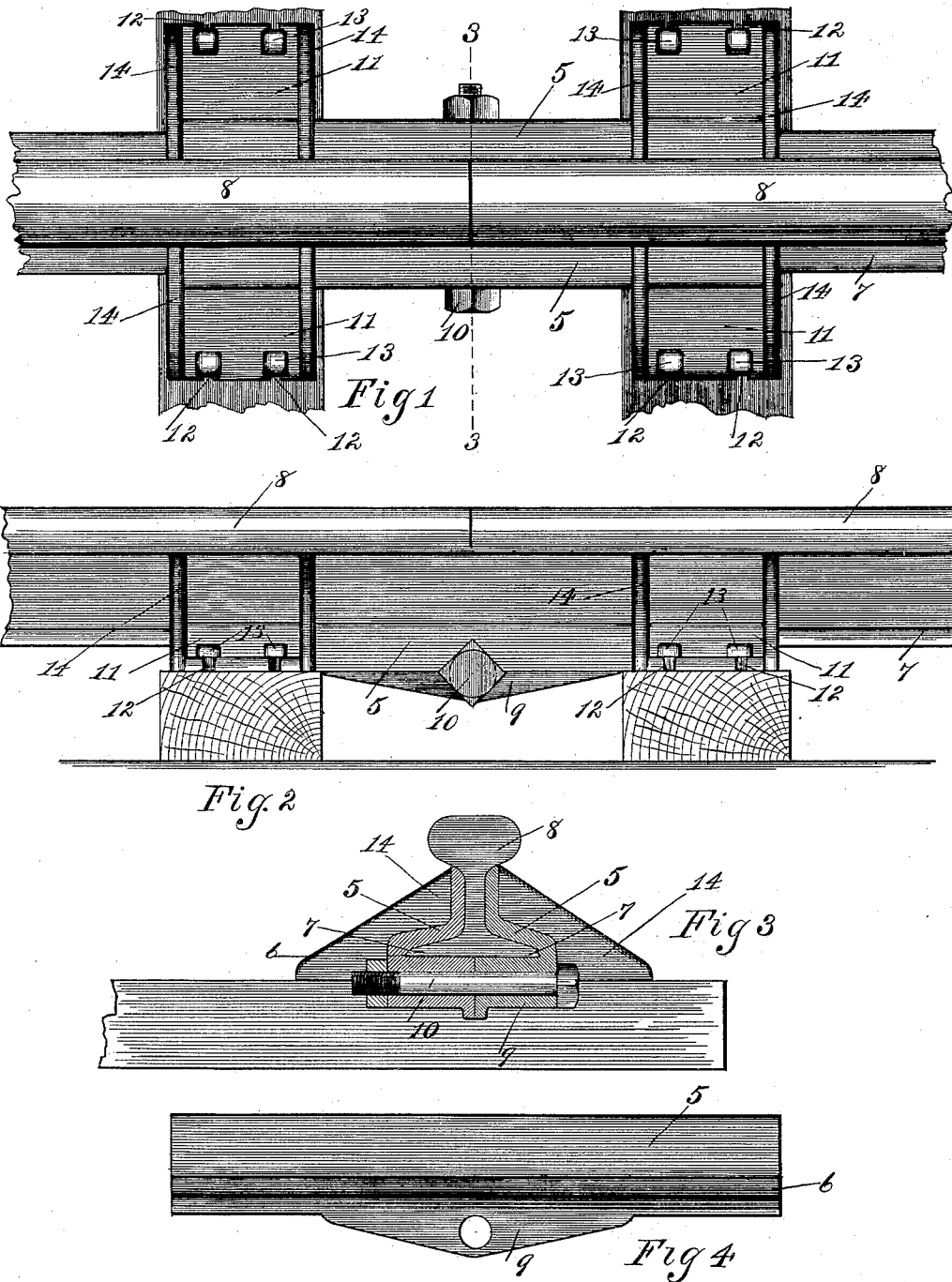


(No Model.)

