

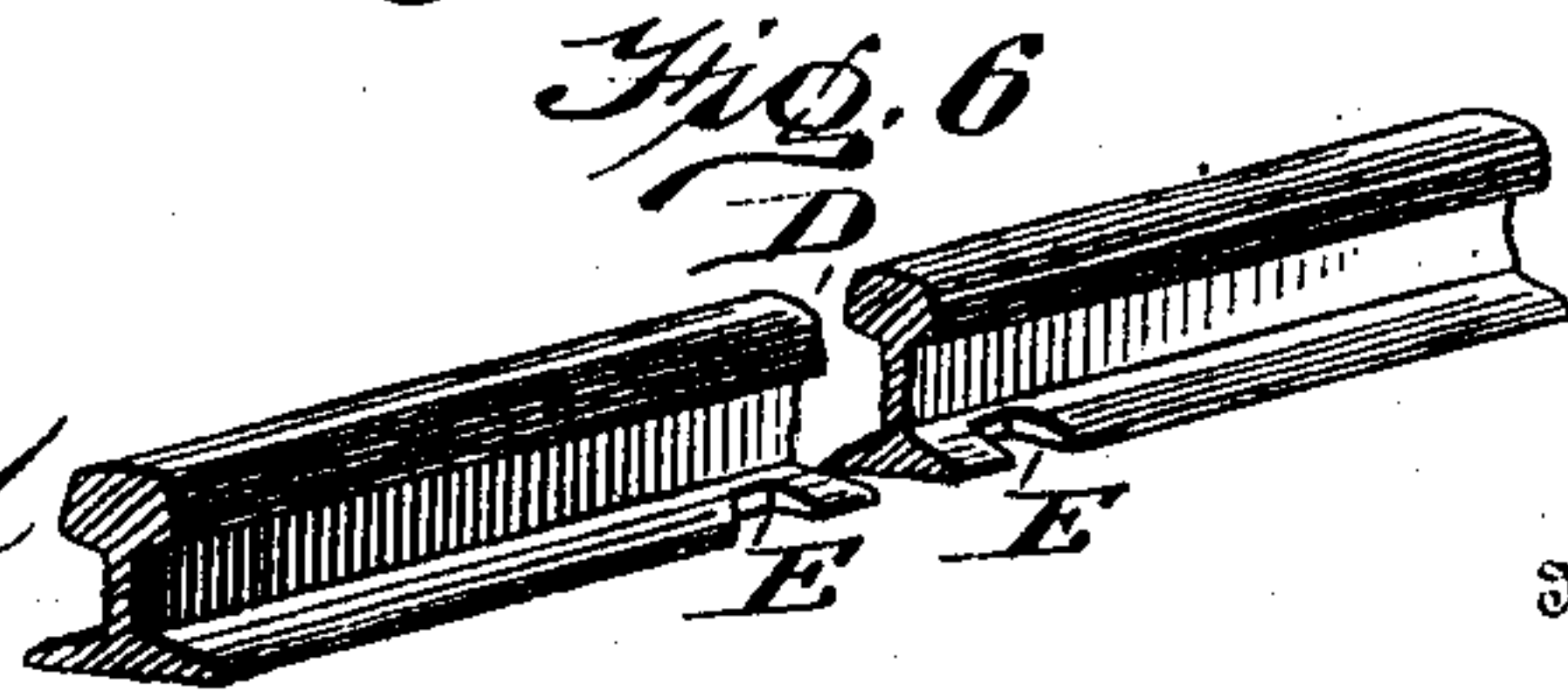
