(No Model.)

H. J. SCHMICK.

RAIL JOINT.

No. 532,710. Patented Jan. 15, 1895.

FIG. 1.

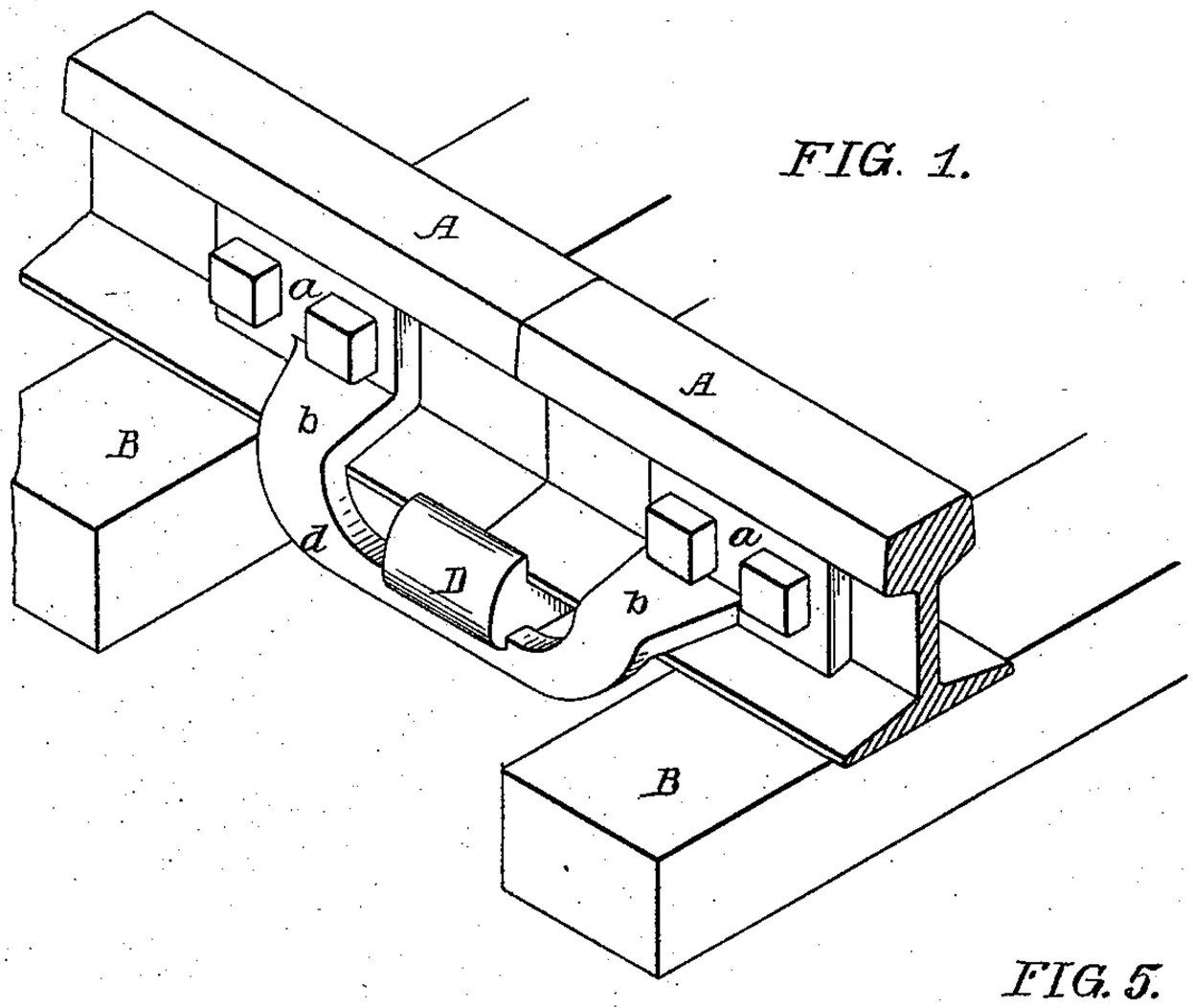


FIG. 2.

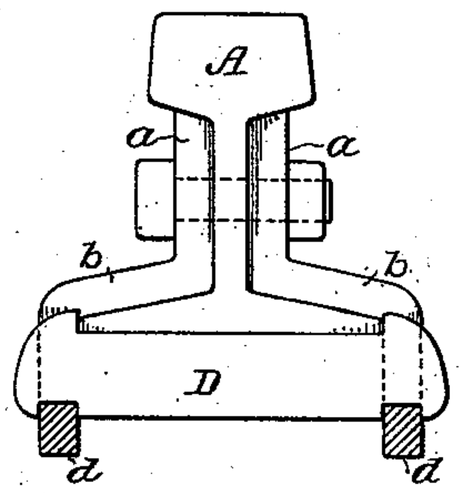


FIG. 5.

