

No. 772,825.

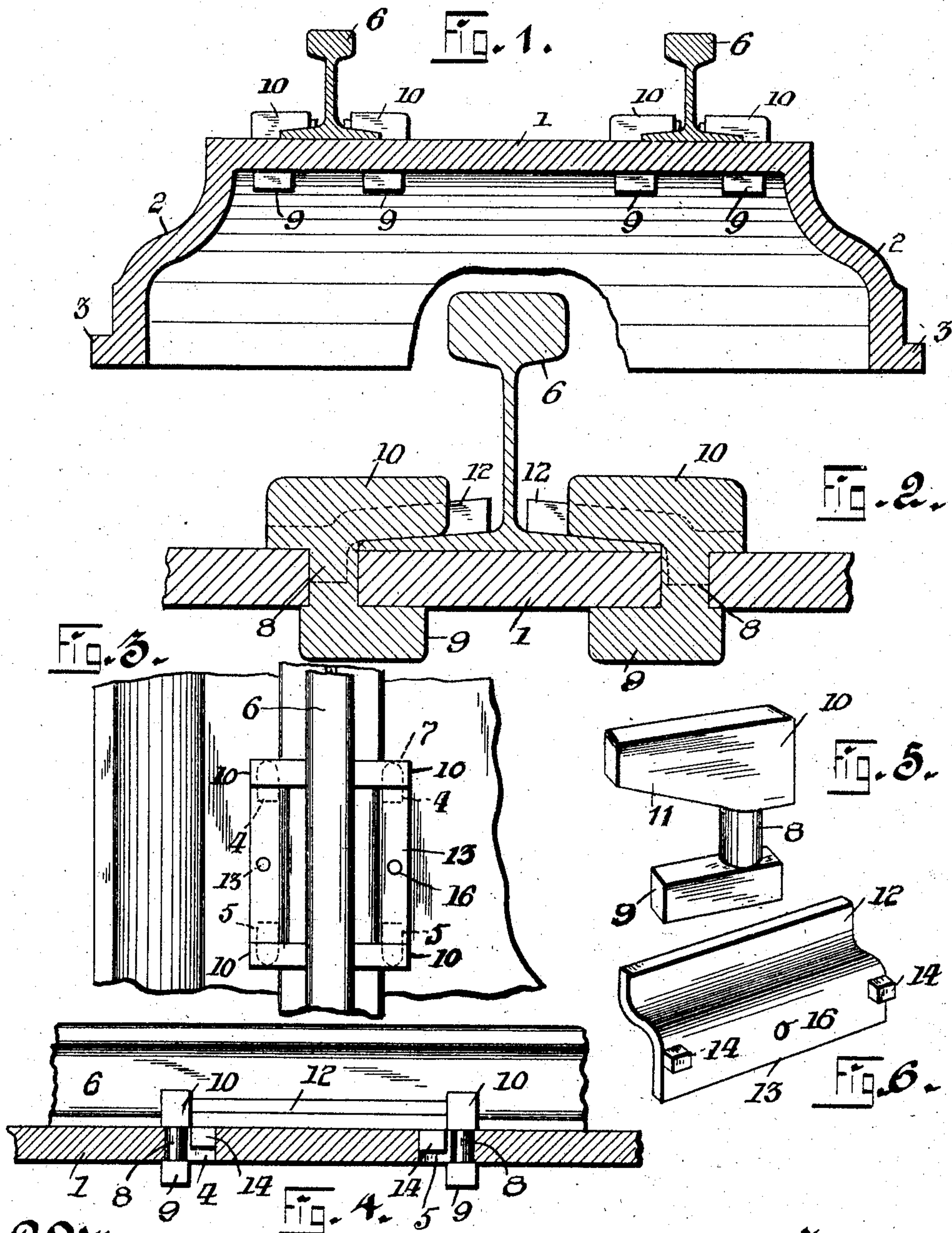
PATENTED OCT. 18, 1904.

L. REGDON & F. MAKROCZY.

RAIL JOINT.

APPLICATION FILED JUNE 24, 1904.

NO MODEL.



Witnesses.
C. Klostermann.
J. H. Butler

Inventors
L. Regdon & F. Makroczy
by A. C. Everett & Co.
Attorneys

UNITED STATES PATENT OFFICE.

LOUIS REGDON AND FRANK MAKROCZY, OF HOMESTEAD, PENNSYLVANIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 772,825, dated October 18, 1904.

Application filed June 24, 1904. Serial No. 214,065. (No model.)

To all whom it may concern:

Be it known that we, LOUIS REGDON and FRANK MAKROCZY, subjects of the Emperor of Austria-Hungary, residing at Homestead, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to metallic ties and rail-fasteners, and has for its object to provide a metallic tie upon which novel means is employed for fastening the rail-sections thereon.

