

(No Model.)

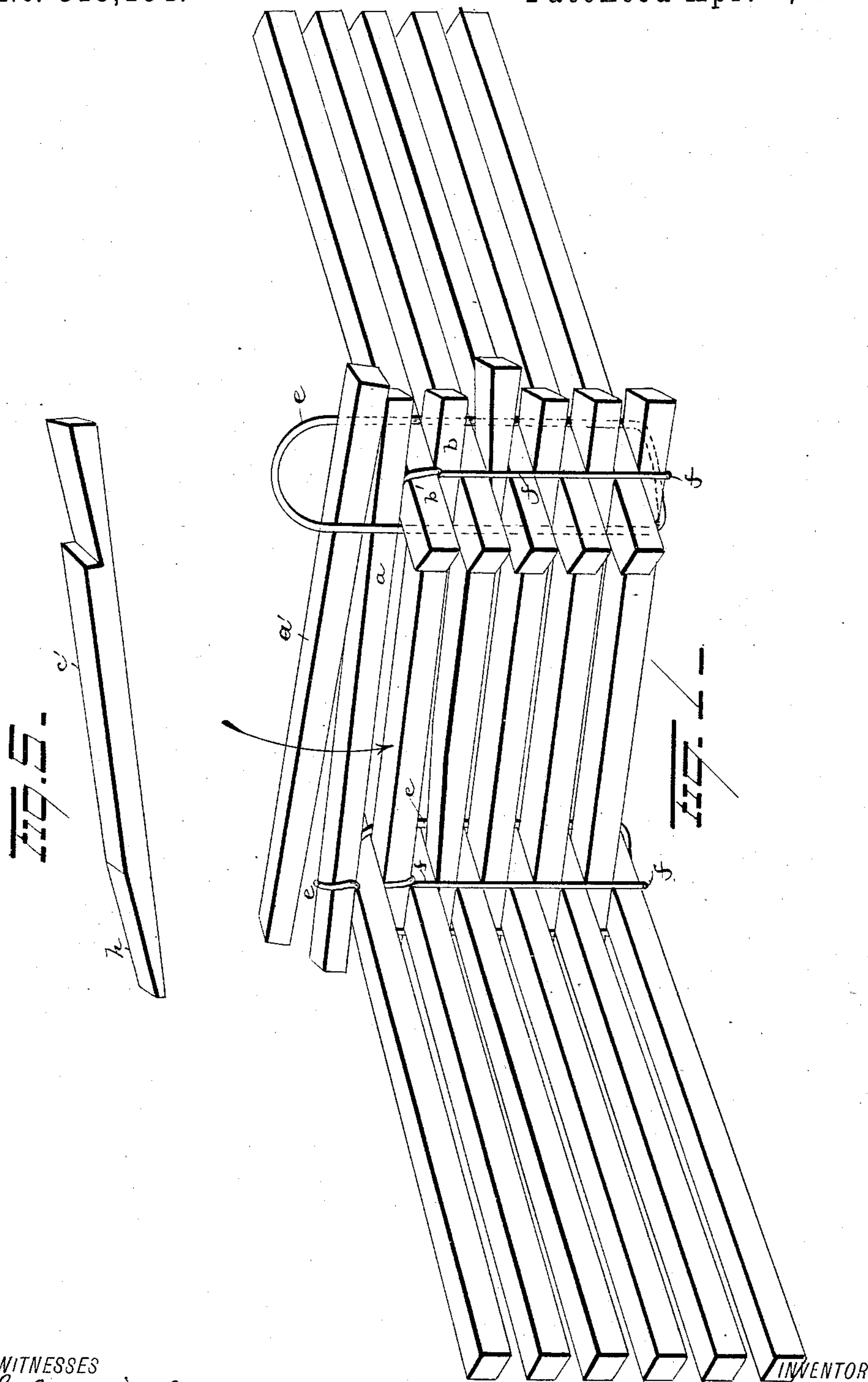
2 Sheets—Sheet 1.

D. M. EMMITT.

FENCE.

No. 315,134.

Patented Apr. 7, 1885.



WITNESSES

*S. G. Nottingham*  
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INVENTOR

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2 Sheets—Sheet 2.

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FIG. 2.