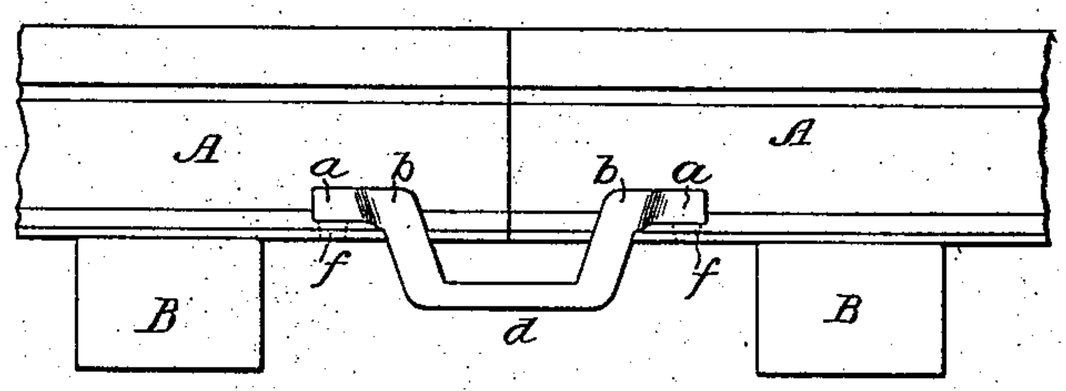


FIG. 3.

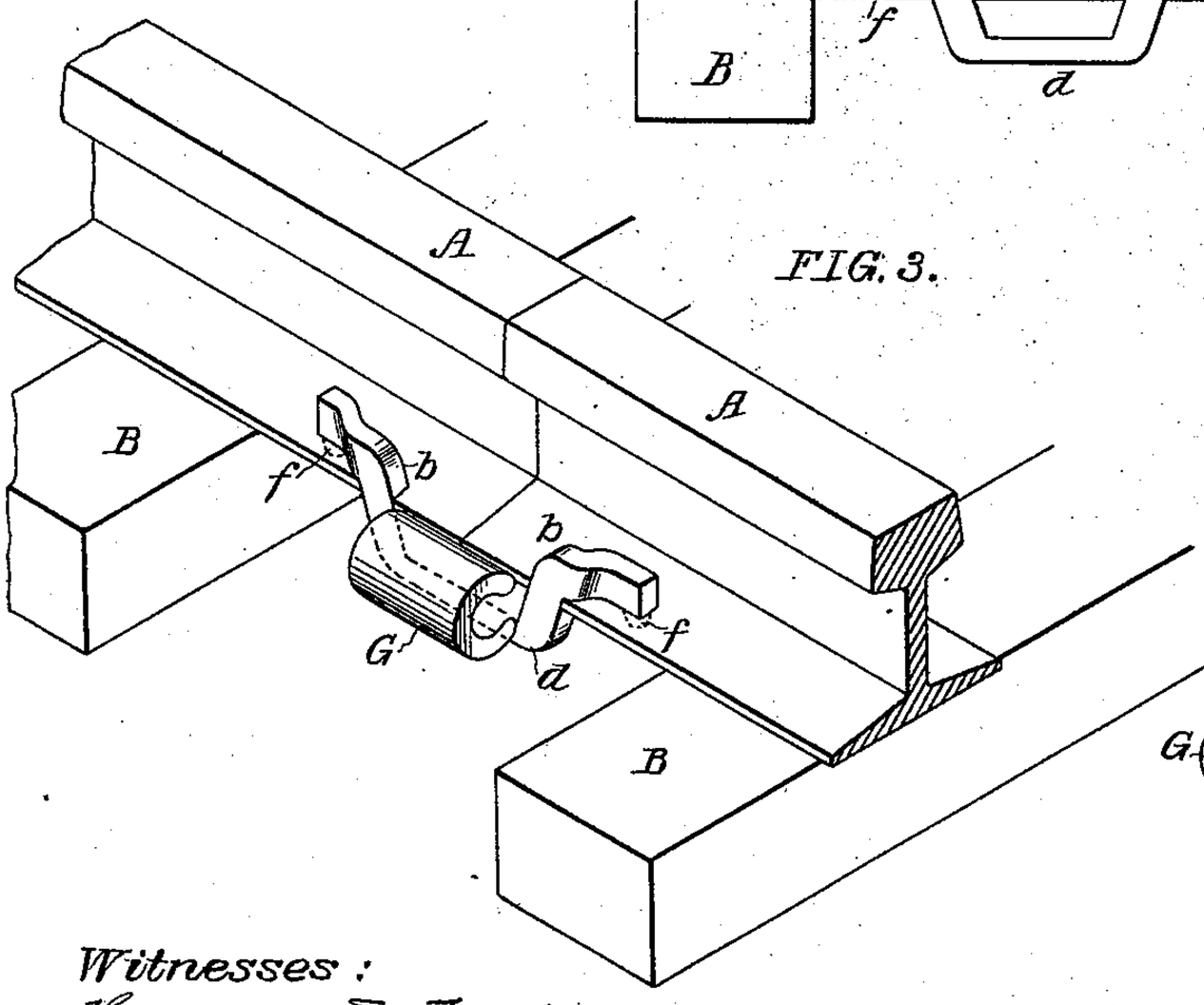
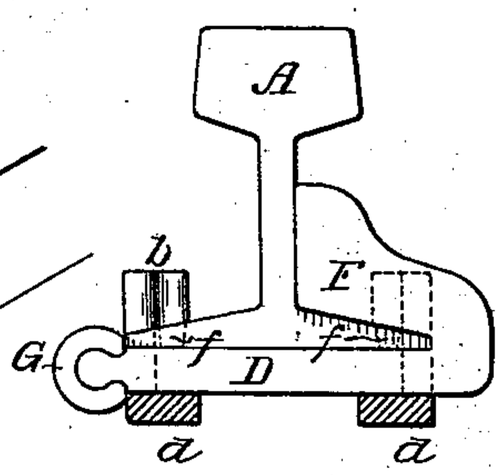


