

(No Model.)

J. G. BURCHAM.  
FENCE.

No. 464,349.

Patented Dec. 1, 1891.

Fig. 1.

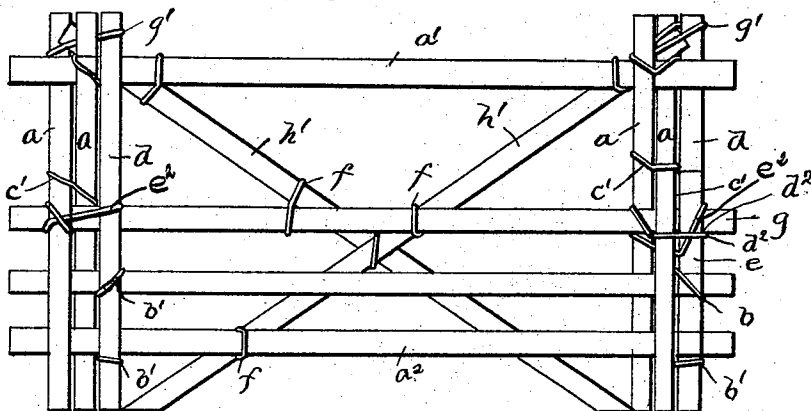


Fig. 3.

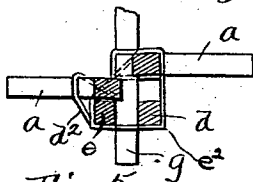


Fig. 5.

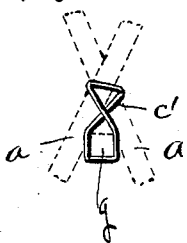


Fig. 2.

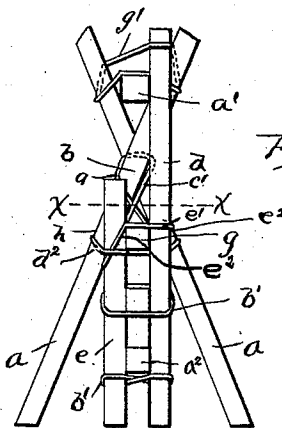


Fig. 6.

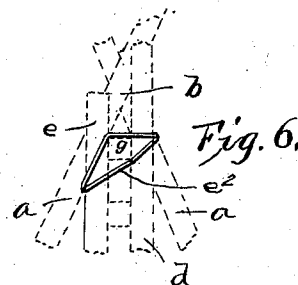
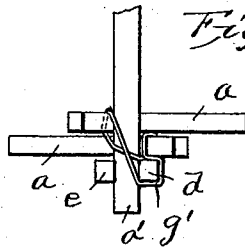


Fig. 4.



WITNESSES:

*E. C. Duff*  
*C. M. Werk*

INVENTOR  
J. G. Burcham

BY  
*E. C. Duff*  
ATTORNEY.

# UNITED STATES PATENT OFFICE.

JACKSON G. BURCHAM, OF MOUNT ZION, ILLINOIS.

## FENCE.

SPECIFICATION forming part of Letters Patent No. 464,349, dated December 1, 1891.

Application filed May 16, 1891. Serial No. 393,022. (No model.)

*To all whom it may concern:*

Be it known that I, JACKSON G. BURCHAM, of Mount Zion, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Fences; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 part of this specification.

My invention relates to certain improvements in fences; and it consists in certain novel features of construction and in combinations of parts more fully described hereinafter, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 represents a side elevation of one side of a fence. Fig. 2 is an end view thereof. Fig. 3 is a section on the line  $xx$ , Fig. 2. Fig. 4 is a top plan of a portion of my improved fence with parts removed. Figs. 5 and 6 are details showing the different mode of fastening the wire ties, the rails, stakes, &c., being shown in dotted lines and the wire ties in full lines.

