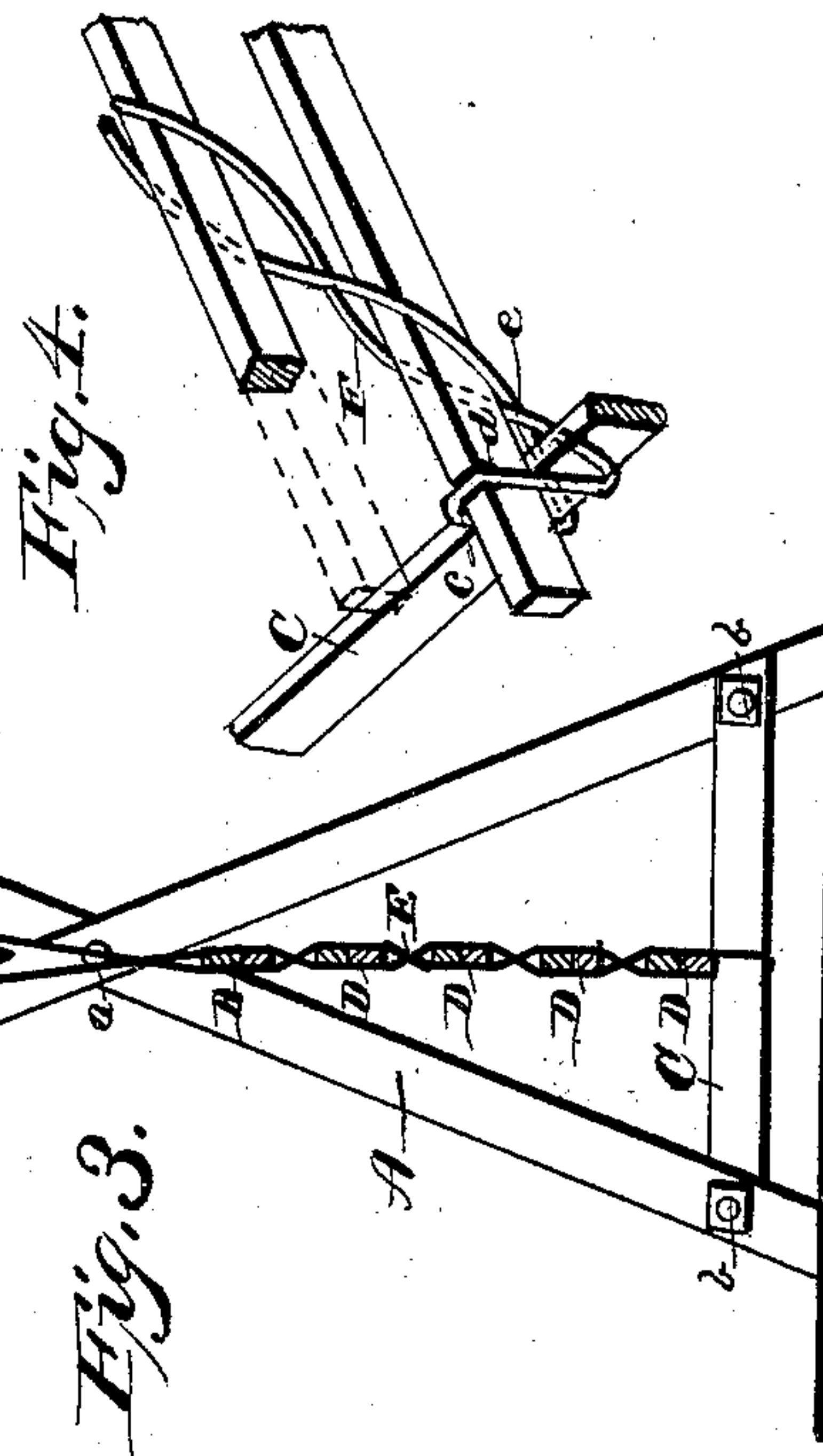