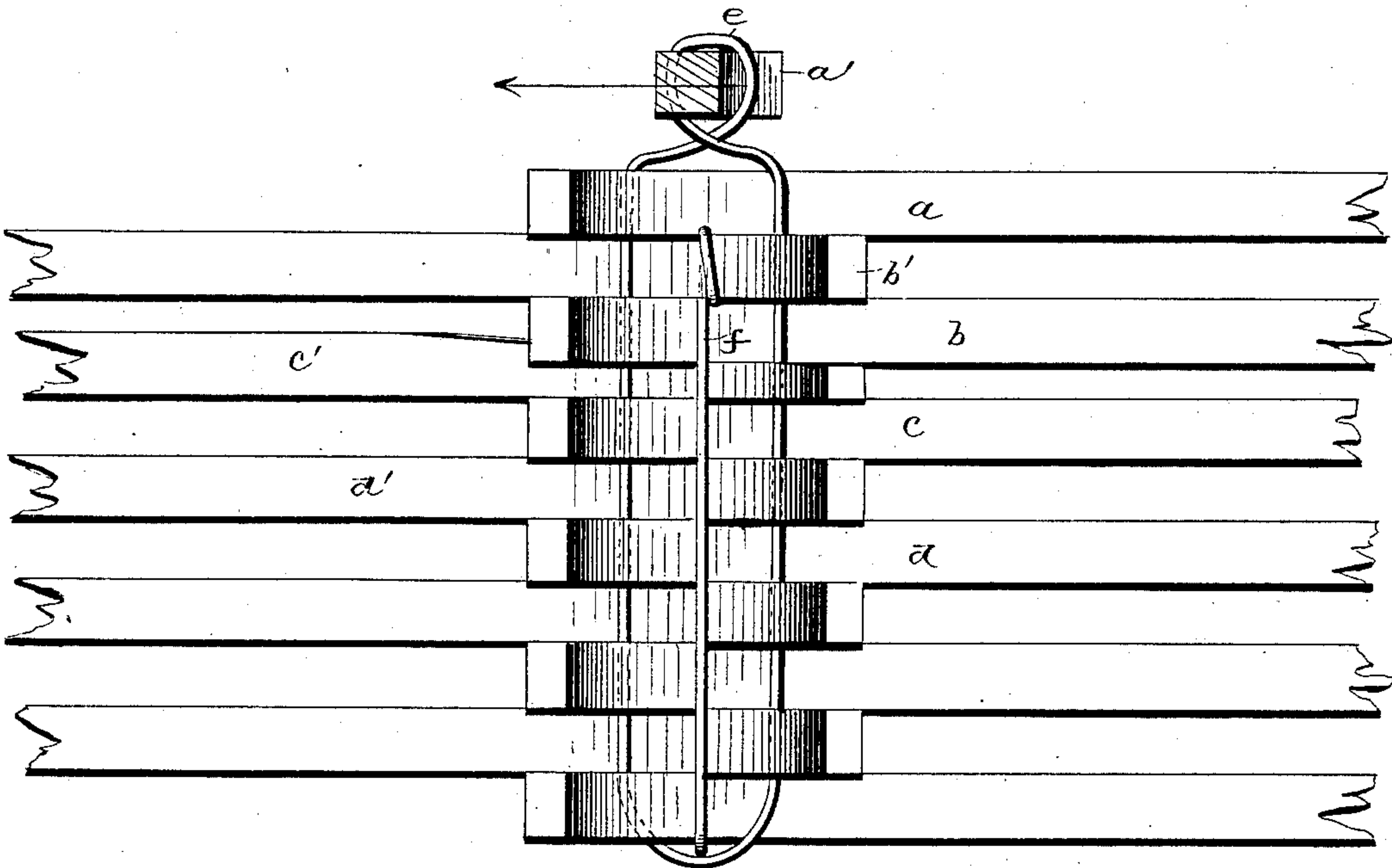


FIG. 3.

