

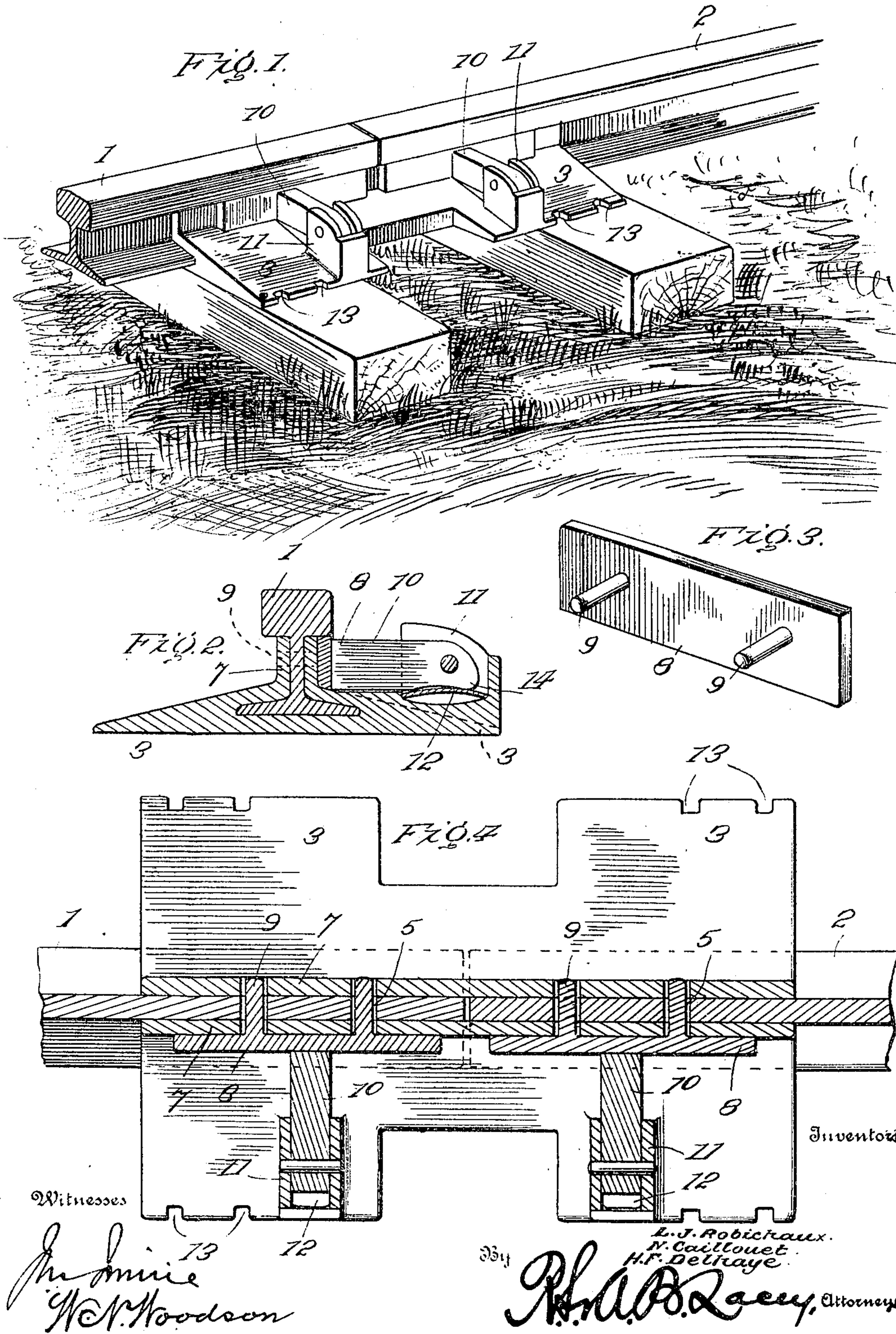
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L. J. ROBICHAUX, N. CAILLOUET & H. F. DELHAYE.

RAIL JOINT.

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UNITED STATES PATENT OFFICE.

LEONARD J. ROBICHAUX, NICHOLAS CAILLOUET, AND HUBERT F. DELHAYE, OF CHARENTON, LOUISIANA.

RAIL-JOINT.

No. 812,296.

Specification of Letters Patent.

Patented Feb. 13, 1906.