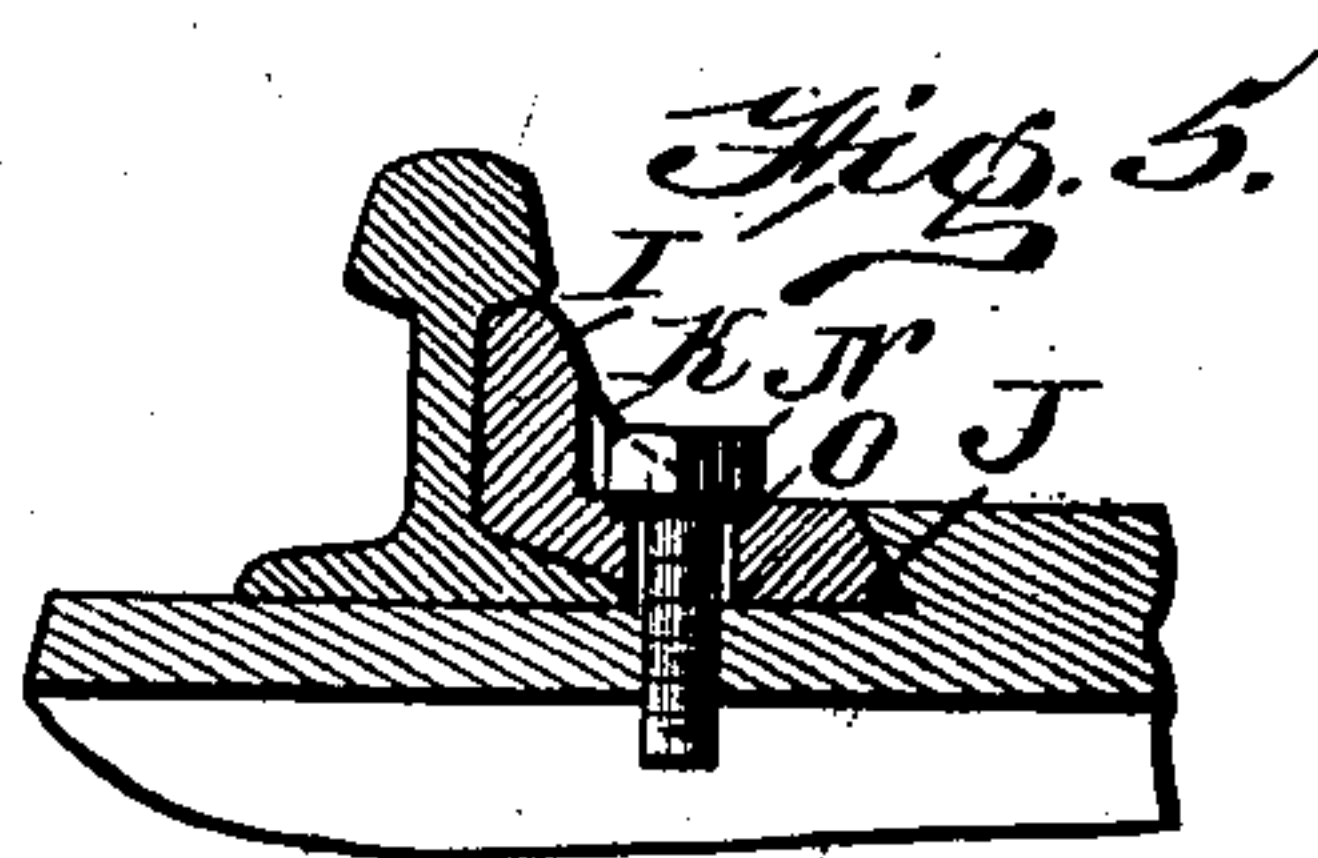
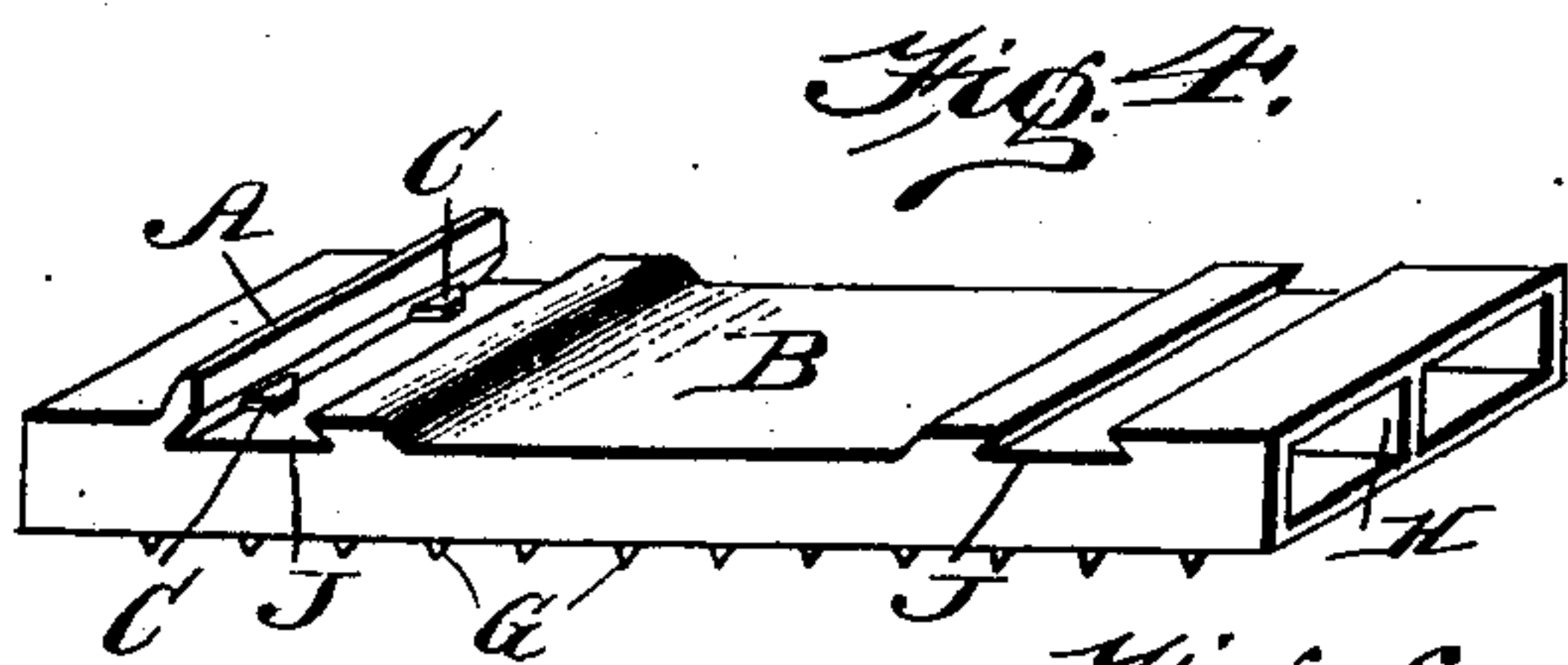
