

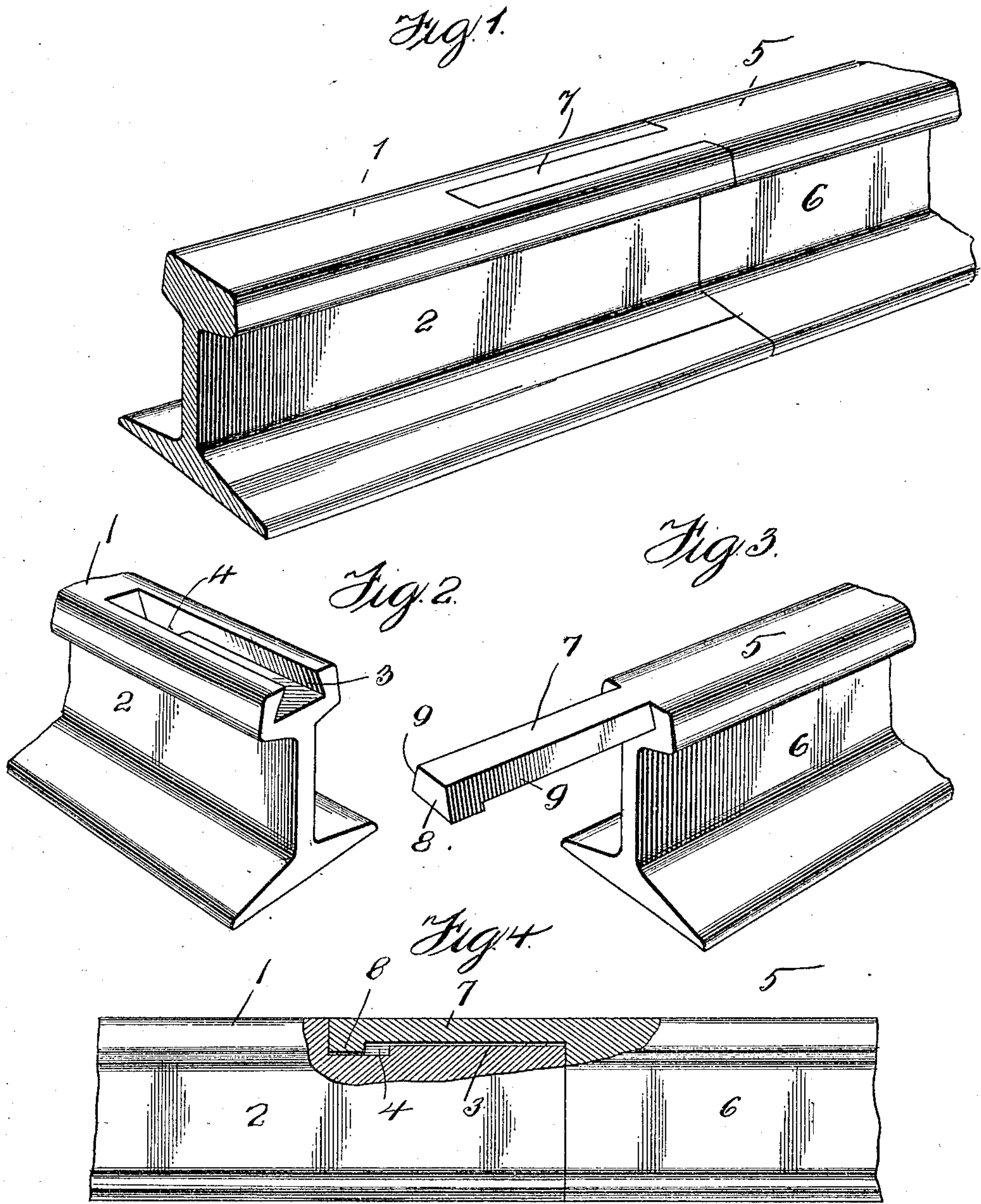
No. 871,104.

PATENTED NOV. 19, 1907.

M. H. BRINK.

RAIL JOINT.

