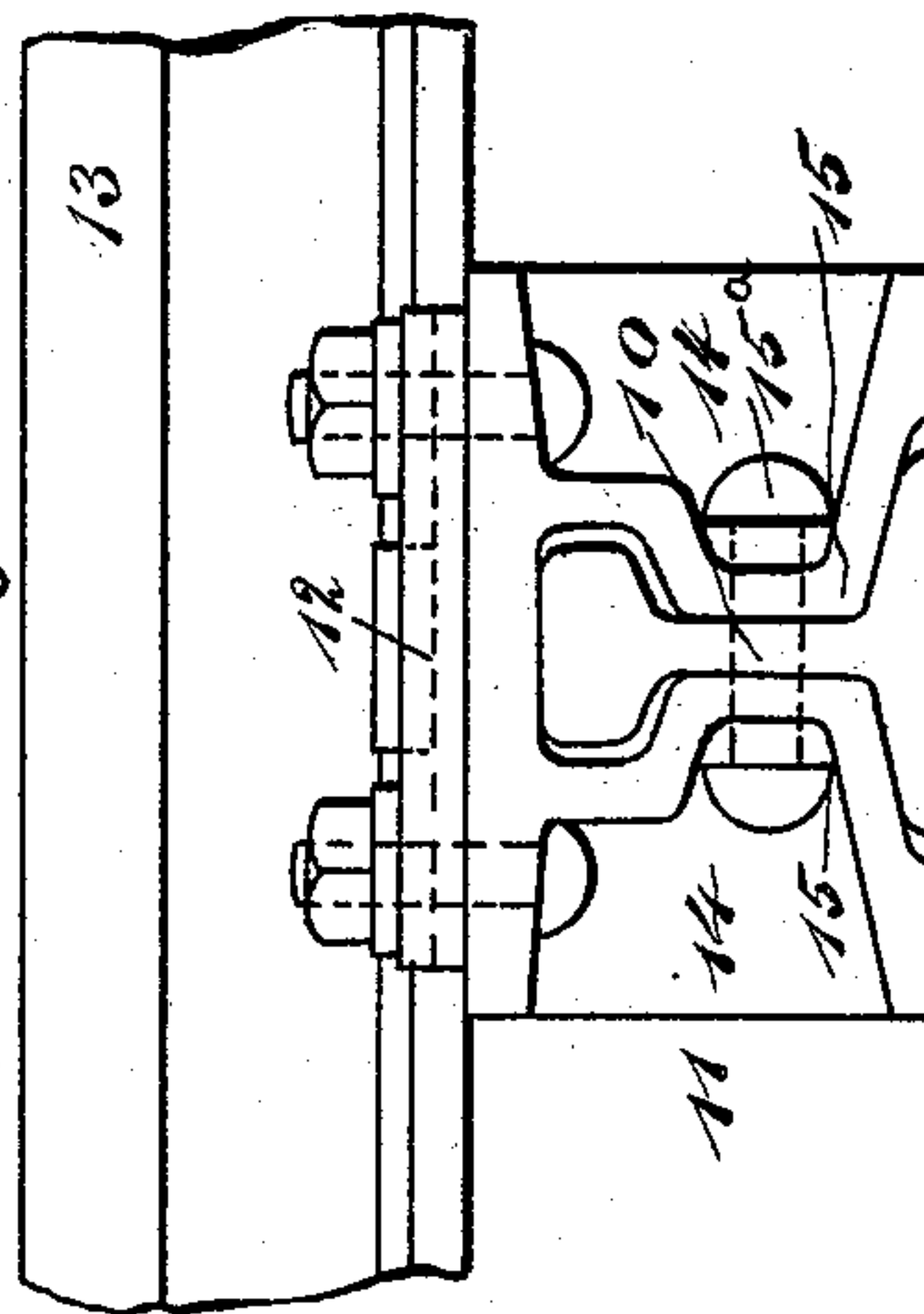
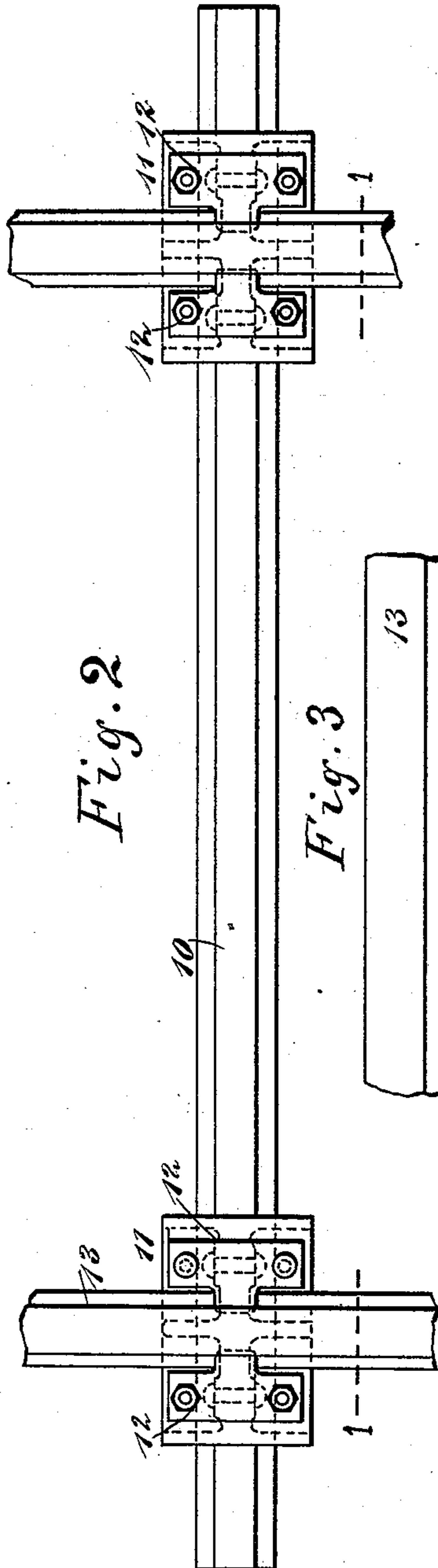
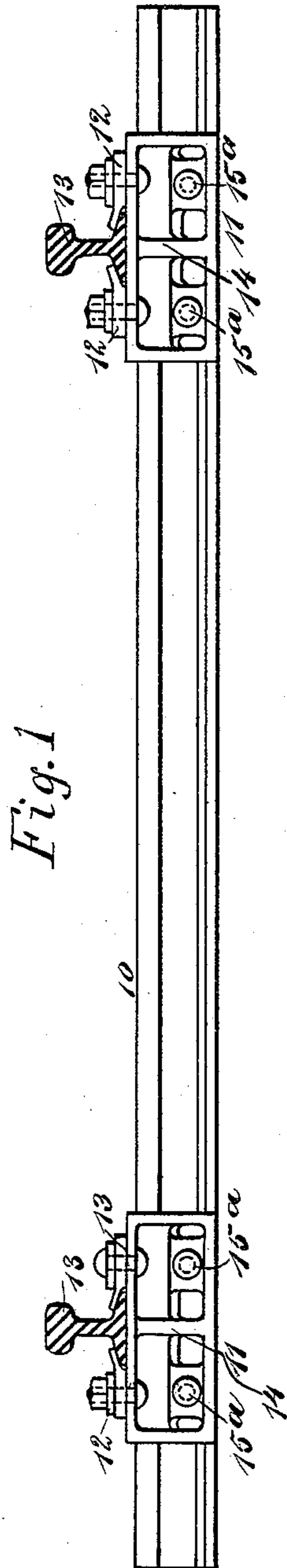


