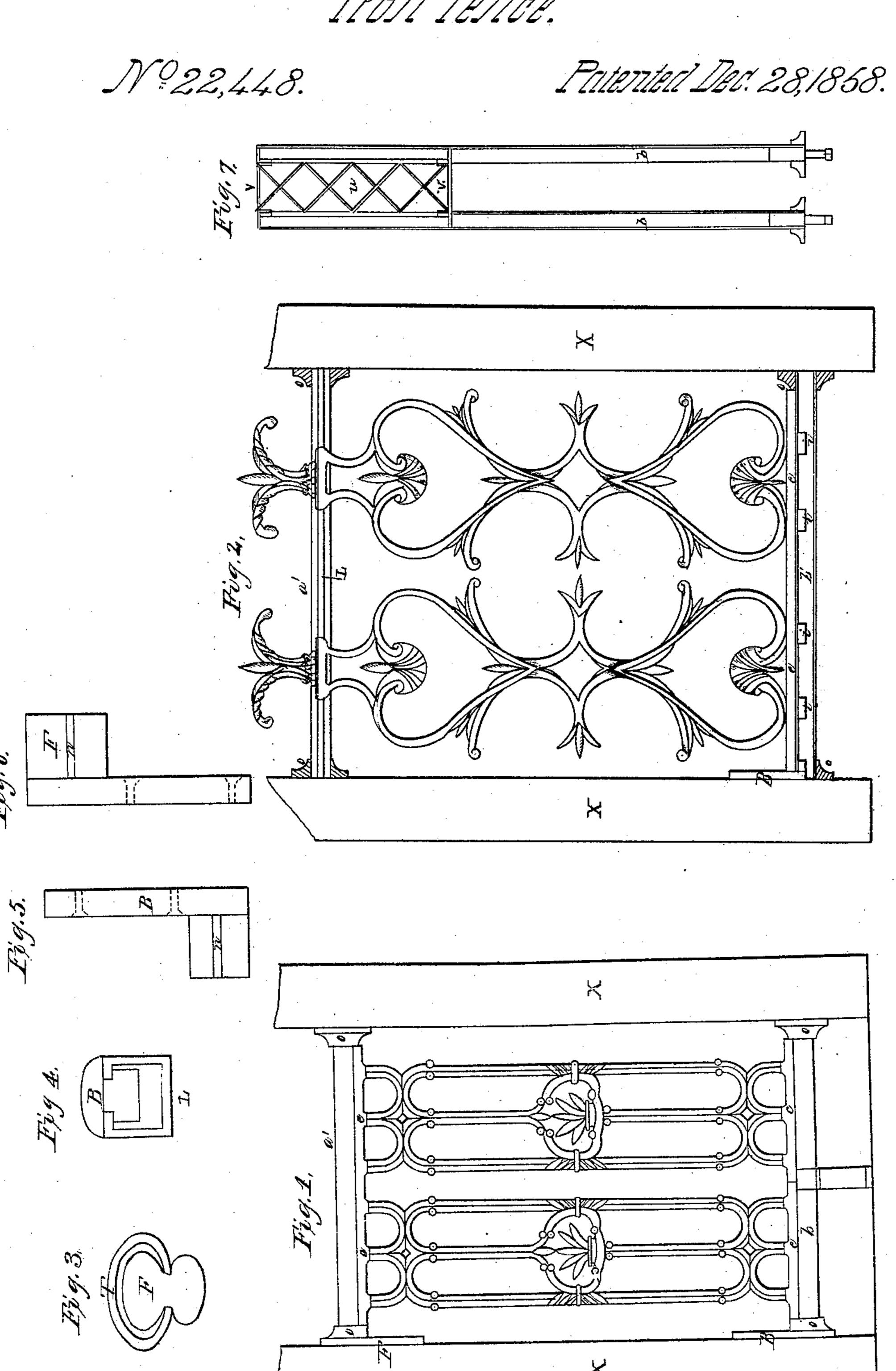
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UNITED STATES PATENT OFFICE.

JAMES NUTTALL, OF NEW ORLEANS, LOUISIANA.

CONSTRUCTION OF IRON RAILING.

Specification of Letters Patent No. 22,448, dated December 28, 1858.

To all whom it may concern:

Be it known that I, James Nuttall, of the city of New Orleans, parish of Orleans, State of Louisiana, have made a new and useful Improvement in the Construction of Iron Railing; and I hereby declare the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of ref10 erence marked thereon, making a part of this specification, the same letters being used to designate the same parts shown in the different figures.

I form the rails out of wrought iron plates, 15 which are drawn to the shape required. Those shown in Figures 1 and 2 are of same figure, although the patterns of the panels so far as figure are different. Figs. 3 and 4, cross sections, give the form of the rails, also 20 the manner the panels are attached to the same, the letter, T, in Fig. 3, indicating the top rail, and the letter, F, indicating the head of the panel inserted in the rail, the letter, L, indicating the lower rail, and the 25 letter, B, the lower end of the panel. The grooves on each side of this part of the panels receive the rails, which forms a permanent attachment, and at the same time the shoulders on the panels, both inside and out-30 side of the rails, give a support to the rail, which being made of light material, the rails are strengthened by the aid of the panels, and not liable to injury from expansion or contraction, and at the same time admits of 35 expeditious erecting, which only requires the panels to be put into the rails to fill up the space required, then the attachment of the ends of the rails to the side fastenings.

Fig. 1 shows the panel, with the lower rail (b) and upper rail (a') showing the exterior shoulders of the panels (c) attached to the side frames (x) by boxes (o), made to receive the end of the rails on one side; and on the other side are holdfasts, B, and, F, as seen in Figs. 5 and 6, having a groove (n) on their sides to receive the edges of the rails

identical to that described in Figs. 3 and 4. These holdfasts as indicated by the screw holes, are attached to the subjects to which the rails are joined. The modes of attaching 50 the rails to side frames can be numerous, however, and further description of this particular is not deemed necessary. Fig. 2 shows the same arrangement so far as the attachment of the panels to the rails, the 55 lower rail (b') made sectional, showing the parts of the panels making the interior shoulders marked (i) and the exterior shoulders (c). The upper rail in this figure is placed on the side of the panels, with the 60 opening marked (z) into which the locks on the panels are inserted, fitting and holding the rail in the same manner of the others described. Between the locks on the panels, in order to hold them permanent, are bars 65 made the same as the locks on the panels, and the length required to retain the panels in their position so far as the required distance apart. This arrangement allows the head of the panel to be extended above the rail. Fig. 70 7 shows the same arrangement for constructing veranda railing, the rails (b, b) standing in a vertical position, and shown sectional, with the panel (u), and their ends v, v, having the locks on the sides. The foot of the 75 rails can be secured by screws or keys as well as the heads, or similar to the holdfasts shown in Figs. 5 and 6.

I do not claim broadly dovetail connection as such is not the scope of my inven- 80 tion. But

What I do claim is—

The combination of bent sheet metal rails, with grooves in the panels receiving the edges of the rail and giving an internal and 85 external bearing to the rail substantially as set forth.

JAMES NUTTALL.

Witnesses:

Francis Armstrong, John Henderson.