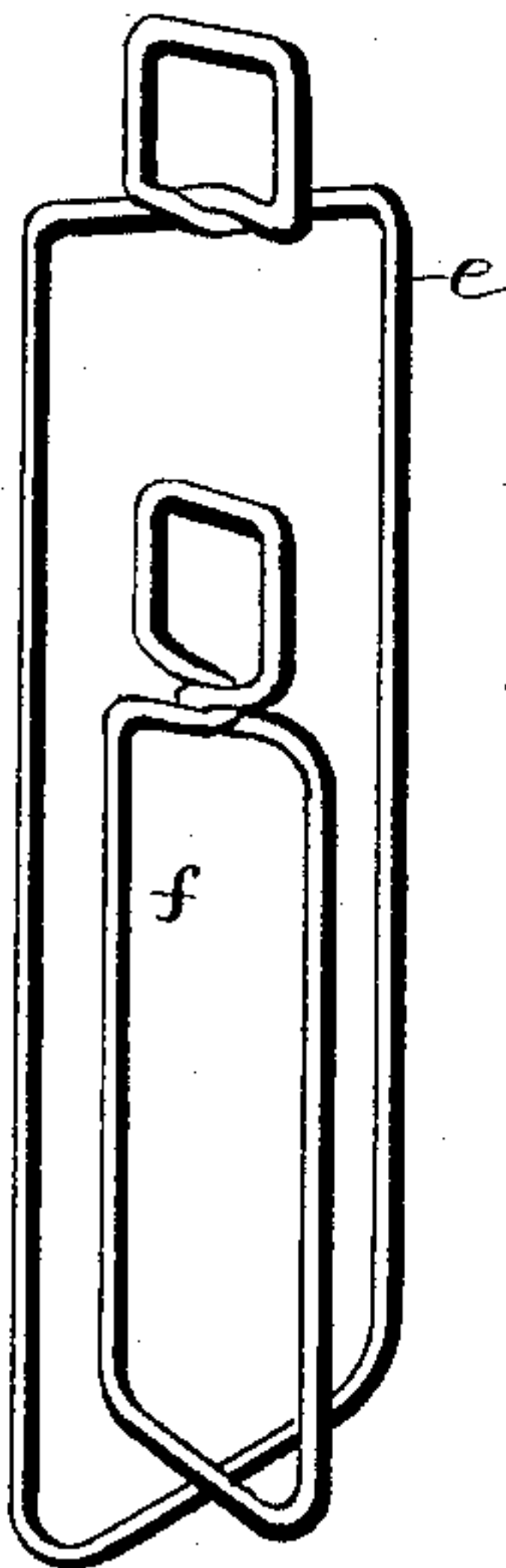
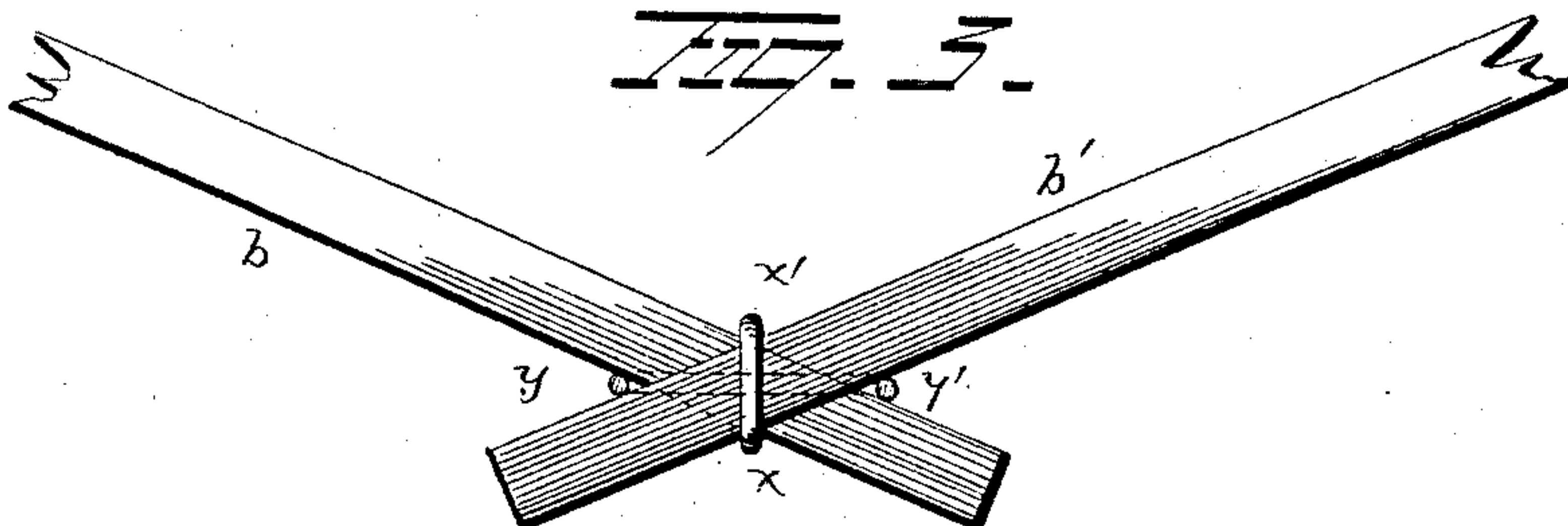


FIG. 4.

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# UNITED STATES PATENT OFFICE.

DAVID MARTIN EMMITT, OF COLUMBIA, MISSOURI.

## FENCE.

SPECIFICATION forming part of Letters Patent No. 315,134, dated April 7, 1885.

Application filed July 3, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID M. EMMITT, of Columbia, in the county of Boone and State of Missouri, have invented certain new and useful Improvements in Fences; and I do hereby 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.

My invention relates to an improvement in fences, and especially to means for locking together the adjacent panels or lengths of rail fences.