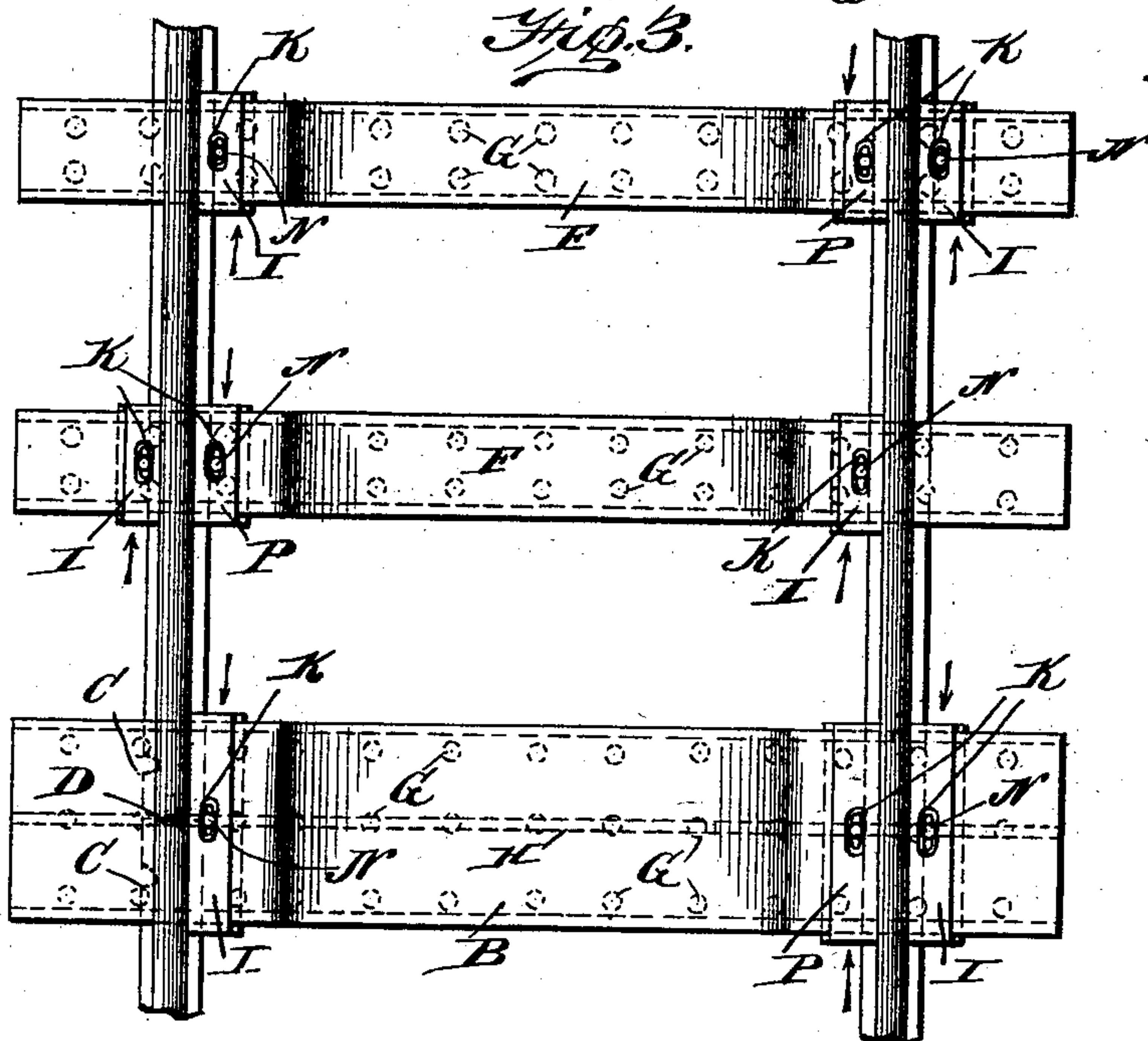
