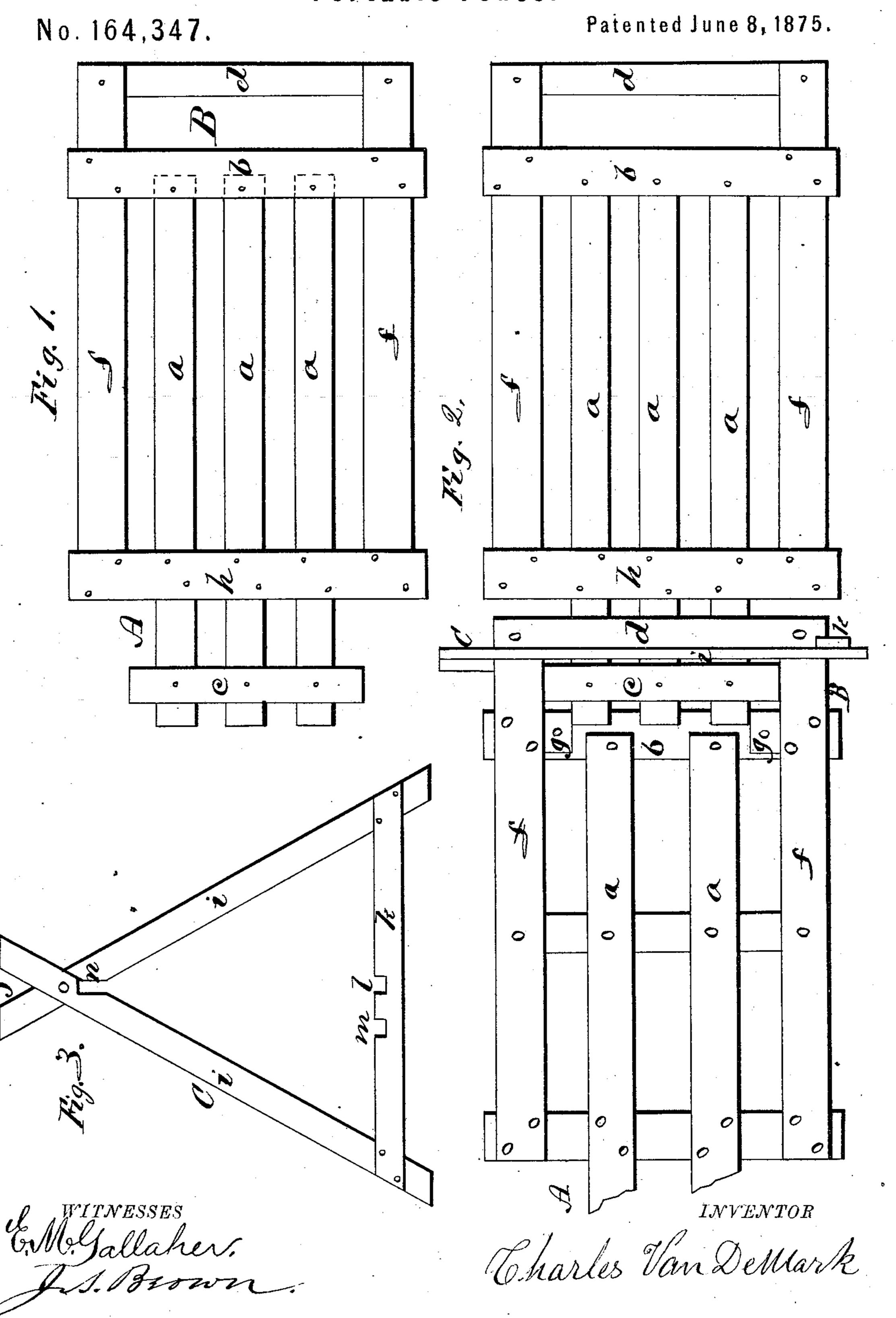
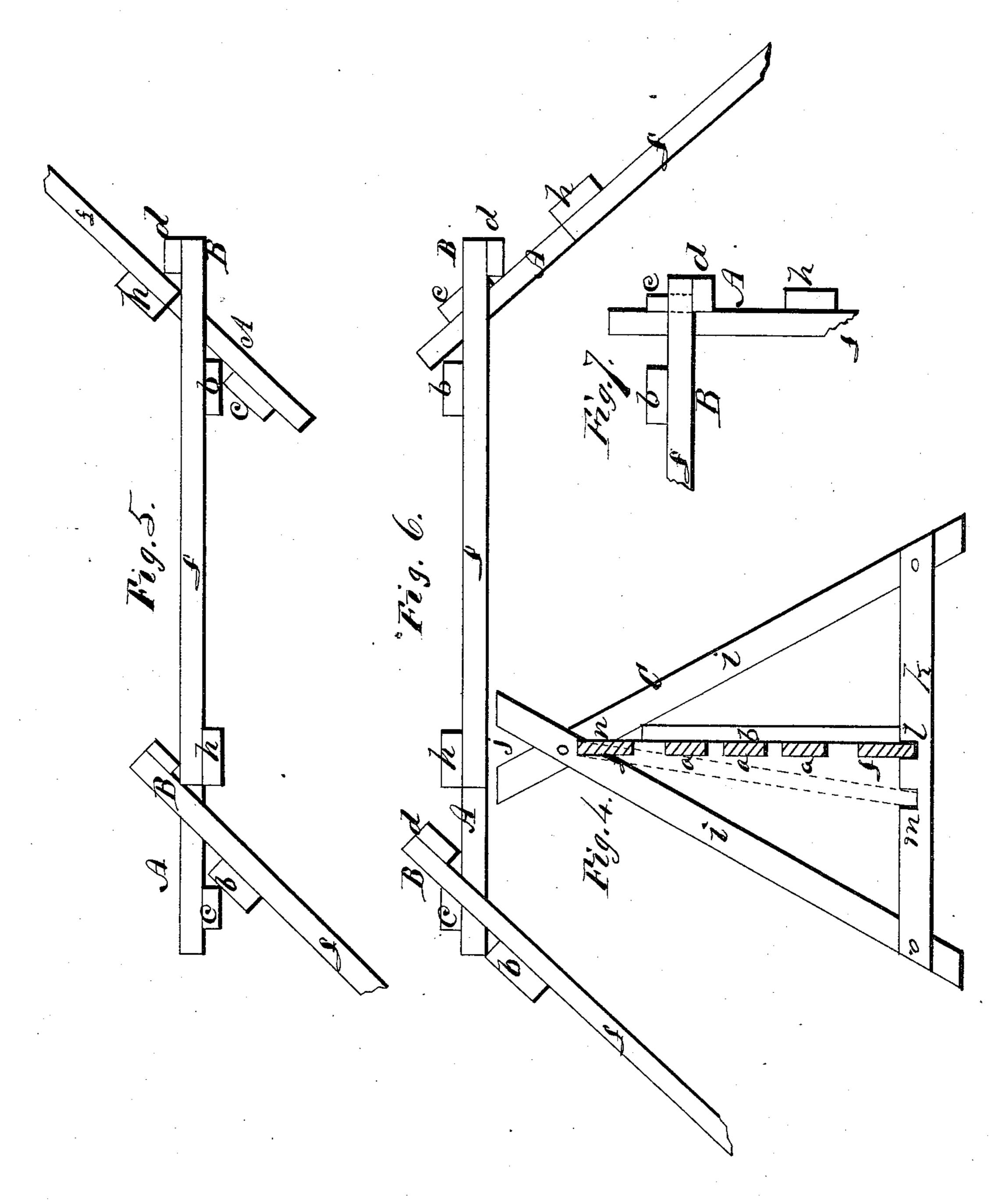
## C. VAN De MARK. Portable Fence.