(No Model.)

E. S. MOFFAT & T. G. WOLF.
RAILROAD TIE.

No. 472,901.

Patented Apr. 12, 1892.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD S. MOFFAT AND THEODORE G. WOLF, OF SCRANTON,
PENNSYLVANIA.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 472,901, dated April 12, 1892.

Application filed October 3, 1891. Serial No. 407,609. (No model.)

To all whom it may concern:

Be it known that we, EDWARD S. MOFFAT and THEODORE G. WOLF, both of Scranton, in the county of Lackawanna and State of Pennsylvania, have invented a new and Improved Railroad-Tie, of which the following is a full, clear, and exact description.

Our invention relates to improvements in railroad-ties; and the object of our invention is to produce a tie especially adapted for all metallic railways, which tie may be cheaply made, quickly adjusted, and will support the track-rails in such a manner that they cannot shift and will have the necessary elasticity.

To this end our invention consists in a railroad-tie the construction of which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a cross-section through the track on the line 1 1 in Fig. 2, showing the tie in side elevation. Fig. 2 is a broken plan view of the track provided with our improved tie, and Fig. 3 is an end view of the tie with a section of the track-rail supported thereon.

The tie-bar 10, as shown in the drawings, consists of a section of an ordinary track-rail, and it is provided near the ends with blocks 11, which rest firmly upon the tie-bar and road-bed and which have flat tops adapted to support the clips 12, which are bolted thereto, and the track-rails 13, which are held in place by the clips. Each block 11 is provided with lateral ribs 14, which prevent it from shifting, and the block is provided with a central longitudinal passage-way adapted to receive the tie-bar 10, and the walls 15 of this passage-way are shaped so as to fit nicely around the tie-bar, and the tie-bar and block are held firmly together by the fastening-bolts 15^a.

The blocks are made large enough to form a good bearing-surface for the track-rails, and the under sides of the blocks, owing to the shape of the walls 15, which embrace the tie-bar, will be flush with the bottom of the tie-bar.

If desired, a plain flat bar may be substituted for the tie-bar 10.

The ties are laid in the road-bed in the usual way, with the tie-bar embedded in the road-bed and with the blocks 11 projecting slightly above the surface, so as to support the track-rails at the right height.

From the foregoing description it will be seen that the ties are extremely simple and cheap, as the tie-bar 10 may be cut from an old and worn rail, that they contain little metal in proportion to their strength, and that they may be quickly applied to a road-bed.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. In a railroad-tie, the block 11, having a longitudinal passage through it shaped to receive an ordinary rail and having bolt-apertures through its side walls at the web, lateral flanges 14 on its outer sides, and bolt-holes through its flat upper side to receive the bolts of the track-rail clips, substantially as set forth.

2. A railroad-tie comprising a tie-bar formed of a section of track-rail and track-supporting blocks mounted on the ends of the tie-bar, said blocks having lateral ribs and having inner walls adapted to fit the tie-bar, substantially as described.

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Witnesses:

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