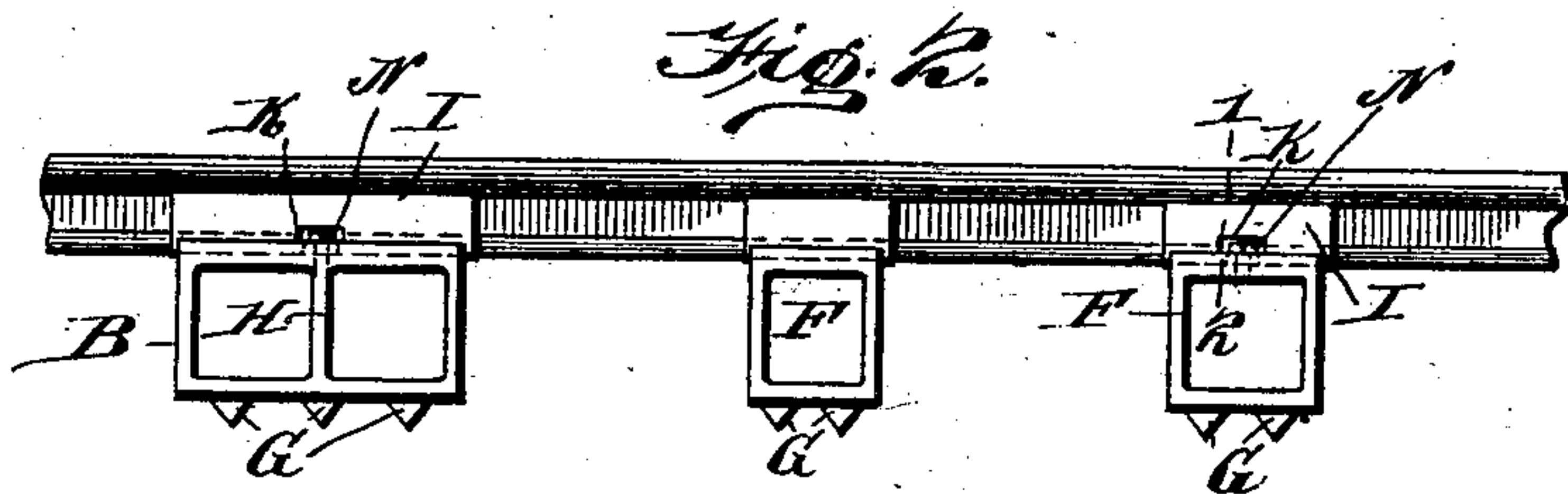
