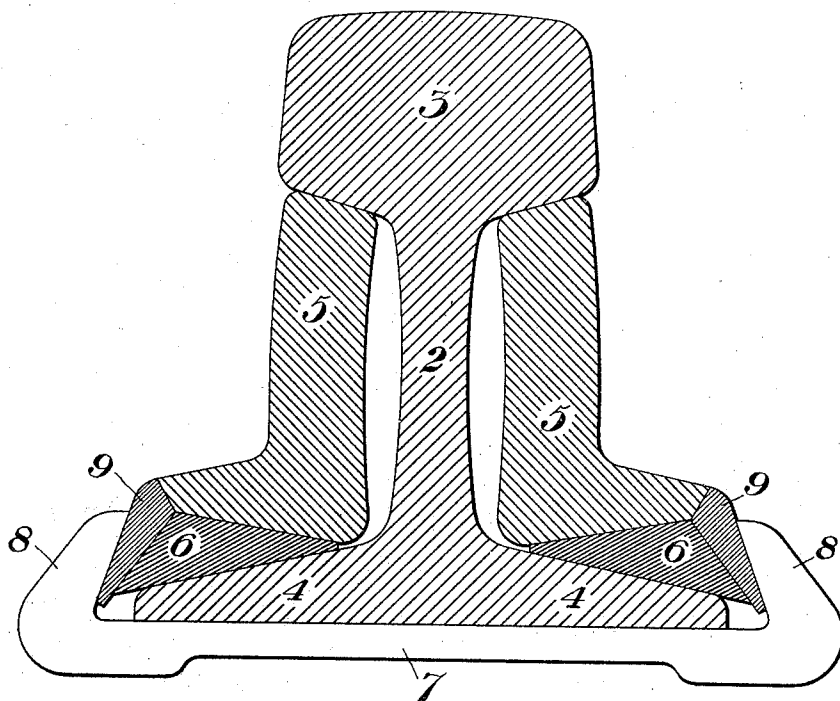


(No Model.)

J. L. POPE.
RAIL JOINT SECURING DEVICE.

No. 513,340.

Patented Jan. 23, 1894.



WITNESSES

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JOHN L. POPE, OF CLEVELAND, OHIO.

RAIL-JOINT-SECURING DEVICE.

SPECIFICATION forming part of Letters Patent No. 513,340, dated January 23, 1894.

Application filed June 19, 1893. Serial No. 478,093. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. POPE, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Rail-Joint-Securing Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, which illustrates a cross-sectional view of my improved rail-joint.

My invention relates to rail-joint securing devices, and is designed to afford a simple and effective means whereby the strains to which the joint is subjected will tend to force the parts into closer contact and compensate for any wear thereon, being of the same general class as those disclosed in my prior patents, No. 395,918, dated January 8, 1889, and No. 492,558, dated February 28, 1893.

In the drawing, 2 indicates the web, 3 the head, and 4 the foot of the rail. 5, 5, represent the fish or angle-plates, bearing at their upper portions against the head of the rail, and resting upon the triangular wedge-plates 6, which bear upon the lower rail flanges. The ends of the rails rest upon the connecting piece or plate 7, having inwardly bent flanges 8, and between these flanges and the outer faces of plates 6, are inserted the keys 9. The outer edge of the angle-plate base is inwardly beveled, as shown, and the key is provided with a similar outwardly-beveled edge in contact with the same. The plates 6 are preferably of about the same length as the angle-plates, while the chair 7 and keys 9 are usually much shorter, as they need extend only a short distance on each side of the joint. It will be seen that as the planes of the inner face of the chair flanges and outer face of the plate 6 converge downwardly, when pressure is brought upon the head of the rail, the resulting force will tend to slide the plate 6 down the sloping foot of the rail, and at the same time press down upon the key. Both these pressures tend to force the key against

the outer edge of the fish-plate on account of the differing angles of its face, and thus the parts are held firmly in place by a pressure which ordinarily tends to force them apart.

Variations may be made in the form and general arrangement of the parts without variance from my invention, since—

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

1. In a rail-joint, the combination with the fish or angle-plates, of wedge-plates upon which they rest, a connecting piece or plate passing beneath the joint and having projections, and keys inserted between the wedge-plates and said projections; substantially as described.

2. In a rail-joint, the combination with the fish or angle-plates, of wedge-plates fitting between the same, and the base flanges or foot of the rail, a connecting piece or plate passing beneath the joint and having projections upon the outer sides of the fish or angle-plates, and keys fitting between said projections and the wedge-plates, and bearing against the fish or angle-plates; substantially as described.

3. In a rail-joint, the combination with the fish or angle-plates having an inwardly beveled lower outer edge, of wedge-plates fitting between the same and the base flanges of the rail, a connecting piece passing beneath the joint and having projections upon the outer sides of the fish or angle-plates, and keys fitting between said projections and the wedge-plates and having outwardly beveled upper edges bearing against the beveled edges of the fish or angle-plates; substantially as described.

In testimony whereof I have hereunto set my hand.

JOHN L. POPE.

Witnesses:

THOMAS W. BAKEWELL,
W. B. WHITING.