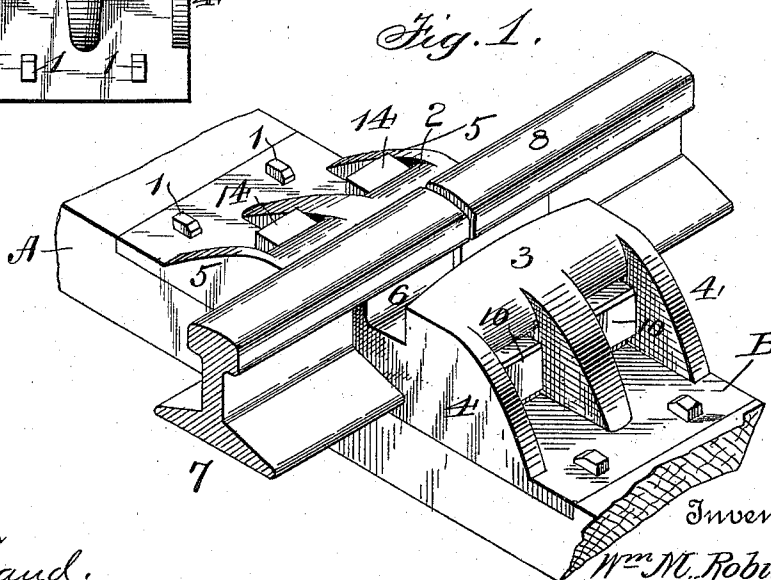
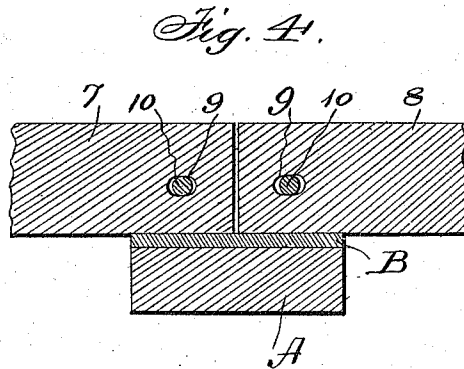
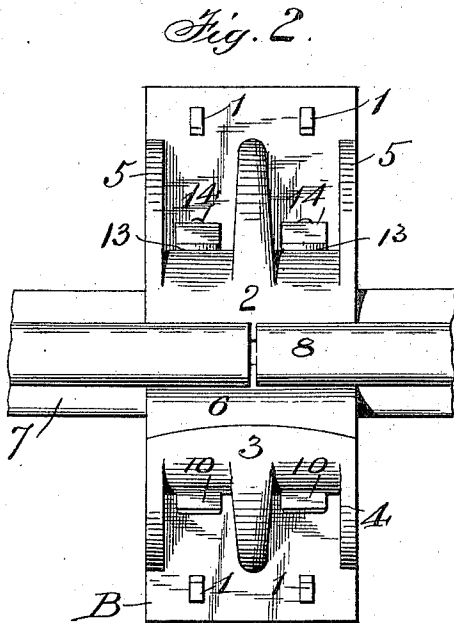
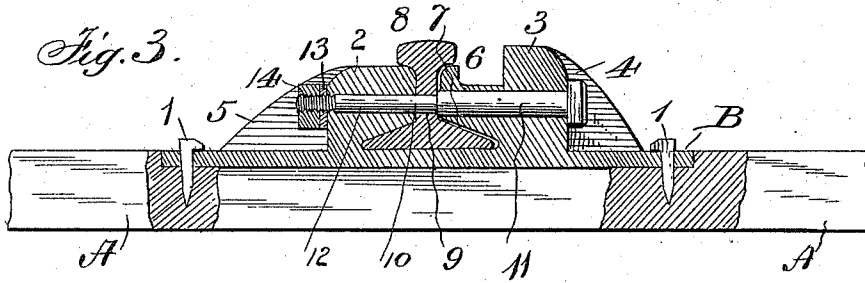


(No Model.)