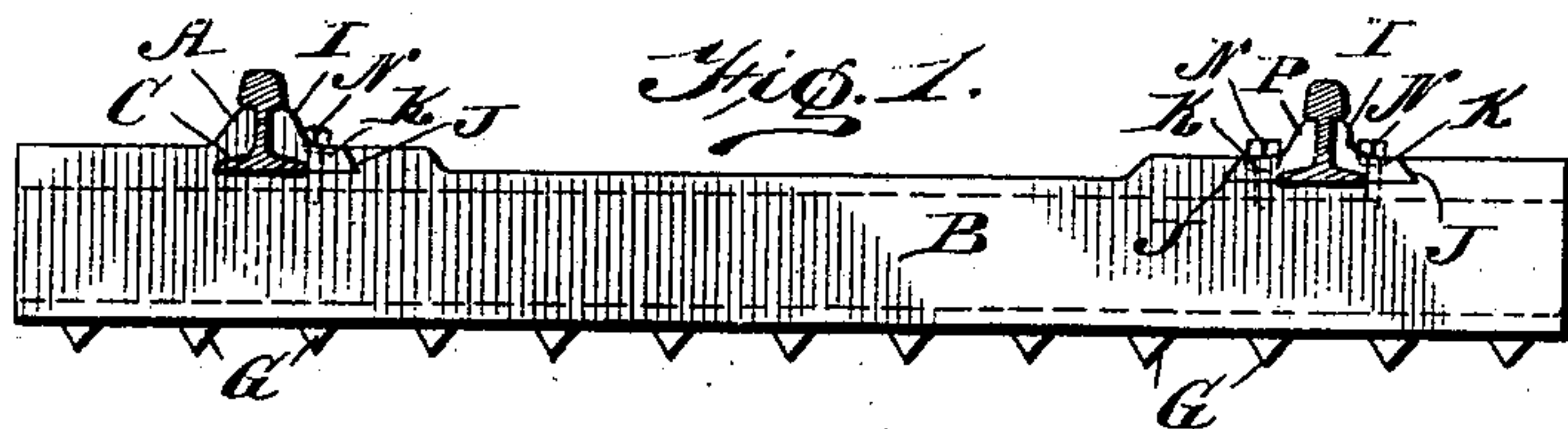
No. 715,698.

