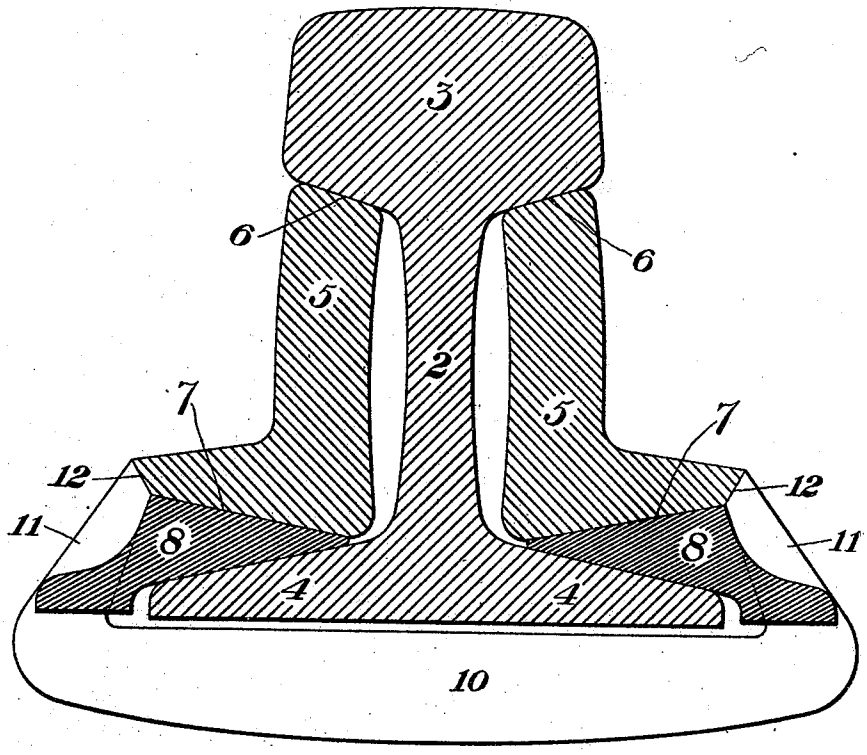
(No Model.)

J. L. POPE.

AUTOMATIC LOCKING DEVICE FOR RAILWAY JOINTS.

No. 513,415. Patented Jan. 23, 1894.



WITNESSES

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AUTOMATIC LOCKING DEVICE FOR RAILWAY-JOINTS.

SPECIFICATION forming part of Letters Patent No. 513,415, dated January 23, 1894.

Application filed June 19, 1893. Serial No. 478,094. (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 Automatic Locking Devices for Railway-Joints, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, which shows a cross-sectional view of my improved automatic lock joint.

My invention relates to the devices employed for securing rail-joints, and is designed to produce a self-locking mechanism whereby any strain brought upon the joint will tend to wedge the connecting fish or angle-plates more firmly in place and automatically compensate for any wearing of the parts.

To that end it consists in the combination of fish or angle-plates having inwardly and downwardly inclined bearing faces, with wedge-plates upon which they rest, and a connecting piece passing beneath the joint and bearing against the wedge plates and the beveled outer edges of the fish or angle-plates.

In the drawing, 2 indicates the web, 3 the head, and 4 the foot of the rail.

5, 5, are the angle-plates, having inwardly and downwardly inclined faces 6 and 7, bearing, respectively, against the head of the rail, and wedge-plates 8 resting upon its foot. These seating surfaces of the angle-plates are inclined at different angles so that their planes converge inwardly. The wedge-plates have inwardly-converging upper and lower faces to correspond with the faces of the rail foot and angle-plates. A connecting plate 10 passes beneath the rails at the joint, but somewhat below the same, and is provided with inwardly-bent flanges 11 extending up on each side of the rails. The flanges 11 at their upper ends are provided with outwardly beveled faces 12, bearing against corresponding inwardly beveled faces upon the angle plates.

When the parts are in position, and any pressure is brought upon the joint, the angle-plates tend to move inwardly on account of their downwardly inclined faces; but on account of the converging angles of said faces, the plates cannot so move, and hence under these opposing forces a constant tightness of the parts results. The wedge-plates are held in place by the chair, which also bears against the angle-plates and assists in their tendency to move inward by reason of the inwardly beveled faces.

It is evident that as the plates become worn by continued use, they will be automatically forced in and tightened and hence this wear is compensated by such adjustment.

Modifications may be made in the form and arrangement of the parts without departure from my invention, since

What I claim is—

1. In a rail joint, the combination with the angle-plates, of wedge-plates upon which they rest, and a chair passing beneath the joint and having projections in contact with the wedge-plates and angle-plates; substantially as described.

2. In a rail joint, the combination with the angle-plates and wedge-plates upon which they rest, of a connecting plate extending beneath the joint, having bent-up projections provided with beveled faces in contact with similar faces upon the angle-plates; substantially as described.

In testimony whereof I have hereunto set my hand.

JOHN L. POPE.

Witnesses:
THOMAS W. BAKEWELL,
W. B. WHITING.