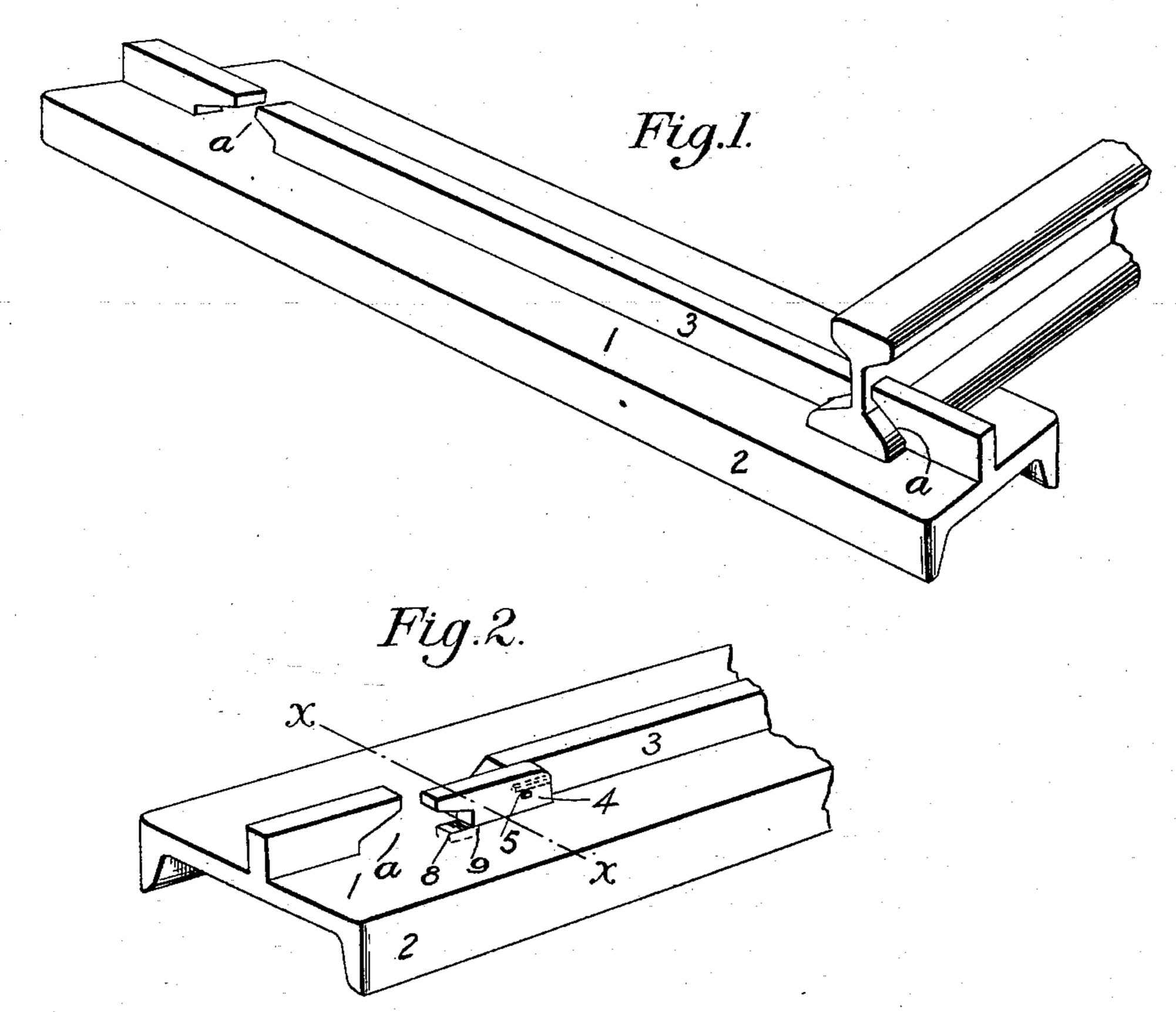
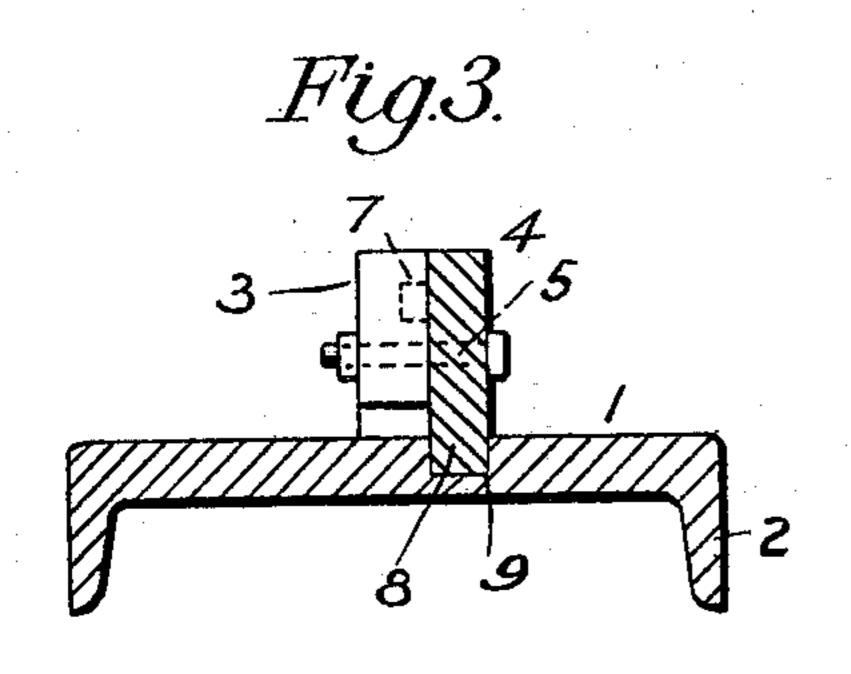
(No Model.)

