

(No Model.)

2 Sheets—Sheet 1.

J. M. FENNERTY.

RAILWAY CHAIR.

No. 354,117.

Patented Dec. 14, 1886.

FIG. 1.

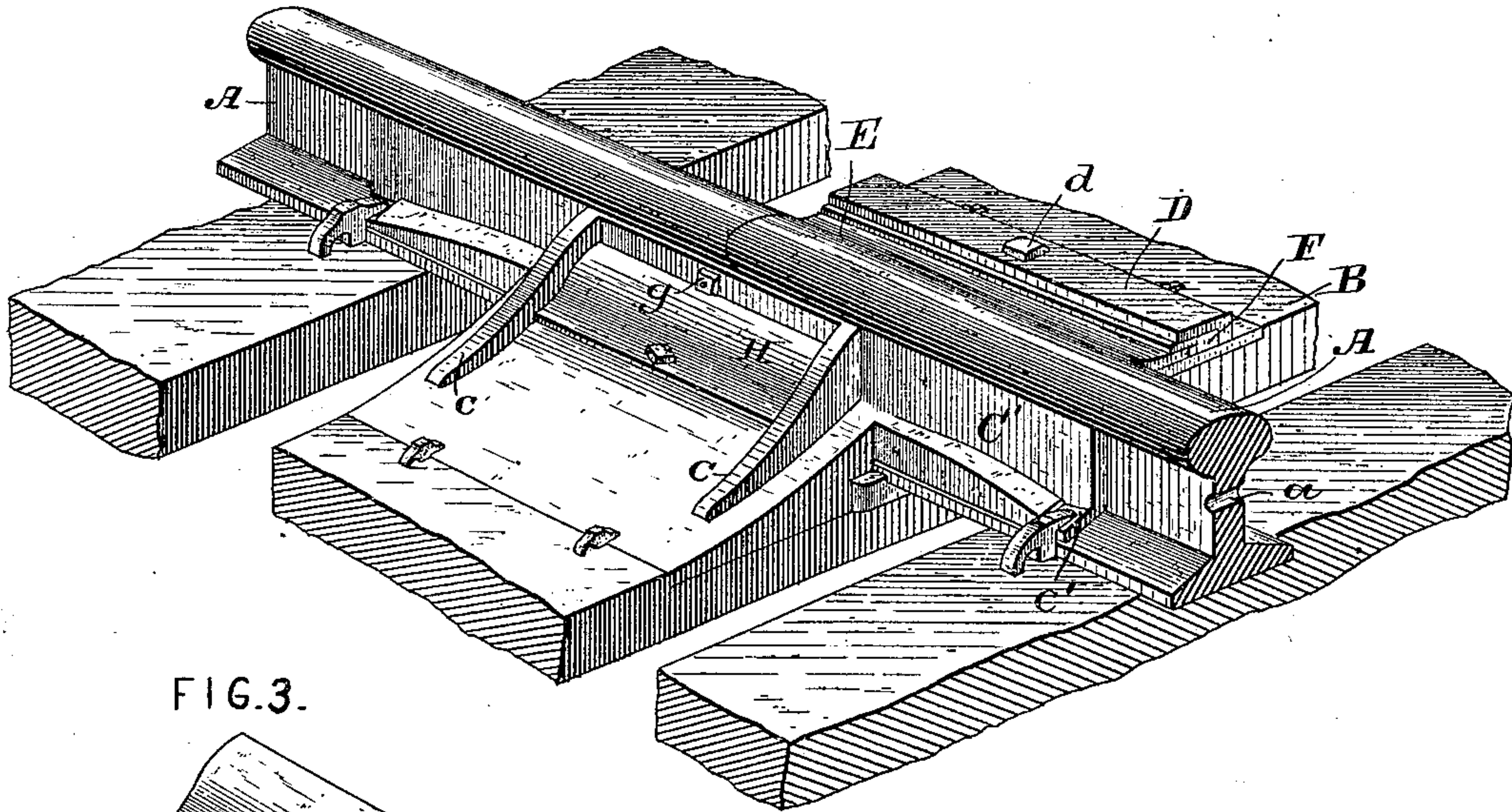


FIG. 3.