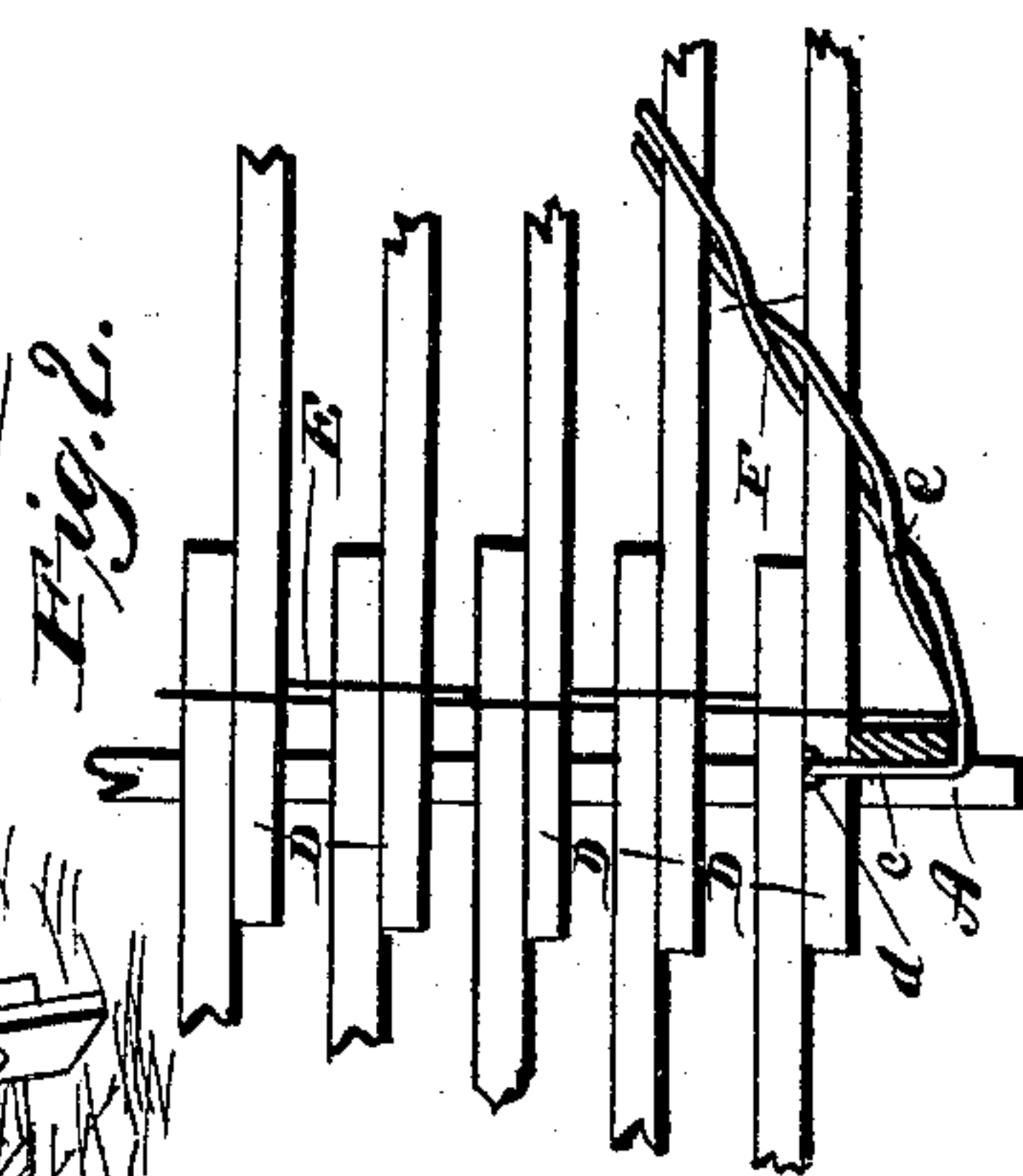
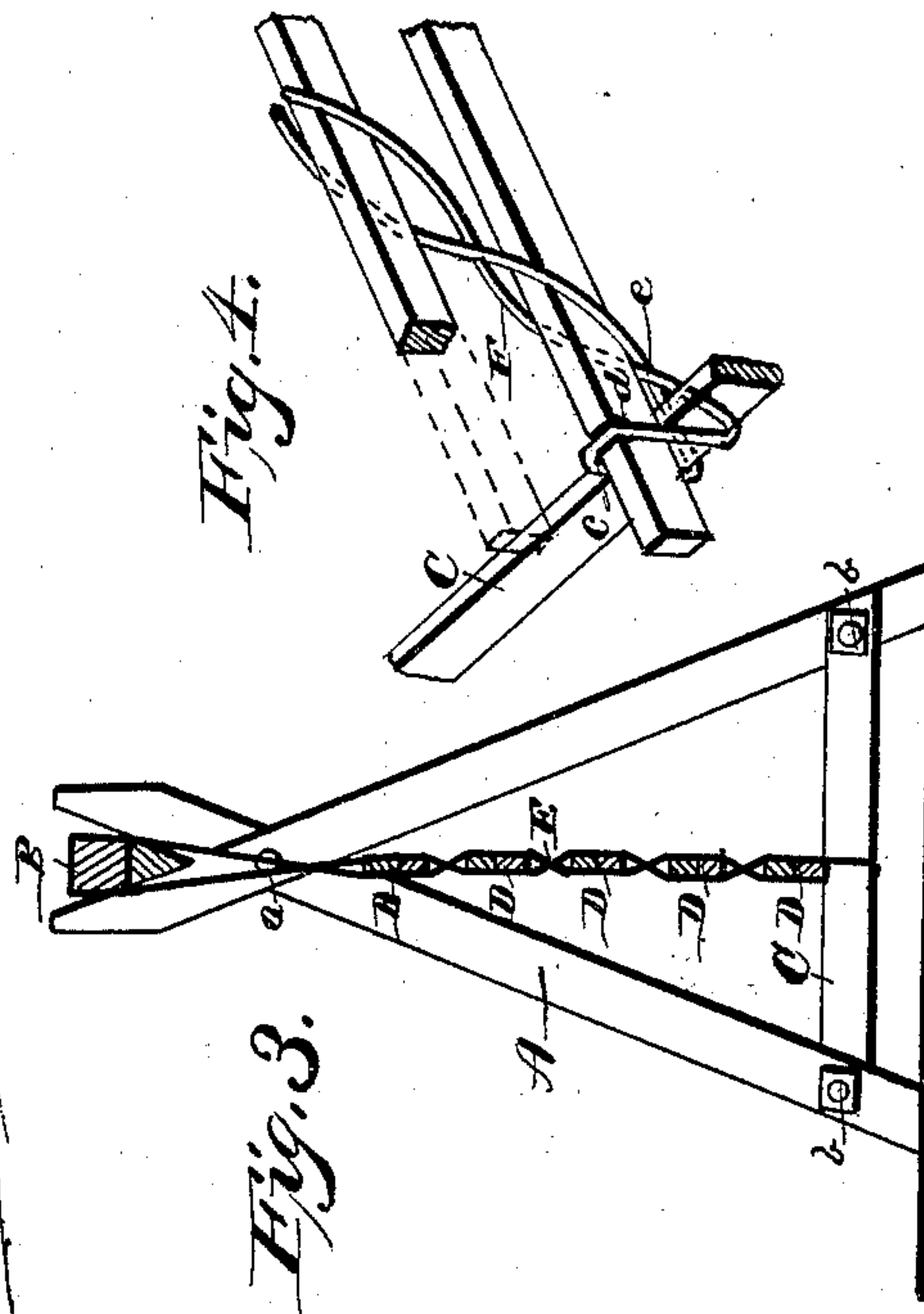
