

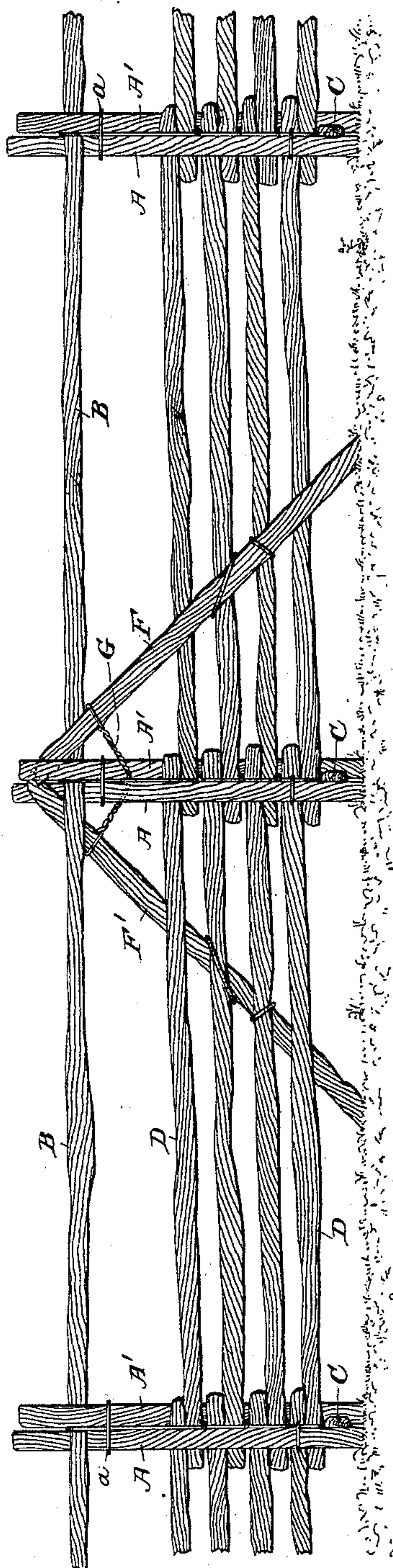
(No Model.)

H. & D. S. HARTWELL.
FENCE.

No. 429,685.

Patented June 10, 1890.

FIG. 1.



Attest:
Jas. K. McEachern
Jos. K. Hagmann

FIG. 3.