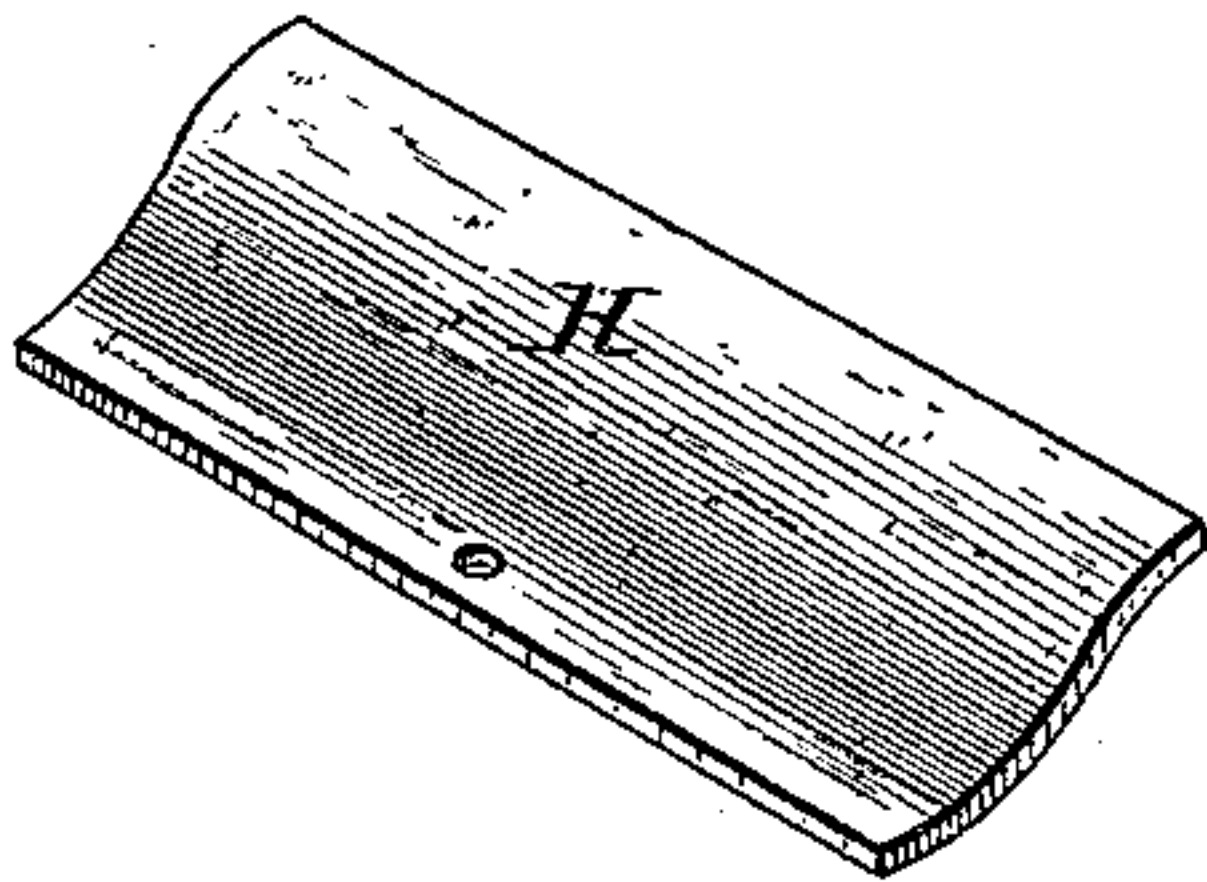


FIG. 4.