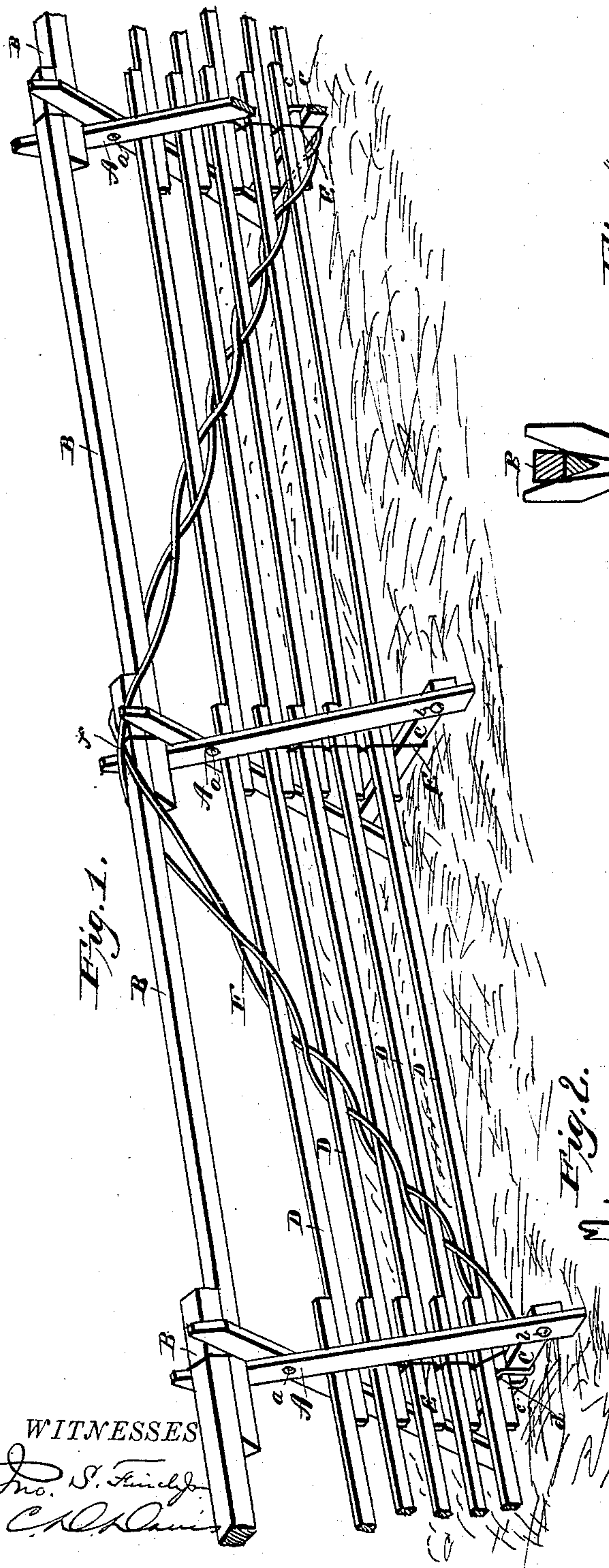


