No. 735,864. PATENTED AUG. 11, 1903.

J. E. DUTTON.

RAIL JOINT.

APPLICATION FILED MAY 6, 1903.

NO MODEL.

Fig. 1.

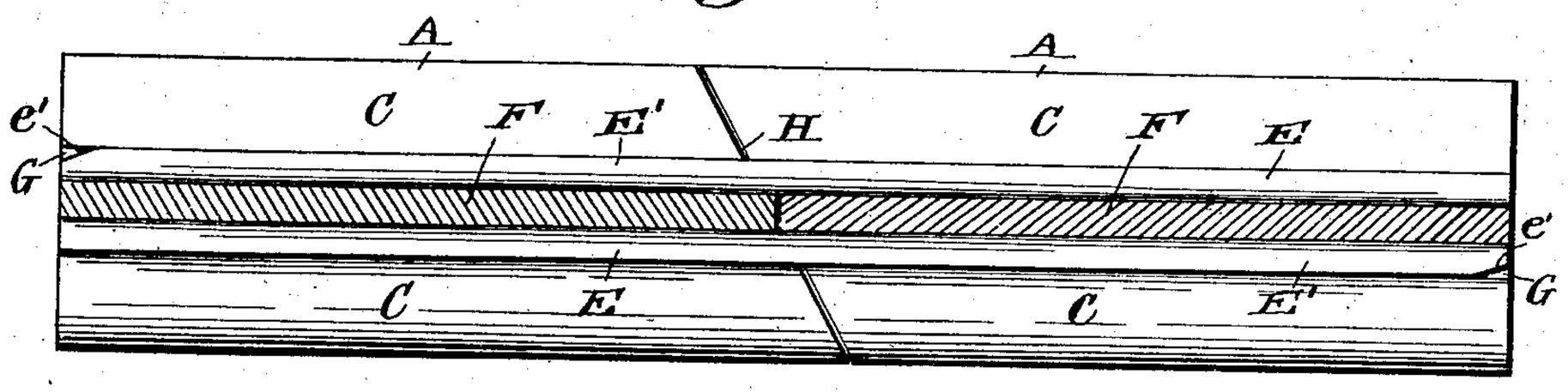


Fig. 2.

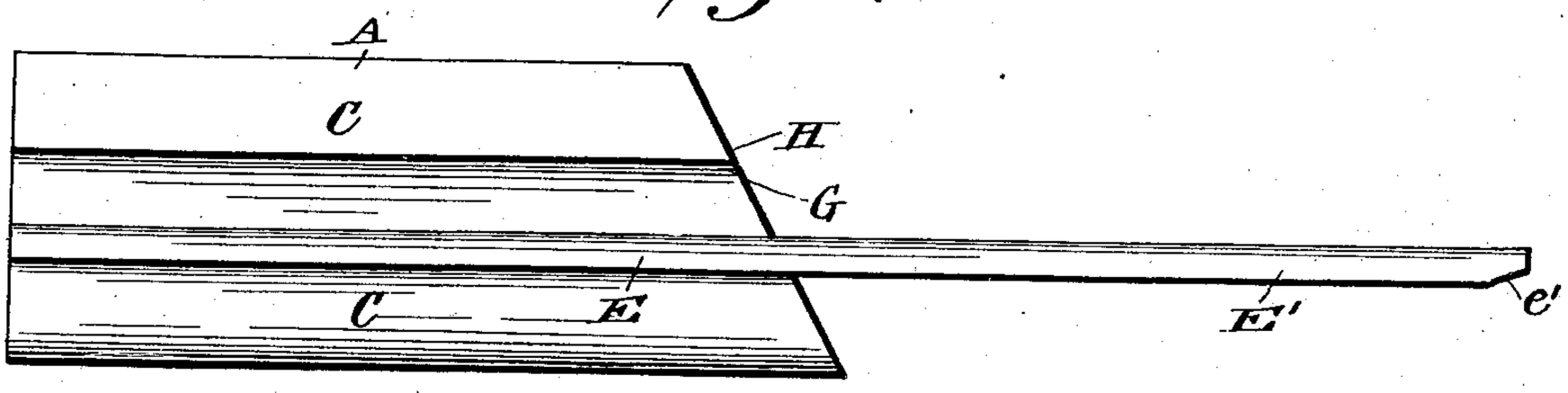


Fig. 3.

