppositely-disposed crossed stakes, which intersect near their upper ends to form upper and lower crotches or angles and are arranged at their lower ends remote from and upon opposite sides of the line of the fence, and 2 represents rider rails which rest and are overlapped at their adjacent ends in the upper angles or crotches formed by the crossed stakes. These overlapping ends of the rider rails lie one upon the other, whereby they are in a vertical plane, and the tie-wire or lashing 3, which is united at its ends to form a loop, is engaged with the upper ends of the crossed stakes, passes at one side over and at the other side under the upper of the two overlapping ends of the rider rails, whereby said sides of the loop lie substantially in a vertical plane. The tension bar 4 is now in-

serted at its upper end between the upper and lower sides of the loop formed by the tie-wire or lashing, to accomplish which it is necessary to hold said bar in the inverted position indicated in Fig. 3, after which the free end of the bar is depressed to the position shown in Fig. 1, thereby twisting the sides of the loop and compressing the upper ends of the stakes and inclosed ends of the rider rails.

The upper panel rails 5 are overlapped at their meeting ends in the lower angle or crotch of the crossed stakes and are secured therein by means of a tie 6, which passes around both crossed stakes to form a loop, the sides of the loop passing respectively over and under the overlapped ends of the rails.

7 represents a brace-bar, which is inclined in the opposite direction from the tension bar above described, with its upper end in contact with the overlapping ends of the upper panel-rails and its lower end resting upon the ground in proximity to the line of the fence. A tie-wire 8 is employed to connect the upper end of this brace-bar to the overlapping ends of the upper panel rails.

The lower panel rails 9 overlap slightly at their adjoining ends between the lower portions of the crossed stakes and are respectively lashed to the bars 4 and 7, at each intersection therewith by means of the tie-wires 10. In this way each panel rail is lashed independently to a brace, and the extremities of the rails which project beyond such lashings and lie between the braces are overlapped in the vertical plane of the crossed stakes. These overlapping ends may be connected by means of an additional tie-wire 11, when the distance between the braces is great or when it is desired to effect a more rigid connection of the parts. Such a tie-wire 11 is shown in Fig. 1, connecting the overlapping terminals of the lowermost panel rails.

The tie-wires 10 are arranged to prevent the sagging of the panel rails when attacked by small animals, or when said wires become slightly loosened, such arrangement consisting in passing the tie-wires through and causing them to lie in the acute angles formed between the bars 4 and 7 and the rails. Ordinarily, tie-wires of this class are passed through and lie in the obtuse angles formed

by the intersection of two bars or parts of a fence, but by extending them through the acute angles an additional purchase upon the intersecting parts is secured and the slight loosening of the wires does not permit the depression of the rails.

In addition to the above I employ anchoring devices 12, consisting of an anchor 13, which is arranged beneath the surface of the ground, and a connection 14, preferably of wire, which is fastened at its upper end to the lowermost panel rail at its center or intermediate between the planes of the crossed stakes.

The corners or terminal points of the fence, when constructed in accordance with my invention, involve a slightly modified relation of the parts in respect to the disposition of the inclined brace. This alteration is due to the necessity for terminating the panel rails at or near the plane of the crossed stakes, and of providing some means for the connection of the terminals of such rails with the terminals of corresponding rails of that portion of the fence which is arranged at an angle to that under discussion. I accomplish the above by omitting the inclined brace 7 and providing an upright 15, which is arranged parallel with the plane of the panel rails and is lashed at each intersection with the panel rails and the rider rails.

From the above description, it will be seen that except at the corners or terminals of a fence I dispense with a vertical post or upright, and employ two oppositely-inclined bars, respectively 4 and 7, which are arranged upon opposite sides of the planes of the crossed stakes with their upper ends contiguous to those of the crossed stakes and their lower ends separated and arranged upon or in proximity to the line of the fence. It will be seen that an upright arranged in or adjacent to the plane of the crossed stakes would serve only as a means for connecting the overlapping terminals of the panel rails, whereas, by the arrangement which I have illustrated, the oppositely-inclined bars perform a double function in that they serve as means for holding the ends of the panel rails

in position and at the same time support the structure against longitudinal strain or strain parallel with the line of the fence. In addition to this the downwardly-divergent bars, by extending out into the panels, or spaces between the crossed stakes, support the intermediate parts of the rails and insure them against being lifted or broken by the pressure of stock. Furthermore, these oppositely-inclined bars, as will be seen by reference to the drawings, are arranged respectively upon opposite sides of the plane of the panel rails, thereby counterbalancing the weight of opposite sides of the fence and disposing the panel rails between the planes of the said bars. In other words, each panel rail is connected to both of the bars in that panel and lies between the planes thereof. It will be evident that the projecting ends of the panel rails which lie in the plane of the crossed stakes cannot be subjected to great strains owing to the location of and protection afforded by said stakes in preventing the stock from reaching the same.

Having described the invention, what I claim is—

The herein described fence, comprising crossed stakes 1, a tie-wire connecting the stakes at their intersection, rider rails and upper panel rails seated in the upper and lower angles of the crossed stakes, oppositely inclined bars 4 and 7 arranged parallel with the line of the fence and resting at their lower ends upon the ground, intermediate and lower panel rails arranged in contact with said bars, and lashings for securing the panel rails to the bars 4 and 7 and consisting of tie-wires extending around the intersections of the bars and rails and passing through and lying in the opposite acute angles formed by such parts, substantially as specified.

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

JAMES W. WOLFE.

Witnesses:

FLO. G. KENYON,
M. W. HICKS.