

A. L. HODGES.
RAIL JOINT.
APPLICATION FILED NOV. 16, 1904.

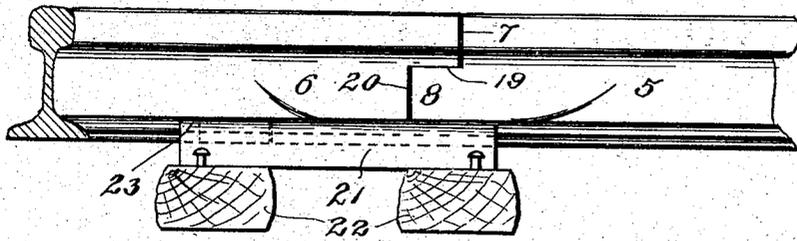


Fig. 1.

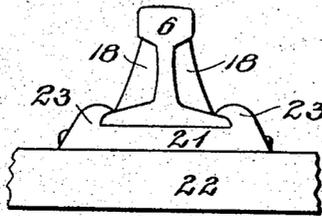


Fig. 2.

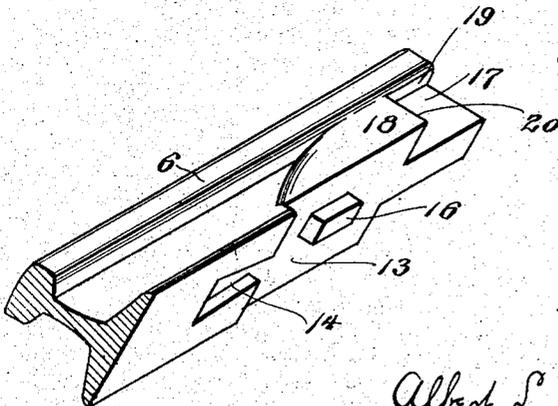
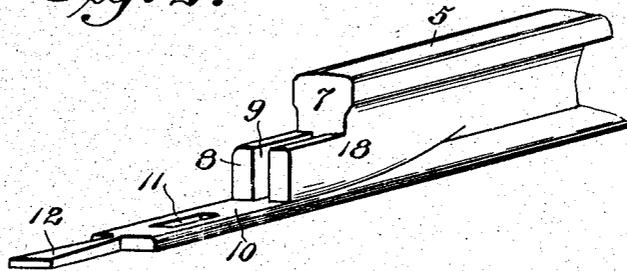


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

ALBERT LEMUEL HODGES, OF NEWMARKET, TENNESSEE.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 781,519, dated January 31, 1905.

Application filed November 16, 1904. Serial No. 233,016.

To all whom it may concern:

Be it known that I, ALBERT LEMUEL HODGES, a citizen of the United States, residing at Newmarket, in the county of Jefferson and State of Tennessee, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

My invention relates to rail-joints, and has for its object to provide simple and efficient means for joining the abutting ends of railway-rails without the use of fish-plates or bolts.

The invention consists in certain novel features of construction hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of the joint. Fig. 2 is an end view thereof. Fig. 3 is a perspective view of the two rail-sections before they are united.

Referring specifically to the drawings, the two rail-sections are indicated at 5 and 6, respectively. The head and a portion of the web of the rail 5 are cut away at one end, as at 7, and the remaining portion 8 of the web is formed with a mortise 9, which extends downwardly to the base of the rail, but not through the same. Beyond the part 8 the base of the rail extends forwardly, as at 10, and has a mortise 11, and its front end is shaped to form a flaring tongue 12. The end of the rail 6 is properly shaped to fit the end of the rail 5. The base of said rail 6 is cut away, as at 13, to an extent equal the length and thickness of the part 10, on which it fits. A mortise 14 is also made to receive the tongue 12, and a tenon 16 extends from the rail 6 into the mortise 11. The tongue 12 and tenon 16 fit loosely in the respective mortises to permit expansion and contraction of the rails. The end of the rail 6 next to the abutting rail 5 has a tenon 17, which fits in the mortise 9. The webs of both rails near their abutting ends are reinforced or thickened, as at 18. This enables the mortise 9 to be made without weakening the rail and forms a shoulder

19 on the rail 6, which fits on the top of the part 8, and also a shoulder 20, which abuts against the front end of said part 8 when the rails are united. Directly under the joint the rails rest on a chair 21, which is spiked to the tie 22 and has at its outer ends flanges 23, extending over the base-flanges of the rails.

Rail-sections united as herein described will be effectively held against endwise and side-wise separation. No fish-plates or bolts are required, and the track can be rapidly laid. The abutting parts of the rail-sections are all perpendicular, so that there is no wedging action to bind the parts and prevent expansion and contraction. This also permits the joint to be easily broken when desired by simply lifting up the rail 6, the chair 21 first being removed.

Having thus described my invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A rail-joint comprising abutting rails, the head and a portion of the web of one of the rails being removed and the remaining portion of its web being formed with a mortise, and the base extending forwardly beyond said web; and a tenon on the other rail fitting the mortise, the bottom of said rail being cut away to receive the forwardly-extending base portion of the other rail.

2. A rail-joint comprising abutting rails having reinforced webs at their ends, the head and a portion of the web of one of the rails being removed and the remaining portion of its web being formed with a mortise, and the base extending forwardly beyond said web and having a mortise; and tenons on the other rail fitting in the mortises, the bottom of said rail being cut away to receive the forwardly-extending base portion of the other rail.

3. A rail-joint comprising abutting rails having reinforced webs at their ends, the head and a portion of the web of one of the rails being removed and the remaining portion of its web being formed with a mortise, and the base extending forwardly beyond said web

and having a flaring tongue at its outer end;
and a tenon on the other rail fitting the mor-
tise, the bottom of said rail being cut away
to receive the forwardly-extending base por-
5 tion of the other rail and having a mortise to
receive the tongue thereon.
In testimony whereof I have signed my name

to this specification in the presence of two sub-
scribing witnesses.

ALBERT LEMUEL HODGES.

Witnesses:

LUM HODGES,
W. J. WOOTEN.