J. H. BAILEY.

Fence.

No. 211,491. Patented Jan. 21, 1879.

Fig: 1.

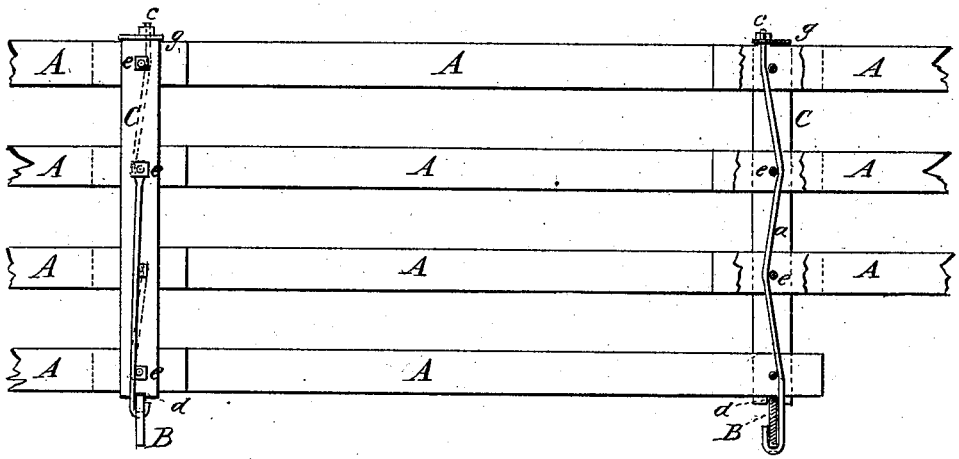


Fig: 2.

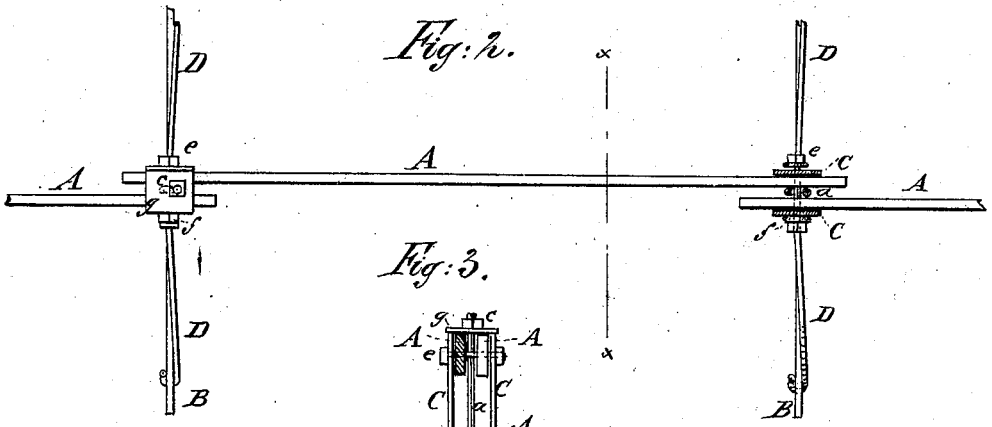
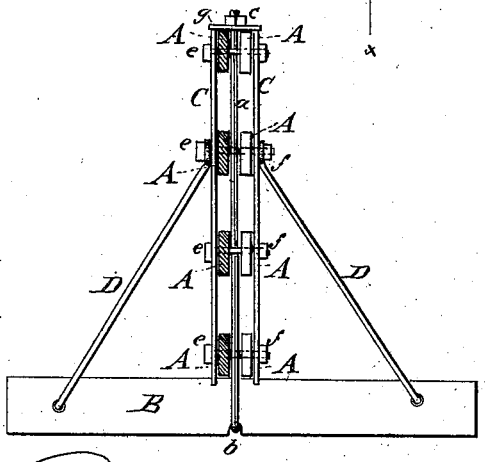


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE

JOSIAH H. BAILEY, OF WILMINGTON, OHIO.

IMPROVEMENT IN FENCES.

Specification forming part of Letters Patent No. **211,491**, dated January 21, 1879; application filed October 28, 1878.

To all whom it may concern:

Be it known that I, JOSIAH H. BAILEY, of Wilmington, in the county of Clinton and State of Ohio, have invented a new and Improved Fence, of which the following is a specification:

The object of this invention is to produce a cheap, strong, and durable fence that can be easily and quickly erected or removed from the place where it is set up.

It consists in making the fence partly of wood and partly of iron, avoiding the use of wooden posts.