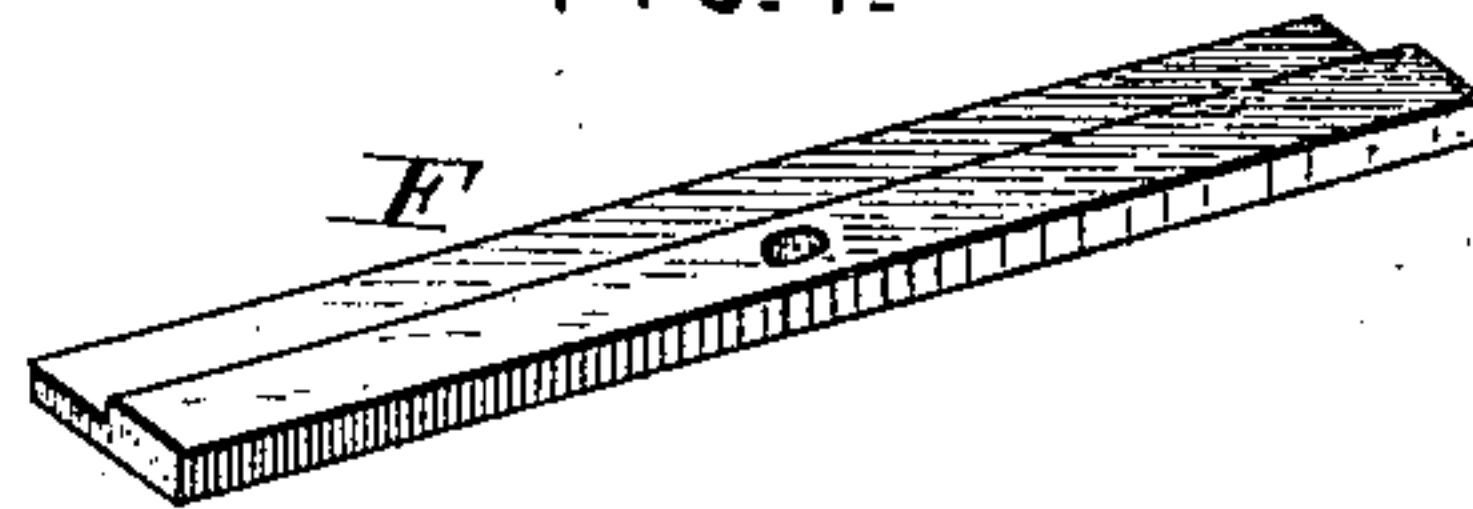
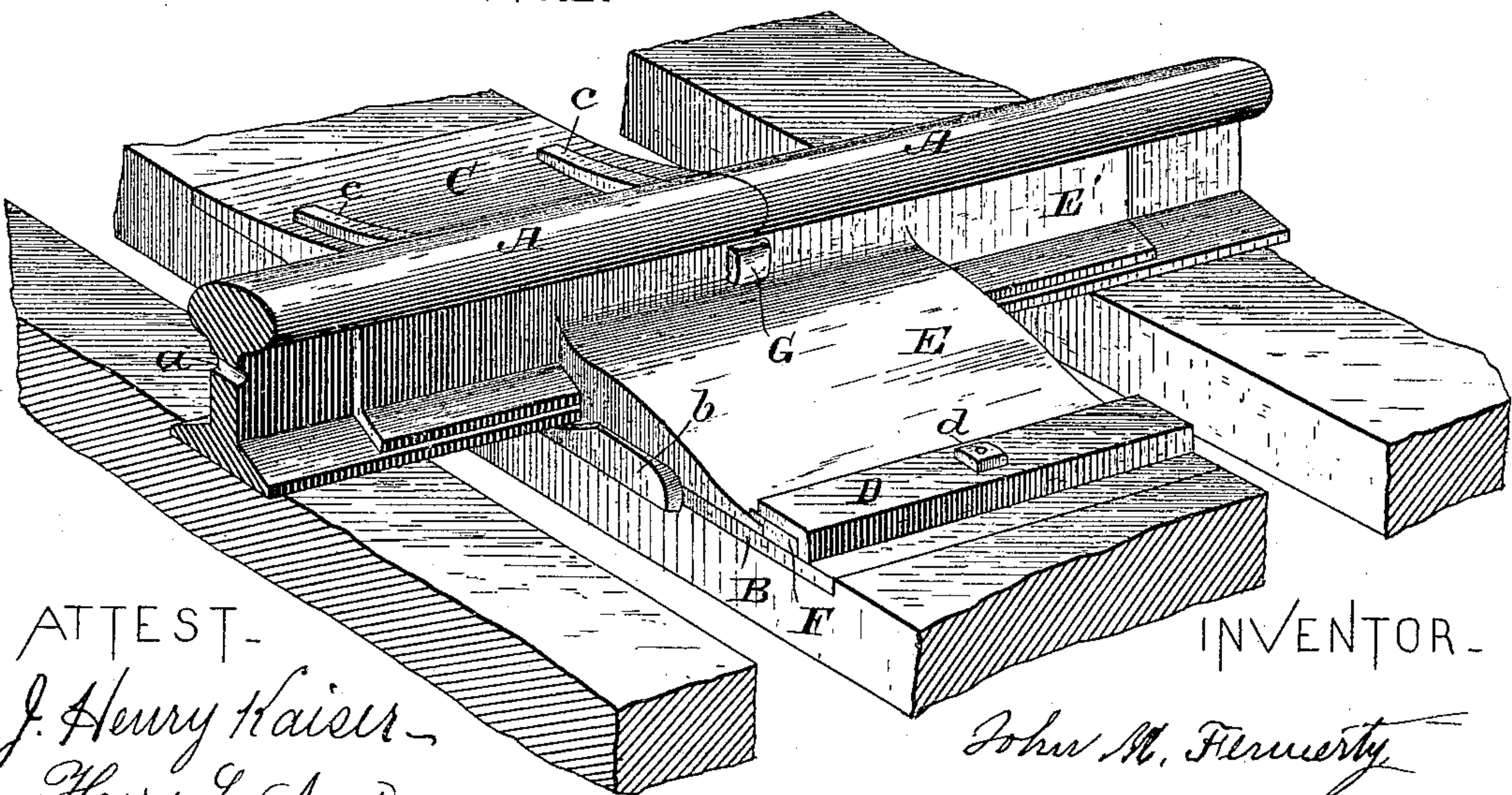


