(No Model.)

J. J. JOHNSTON.

COMBINED IRON AND WOOD FENCE.

No. 265,826. Patented Oct. 10, 1882.

Fig. 1.

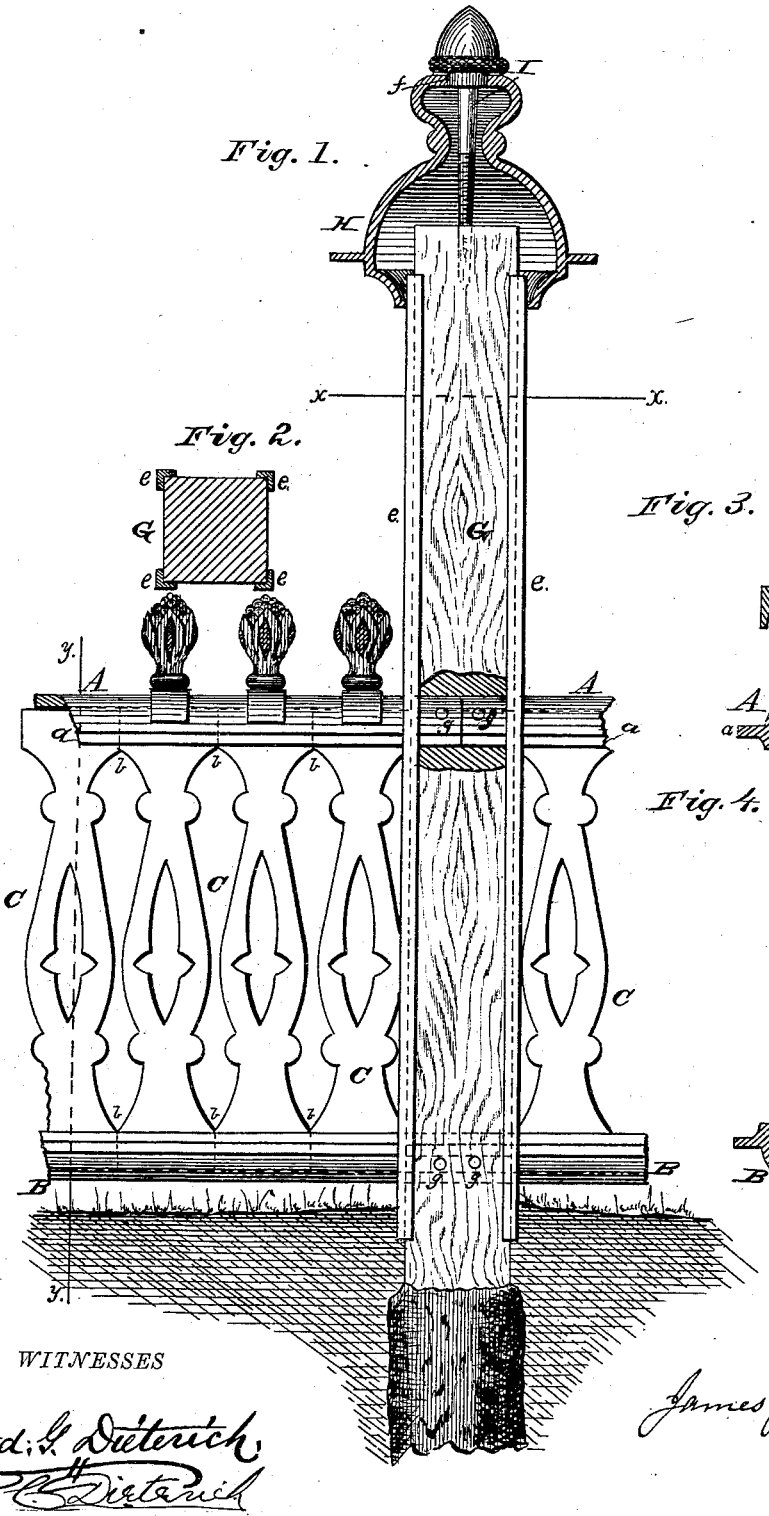


Fig. 2.

Fig. 3.

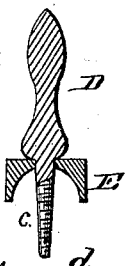
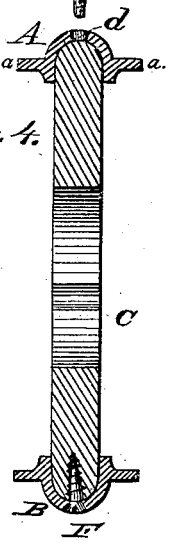


Fig. 4.