Patented Dec. 9, 1902.

F. P. SALEME.
KEYWAY RAIL JOINT TIE.

(Application filed Jan. 24, 1902.)

(No Model.)



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UNITED STATES PATENT OFFICE.

FRANK PAUL SALEME, OF JUNIATA, PENNSYLVANIA.

KEYWAY RAIL-JOINT TIE.

SPECIFICATION forming part of Letters Patent No. 715,698, dated December 9, 1902.

Application filed January 24, 1902. Serial No. 91,130. (No model.)

To all whom it may concern:

Be it known that I, FRANK PAUL SALEME, a citizen of the United States, residing in the borough of Juniata, in the county of Blair and State of Pennsylvania, (whose post-office is "Kipple,") have invented a new and useful Keyway Rail-Joint Tie and Common Keyway-Tie, of which the following is a specification.

My invention relates to improvements on the rail-joint and fastening of rail to the tie by a keyway which is tapered; and the objects of my improvements are, first, the joining of rails on one tie; second, rails are fastened to the ties by a keyway; third, the keyway protects the rail and tie, and this keyway is used for rail-joint and common tie. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation with a section through both rails and also shown where set-screws are located on key. Fig. 2 is an end elevation which shows that the ties are hollow and that the rail-joint tie has a rib through the center of tie; also shows pointed heads on the bottom of ties. Fig. 3 is a top view of the track, which is the general arrangement of laying the ties in position; also shows how rails are connected and that the keys are driven in place right and left, which are indicated by arrows; Fig. 4, a detailed view in perspective of the rail-joint tie and the blocks thereon shown for connecting rails; Fig. 5, a detailed sectional view through the line 1 2. (See Fig. 2.) Fig. 6 represents two pieces of rails for connection on the rail-joint tie.

Similar letters refer to similar parts throughout the several views.

The part A is cast onto tie B, and blocks C are cast onto tie B, so as to hold the ends of both rails for rail-joint connection. These blocks C are only applied to tie B, which is used for rail-joint connection. The blocks C are cast in position so as to allow contraction and expansion at the rail connection D. (See Fig. 6.) The triangular form cut E (see Fig. 6) is to be larger than block C, so as to allow a little clearance. Tie B and tie F have pointed heads G cast on the bottom, so as to prevent the ties B and F from moving when placed in position, also that the point-

ed heads G should be located far enough apart to allow for tamping the ties B and F with stone. Ties B and F are hollow, with the exception of tie B, which has a rib B through the center, so as to give it more support, for the reason that this tie B is used for rail-joint connection. When key I is driven into taper way J, it tightens the rail, and this key I to have a slot K, extending parallel with the rail, also hole M (see Fig. 5) for set-screw N, which is tapped into ties B and F. This set-screw N is used in case anybody tampers with the track; also, set-screw N to have a washer O. Key P is larger than key I (see Fig. 1) in case of regaging rails, by which I put key I in the place of key P, and in the place of key P, I put key I, so as to have the rails in normal condition after track is regaged. This operation applies only to the one side of ties B and F, which has the two taper ways J for the keys I and P. Tie F is not as large as tie B, but is made on a principle similar to tie B. (See Figs. 2 and 3.) When track is laid, ties B and F are arranged in similar position, (see Fig. 3,) so as to make it secure, and when track is arranged in this position it acts as one body. The ties B and F are placed in that position throughout the distance.

My invention is applicable to steam, electric, and all other railway-tracks and presents a durable structure not liable to dislocation when properly adjusted and in the event of the derailment of cars prevents the track from being torn up. It furthermore presents a structure which is free from obstructions to catch chains, rods, or other parts of the rigging carried by a train when the same are hanging down from the cars passing over the track.

I am aware that prior to my invention tracks have been laid with wooden ties and rails fastened with bolts, nuts, nut-locks and at the rail-joint connection fish-plates used. I therefore do not claim such a combination; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a rail-joint, the combination with a metallic tie having a keyway cast thereon and projections in said keyway, of rails having notches therein larger than and engaging said projections, of a key securing the rails in said

keyway, a slot in said key, and a bolt rigidly secured in said tie and sliding in said slot.

2. In a railway-joint, the combination with a metallic tie having a keyway cast thereon, and projections in said keyway, of rails having notches therein larger than and engaging said projections, of a key securing the rails in said keyway, a slot in said key, a bolt rigidly secured in said tie and sliding in said

slot, and pointed projections cast on the under surface of said tie.

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

FRANK PAUL SALEME.

Witnesses:

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