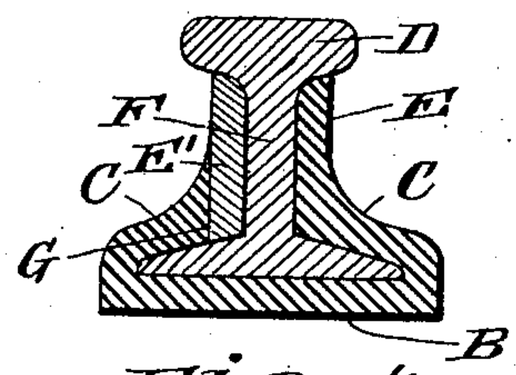


Fig. 4.

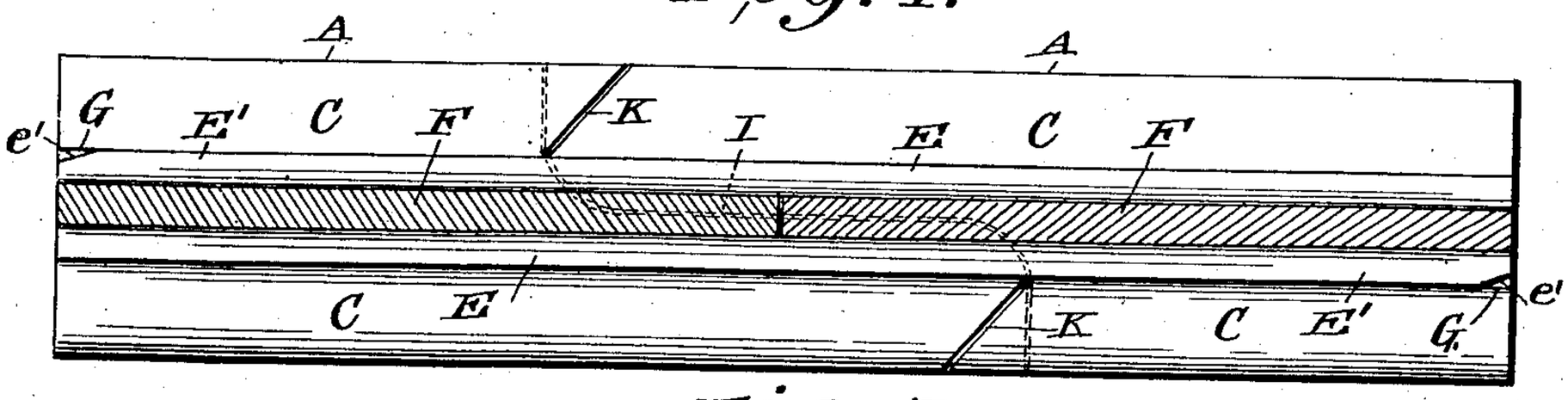
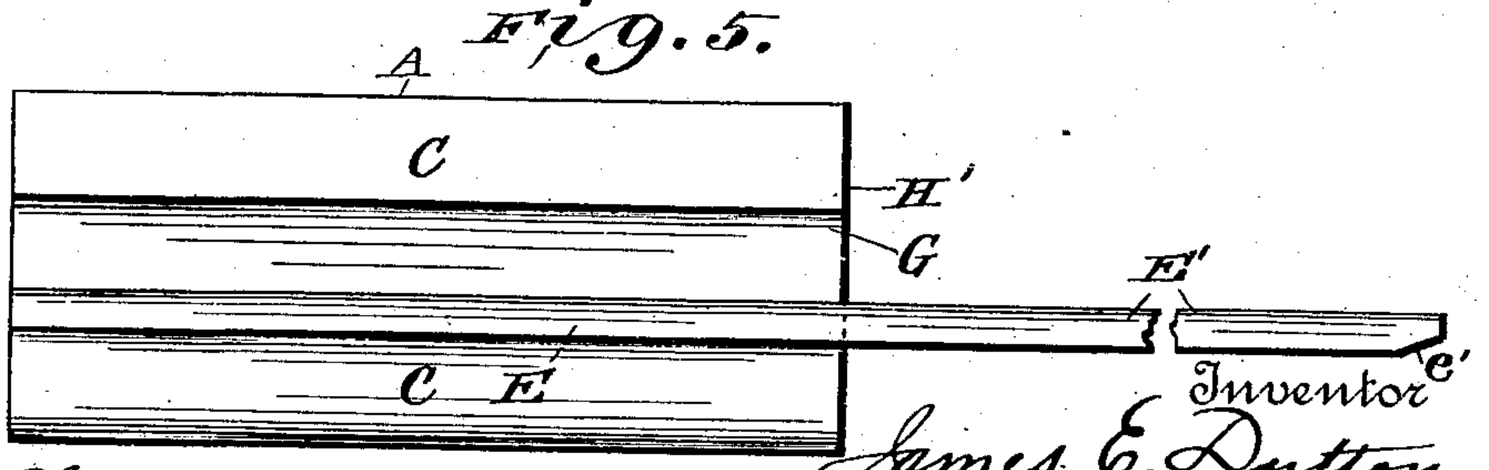


Fig. 5.