Heretofore the overlapping ends of the rails of two adjacent lengths or panels of a rail-fence have been secured by means of a wire loop encircling said ends, and the top rail inserted from the outer side of the angle formed by the rails through the upper end of the wire loop, and the rail then turned around so as to come in line with one panel and constitute the top rail thereof. This method of securing the rails together is defective for the following reasons:

In fences as ordinarily built the rails are usually three-corned, and are irregular and uneven in shape and size. By imparting simply a half-turn to the loop it is impossible to contract the loop in length sufficiently to firmly bind the ends of the rails together. The rails are ordinarily laid with their edges uppermost, and should the top rail be overturned in any manner the fastening is thereby loosened, so as to be of little use in upholding the fence. Again, where but a half-turn is imparted to the loop, one side of the loop is forced outwardly or away from one of the angles formed by the overlapping ends of the rails, so that one length or panel is unprovided with any side support that comes in direct contact therewith, and hence is not rigidly secured against displacement. Again, in the construction in question, the top rail may be slipped out of the loop, owing to the fact that it is practically impossible to tighten the loop to any great extent, certainly not to an extent sufficient to firmly bind and hold the top rail, and by simply removing the latter the entire fastening is destroyed.

My invention is an improvement over the device set forth in my application for Letters

Patent for an improvement in fences filed the 22d day of April, 1884, and the object of which is to obviate the defects and objectionable features above noted, and to provide a fastening that shall be simple and effective in practice. A further object is to provide a wedge-rail by means of which the fence can be readily tightened when, from various causes, the wire has become loose; and with these ends in view my invention consists in the parts and combinations of parts, as will be more fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of three sections of a worm-fence, showing the adjacent ends of two panels locked and the adjacent ends of two panels partly locked. Fig. 2 is a view in front elevation showing the manner of locking the loops to the rails. Fig. 3 is a plan view of the adjacent ends of two panels, showing the relative position of the loops. Fig. 4 is a perspective view of the loops, and Fig. 5 is a view of the wedge-rail.

$a, b, c,$  and  $d, a', b', c',$  and  $d'$  represent, respectively, the four upper rails of two successive panels of fence. The wire loop  $f$  is passed about the overlapping ends of these rails in the opposite angles  $x$  and  $x'$ , and projects sufficiently far above the rail  $b$  to admit the end of the rail  $b'$ . The loop  $e$  is passed about the overlapping ends of the said rails in the angles  $y$  and  $y'$ , and projects sufficiently far above the rail  $a$  to admit the end of the rail  $a'$ . The loop  $f$  is first placed around the ends of the rails it is to embrace, or the ends of the rails placed within the loop, and the top rail within said loop is given a complete turn, which brings it back to its original position. This operation necessarily shortens the loop and firmly binds the ends of the rails together. The loop  $e$  is next placed in position on the rails already secured by the loop  $f$ , at or approximately at right angles to said loop  $f$ , and the two top rails,  $a$  and  $a'$ , of the adjacent panels placed in position therein. The top rail is then turned to its proper position, which firmly binds the adjacent ends of all the rails of both panels. This method of forming the fence-lock has many important advantages, among which are the following: The lower



portion of the loop is sufficiently contracted in length to firmly bind and secure together rails of irregular size and shape.

Owing to the fact that the upper ends of the loops *e* and *f* cross the rail diagonally, the sides of the loops are drawn snugly into the corners formed by the overlapping ends of the rails, and afford firm side supports for the side of the rails, and retain the sections or panels in an upright position. Again, the top rail *a'* and the rail *b'* being completely encircled by the loops and bound to the lower rails, the upper rails, *a*, *a'*, *b*, and *b'*, are not liable to become displaced or loosened, as they are firmly bound together.

For the purpose of tightening the rails when they become loose through the partial displacement of the wire loops, I provide a wedge-rail, *c'*, one end of which is beveled, as shown at *h*, and the opposite end being cut away or beveled in the same direction, the said rail forming one of the rails of the panel.

When it is desired to tighten the loop and more closely bind the rails together, the same may be done by driving the wedge-rail in the direction of its beveled end, thereby simultaneously tightening the ends of the adjoining rails and panels.

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

1. The combination, with the overlapping

ends of the rails of the two adjacent sections or panels of a worm-fence, of wire loops encircling said ends in the two sets of opposite angles, and a top rail secured within and completely encircled by a twisted loop on the upper end of one of the said loops, substantially as set forth. 35

2. The combination, with the overlapping ends of the rails of the two adjacent sections or panels of a worm-fence, of a wire loop encircling said ends in one set of opposite angles, a wire loop encircling all except two of said ends in another set of opposite angles, and rails secured within and completely encircled by twisted loops on the upper ends of said loops, substantially as set forth. 40 45

3. The combination of the overlapping ends of the rails of a worm-fence, and loops arranged at or approximately at right angles to each other and locking the adjacent ends of the panels, one of the rails of one or more of the panels being provided with wedge-shaped ends, substantially as and for the purpose set forth. 50 55

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

DAVID MARTIN EMMITT.

Witnesses:

H. G. COOK,  
W. F. CUNNINGHAM.