WITNESSES

Fred. L. Dieterich

F. C. Dieterich

INVENTOR

James J. Johnston

UNITED STATES PATENT OFFICE.

JAMES J. JOHNSTON, OF COLUMBIANA, OHIO, ASSIGNOR TO THE UNITED STATES IMPROVEMENT COMPANY, (LIMITED,) OF SAME PLACE.

COMBINED IRON AND WOOD FENCE.

SPECIFICATION forming part of Letters Patent No. 265,826, dated October 10, 1882.

Application filed February 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES J. JOHNSTON, of Columbiana, in the county of Columbiana and State of Ohio, have invented a certain new and useful Improvement in Combined Iron and Wood Fence; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in combined iron and wood fence; and it consists in making the top and bottom rails of U-shaped iron having side flanges, the top rail being furnished with iron ornaments, which rest upon recessed or grooved blocks forming a base for the ornaments placed at suitable intervals on the top rails, the tang of said ornaments being furnished with screw-threads for the purpose of holding the ornaments in position, and at the same time coupling the top rail firmly to the vertical wooden rails, the upper and lower ends of which are fitted to the grooves of the bottom and top rails, the bottom rail being attached to the lower end of the wooden vertical rail by means of "wood-screws," panels of suitable length of said fence being placed between wooden posts, the corners of which are protected by angle-iron and surmounted by an ornamental cap-piece, the bottom and top rails being secured in recesses made in said post, and by pins passing transversely through said post and rails, all of which will hereinafter more fully and at large appear.

To enable others skilled in the art with which my invention is most nearly connected to make and use it, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of this specification, Figure 1 is a side elevation of two sections of two panels of my improved fence secured to a post. Fig. 2 is a transverse section of a post at line *x x*. Fig. 3 is a vertical section of the ornament for the top rail and the base of said ornament. Fig. 4 is a vertical and transverse section of the fence at line *y y* of Fig. 1.

Reference being had to the accompanying drawings, A represents the top rail, and B the bottom rail, which are constructed of wrought-iron rolled into the form of a letter U, (when viewed in cross-section,) having side flanges, *a*. (Clearly shown in Fig. 4.) The vertical rails C are constructed of wood equal in thickness to the width of the grooves of the top and bottom rail, and the ends of said vertical rails, by means of a suitable tool, made to correspond to the contour of the grooves in the rails A B, as shown in Fig. 4. One form of the wooden vertical rails C is represented in the accompanying drawings; but a great variety of forms may be used for the purpose of giving the fence a variety of designs in the wooden part of it; but in all cases that portion of the ends of the wooden rails which fit in the grooves of the rails A B should fit closely together, as indicated by the dotted lines at *b* in Fig. 1, for the purpose of giving stiffness and firmness to the panels of the fence, and above the center of each of the vertical rails, or above the center of every alternate vertical rail, should be placed one of the ornaments D, with its grooved base E. The tang *c* of the ornament D, passing through opening *d* of the rail A, is screwed down into the upper end of the wooden rail C, thereby securely coupling the rail A and vertical rail C firmly together. The lower rail, B, is furnished with openings for wood-screws F, which are screwed into the lower end of the vertical rail C, as shown in Fig. 4, thereby securing said rail firmly to the lower end of said vertical rail, whereby a panel of the fence, consisting of the top rail, A, and bottom rail, B, of iron, and vertical rails C, of wood, is formed having great stiffness and strength. The wooden post G is square when viewed in cross-section, and its corners are protected by angle-iron *e*, as shown in Figs. 1 and 2. The upper end of the post is furnished with a hollow metallic cap-piece, H, secured in place by a screw, I, having an ornamental head, the shoulder *f* of said screw fitting in an opening in the upper end of the cap-piece H. In the post G, between the corner-pieces of angle-iron *e*, are recesses for the reception of the ends of the rails A B,

which rails are secured in said recesses and to the post by means of pins *g*, which pass transversely through the post and said rails, as shown in Fig. 1.

A fence constructed as hereinbefore described will be light, strong, and highly ornamental, easily set up in place, and manufactured cheaply and with great facility.

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

In a combined iron and wood fence, the combination of the U-shaped rails A B, having side flanges, *a*, the vertical rails C, ornaments D, having screw-tang *c*, groove-base E, and the post G, having corners *e* of angle-iron, and hollow metallic cap H, secured in place by screw I, substantially as herein described, and for the purpose set forth.

JAMES J. JOHNSTON.

Witnesses:
T. D. D. OURAND,
DE WITT C. ALLEN.