FIG. 2.



ATTEST.  
J. Henry Kaiser  
Harry L. Amer.

INVENTOR.

John M. Fennerty

(No Model.)

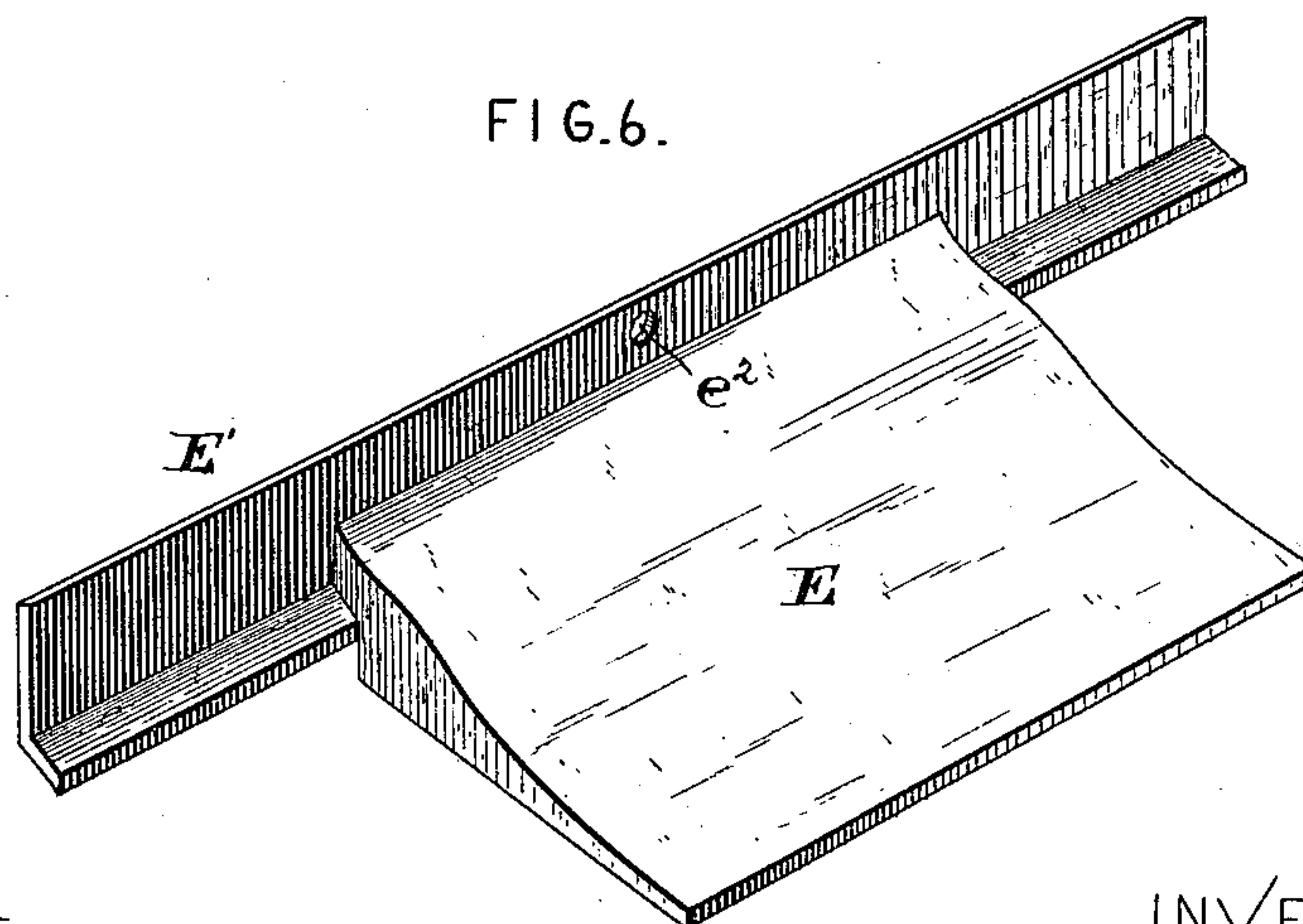
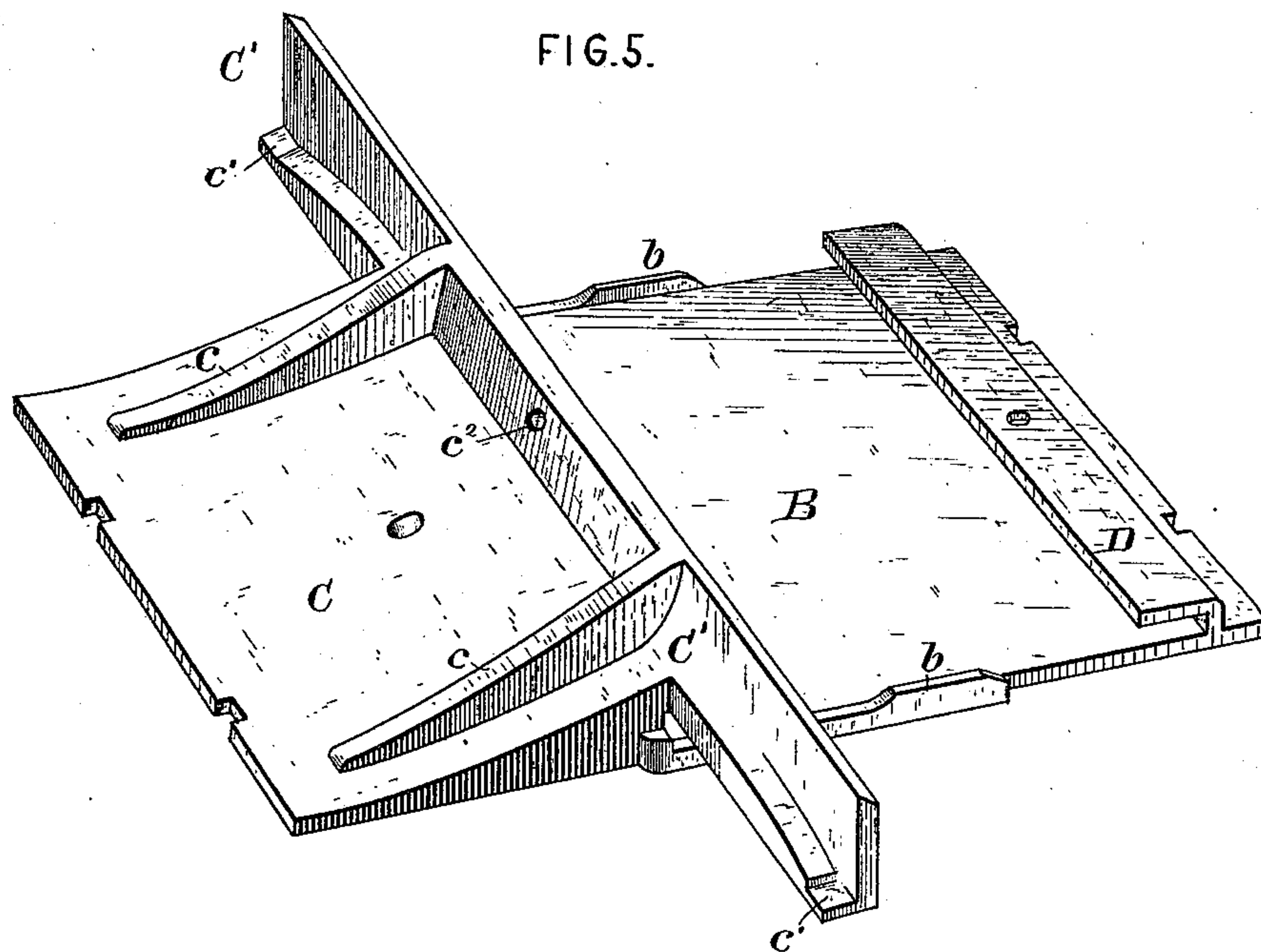
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# UNITED STATES PATENT OFFICE.

JOHN M. FENNERTY, OF WASHINGTON, DISTRICT OF COLUMBIA.

## RAILWAY-CHAIR.

SPECIFICATION forming part of Letters Patent No. 354,117, dated December 14, 1886.