(No Model.)

J. C. KEMP.
FENCE.

No. 397,370.

Patented Feb. 5, 1889.



WITNESSES

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UNITED STATES PATENT OFFICE.

JACOB C. KEMP, OF TIFFIN, OHIO.

FENCE.

SPECIFICATION forming part of Letters Patent No. 397,370, dated February 5, 1889.

Application filed March 20, 1888. Serial No. 267,815. (No model.)

To all whom it may concern:

Be it known that I, JACOB C. KEMP, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have
5 invented certain new and useful Improvements in Fences, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates particularly to certain
10 new and useful improvements upon that class of farm-fences known as "stake-and-rider fences;" and it has for its object, essentially, to provide a portable fence of this character with a wire brace of peculiar and simple construction, whereby the fence will be held
15 firmly and steadily in an upright position and will resist the tendency of strong winds to overturn it, the said brace also having a tendency to keep the panels in alignment
20 with each other, as will presently appear.

The invention consists in certain novel features of construction that will be fully hereinafter described, and particularly pointed out in the claim appended, reference being had to
25 the accompanying drawings, in which—

Figure 1 represents a perspective view of a portion of a fence with my improved brace applied thereto; Fig. 2, a detail view of one of the lower ends of the brace; Fig. 3, a transverse sectional view of the fence; and Fig. 4,
30 a detail perspective view of a portion of the fence, showing more clearly the manner of securing the lower end of the post.

Referring to the drawings by letter, A designates the stakes of the fence, these stakes resting upon the surface of the ground, (or upon blocks buried therein, as may be desired,) and secured together by a bolt and nut, *a*, at the point of their intersection near
40 their upper ends, thus forming a crotch in which rest the rider-rails B of the fence.

