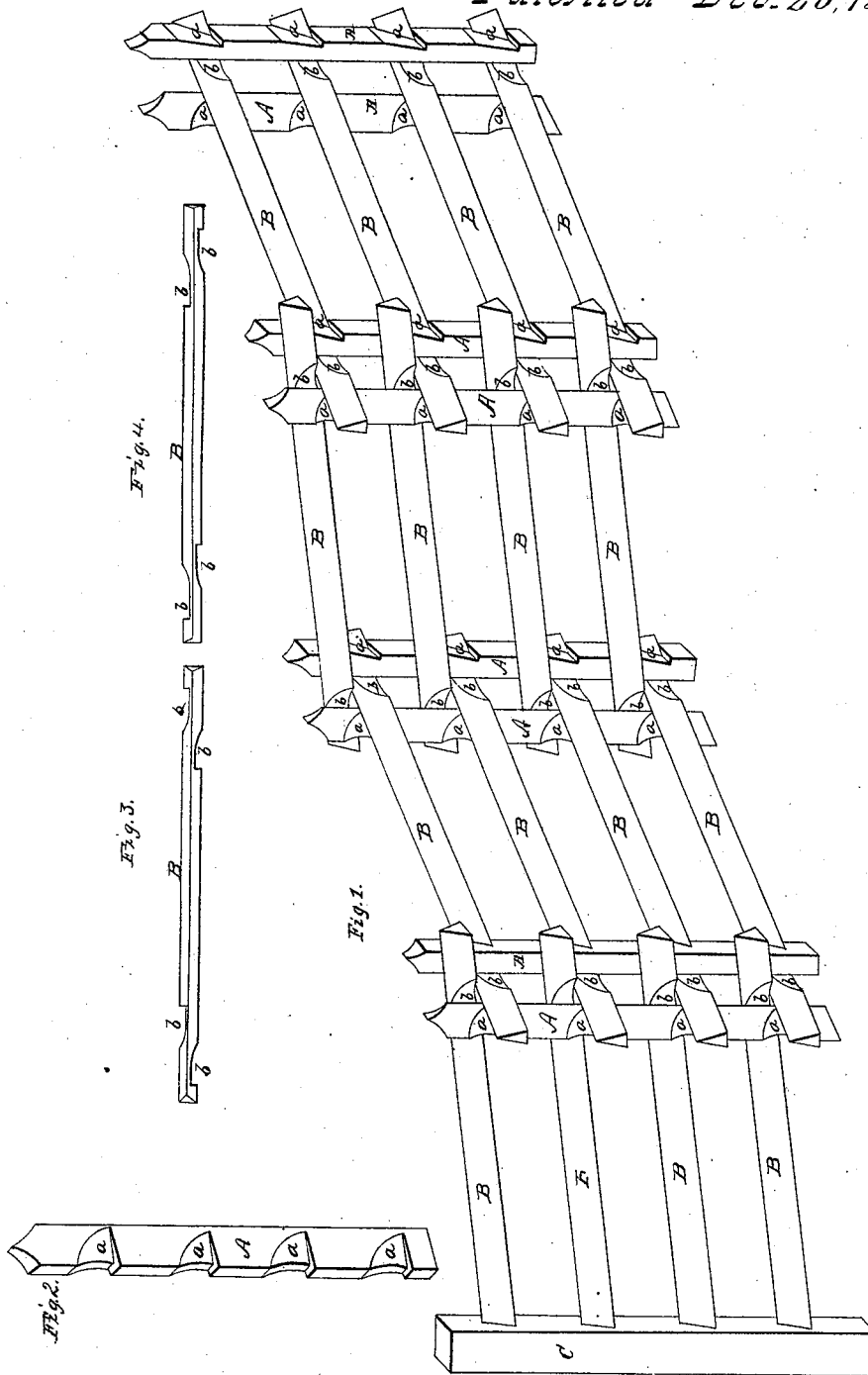


T. R. Byrnes,
Wood Fence,

Nº 51,691.

Patented Dec. 26, 1865.



Witnesses;
John L. Gwin
John L. Gwin

Inventor;
Thomas R. Byrnes
By Munnick
Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS R. BYRNES, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN FENCES.

Specification forming part of Letters Patent No. 51,691, dated December 26, 1865.

To all whom it may concern:

Be it known that I, THOMAS R. BYRNES, of the city and county of Washington, in the District of Columbia, have invented a new and useful Improvement in Fences; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

Figure 1 is a perspective view of my improved fence. Fig. 2 is a detached view, showing, in perspective, one of the battens or upright pieces of the fence. Figs. 3 and 4 are top views of two of the rails detached.

Similar letters of reference indicate corresponding parts in the several figures.

This invention is designed with a view to render unnecessary the digging of post-holes and the employment of nails or similar devices in the construction of a fence which has all the requisites of a neat, cheap, and strong farm-inclosure, and which does not necessarily involve the skill of a special mechanic to build it.

To this end the rails of my improved fence are disposed in zigzag form, like the common country worm-fence; but the rails, instead of being supported by lying upon one another, as in the ordinary worm-fence, rest in notches in the battens or upright pieces, and are themselves notched and crossed between each pair of adjacent battens in such a way as to be firmly and securely interlocked and adapted to withstand great lateral force.

The following description will enable others skilled in the art to which my invention appertains to fully understand and use the same.

In the accompanying drawings, A A represent the battens or upright pieces of the fence, and B B the horizontal rails. At the corner of the fence a post, C, is employed to join the fences, which run at right angles to each other, the rails adjoining the post being connected therewith by the usual mortise and tenon; but elsewhere the entire fence is composed of the battens A and rails B. The battens A are notched, as shown at *a*, to give the necessary vertical support to the rails B, and the rails

B are notched at *b* to support the parts longitudinally or brace them in the direction in which the fence runs. The battens are placed out of line. In other words, they do not stand in a plane at right angles to a line drawn between the corners of the fence, or from post to post. Hence the rails B, in being set in their appropriate notches in the battens A, are adapted to have their ends crossed between the two adjacent battens and interlocked, as clearly represented in the drawings.

The form of the notches in the rails B is more clearly represented in Fig. 3, said notches having each a shoulder to hold the battens against horizontal displacement. The rail represented in Fig. 3 would have its place in either of the alternate sections of the fence, beginning with the first, but position of the notches on the respective sides of the rails is reversed in those constituting the intervening sections, as is shown in Fig. 4. This difference in the disposition of the notches is only necessary where the fence has the zigzag form represented in the drawings, for it is apparent that in a circular fence constructed upon this general plan the rails may be all notched alike.

It is manifest that a circular fence can be made of the rails and battens without departing from the essential principle of my invention, as it consists simply in notching the rails and battens and interlocking or connecting them in the manner shown.

In a fence constructed as above described the battens and rails have sufficient support without the employment of posts inserted in the ground.

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

The fence herein described, the same consisting of the notched battens or uprights A and notched rails B, connected or interlocked, substantially as described.

THOMAS R. BYRNES.

Witnesses:

ALEXR. A. C. KLAUCKE,
JOHN A. WIEDERSHEIM.