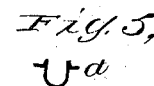
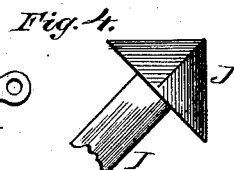
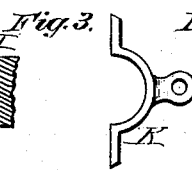
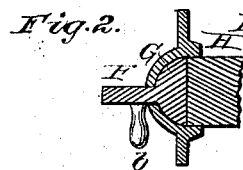
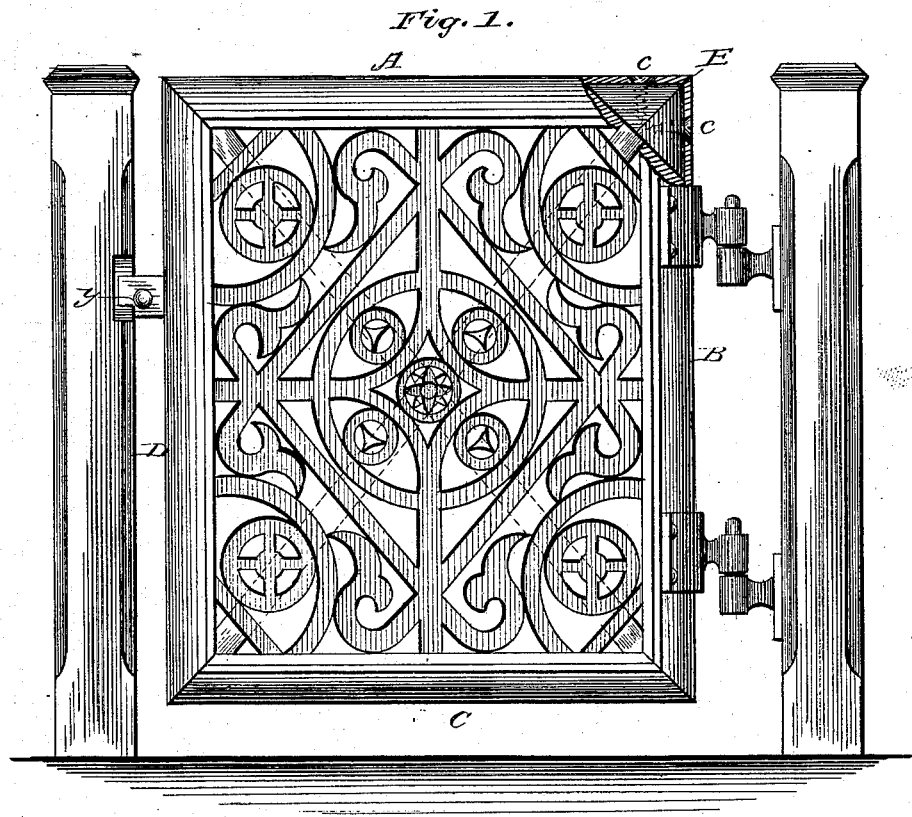


(No Model.)

J. J. JOHNSTON.
COMBINED IRON AND WOOD GATE.

No. 264,882.

Patented Sept. 26, 1882.



WITNESSES

Ad. L. Dutovich
T. C. Dutovich

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 GATE.

SPECIFICATION forming part of Letters Patent No. 264,882, dated September 26, 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 Gate; 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 gate; and it consists in making the frame of the gate in sections of wrought-iron rolled in the form of the letter U, and having side flanges, and securing said sections together through the medium of corner-blocks of cast-iron fitted to the groove in said iron, said corner-blocks being cast upon the ends of wrought-iron braces, which braces, when in position in the gate, form the letter X, riveted together in the center, said sections forming at the corners of the gate miter-joints and secured to said corner-blocks by screws, the inner face of the knuckles of the hinges of said gate corresponding to the outer wall of the frame and riveted thereto, and the latch of the gate fitted to the groove in the frame with the tongue of the latch projecting through a slot in one of the sections, and so arranged that it will latch of its own gravity when closing the gate, the panel of said gate being constructed of wood, the edges of which are fitted to the grooves of the sections of the frame, 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 front elevation of my improvement in iron and wood gate combined, and representing the upper right-hand corner of a portion of the frame broken away. Fig. 2 is a horizontal section at line *y*. Fig. 3 is an end view of the knuckle portion of the hinge. Fig. 4 represents one of the cast-iron corner-blocks as secured on the diagonal braces. Fig. 5 represents a trans-

verse section of the iron for the frame of the gate.

Reference being had to the accompanying drawings, A B C D represent the four sections of the frame of the gate, which are made of iron of U shape, with side flanges, *a*, as shown in Fig. 5, which iron is formed in its manufacture by the rolling process. The sections A B C D form miter-joints at E in the construction of the frame.

In section D of the frame is a slot for the tongue F of the latch, the part G of which is fitted to the groove in said section, and is held in position by the wooden panel H, as indicated in Fig. 2, the tongue F of the latch having a handle, *b*. The outer edges of the wooden panel H are fitted to the grooves of the sections A B C D.

The diagonal braces I are furnished with cast-iron corner-pieces J, which are cast upon the ends of said diagonal braces, the form of which corner-pieces is clearly shown in Figs. 1 and 4, and fit neatly and closely in the groove at the miter-corners E. The diagonal braces are riveted together at the point where they cross each other at the center of the gate. The knuckle portion K of the hinges on their inner faces corresponds to the contour of the outer wall of the frame, the form of said knuckle being clearly shown in Figs. 1 and 3, and is riveted to the flanges *a*, as indicated in Fig. 1.

The several parts of the gate being constructed as hereinbefore described, the diagonal braces I are secured upon the wooden panel H, as indicated by the dotted lines in Fig. 1, the section B having the knuckles K secured to it, and the section D having the latch secured in it, as indicated in Figs. 1 and 2, with a portion of the panel H cut away to admit of the proper vertical movements of the latch. The sections A B C D are then secured to the corner-pieces J by means of screws *c*, as indicated in Fig. 1, which completes the construction of the gate. The outer face of the wooden panel may be made highly ornamental by securing thereon scroll-work formed by scroll-sawing, as shown in Fig. 1, the design of which scroll-work may be changed to suit the taste of the manufacturer and user.

A gate constructed as hereinbefore described will be strong, light, durable, ornamental, and can be manufactured cheaply.

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

In an iron and wood gate combined, a miter-
frame constructed in sections A B C D, of iron
of U form, having side flanges, *a*, in combina-
10 tion with diagonal braces I, having corner-

blocks J cast on the ends thereof, the wooden panel H, the knuckles K, and latch consisting of tongue F and part G, adapted to move in section D, substantially as hereinbefore described, and for the purpose set forth.

JAMES J. JOHNSTON.

Witnesses:

T. D. D. OURAND,

DE WITT C. ALLEN.