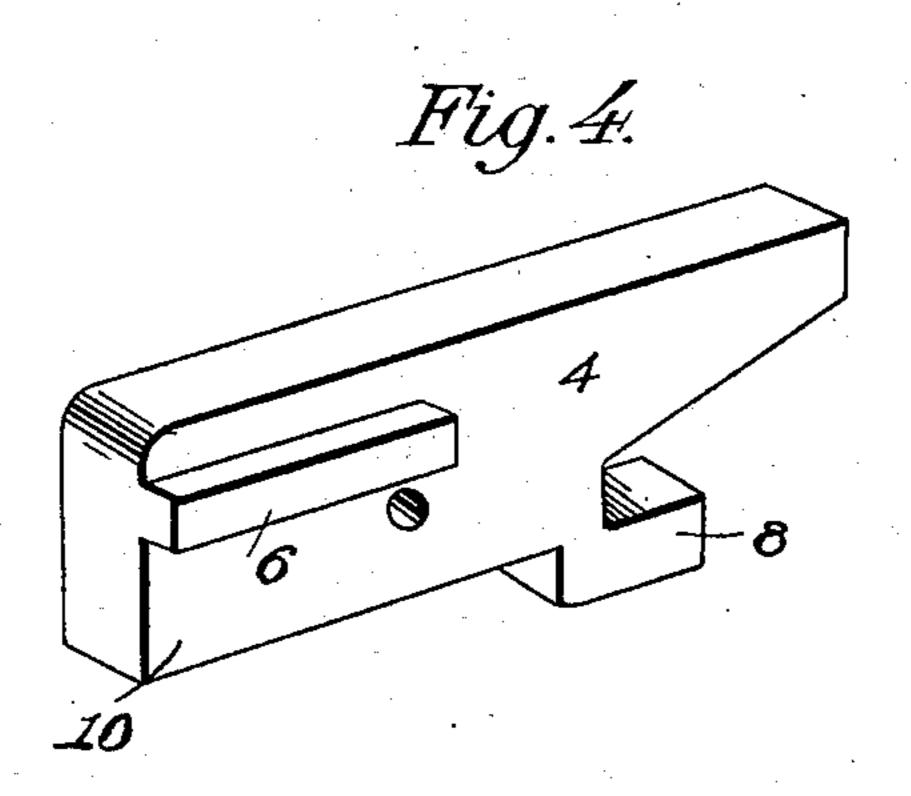
## H. T. ARMSTRONG. RAILROAD TIE.

No. 604,183.

Patented May 17, 1898.







Witnesses: J. Borren J. Collector, Inventor:

Henry T. Armstrong

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## United States Patent Office.

HENRY T. ARMSTRONG, OF JOSHUA, TEXAS.

## RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 604,183, dated May 17, 1898.

Application filed May 14, 1897. Serial No. 636,594. (No model.)

To all whom it may concern:

Be it known that I, Henry T. Armstrong, a citizen of the United States, residing at Joshua, in the county of Johnson and State of Texas, have invented certain new and useful Improvements in Railroad-Ties; and I do 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.

This invention relates to improvements in metallic railroad-ties, and more particularly to that class of which patent to W. H. Addicks, No. 539,210, dated May 14, 1895, may be taken as a type; and the object of the present invention is to simplify the construction and reduce the cost without impairing the efficiency of the device.

To this end the invention consists in the construction, combination, and arrangement of the device as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of my improved tie. Fig. 2 is a perspective view of one end of another form of tie. Fig. 3 is a cross-section on the line x x of Fig. 2, and Fig. 4 is a detail perspective view of one of the rail-fastening 30 blocks.

In the drawings, 1 denotes the body of the tie, which is provided at its sides with supporting-flanges 2, the adjacent faces of which are beveled, and 3 denotes a longitudinal web formed integral therewith.

In constructing railroads I use the tie shown in Fig. 1, in which the web 3 is shown as provided with slots a a, corresponding to the base and web of the rails. A tie thus constructed is slipped onto the ends of the rails and slid along to the desired point.

In the construction shown in Figs. 2 and 3 I have cut away the outer end of the inner

section of the web 3, so that the tie may be placed under the rails and the rails lowered 45 into the slots a a in the web 3. To close this opening, I employ fastening-blocks 4, which abut against the web and base of the rail and hold the same in position. These blocks are secured to the middle section of the web 3 of 50 the tie by bolts 5, and in order to relieve the bolts of any undue strain incident to the jarring of the rails I provide the blocks with a locking-toe 8, which is inserted through an orifice 9 in the tie 1 and projects under the 55 base of the rail, while the base of the block forms a key 10, which fits into a longitudinal recess 12 in the tie. I further provide the block 4 on its inner side with a lateral rib 6, which takes into a longitudinal groove 7, 60 formed in the side of the cross-bar of the tie. By this construction the strain is equally distributed and is removed from the bolt used to secure the block in position.

From the foregoing description, taken in 65 connection with the accompanying drawings, the construction and operation of the device will be readily understood without requiring an extended explanation.

Having thus described my invention, what 70 I claim, and desire to secure by Letters Patent, is—

The combination with the tie 1, formed with the orifice 9 and the longitudinal groove 7 communicating therewith, and the integral 75 slotted longitudinal web 3, of the block 4 formed with the integral toe 8 and lateral rib 6, and the bolt 5 adapted to detachably secure said block to said web 3, substantially as shown and described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

HENRY T. ARMSTRONG.

Witnesses:

O. S. HALL, J. W. REDEKER.