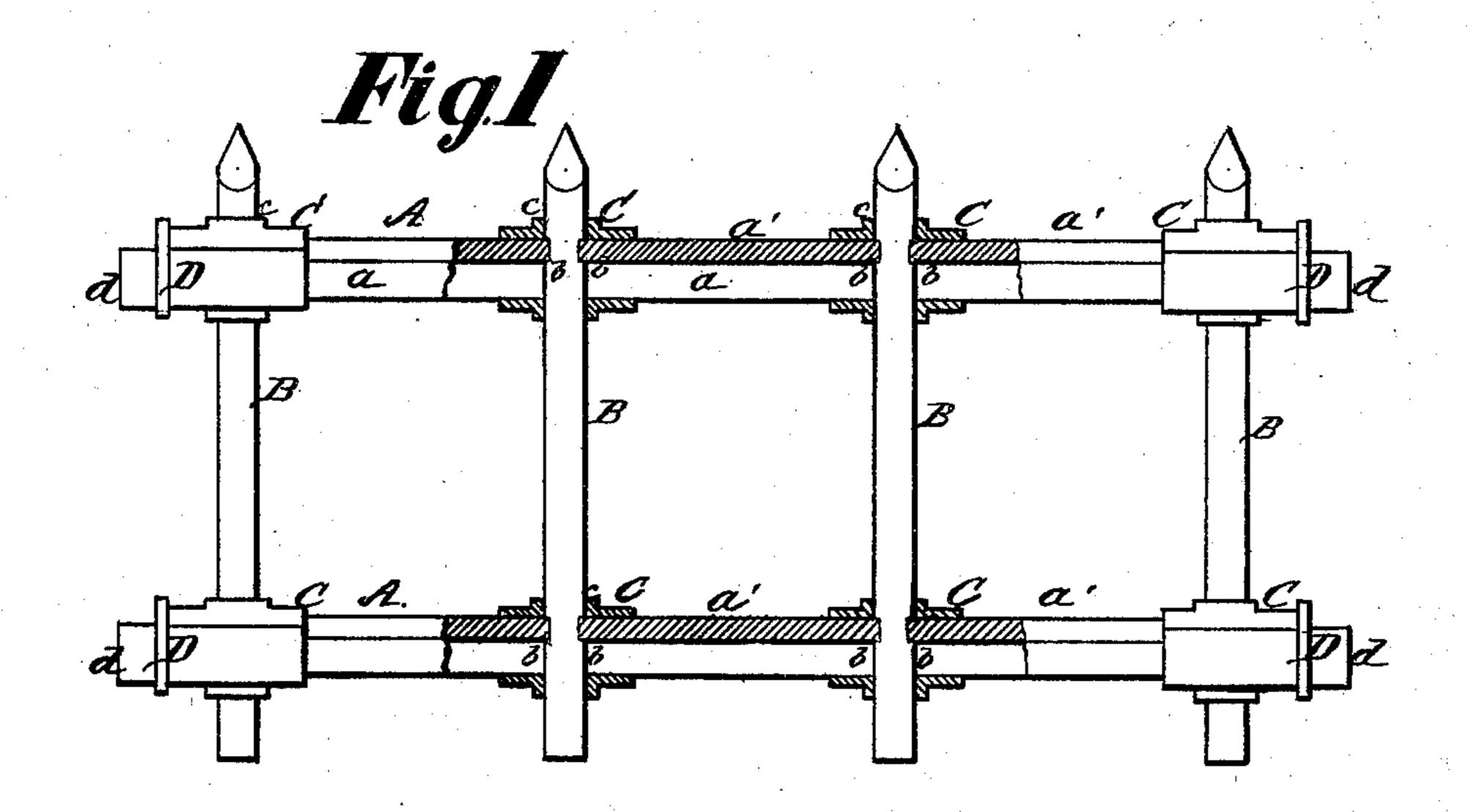
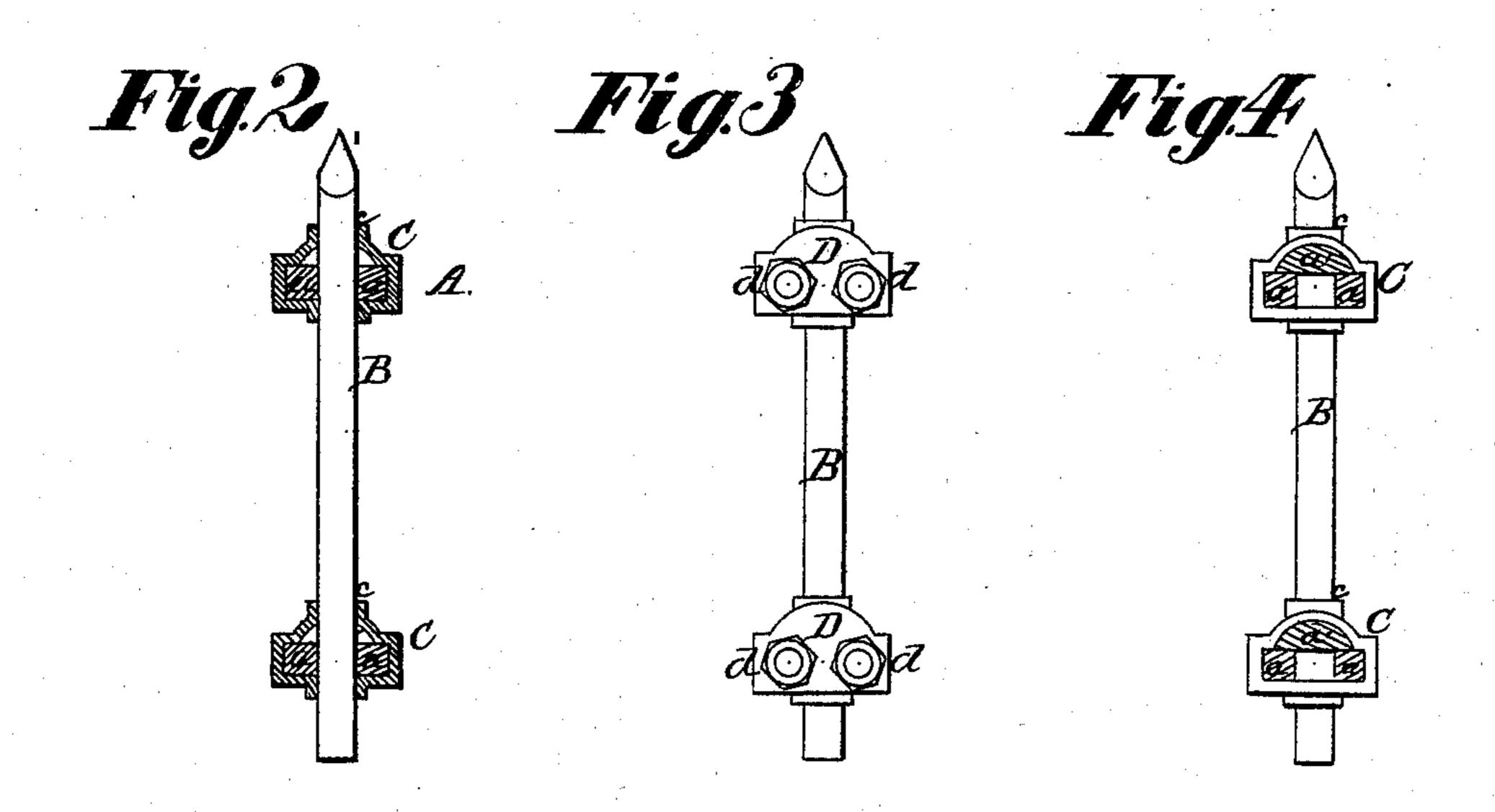
## F.O. HANSON.

