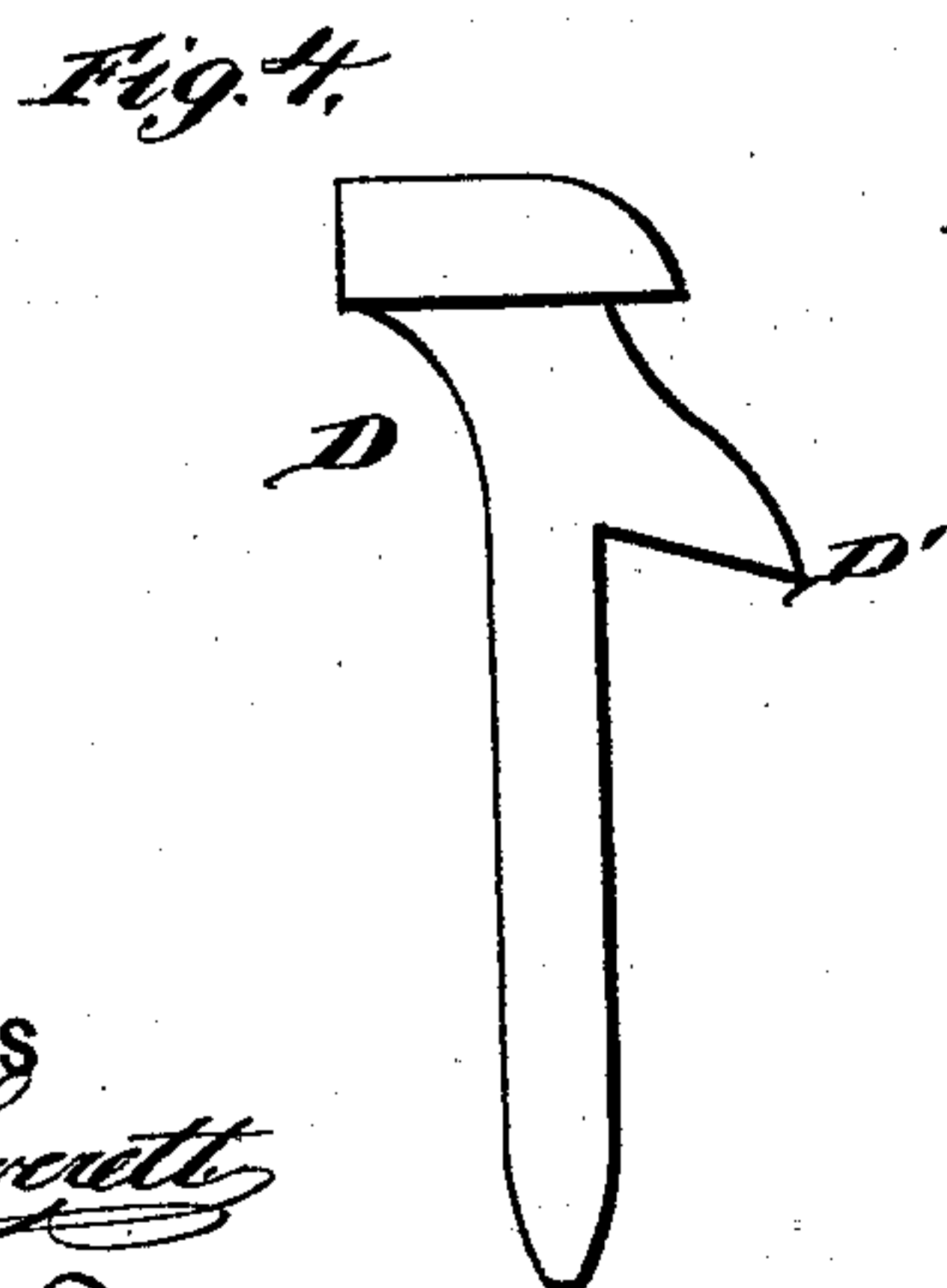