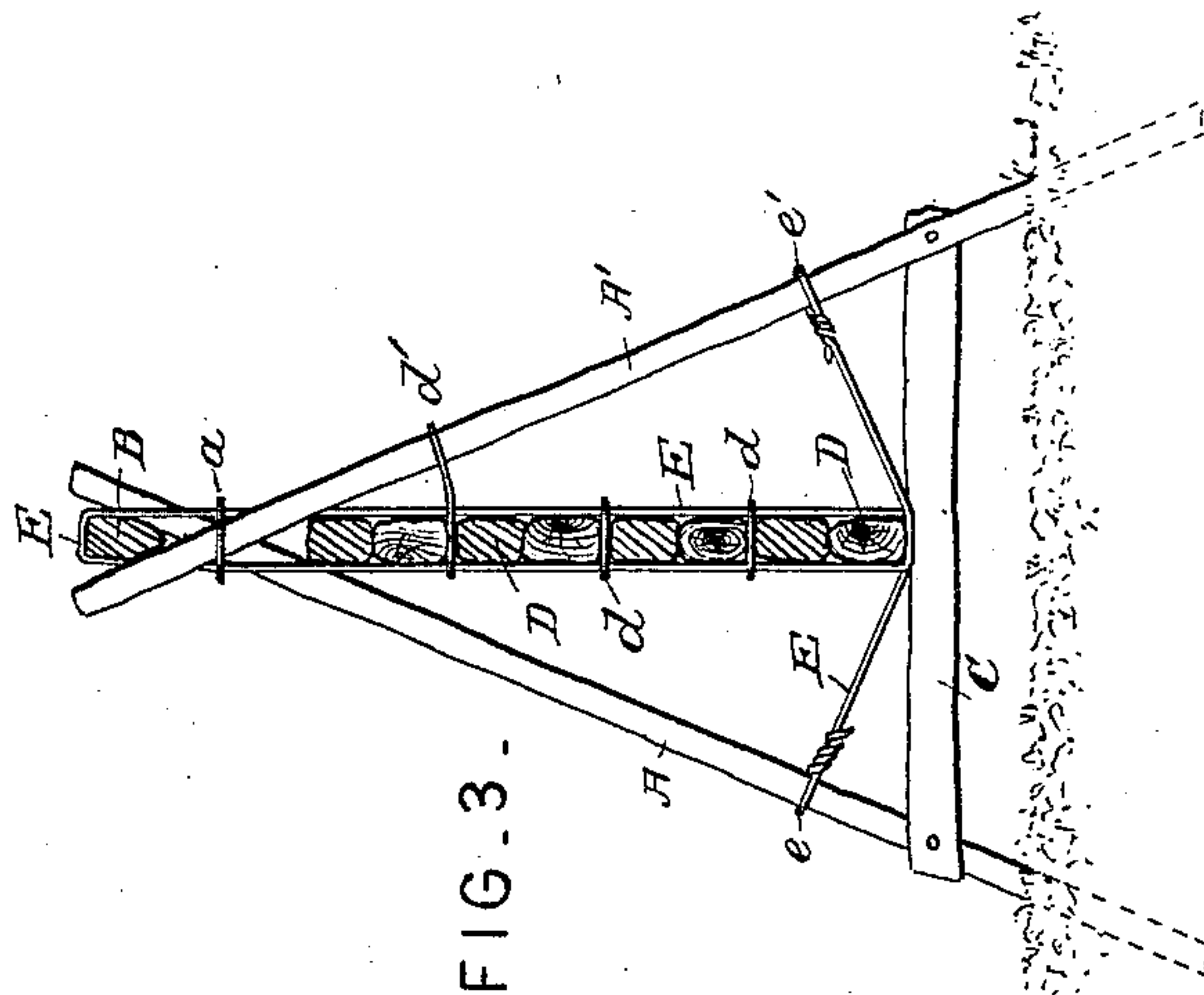
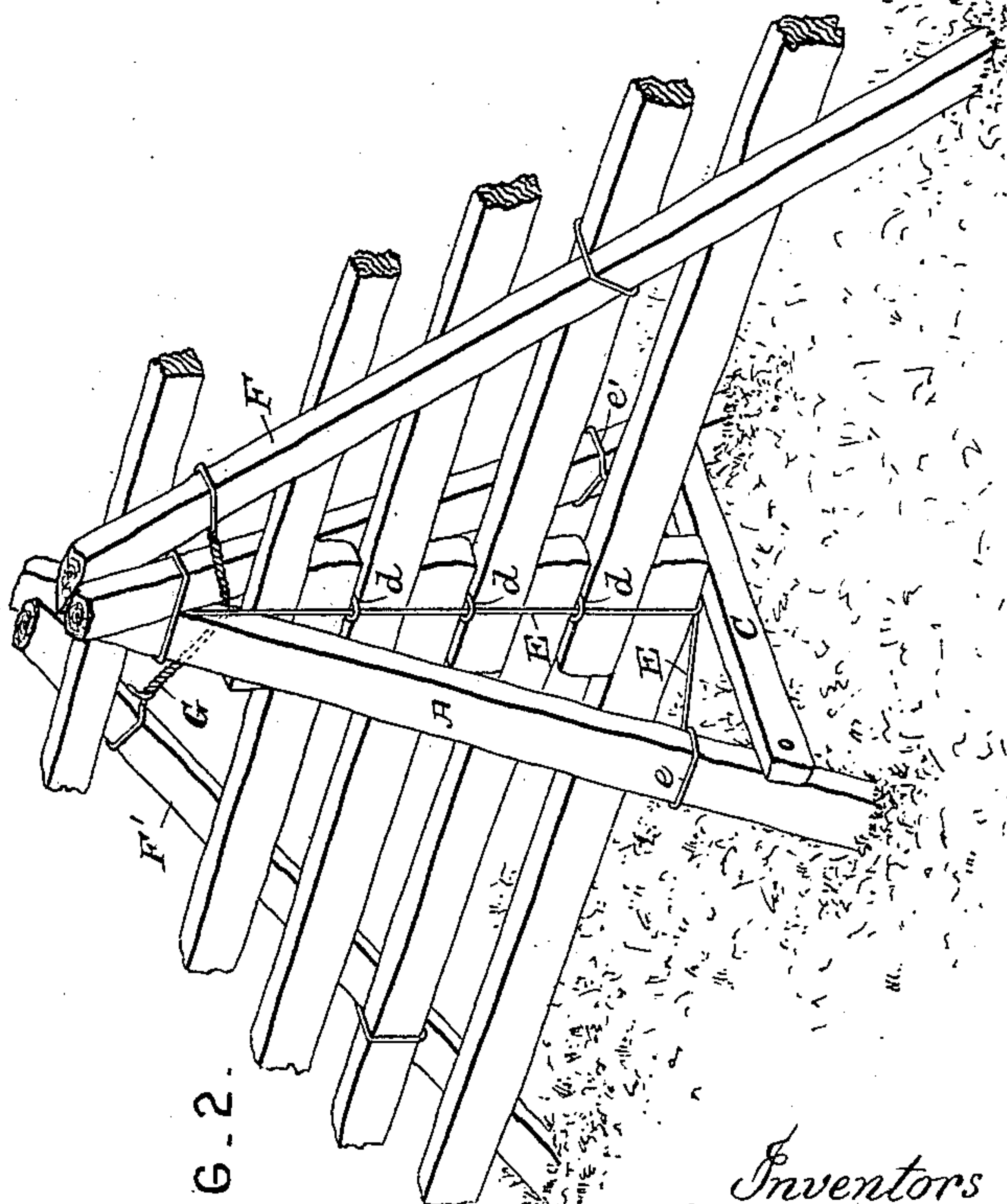