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WITNESSES:

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MORIS H. BRINK, OF BLAIRSVILLE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JOHN B. CARSON, OF BLAIRSVILLE, PENNSYLVANIA.

RAIL-JOINT.

No. 871,104.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed February 1, 1907. Serial No. 355,315.

To all whom it may concern:

Be it known that I, MORIS H. BRINK, a citizen of the United States of America, residing at Blairsville, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to rail joints, and the invention has for its object to provide novel means for preventing the lateral and vertical displacement of the confronting ends of two sections of rails.

15 Another object of this invention is to provide a rail joint having a continuous tread which will prevent the jarring of rolling stock passing over the joint.

20 With these and other objects in view, which will more readily appear as the invention is better understood, the same consists in the novel construction, combination and arrangement of parts to be hereinafter more fully described and then specifically pointed out in the appended claims.

25 Referring to the drawing forming part of this specification, like numerals of reference designate corresponding parts throughout the several views, in which:

30 Figure 1 is a perspective view of my improved rail joint, Fig. 2 is a perspective view of one end of a rail, illustrating a dove-tailed groove formed in the tread thereof, Fig. 3 is a perspective view of the end of another rail illustrating the tongue adapted to engage in the groove, and Fig. 4 is an elevation of two connected rails, partly in section.

40 To put my invention into practice, I provide the head 1 of an ordinary rail 2 with a dove-tail groove 3 having the bottom thereof at its inner end formed with a recess 4.

45 The head 5 of the rail 6 to be connected to the rail 2 is provided with an outwardly extending tongue 7 having the sides thereof slightly beveled and further having depending from its lower face at the free end thereof a lug or enlargement 8.

To connect the rails 2 and 6, the end of

the tongue 7 is placed in the dove-tail groove 50 3 and the rail 6 is moved towards the rail 2, until the lug or enlargement 8 lies over the recess 4 and the tongue 7 strikes the inner end of the groove 3, sufficient clearance being present between the tongue and the 55 sides of the groove to permit a small vertical movement. By releasing the end of the rail 6, the tongue 7 is lowered and the lug or enlargement 8 engages in the recess 4. During this operation, the top of the tongue 60 7 lies slightly above the head of the rail 1 but upon the lug or enlargement 8 reaching the recess 4, the tongue 7 assumes a position where its top is flush with the top of the head 1 of the rail 2. 65

By referring to Fig. 4, it will be observed that the recess 4 is of greater length than the lug or enlargement 8, thereby allowing longitudinal movement of the rails 1 and 6 in case of expansion and contraction. 70

The novel manner in which I connect the confronting ends of two rails together prevents lateral and vertical displacement of one rail with relation to its adjoining rail, also longitudinal displacement beyond the 75 distance prescribed for expansion and contraction. It will therefore be seen that the dove-tail features of the groove 3 and the tongue 7 form a very important function in connection with my improved rail joint. 80

I do not care to confine myself to the manner of securing the rails to ties or to the use of fish plates, bars or similar rail fasteners.

What I claim and desire to secure by Letters Patent, is:— 85

1. A rail joint comprising two sections of rails having confronting ends, the head of one of said rails having a dove tail groove having the bottom thereof at its inner end 90 terminating in a recess, the other of said rails having its head provided with an outwardly extending tongue having beveled sides and adapted to slide into the groove, and a depending lug or enlargement carried by the outer end of said tongue and adapted to engage in the said recess, said 95 lug or enlargement being of a less length

than said recess to permit of a slight longitudinal movement of said rails, substantially as described.

2. A rail joint consisting of two sections
5 of rails, the head of one of said rails having a dove-tail groove formed therein terminating at its inner end in a recess, a tongue carried by the head of the other of said rails and adapted to fit in said groove, said

tongue having the sides beveled, and a de- 10 pending lug or enlargement carried by said tongue and adapted to engage in said recess.

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

MORIS H. BRINK.

Witnesses:

ROBERT H. WIGGINS,
COULTER WIGGINS.

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[Handwritten initials]

[Handwritten signature]