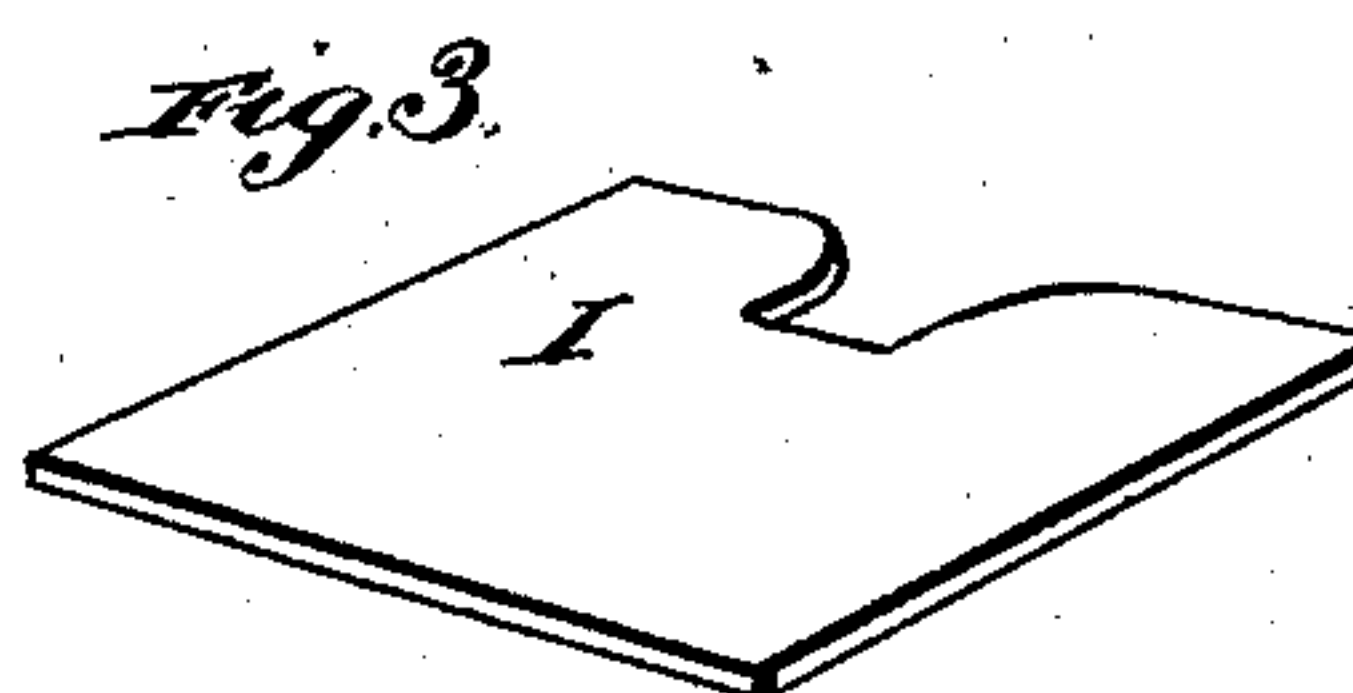
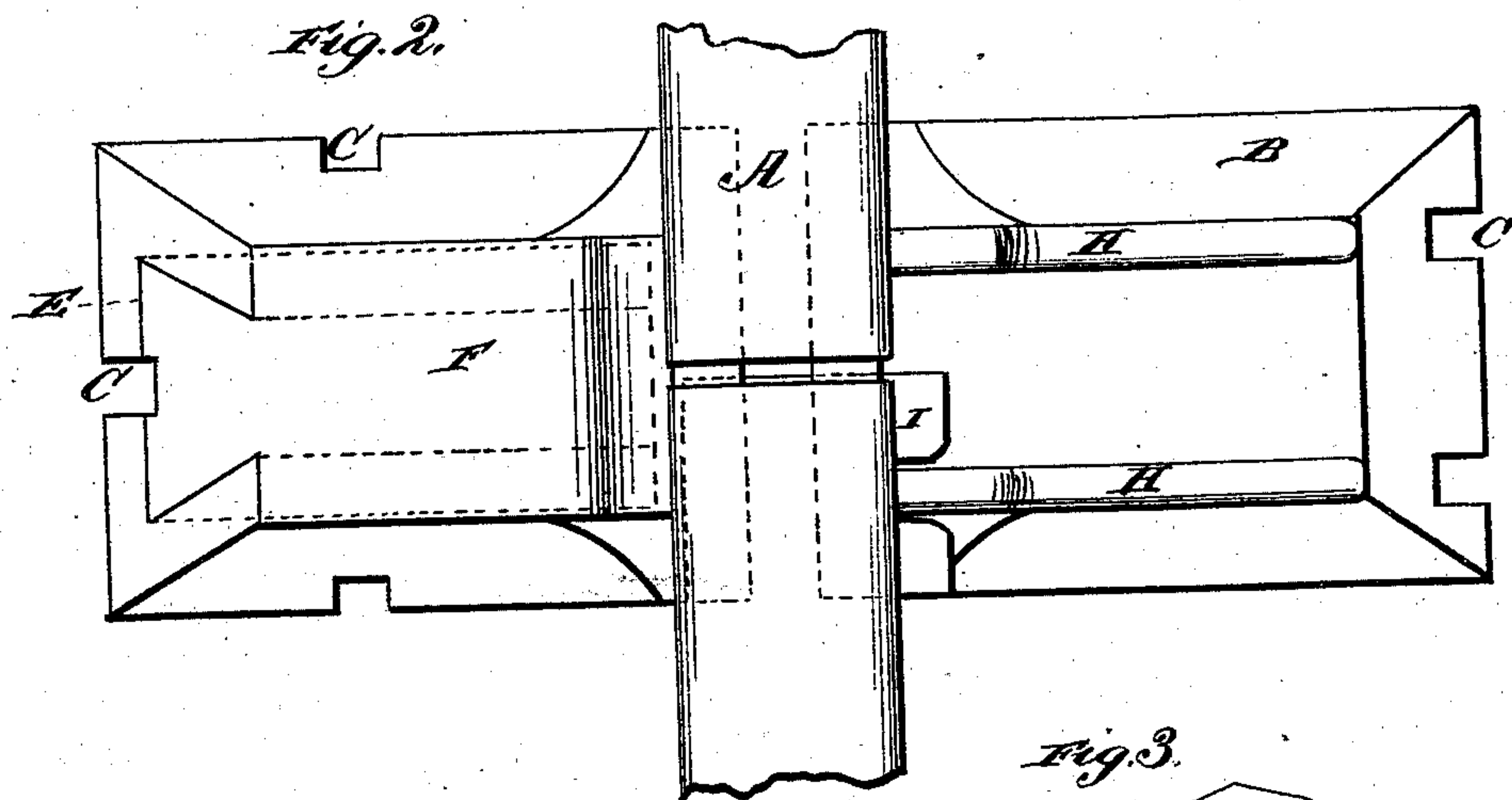