J. J. ANDERSON.
RAIL JOINT FOR USE ON RAILROADS.

No. 463,130.

Patented Nov. 17, 1891.



Witnesses:
W. C. Collier
J. L. Tunison

Inventor:
James J. Anderson
By E. C. Crawford, Atty.

UNITED STATES PATENT OFFICE.

JAMES J. ANDERSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE ANDERSON RAIL JOINT COMPANY, OF ILLINOIS, AND NOEL BROSSAU AND EBEN D. NORTON, ALL OF SAME PLACE.

RAIL-JOINT FOR USE ON RAILROADS.

SPECIFICATION forming part of Letters Patent No. 463,130, dated November 17, 1891.

Application filed February 13, 1891. Serial No. 381,268. (No model.)

To all whom it may concern:

Be it known that I, JAMES J. ANDERSON, a citizen of the United States, residing at Chicago, in Cook county, Illinois, have invented a certain new and useful Improvement in Rail-Joints for Use on Railroads, of which the following is a specification.

My invention is designed as an improvement on the rail-joint for which I obtained Letters Patent of the United States No. 436,572, dated September 16, 1890.

The following is a specification of my present invention:

The objects of my invention are to avoid the trouble caused by defects in castings, to prolong the life of ties, to prevent the ends of rails from being split by the concussion of the car-wheels, to provide ribs which will keep a rail from rolling over on curves, and to provide a suspended rail-joint so constructed that it will be absolutely immovable. I accomplish these objects by means of the appliances illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my rail-joint, a rail embraced by it, and portions of ties on which the joint rests. Fig. 2 is a side elevation of the same. Fig. 3 is a cross-section taken on the line 3 3 of Fig. 1. Fig. 4 is an inside elevation of one of the sections of the joint.

Like numerals refer to like parts throughout the several views.

Referring to the drawings, it will be seen that the chief parts of the joint are the longitudinal sections 5 5. Each of these is exactly like the other, and is cast, with the slot 6 made in its inner side through its entire length. These slots are made of such dimensions that they will receive the flanges 7 of the rails 8.

On the lower side of each section is the lip 9, made integral with the section and flush with the inner side of the same. A hole is made through the center of these lips, through which the bolt 10 passes.

Each foot 11 of the joint is integral with the same and has in its outer edge suitable notches 12 for the spike 13, which fasten it to the tie.

The ribs 14, made integral with the sections and the feet of the joint, strengthen the joint, and thus aid in keeping the rail from rolling over at curves in the road.

My joint is designed to be applied to rails meeting between two ties. This constitutes what is known as a "suspended joint." The chief essential of such a joint is that it shall hold the ends of the two rails perfectly immovable. If the rails are not thus held, if one rail drops the least distance below the other, the higher one will be pounded and split by the wheels of the cars, and thus be made useless in a little time.

In my present form of joint, the flanges of the rails being inserted in the slots 6, the two rails rest on a common support, and the two parts of that support being tightly bound together by the bolt 10 the ends of the rails will be rendered absolutely immovable, and hence both extra wear and noise will be avoided. It is believed that this result is not accomplished by any joint in existence, because in all the other joints the clips securing the joint against the rail soon become worn, and hence the joint ceases to be perfectly tight.

The feet of my present joint are made wide enough to cover the face of the tie, and hence preserve the tie from the tendency of the rail to cut into it.

Owing to defective castings, many of the joints which require a nicely-fitting clip cannot be used. My present rail, being made of two exactly like parts, avoids this trouble and its consequent expense.

It is now obvious that in all its relations to railroad construction and operation this joint will save expense, besides affording the other advantages above indicated.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

In a rail-joint, substantially as described, the combination of two like sections grooved to receive the flanges of rails, a bolt securing the sections against the rails, feet extending laterally from the ends of each section across the railroad-tie, having notches for the passage of spikes, and ribs integral with the sections and feet extending from the top of the former to the bottom of the latter, as and for the purposes stated.

JAMES J. ANDERSON.

Witnesses:

E. C. CRAWFORD,
W. S. BURLING.