It is put together by laying an iron base-plate, from which is erected an iron post or bar. The adjacent ends of the planks in adjoining panels are placed on opposite sides of this post, between iron bars, and secured by transverse bolts passed through the bars and planks, so as to bind the whole firmly together. A nut is also screwed on the top of the post, down on a washer bearing upon the top plank of the panel, and lateral braces are provided to strengthen it against pressure from the sides.

In the accompanying drawing, Figure 1 is a side elevation of my improved fence. Fig. 2 is a top view of the same, partly in section; and Fig. 3 is a vertical section through line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A A, &c., are the wooden planks forming the panel of the fence. B B are the base-plates, made of iron, placed under the ends of the panel and resting on the ground. From the lower edge of these base-plates an iron rod, *a*, forming a post, is projected upward, its lower end being bent under the base-plate and entered into a notch, *b*, therein, so as to hold it against lateral displacement. The posts *a* are of zigzag shape, the angles occurring where the planks A cross the said posts, and at the middle line of the planks, as clearly indicated in the drawing. The tops of post *a* are screw-threaded for the reception of a burr, *c*.

C C are metal plates, placed on either side of the intersecting ends of the panels, and inclosing between them the adjacent ends of the planks A. The lower ends of these plates rest upon the base-plates B B, a notch, *d*, in this end receiving the edge of the plates, thus preventing them from being slipped sidewise from their places.

Bolts *e e*, &c., are passed transversely through the plates C C and through the ends of the planks A, and are securely fastened by burrs *f*, bearing upon one of the said plates, so that the adjacent ends of the planks forming adjoining panels are firmly bolted together and to the side plates, C C.

Braces D D are applied to each side of intersecting panels. The lower ends of these braces are hooked securely in the base-plates at a proper distance from the panels, so as to obtain adequate support, while the upper ends bear against the side plates, C C, at the junction of the third plank from the bottom therewith, or higher, if necessary. On this end of the braces is an eye, through which is passed the bolt *e*, which is passed through the ends of the planks at this point, so that the same bolt secures the two braces in place, as well as the planks and side plates together. These braces furnish lateral strength and support to the panels, so that they will not yield to the force of the wind or to any other pressure exerted upon them from the sides.

In the construction of the fence, the ends of the planks forming one panel are placed on one side of the middle post *a*, while the ends of the planks forming the adjoining panels are placed on the opposite side thereof. In this way the planks are kept apart, and thus the rapid decay superinduced by the contact of the wooden planks furnishing a lodgment for dampness in wooden fences is avoided, and the planks are kept dry, thus prolonging their usefulness.

In bolting the planks A and the side plates together at the intersection of the panels, alternate bolts are placed on opposite sides of the middle post *a* in the angles formed by its zigzag shape, which is given to it in order to permit this arrangement. The object of this is to give an endwise brace to the planks that hold them rigidly in place when the fence is erected on the side of a hill or gully. Without this arrangement the planks would turn on the bolts as on pivots, and when carried up or down an incline would change their angle

with the connecting posts and plates, and thus not only spoil the symmetry of the fence, but weaken it by subjecting parts to unnecessary weight and strain.

A washer or plate, *g*, is placed over the upper ends of posts *a*, and rests upon the top planks and the ends of the side plates, C C. The burr *c* is screwed down on this washer, thus rigidly connecting the planks and base-plate together through the posts *a*. Thus, by means of the vertical and lateral bolting, the adjoining panels are made fast and rigidly bound together.

A fence constructed in this manner possesses the important qualities of cheapness, durability, and strength. Very little wood enters into its construction. This of itself is an important matter in localities where wood is scarce, and the part made of wood is so arranged that it is saved, as far as possible, from the rapid decay to which it is exposed in fences as usually constructed.

An important practical advantage arising from the construction of this fence is that when it is desired to go through any part of it the planks can be quickly and easily removed by simply unscrewing the nuts and withdrawing the bolts at each end without interfering in the slightest degree with the adjoining panels, and they can be as quickly replaced. So, too, if it is desired to drive small stock through the fence at any point, it can be done by simply removing the lower plank from the panel, as above described.

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

As an improvement in fences, the combination and arrangement of middle posts *a*, planks A, forming the panels, and side plates, C C, with the base-plates, B, and braces D, the parts being secured together laterally by bolts *e*, and vertically by nuts *c*, on the ends of middle posts *a*, in the manner substantially as described.

JOSIAH H. BAILEY.

Witnesses:

N. M. LINTON,

ENOS P. BAILEY.