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No. 164,347.

Patented June 8, 1875.



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## UNITED STATES PATENT OFFICE.

CHARLES VAN DE MARK, OF HILLSDALE, MICHIGAN.

## IMPROVEMENT IN PORTABLE FENCES.

Specification forming part of Letters Patent No. 164,347, dated June 8, 1875; application filed April 9, 1875.

To all whom it may concern:

Be it known that I, Charles Van De Mark, of Hillsdale, in the county of Hillsdale and State of Michigan, have invented certain Improvements in Portable Fences; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings mak-

ing part of this specification—

Figure 1 being a side view of one of the sections or panels of my improved portable fence separate; Fig. 2, a side view of two panels thereof, as set up together to form a straight fence, and held in one of the supporting-braces; Fig. 3, a side view of one of the supporting-braces; Fig. 4, a similar view of a brace, showing in cross-section two panels of the fence secured therein; Fig. 5, a top view of a panel, and adjacent ends of two other panels, arranged as a zigzag or worm fence, without supporting - braces; Fig. 6, a similar view, showing the arrangement of the panels to produce an octagonal or circular fence; Fig. 7, a top view, showing the manner of forming a square fence corner with the panels.

Like letters designate corresponding parts

in all of the figures.

My present improvements belong to the class of portable fences, the sections, or panels of which are locked together by hooks and

eyes.