Application filed March 20, 1886. Serial No. 195,980. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN M. FENNERTY, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Railway-Chairs; 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 appertains to make and use the same.

This invention relates to railway-rail joints or chairs, and is designed as an improvement upon the construction shown in Letters Patent No. 335,067, granted to me January 26, 1886.

The main object of the invention is to prevent or reduce to a minimum the vertical and lateral movement of the rail ends under a passing train, thus prolonging the life of rolling-stock and reducing cost of repairs, and obviating the employment of bolts, as now used, thereby making a continuous rail. Minor objects will appear hereinafter.

The invention consists of novel features of construction and combinations, which will be fully described in the ensuing specification, and claimed in the clauses at the close thereof.

In the accompanying drawings, Figure 1 is a perspective view illustrating railway-rails secured by my improved railway chair or rail joints. Fig. 2 is a similar view, looking at the other side. Fig. 3 is a perspective view of the nut-locking plate. Fig. 4 is a similar view of the key or wedge which holds the removable member of the device. Figs. 5 and 6 are detail perspectives of the fixed and removable member.

Where the same parts are shown in several figures of the drawings they are correspondingly lettered.

The device illustrated embodies in a single structure a "chair" to receive the meeting or abutting ends of railway-rails and prevent the vertical movement of said ends with relation to each other, and prevent the lateral movement of said ends with relation to each other.

The rails A may be of ordinary shape, with a semicircular notch, *a*, cut in the web of the adjoining ends, as shown. The rail ends are seated upon a flat base, B, having at one end a solid rising abutment, C, terminating in a long-plate, C', which extends on either side of

base A and fits snugly against the web of the rails, filling the space between the head and flange thereof, as shown in Fig. 1, thus acting as a side support and brace. The lower edge of plate C' is undercut on its inner face, as shown, to receive one side of the flange of the rail, and its upper edge is braced by ribs *c*, extending to near the outer end of abutment C. The outer ends of plate C' are preferably provided with depressions or seats *c'*, to receive the head of a spike, which holds said outer ends firmly upon the flange of the rail. At the other end of the base B is an overhanging-shaped lip or keeper, D, and between this keeper and plate C' the base B is provided, on either side, with guide-flanges *b*, as shown in Figs. 2 and 5. The other side or brace plate, E', which is substantially like plate C', is secured to or forms part of a removable abutment, E, which, when in use, is seated upon the base B and between the guide-flanges *b* thereof. The plate E' is forced tightly against the webs of the rail ends by means of a wedge-key, F, inserted between the keeper D, and secured by means of a screw-bolt, *d*, passing through the keeper and key F, and engaging a tapped hole in base B.

The plates C' E' are each provided with a bolt-hole, *c<sup>2</sup> e<sup>2</sup>*, registering, when the parts are assembled, with the notches *a* in the rail ends, and through these holes and notches passes a bolt, G, secured by a nut, *g*. The head of bolt G is of such size that one of its faces rests upon the upper surface of abutment E, and is thus prevented from turning, and to lock the nut *g*, I secure a metal strip, H, upon the abutment C, with one edge bearing firmly against the lower face of the nut, as shown in Fig. 1. This strip H is bolted tightly to the abutment C, and is of a length to fit snugly between the ribs *c*, thereby providing against accidental displacement.

I prefer to cast the parts B *b*, C C' *c*, and D all in one piece, as also the parts E E', as this insures greater rigidity and strength of the structure; but they may be otherwise constructed without departing from the principles of my invention.

I claim—

1. As a new article of manufacture, a chair and web-plates for a railway-rail joint, the same

consisting of a fixed part embodying a base,  
an abutment terminating in a web-plate, and  
a keeper, and a removable part embodying an  
abutment terminating in a web-plate, said web-  
5 plates being extended beyond the base, sub-  
stantially as described.

2. In a railway-rail joint, the combination,  
substantially as described, of the rail ends,  
the chair provided upon one end with a fixed  
10 web-plate and at the other with a keeper, the  
removable block or abutment carrying a web-  
plate, said web-plates being extended beyond  
the base, and the key.

3. In a railway-rail joint, the combination,  
substantially as described, of the rail ends, the 15  
chair provided upon one end with a fixed web-  
plate and at the other with a keeper, the re-  
movable block or abutment carrying a web-  
plate and the key, and the nut-lock H.

In testimony whereof I affix my signature in 20  
presence of two witnesses.

JOHN M. FENNERTY.

Witnesses:

J. HENRY KAISER,  
HARRY D. AMES.