FIG. 2.



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UNITED STATES PATENT OFFICE.

HARMON HARTWELL AND DAVID S. HARTWELL, OF MARSEILLES, OHIO.

FENCE.

SPECIFICATION forming part of Letters Patent No. 429,685, dated June 10, 1890.

Application filed October 3, 1889. Serial No. 325,916. (No model.)

To all whom it may concern:

Be it known that we, HARMON HARTWELL and DAVID S. HARTWELL, citizens of the United States, residing at Marseilles, Wyandot county, State of Ohio, have invented certain new and useful Improvements in Fences; and we 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.

Our invention relates to improvements in fences, the object being to provide a simple, cheap, and durable fence which may be easily repaired or entirely removed at will.

This application is for the purpose of securing improvements on the construction shown in the Patent No. 380,034, dated March 27, 1888; and the invention consists of certain features of novelty described in the following specification, and particularly pointed out in the claim.

In order that the invention may be fully understood, we will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 represents in elevation a portion of a fence constructed according to our invention. Fig. 2 is a detail perspective view. Fig. 3 is a transverse section.

In constructing our fence we use pieces A A', similar to those shown in patent above referred to, and place them the same, securing them with the wire *a* where they cross at the top, and the top rail B is placed in the crotch formed by the lapping upper ends of said pieces A A'. At the base of pieces A A', a suitable distance from the ground, is secured a cross-piece C, upon which the lower series of rails D are placed, and these rails are so placed as to bring the upper series tightly against the lower crotch of pieces A A'.

Binding-wire E is secured at *e* to piece A, passes beneath the lower series of rails D, up over the top of top rail B, down on the oppo-

site side, and again beneath rails D, and is secured to piece A' at *e'*. The fence is thus secured by a continuous binding-wire, which is more durable and will hold the rails more firmly to place. Between each pair of rails D are interposed binding-wires *d*, which pass around the main binding-wire E and serve to stiffen said wire E, also to more securely bind the ends of each pair of rails D. The uppermost of these wires *d'* is secured to piece A'.

At suitable intervals along the fence is placed a pair of diagonal braces F F'—one on each side of the fence. Their lower ends enter the ground and their upper ends rest in the crotch formed by top rail B and pieces A A'. These braces F F' are tightly secured at their upper ends by wire G, which is fastened at one end to brace F, passes beneath the lower crotch of pieces A A', and is fastened at the other end to brace F'. These braces F F', thus secured together by wire G, hold each other firmly to place, and they cannot be displaced without first removing wire G.

The cross-piece C is for the double purpose of supporting rails D and for supporting the fence in case of settling of pieces A A'. Said cross-pieces C limit the settling of the fence, and thus keep the rails above ground.

Having thus described our invention, the following is what we claim as new therein and desire to secure by Letters Patent:

In a fence, the combination, with the inclined pieces A A' and rails D and B, of the inclined braces F F', resting with their upper ends in the crotch of said pieces A A' and tied to said rails, and wires G, secured to the upper portions of said braces and carried beneath the crotch of said inclined pieces A A', substantially as described.

In testimony whereof we affix our signatures in presence of witnesses.

HARMON HARTWELL.
DAVID S. HARTWELL.

Witnesses:

THOMPSON DELLER,
EMMA D. DELLER,
FRANK H. CHADWICK,
CARL RANSBURG.