Thus, in the drawings, the hook end of each panel is shown at A, and the eye end of the same is shown at B, and it is readily seen how one locks into the other. The several improvements now claimed by me will be herein specified in order. The middle boards a a of each panel, where they are attached at the end B of the panel to the inner upright or cleat b, instead of reaching across the full width of the cleat extend only about half-way across, as clearly shown in Figs. 1 and 2. This allows the ends of the middle boards at the hook end A of the adjacent panel to lap upon the upright without lapping over the said first-named boards. Then the outer cross-cleat c of the hook end A of each panel is situated a short distance from the ends of the boards, as shown, so as to allow the boards to lap upon the cleat b, and it is so located in relation to the dis-

tance between the two uprights or cleats b and d of the eye end B of the adjacent panel that there is allowed a little play of the panels endwise, as seen in Fig. 2, so that the panels readily adapt themselves to uneven ground, and at the same time it makes a close lock for every kind of fence constructed with the panel. The cleat c is cut of the proper length to come in between the top and bottom boards f of the adjacent panel. Simple blocks on the ends of the boards a a, as shown in Fig. 8, may be used instead of whole cleats c to save material. I also apply on the cleat b of each panel, two blocks, g g, one close to the upper board, and the other close to the lower board of the panel, and the two blocks or stops being of the proper width to allow just sufficient space between them to allow the middle boards a a of the adjacent panel to pass freely between them, as shown in Fig. 2. Thus the panels are all kept at uniform heights.

In making the panels, as above described, one object in view is economy of material, as well as simplicity of construction. Thus the hook and eye ends of the panels are so proportioned that the middle boards are of the same length, nearly or exactly, as the upper and lower boards, so that the boards being all cut of uniform length, there is no waste of material, and all the uprights and cross-cleats are made of boards of the same width as the boards, so that no difficulty ever arises in procuring proper material for the entire construction anywhere, or they may be made of differ-

ent widths and material, if desired.

In putting up the panels as a straight fence, the cleat c of the hook end of each panel may be placed on the opposite side of the boards to that of the inner upright h thereof, so as to keep the principal cleats all on one side of the fence; but this is not essential, and I have shown them in the drawings on the same side, which arrangement is also the proper one both for zigzag and octagonal or circular fences. At the other end of the panel, the cleats b and d are on opposite sides of the boards.

For supporting the panels in a straight fence, a brace, C, Figs. 3 and 4, of peculiar construction is employed. The inclined pieces *i i* thereof cross each other at the top, and reach a little distance above their crossing, so as to

form a notch, j, in which a top pole may be placed, to raise the fence higher when desired. Also, the bottom cross-piece k has two notches, lm, in its upper edge to receive the lower edge of the panel, one notch, l, being vertically below the notch n, under the crossing of the two inclined pieces which receives the upper edge of the panel, and the other notch, m, at one side of the centrally-situated notch l, which supports the panel in a vertical position, while the notch m (or notches, for there may be more than one) is for the purpose of inclining the panels in cases where it is preferred, for guarding against heavy winds, or where the fences are located on sideling ground, for bringing the panels into a vertical position. The full lines, in Fig. 4, show the panel sustained in a vertical position, and the dotted lines indicate its arrangement in an inclined position.

For making a self-supporting zigzag fence with these panels, they are arranged as shown in Fig. 5, the cleat c of the hook-end of each panel bearing and holding against the inner cleat b of the eye end of the adjacent panel. When thus arranged, the panels are alternately placed with their main cleats on opposite sides of the fence.

For making an octagonal or circular fence of the panels, they are locked together, as represented in Fig. 6, the cleat c of the hookend of each panel bearing and holding against the outer cleat d of the eye end of the adjacent panel. This arrangement places the principal cleats all on the outside of the fence.

In making right-angled corners with the

panels, the hook end of one panel is locked into the eye end of the adjacent panel, as shown in Fig. 7, the cleat e hooking outward around the cleat d. A key or small strip of board of the proper width may be inserted between the cleat b of the eye end of one panel and the boards of the hook end of the other panel, thus binding them firmly together.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. The hook end A of the fence-panel formed with the cleats ch, arranged as described, and the eye end B of the adjacent panel, formed with the cleats bh, arranged as described, whereby an angular self-locking fence is constructed, substantially as herein specified.

2. The hook-end A of the fence-panel formed with the cleat c, overlapped by the boards a a, and the eye end B of the adjacent panel, formed with the cleat b, overlapping the boards a a, and provided with blocks g g, whereby a straight self-locking fence is constructed,

substantially as herein specified.

3. In combination with the fence-panels constructed as herein described, the brace C, formed with its sides i i overlapping the top of the fence to form a rider-notch, l, and with notches l m n, substantially as herein specified.

Specification of my improved fence signed by me this 11th day of January, 1875.

CHARLES VAN DE MARK.

Witnesses:

J. E. Roberts,

J. A McElroy.