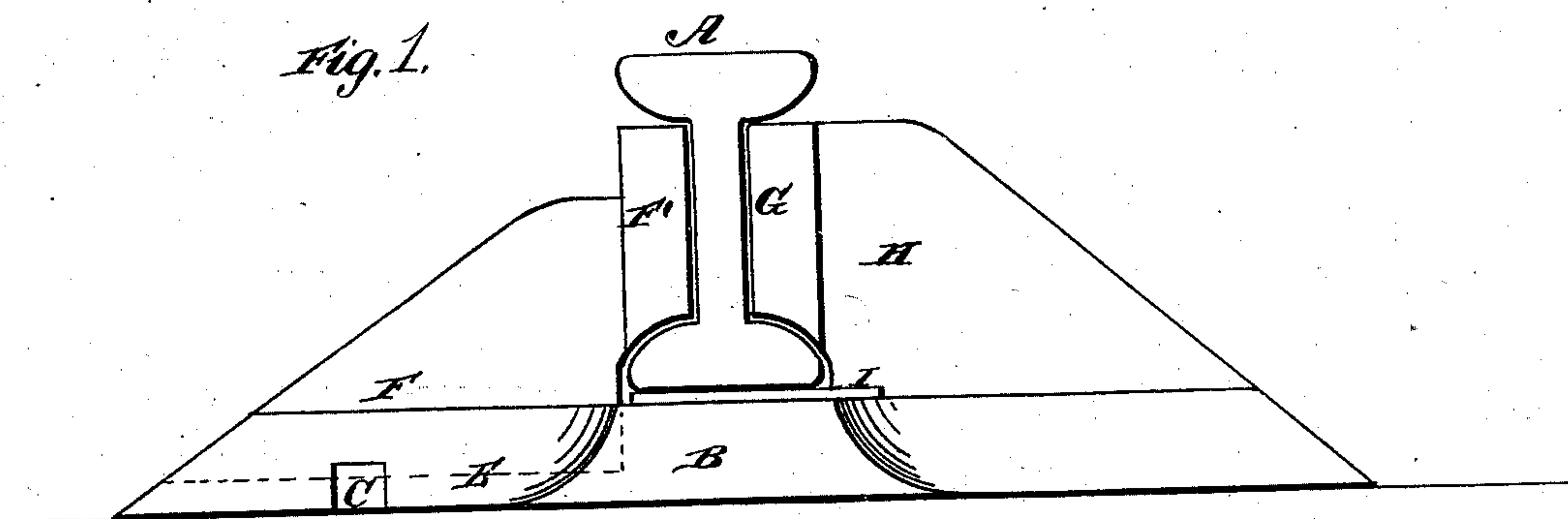