In the drawings, the letters  $aa$  indicate the two supporting-stakes crossing each other at the points marked  $b$ . Vertical stakes  $d$  extend from the ground upwardly, the stake  $d$  extending from a point above the top rail  $a'$  to a point below the lowest rail  $a^2$ , while the stake  $e$ , which is intended to support the three lowest rails, may be about half the size of the stake  $d$ , and only extends to a point near the intersection of the two stakes  $a$ , the purpose of which will shortly be described. The two lower rails rest on or are placed between suitable wire ties  $b' b'$  between the two vertical stakes  $d$ . The rail  $g$  is then placed in position directly below the angle where the supporting-stakes cross and in the space between the two vertical stakes. This rail  $g$ , as well as the vertical stakes and cross-stakes, are securely bound together by wire fastenings, as follows: A wire  $c'$  is passed across the outer sides of the diagonal stakes  $a$  at the points where such stakes cross, and is then passed down and under the rail  $g$  and again brought around such rail  $g$  and upwardly and

around one of the diagonal stakes where the ends of such strand of wire are twisted together, thereby firmly securing the rail  $g$  and the diagonal stakes together by a single piece of wire. At the point  $h$  a wire tie  $d^2$  is passed around one of the diagonal stakes  $a$  and short stake  $e$ , thereby securing the two together. Another piece of wire  $e^2$  is passed around the stake  $d$ , then passed around the short stake  $e$  under rail  $g$ , and around cross-stake  $a$ , thereby holding rail  $g$ , one of the diagonal stakes  $a$ , and the stakes  $d$   $e$  together.

$h' h'$  indicate brace-beams across face of rails, being fastened to such rails, as shown, by a series of wire ties  $f$ .

The top rail  $a'$  rests in between the cross-stakes  $a$ , and is securely held in a rigid position by the wire ties  $g'$ , which are passed around one side of one of the diagonal stakes of vertical stake  $d$ , then across and around the other diagonal stake  $a$ , and finally around the starting-point, where the two ends of the wire are twisted together. The short vertical stake or post  $e$  assists in supporting the rails and establishing the stability of the lower portion of the fence, while the ordinary post  $d$  extends up above the crotch of the cross-stakes to insure the stability of the upper part of the fence and to assist in supporting the cross-stakes and rider-rails  $a'$ . By this arrangement but a single long post at each end of a panel is required, thereby economizing material, as short pieces otherwise useless can be utilized for the short vertical stakes, and, furthermore, a great saving of wire is accomplished by employing but a single ordinary post, as the wire ties at the top of the fence pass around but one post, while ordinarily they would have to pass around two and the distance between two ordinary posts.

Great durability and stability are attained by my peculiar arrangement of main securing ties or wires, which are three in number. The lower wire  $e^2$ , Figs. 3 and 6, is passed around outer side of one inclined stake  $a$ , around the post and short vertical stake, and over rail  $g$  on one side of post and under the same rail on the opposite of the post and stakes. This wire secures the post  $e$ , post  $d$ , and rail  $g$  firmly together and forms a support for rail  $g$ . The second main wire  $c'$ , Fig. 5, is passed around the cross-stakes at the point

of intersection, and is then crossed to form a loop which surrounds the rail *g*, thereby binding the cross-stakes together and drawing the rail *g* tightly up into the under crotch formed by such cross-stakes, and hence tending to spread the cross-stakes, so that all the fastening-wires thereof will be held and maintained taut. The third main wire *g'*, Figs. 2 and 4, binds together the upper part of the fence by passing around the upper ends of the two cross-stakes and up over the rider-rail *a'*, forcing the same tightly and snugly down into the crotch of the cross-stakes, and the upper side of this wire from the rider of the stakes farthest from the post *d* passes between the stakes and around the upper end of said post, thereby drawing the post tightly against the rider-rail and a stake *a*, and firmly holding the cross-stakes and rider-rail and post in position. The short stake serves as a good support for the lower rails when the same are fastened thereto and to the stake *d* by the wire ties, as herein described.

This fence can be put up in a remarkable short period of time, and by reason of the pe-

culiar manner in which the wire ties are secured to the different parts the fence will be found to be more strongly put together than the old styles of rail fences now in use and much cheaper to build.

What I claim is—

The herein-described fence, consisting of the rails, the long and short posts, the rider-rail, the two cross-stakes, loop-tie *e'*, passed around said posts, a cross-stake, and over and beneath rail *g*, the loop-tie *c'*, passing around the two cross-stakes at the crossing-point and having a loop surrounding and drawing rail *g* up into the under crotch of said cross-stakes, and the upper loop-tie *g'*, passed around the upper ends of the cross-stakes and a post and over and forcing down the rider-rail, as set forth.

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

JACKSON G. BURCHAM.

Witnesses:

J. S. HUGHES,

J. A. MILLER.