C is a cross-bar, secured to and connecting the lower ends of the stakes A, the cross-bar being firmly secured to the stakes by means of
45 bolts and nuts at *b*. This cross-bar serves to brace and retain the stakes the required distance apart, and also serves to support the rails D of the fence. The horizontal rails D of the fence overlap each other at their adjacent
50 ends, and are securely held in place by means of a vertical wire tie, E. This wire tie E is

first bent around under the cross-bar C, the two ends of the wire passing up on opposite sides of the same. The two portions of the wire are then passed through in opposite di- 55
rections between the ends of the first and second rails, and preferably twisted once or twice to firmly clasp the adjacent overlapping ends of the lower rails. The two portions of the wire are then passed and clamped around the 60
overlapping ends of the next two rails in the same manner, and so on until all the rails of the fence have been securely fastened together, when the two ends of the wire are passed up upon opposite sides of the rider- 65
rails B and over the top of the same, where they are twisted securely together. By this means the rails are all securely held in place, the wire tie having a tendency to hold the rider-rails firmly down in the crotch formed 70
by the cross-stakes, as is evident. To the fence thus constructed I apply my improved tie or brace F, which consists, preferably, of a single piece of strong stout wire. In applying the wire brace F to the fence a loop, *c*, is 75
first formed in it about midway its length, and this loop is then slipped over one of the ends of one of the lower rails, the loop resting in a shallow notch, *d*, in the upper edge of this rail, as clearly shown in Fig. 4 of the 80
drawings. The two portions of the wire are then drawn taut and passed down close under the cross-bar C, the wires being crossed at *e* under the lower rail and brought up on opposite sides of the fence. The two ends of the 85
wire are then passed through the space between the first two rails in opposite directions, crossing each other and coming out upon opposite sides of the fence, thus firmly tying or clamping the lower rail down to the cross-bar 90
C. The wires are then passed through the next space in the same manner, crossing each other, and coming out upon opposite sides of the fence, as before, and so on until all the rails of the fence have been thus tied to- 95
gether, the wires extending up diagonally across the panel to the top of the next panel. The wires are drawn perfectly taut and cross each other on top of the overlapping ends of the rider-rails at *f*, passing down upon op- 100
posite sides of the same on the other side of the supporting-stakes, and from thence ex-

tend diagonally down across this panel to the lower end of the next panel, the wires being intertwined between the rails in the same manner as they are upon the first panel. The ends of the wires are then finally crossed under the lower rail, as at *c'*, and passed under the cross-bar C, and then up over the end of one of the lower rails, where they are twisted securely together, forming another loop, *c*, to embrace the end of the rail. This bracing-wire, when drawn taut, serves to firmly and securely fasten all the parts of the fence together, thereby enabling it to withstand or resist the action of strong winds. The brace serves as a tie to effectually secure the two adjacent panels firmly together, as is evident, rendering it impossible to separate the panels while this tie or brace is in place.

It is obvious that if so desired I may twist the parts of wires together at the point where they intersect each other between the rails. Thus twisting the wires will have a tendency to more firmly clamp the rails.

The object in hooking the loops *c* of the double wire brace over the projecting ends of the lower fence-rails and then carrying the parts of the brace down under the cross-bar C, and crossing them at *e*, and then drawing them taut and intertwining them tightly among the rails, is to materially assist in holding and binding the lower rails down upon the cross-bars, and thereby prevent any longitudinal movement on the part of the rails, regardless of their inclination.

It will also be evident that by this construction of brace the greater the force exerted to pull the panels asunder the greater will be the force exerted by the brace to hold and bind the lower rails down to their seats on the cross-rails and the rider-rails down to their seats in the crotches formed by the cross-stakes.

It will also be observed that the greater the tension upon the brace the tighter will the fence-rails be clamped by the intertwined wires. The double brace forms a perfect binder for the adjacent panels of the fence, rendering it impossible for strong winds to overturn any one or two of the panels without turning over the entire fence. The object is to further guard against longitudinal movement of the lower rails.

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

The combination, with the fence constructed of the crossed supporting-stakes A, the cross-bars C, secured to the said stakes near their lower ends, the overlapping rider-rails, the overlapping fence-rails, and a tie-wire, E, securing the overlapped ends of the said rails together, of a double wire brace, F, having formed in one end a loop, *c*, looped over the projecting end of the lower fence-rail, the two portions of the brace being passed down under the cross-rail C and crossed again at *e*, and then up diagonally across the panel and again crossed at *f* directly over the overlapped ends of the rider-rails, the two portions of the wire being then passed down diagonally across the adjacent panel and under another cross-rail C and looped up over the end of the lower fence-rail, the two wires of the brace being drawn taut and intertwined between the rails of both panels, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB C. KEMP.

Witnesses:

A. C. BARBOUR,
E. G. ROWLAND.