W. M. ROBINSON.
RAIL JOINT.

No. 576,228.

Patented Feb. 2, 1897.



Witnesses
F. L. Ouraud.
K. A. Haw.

Inventor,
W. M. Robinson,
by John Weddell
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM M. ROBINSON, OF DILLINER, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO N. H. MINOR, OF SAME PLACE.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 576,228, dated February 2, 1897.

Application filed July 3, 1896. Serial No. 597,924. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. ROBINSON, a citizen of the United States, residing at Dilliner, in the county of Greene and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to rail-joints.

My object is to provide a simple and extremely strong rail-joint which will hold the rails firmly together and yet allow contraction and expansion.

A further object is to provide an improved rail-joint which, while being simple, will effectually prevent the rails from being quickly torn up, thereby more satisfactorily defeating any attempt at train-wreckage.

Having these objects in view, my invention consists of a rail-joint of peculiar construction, as will appear more fully hereinafter in the description and appended claims and in the accompanying drawings, in which—

Figure 1 is a perspective view of my invention; Fig. 2, a plan view; Fig. 3, a cross-section, and Fig. 4 a longitudinal section.

A designates an ordinary tie or sleeper. This tie is preferably recessed to properly receive my improved rail-joint and more satisfactorily prevent it from twisting out of position.

B designates a heavy casting which constitutes the main portion of my rail-joint, and which is received in the recess in the tie and is suitably connected to the latter by spikes 1.

The abutment-heads 2 and 3 of the rail-joint are suitably braced by sets of webs 4 and 5, respectively. Abutment-head 3 is somewhat broader and higher than the other head and is provided with a slot or recess 6, which is adapted to receive the flange of the car-wheel, said head lying on a level with the top of the rail and serving as a wheel-guide. The space between the contiguous portions of the abutment-heads is suitably fashioned to receive the ordinary form of rail.

The numerals 7 and 8 designate rail-sections, and each of these sections is provided with an elongated bolt-hole 9, which is located near the inner end of the section. Two or more bolts 10 are employed, and the shank of each bolt is provided with an elongated portion 11, which is a trifle longer than the width of abutment-head 3, and a reduced portion 12, which is of greater length than the width of abutment-head 2, and is screw-threaded on its end, being provided with a washer 13 and a nut 14. The large portion of the shank of the bolt is of greater diameter than the opening in the rail. The bolts pass through the two abutment-heads, and the shoulders at the end of the enlarged portions of the shank of the bolt abut on the vertical webs of the respective rail-sections, so that when the nuts are adjusted said sections are clamped firmly against abutment-head 2.

My improved rail-joint is extremely strong, and owing to its peculiar construction and the manner in which it is connected to the tie or sleeper it is impossible for it to twist and also for any unauthorized person to quickly tear up the rails.

Slight modifications might be resorted to without materially affecting my invention, and it is to be understood, therefore, that I consider myself entitled to all such variations as come within the spirit and scope of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a rail-joint, the combination with a casting, of rail-sections received therein, and bolts which pass through the casting and the rail-sections and which are provided with shoulders which abut on said rails.

2. The combination with a casting, of rail-sections received therein, and bolts having enlarged portions which extend through part of the casting, and reduced portions which extend through the rail-sections and the remainder of the casting, thereby providing shoulders which abut on the rail-sections.

3. In a rail-joint, the combination with a casting, of rail-sections fitted into said casting and which sections are provided with

elongated slots, and bolts provided with reduced portions thereby forming shoulders, which bolts pass through the casting and have their reduced portions received in the slots
5 and their shoulders abutting against the rail-sections.

specification in the presence of two subscribing witnesses.

WILLIAM M. ROBINSON.

Witnesses:

H. C. JENNINGS,

W. G. MCINN.

In testimony whereof I have signed this