Another object of our invention is to provide a metallic tie or chair of simple, strong, and durable construction, and upon the tie or chair we employ novel means for fastening the rail-sections and the fish-plates thereon.

Briefly described, our invention comprises a metallic tie or chair of an inverted-U shape, and in the top of the chair or tie we provide slots in which double-headed bolts are placed and turned so that the heads of said bolts will engage the base of the rail-sections and the under face of the top of the tie.

In conjunction with the rail-fastening means we employ plates which are interposed between the rail-fasteners, these plates being adapted to maintain the position of the double-headed bolts, at the same time strengthening and governing the movement of the rail-sections upon the tie.

All of the above construction will be hereinafter more fully described.

Referring to the drawings accompanying this application, wherein like numerals of reference indicate like parts throughout the several views, Figure 1 is a longitudinal sectional view of our improved metallic tie, showing two rail-sections secured thereon. Fig. 2 is an enlarged detail sectional view of the rail-fastening means employed in connection with the metallic tie. Fig. 3 is a top plan view of a portion of the tie, showing a rail-section secured thereon. Fig. 4 is a transverse sectional view of a portion of the tie, showing a rail-section secured thereto. Fig. 5 is a detail perspective view of the fastening means constructed in accordance with our in-

vention, and Fig. 6 is an underneath perspective view of one of the fish-plates employed in connection with our improved rail-fastener and metallic tie.

Referring to the drawings accompanying this application, the reference-numeral 1 indicates a metallic tie or chair, which is preferably made of an inverted-U-shaped form, the sides 2 of the tie being flared and provided with flanges 3 3, these flanges being adapted to rest upon the ballast or road-bed of the railway construction. In the top of the metallic tie we provide slots 4 4 and 5 5, and in order to secure the rail-sections 6 upon the top of the tie we arrange two slots 4 and 5 upon each side of the rail-section, these slots being placed a desirable distance apart to facilitate the fastening means engaging the base of the rail. The slots 4 and 5 are preferably oblong in form and have their one end rounded, as indicated at 7, and in these slots are placed the double-headed bolts, one of which is illustrated in Fig. 5 of the drawings, these double-headed bolts consisting of an annular shank portion 8, upon the one end of which is formed an oblong head 9 and upon the other end is formed a similar head 10, this head upon its under face being provided with a beveled portion 11.

When the rail-sections have been positioned upon the top of the tie, the double-headed bolts are inserted in the oblong slots and rotated until the head 9 of the bolt engages the under face of the top of the tie, while the beveled portion 11 of the head 10 of the bolt engages the top of the base of the rail. When the bolts have been secured in position and the rail-sections locked upon the top of the tie, we employ two plates, one of which is illustrated in Fig. 6 of the drawings. These plates, as illustrated in Figs. 2 and 6 of the drawings, have their one side, 12, bent out of alinement with the opposite side, 13, whereby when the side 13 rests upon the top of the tie the opposite side, 12, will engage and rest upon the top of the base of the rail-section. Upon the under face of the side 13 of these plates, and preferably near the ends thereof, we form depending lugs 14 14, these lugs being adapted to engage in the slots 4 and 5 of the tie, as illustrated in

Fig. 4 of the drawings, these lugs 14 14 preventing the bolts from moving within the slots 4 and 5, and the plates preventing the bolts from rotating within the slots, at the same time serving to hold and strengthen the fastening of the rail-section upon the top of the metallic tie.

It will be observed that our improved rail-fastening may be employed for connecting the ends of two rail-sections together, and any means whatever may be employed to secure the plates 13 13 upon the top of the metallic tie. In the drawings an aperture 16 is provided in each of the plates, whereby any desired means may be employed and secured through this aperture and to the top of the tie. It will also be noted that the tie may be made of any desired shape to obtain the best results therefrom and other slight changes may be made in the details of construction without departing from the scope of the invention.

What we claim is—

1. In a rail-fastener, the combination with a metallic tie having slots formed therein, a rail-section adapted to rest upon said tie, of double-headed bolts mounted in said slots, the heads of said bolts being adapted to engage

the base of the rail-sections and the tie, and means interposed between said bolts to lock said bolts in position.

2. The combination with a metallic tie adapted to support rail-sections, said tie being of a substantially inverted-U-shaped form and having slots formed in the top of said tie, of double-headed bolts mounted in said slots, the heads of said bolts adapted to engage the base of the rail and the top of the tie, plates interposed between said bolts, lugs carried by said plates and adapted to engage in the slots of said tie, substantially as described.

3. The combination with a metallic tie having slots in its top, of double-headed bolts arranged in said slots the upper heads of said bolts being adapted to engage the tie and the base of the rails resting on the tie, plates arranged between the upper heads of the bolts and means for securing said plates to the tie.

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

LOUIS REGDON.
FRANK MAKROCZY.

Witnesses:

K. H. BUTLER,
E. E. POTTER.