Witnesses

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No. 735,864. Patented August 11, 1903.

UNITED STATES PATENT OFFICE.

JAMES E. DUTTON, OF LARUE, OHIO.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 735,864, dated August 11, 1903.

Application filed May 6, 1903. Serial No. 155,899. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. DUTTON, a citizen of the United States, residing at Larue, in the county of Marion and State of Ohio, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

My invention relates to devices for securing the ends of rails; and it consists of two box-like structures to inclose the bottom and one side of the rail and each having a projecting tongue that fits into an opening between the side of the other box and the rail.

The object of my invention is to provide a device for securing the meeting ends of the rail that will dispense with the fish-plate in common use and that will permit automatic adjustment of the rail in expanding and contracting, due to changes in temperature.

The advantages of my invention will more fully appear hereinafter and by reference to the accompanying drawings, in which—

Figure 1 is a top plan view of my improved joint, showing the rail in horizontal section; Fig. 2, a view of one of the members comprising the joint; Fig. 3, a cross-section of Fig. 1, and Figs. 4 and 5 views of modifications of the invention.

Referring to the drawings, in which similar reference characters indicate corresponding parts throughout the several views, A represents the two members comprising my joint, having a base portion B and upwardly and inwardly extending sides C to inclose the base of T-rail D and having on one side of each member a vertical wall E, that fits against one side of the web F of the rail, said wall E being extended, as shown at E′, to form a tongue to fit into an opening G between the side of web F and the corresponding side of the other member of the joint. As shown in the drawings, this wall E and tongue E′ are on the right side of the rail looking from the outer end of the joint member, while the opening G is on the left side; but this structure obviously may be transposed without departing from the spirit of my invention.

As shown in the drawings, the meeting edges H of the two members are cut at an angle of forty-five degrees, though I do not wish to be confined to this specific structure, as any other angle may be substituted, including cutting the edge at a right angle to the side of the member, as shown at H′ in Fig. 5, or the meeting edges, as shown in Fig. 4, may consist of a line I, extended longitudinally of the base portions B and curved outwardly at each side, and the sides C cut obliquely, as shown at K, without departing from the spirit of my invention.

The operation of my invention will be understood to be as follows: One of the members A is slipped on the end of each of the two rails to be joined, with the tongue E′ toward the end of the rail. The two members are then slid toward each other, the ends of the tongues E′ entering the openings G in the other member, the two members finally coming to rest when their meeting edges come together. The outer edge of end of tongue E′ is slightly beveled, as shown at *e′*, to assist in mating the two members in forming the joint. After the joint is completed it is secured to the ties or other suitable support by means of spikes or other desired fastening means.

Having thus described my invention, what I claim is—

1. In a rail-joint, mating members having their meeting edges cut obliquely, and a projecting tongue on each member, substantially as shown and described.

2. In a rail-joint, mating members having their meeting edges cut obliquely, and a projecting tongue on each member, each member being provided with an opening to receive the tongue on the other member, substantially as shown and described.

3. In a rail-joint, mating members, and a projecting tongue on each member adapted to lie along the web of the rail, each member being provided with an opening to receive the tongue on the other member, substantially as shown and described.

4. In a rail-joint, corresponding mating members having their meeting edges cut obliquely, and a projecting tongue on each member adapted to lie along the web of the rail, each member being provided with an opening on the opposite side of the web to receive the tongue on the other member, substantially as shown and described.

5. In a rail-joint, mating members formed to inclose the base and one side of the web

of a rail, said side abutting the rail extended to form a protruding tongue, the other side of said member being spaced apart from the rail-web to form an opening to receive the tongue on the other member, substantially as shown and described.

6. In a rail-joint, corresponding mating members formed to inclose the base and one side of the web of a rail, said side abutting the rail extended to form a protruding tongue, the other side of said member being spaced apart from the rail-web to form an opening to receive the tongue on the other member, and the meeting edges of said members cut obliquely, substantially as shown and described.

7. In a rail-joint, corresponding mating members formed to inclose the base and one side of the web of a T-rail, said side abutting the rail extended to form a protruding tongue having its end beveled, the other side of said member being spaced apart from the rail-web to form an opening to receive the tongue of the other member, and the meeting edges of said members cut obliquely, substantially as shown and described.

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

JAMES E. DUTTON.

Witnesses:
GEO. A. MCGRATH,
RAY W. SIMPSON.