

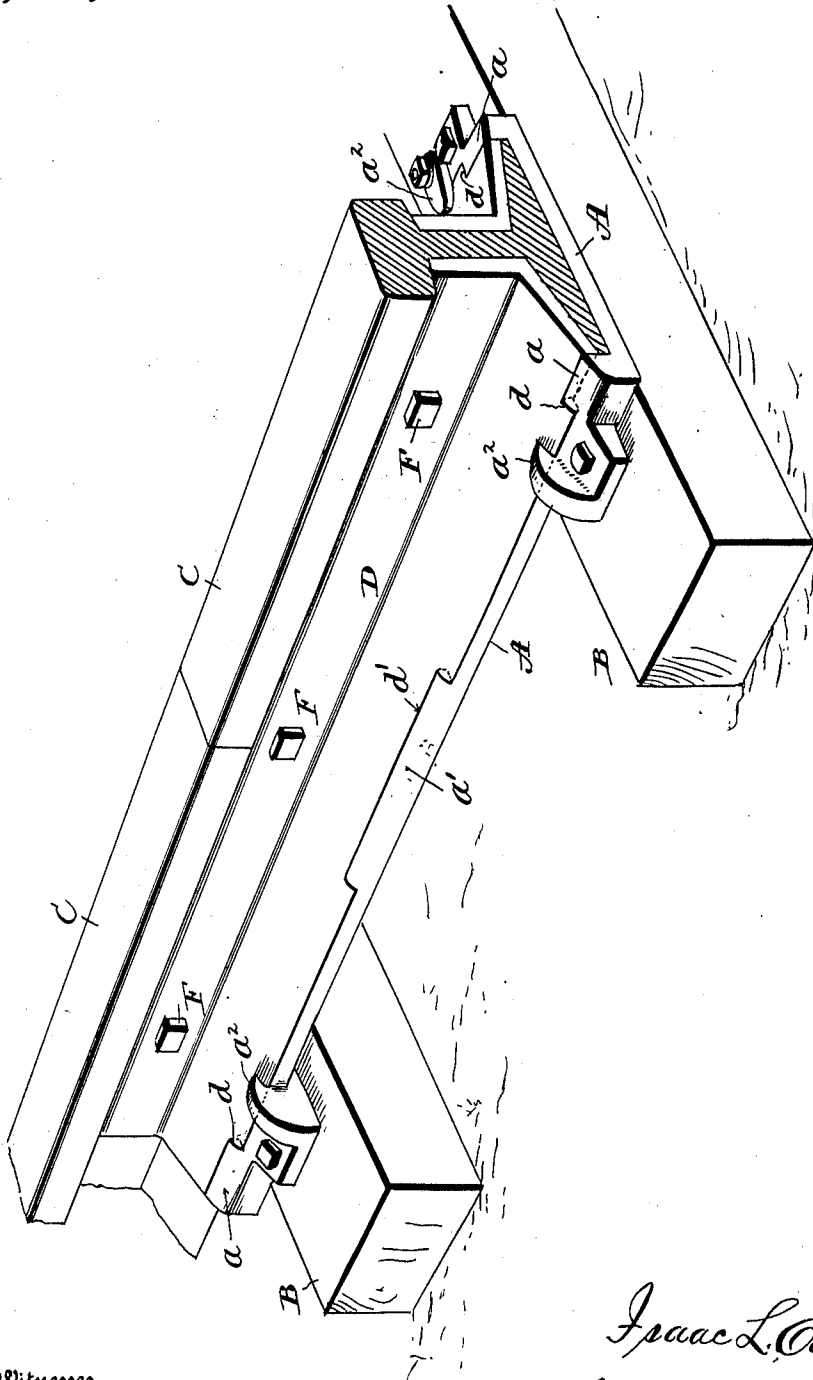
I. L. EDWARDS.

RAIL JOINT.

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1,031,330.

Patented July 2, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

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RAIL-JOINT.

1,031,330.

Specification of Letters Patent.

Patented July 2, 1912.

Application filed July 8, 1908. Serial No. 442,549.

To all whom it may concern:

Be it known that I, ISAAC L. EDWARDS, of Aurora, in the county of Kane and in the State of Illinois, have invented a certain
5 new and useful Improvement in Rail-Joints, and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which the figure is a perspective
10 view of a rail-joint embodying my invention.

The object of my invention has been to provide a rail joint which shall effectively support the ends of the rails, and prevent
15 their springing downward under the pressure of the wheels of a passing train, and to such ends my invention consists in the rail joint hereinafter specified.

In carrying my invention into practice, I provide a bed plate A which is adapted to be supported upon the ties B, and itself to support the rails C. Side plates D are secured to the web of the rails by bolts F, the side plates preferably fitting close up under
25 the tread of the rail. The bed plate is provided with two shoulders *a* on each side of the rails, and each side plate is provided with shoulders *d* which fit closely between the shoulders *a*. The bed plate is also preferably provided with flanges *a'* along its central portion, which are adapted to fit
30 into recesses *d'* on the side plates to prevent lateral movement of the side plates. Lugs *a''* are also formed on the bed plate to confine the side plates *d* laterally.
35

When weight is placed upon the free ends of the rails, it causes pressure upon the central portion of the upper edges of the side plates D, and tends to bend the side plates

downward. In order, however, that such 40 side plates may so bend, it is necessary to elongate or stretch the portion between the shoulders *a* of the base plate. This, however, cannot take place, owing to the fact that the said portion of the side plates D is 45 confined between the shoulders *a*, which being connected by the straight base plate cannot be forced apart without first rupturing the base plate. The bending of the side plates is, therefore, prevented. The action 50 of my rail joint is much the same as that of a bridge truss, consisting of two struts connected by a tie rod, each side plate D corresponding to a strut, and the base plate corresponding to the tie rod. 55

Having thus described my invention, what I claim is:

In a rail joint, the combination of a base plate having two pairs of opposing shoulders *a*, side plates, each of which is adapted 60 to bear against a pair of said opposing shoulders *a*, and to be secured to the rail in an upwardly extending position, said base plate being provided on each side with a centrally located flange *a'* that extends 65 above the plane of the base plate, said flange fitting a recess in the side edge of the side plate, and the side plate extending continuously from the flange to each of the two shoulders *a* of a pair, and lugs on the base 70 plate overhanging the side plates.

In testimony that I claim the foregoing I have hereunto set my hand.

ISAAC L. EDWARDS.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."