FIG. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY J. SCHMICK, OF HAMBURG, ASSIGNOR OF ONE-HALF TO FRANCIS ZUBER, OF READING, PENNSYLVANIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 532,710, dated January 15, 1895.

Application filed November 15, 1894. Serial No. 528,911. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. SCHMICK, a citizen of the United States, and a resident of Hamburg, Bucks county, Pennsylvania, have invented certain Improvements in Rail-Joints, of which the following is a specification.

One object of my invention is to so construct a rail joint as to provide for the rigid support of the rails from below, a further object being to dispense with the use of bolts and nuts in making the joints. These objects I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1, is a perspective view of one form of rail joint constructed in accordance with my invention. Fig. 2, is a transverse section of the same. Fig. 3, is a perspective view of that form of my improved rail joint in which fastening nuts and bolts are dispensed with. Fig. 4, is a transverse section of the joint shown in Fig. 3; and Fig. 5, is a side view of the same with the transverse supporting bar omitted.

In Fig. 1, A A represent the abutting ends of the two rails supported upon the usual cross ties B between which the joint is formed.

To each side of each rail is secured a longitudinal truss comprising the opposite end webs *a a* bolted to the webs of the respective rails, deflected portions *b* extending laterally outward from these webs *a a* so as to clear the base flange of the rails, and a yoke *d* connecting these deflected portions of the truss, and extending alongside of the rails some distance below the base flanges of the same as shown in Figs. 1 and 2. Extending from one of these trusses to the other beneath the rail joint is a transverse supporting block D upon which the base flanges of the rails rest, this block being supported upon the trusses and serving in turn to support the meeting ends of the rails so as to prevent deflection of the end of either rail as a load passes over the same.

To prevent lateral displacement of the supporting block D the same is recessed in its upper face for the reception of the bases of the rails as shown in Fig. 2, and it is also provided with recesses in the under face for the reception of the opposite trusses. One of the main advantages of my invention, however, is the provision which it affords for dispensing with the usual bolts and nuts employed in ordinary rail joints, this construction being illustrated in Fig. 3 on reference to which it will be observed that the end of each truss has a depending lug or finger *f* adapted to an opening in the base flange of the rail so as to effectually prevent any longitudinal separation of the rails, the lugs or fingers *f* being maintained constantly in engagement with the openings in the base flanges of the rails owing to the downward pressure exerted upon the trusses by the transverse supporting block D. As in this case the trusses must be applied to the rails before the application of the transverse supporting block, the recessing of the latter for the reception of the rails or trusses is not available as a means of retaining the supporting block laterally in place. Hence said supporting block has at one end a hooked portion F for engaging with the base flange of the rail and is adapted to the other end for the reception of a sliding key G which bears against the adjacent truss and which may be retained by a suitable key or pin, the hooked end of the block extending upwardly therefrom so as to form a chair for bearing against the webs of the rails at and near the joint.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The combination in a rail joint, of the meeting ends of the rails, trusses secured to the rails and extending across the joint below the bases of the rails, and a supporting block interposed between said trusses and the rail bases, said supporting block being shouldered to engage with the trusses and rails in order to prevent lateral movement, substantially as specified.

2. The combination in a rail joint, of the meeting ends of the rails, trusses extending across the joint below the bases of the rails and having downwardly projecting hooked ends engaging with openings in the base flanges of the adjoining rails, and a supporting block interposed between said trusses and the rail bases, substantially as specified.

3. The combination in a rail joint, of the meeting ends of the rails, trusses extending across the joint below the bases of the rails, and having hooked ends engaging with the adjoining rails, a supporting block interposed between the trusses and the rail bases and having at one end a hook embracing the rail flanges and forming a chair, and a sliding key adapted to the other end of the supporting block and bearing against one of the trusses, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY J. SCHMICK.

Witnesses:
CHARLES REINHART,
GEO. F. POTTEIGER.