IRON FENCE.

No. 171,377.

Patented Dec. 21, 1875.





Hitnesses Francis O. Hanson Inventor

Althounolly Edwin J. Wielain Attorneys

## UNITED STATES PATENT OFFICE.

FRANCIS O. HANSON, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN IRON FENCES.

Specification forming part of Letters Patent No. 171,377, dated December 21, 1875; application filed November 6, 1875.

To all whom it may concern:

Be it known that I, Francis O. Hanson, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Wrought-Iron Railings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a front elevation, partly in section, showing my improvements. Fig. 2 is a transverse vertical section on the line 1 and 4. Fig. 3 is an end view. Fig. 4 is a transverse vertical section on the line 2 and 3.

My invention has for its principal object to dispense with boring or drilling holes in the horizontal rails for the passage of the vertical bars.

My invention consists in the novel construction and combination of parts hereinafter fully described.

In carrying my invention into effect I form the horizontal rail in three sections, viz: the side pieces, which are the full length of the panel, and the top or center pieces, which extend only from one vertical bar to the next one. The vertical bars pass between the side pieces of the horizontal rail, and are notched or recessed to receive the ends of the top or center pieces of said horizontal rails. The vertical bars pass also through loops, bands, or sleeves, which encircle or inclose the horizontal rails for the purpose of keeping the sections of the latter in their proper position.

Referring to the accompanying drawing, A designates the horizontal rails, which are composed of the side pieces a a, each extending the entire length of a panel, and the short center or top pieces a' resting on the sides a a,

and extending only from one vertical bar to another. B B are the vertical bars passing between the side pieces a a, and recessed or notched at b b, for the reception of the ends of the short sections a'. C C show loops, bands, or sleeves, encircling the horizontal rails, and holding the sections thereof together, having also apertures c through which pass the vertical bars B B. The several parts composing a panel are held together by threading the ends of the sections a a of the horizontal rails, passing the same through plates D, which rest against the ends of the bands C, and screwing on nuts d d, as shown.

The sections of the horizontal rails, as well as the vertical bars, constituting the chief part of the railing, should be made of wroughtiron, but the bands C may and are chiefly intended to be cast.

In the drawing I have shown one particular form or shape of railing, but I do not limit myself thereto, my invention being adapted to various designs, and not confined to any one.

What I claim as my invention is—
1. The combination of the horizontal rail A, made in long and short sections a and a', the notched vertical bars B, and the bands or

loops holding the sections of said rail together, substantially as shown and described.

2. The fence - panel consisting of the sectional horizontal rails A the rantial laboration.

tional horizontal rails A, the vertical bars B B, loops or bands C, plates D, and nuts d d, the several parts being combined substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of October, 1875.

FRANCIS O. HANSON.

Witnesses:

SAML. J. VAN STAVOREN, CHAS. F. VAN HORN.