Application filed April 3, 1905. Renewed November 24, 1905. Serial No. 288,902.

To all whom it may concern:

Be it known that we, LEONARD J. ROBICHAUX, NICHOLAS CAILLOUET, and HUBERT F. DELHAYE, citizens of the United States, residing at Charenton, in the parish of St. Mary and State of Louisiana, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to improvements in rail-joints, and more particularly to the threadless-bolt type, and has for its object to produce a joint which will effectively prevent both vertical and lateral movement of the rail ends and in which the use of threaded bolts and nuts is entirely eliminated.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a perspective view of a rail-joint embodying the invention. Fig. 2 is a vertical transverse sectional view through one of the pivoted locking members. Fig. 3 is a perspective view of one of the locking-plates. Fig. 4 is a horizontal section of the rail-joint in the plane of the registering holes and the interlocking lugs, the parts being on a larger scale.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The numerals 1 and 2 designate the rail ends which are to be joined. These rail ends fit into a chair 3, which secures them against lateral and vertical displacement. Two or more holes 5 are drilled in the end of each rail. These holes are approximately elliptical in shape, their major axis having the same direction as the length of the rail, so that the rails are allowed the limited amount of longitudinal movement demanded by their expansion and contraction, due to changes in temperature. Corresponding holes are also drilled in the wings 7 of the chair, which project along the web of the rails on either side. Locking-plates 8 are provided, having lugs 9 extending therefrom and adapted to pass through corresponding holes in the wings of the chair and the web of the rail when said locking-plates are in position. These locking-plates 8 are held securely in position by the locking-dogs 10, pivoted to spaced lugs 11, projecting from the base of the chair at a suitable distance from the wings. As will be

seen in Fig. 3, these locking-dogs have an eccentric portion 14, against which a spring 12 exerts a pressure to hold the locking-dog 10 against accidental displacement when in normal position. In practice it is intended to make this spring 12 of such strength that it will require a lever or other tool to raise the locking-dog 10. The chair is shown in the drawings as adapted to be placed over two adjacent railway-ties, and is provided at suitable points with notches or recesses 13 for the engagement of spikes.

The operation of this device is as follows: The locking-dogs 10 being raised and the locking-plates 8 removed, the rail ends are forced into the chair, so that the corresponding holes in the web of the rail and the wings of the chair register. The locking-plates 8 are then placed in position with the lugs 9 passing through said holes and the locking-dogs 10 forced down into position, so that they hold the locking-plates securely in place. It will thus be understood that the work of joining two rails together is by this invention reduced to a very simple operation and that the difficulties arising from the use of nuts and bolts have been entirely eliminated.

Having thus described the invention, what is claimed as new is—

1. In a rail-joint, the combination of the rails provided with holes, a chair having registering holes, a locking-plate having lugs projecting therefrom to pass through the registering holes of the chair and rails, and a locking-dog for holding said locking-plate in position.

2. In a rail-joint, the combination of the rails provided with holes, a chair having registering holes, a locking-plate having lugs projecting therefrom to pass through the registering holes of the chair and rails, a locking-dog for holding said locking-plate in position, and a spring for holding said locking-dog against accidental displacement.

3. In a rail-joint, the combination of the rails provided with holes, a chair having registering holes, a locking-plate having lugs projecting therefrom to pass through the registering holes of the chair and rails, spaced lugs projecting from the base of said chair, and a dog pivoted to said spaced lugs and adapted to hold said locking-plate in position.

4. In a rail-joint, the combination of the rails provided with holes, a chair having reg-

istering holes, a locking-plate having lugs projecting therefrom to pass through the registering holes of the chair and rails, spaced lugs projecting from the base of said chair, a dog
5 pivoted to said spaced lugs and adapted to hold said locking-plate in position, and a spring for holding said dog against accidental displacement when in its normal position.

10 5. In a rail-joint, the combination of the rails provided with holes, a chair having registering holes, a locking-plate having lugs projecting therefrom to pass through the registering holes of the rails and chair, spaced lugs projecting from the base of said chair, a dog

pivoted to said spaced lugs and adapted to 15 hold said locking-plate in position, a metallic spring between said spaced members, and an eccentric portion on said pivoted member adapted to engage with said spring.

In testimony whereof we affix our signatures in presence of two witnesses. 20

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Witnesses:

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