W. F. MORGAN.
Railroad Rail Joint.

No. 231,837.

Patented Aug. 31, 1880.



WITNESSES
Robert Everett
Chas. H. Page

INVENTOR
William F. Morgan
Gilmore Smith & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM F. MORGAN, OF McKEESPORT, PENNSYLVANIA.

RAILROAD-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 231,837, dated August 31, 1880.

Application filed December 13, 1879.

To all whom it may concern:

Be it known that I, WILLIAM F. MORGAN, of McKeesport, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Rail Joints; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an end elevation of the improved joint. Fig. 2 is a plan view of the same, and Figs. 3 and 4 are detail views of the notched plate and the securing-spikes.

The invention has relation to railroad-rail joints; and it consists in the improved features of construction and combination hereinafter fully described, and particularly pointed out in the claim.

Referring by letter to the drawings, A designates a section of a reversible rail, the conformation of the treads being identical.

B indicates the base of a two-part chair, one part of which is provided with bracing-blocks H H, having a face-plate, G, and the other portion has the sliding block F, having the face-plate F'.

The two-part chair herein shown and described is described in English provisional

specification No. 236 of 1863, and is therefore public property. I claim it only in combination with the notched plate hereinafter described.

To compensate for the wear that takes place at the ends of the rails in rail-joints, I provide a notched plate, I, which I place between the rail at its end and the base of the chair, the notch in this instance fitting against one of the blocks H. This plate I may, of course, be varied to fit chairs of different constructions without departing from the spirit of this invention. As the wear upon the rails comes mostly at their ends, the notched plate is of considerable value, as by it the usefulness of the rails may be greatly extended.

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

In a railroad-rail joint, the combination, with the herein-described chair and reversible rail, of the notched plate I, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM FREDERICK MORGAN.

Witnesses:

JOHN W. MORGAN,
ALEXANDER MORGAN.