

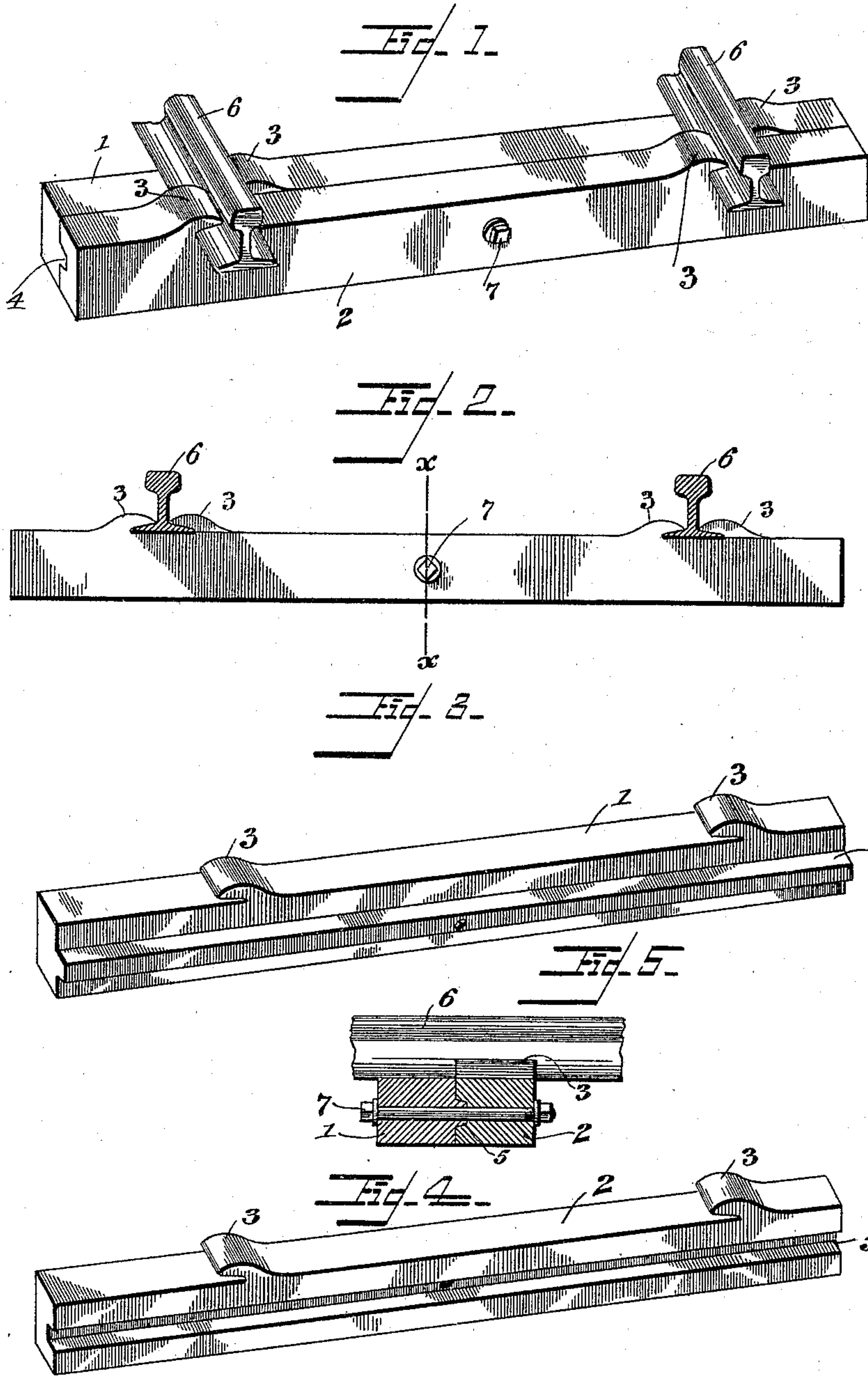
No. 634,882.

Patented Oct. 17, 1899.

A. DIXON.  
RAILROAD TIE.

(Application filed June 28, 1899.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

ALVY DIXON, OF ROCKDALE, WYOMING.

## RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 634,882, dated October 17, 1899.

Application filed June 28, 1899. Serial No. 722,156. (No model.)

*To all whom it may concern:*

Be it known that I, ALVY DIXON, a citizen of the United States, residing at Rockdale, in the county of Carbon and State of Wyoming, have invented a new and useful Railroad-Tie, of which the following is a specification.

This invention relates to track-fastenings, and particularly to sectional metallic cross-ties, and has for its object to provide an improved detachable connection between the sections whereby longitudinal and lateral separation of the tie-sections is prevented, and also to dispense with spikes or other separate track-fastening devices.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and the minor details of construction may be made within the scope of the appended claim without departing from the spirit or sacrificing any of the advantages of the present invention.

In the accompanying drawings, Figure 1 is a perspective view of the improved tie, supporting and fastening in place opposite rail-sections. Fig. 2 is a side elevation thereof. Figs. 3 and 4 are detail perspective views of the respective tie-sections. Fig. 5 is a transverse sectional view taken on the line *xx* of Fig. 2.

Corresponding parts in the several figures of the drawings are designated by like characters of reference.

Referring to the accompanying drawings, 1 and 2 designate, respectively, the opposite sections of the tie and are shown solid, but may be made hollow, as desired. Each section is substantially rectangular in cross-section and is provided upon its upper face with a pair of overhanging lugs or shoulders 3, extending the entire width of the section and located near opposite ends thereof. Furthermore, the shoulders of each section extend in the same direction; but one of the shoulders is located nearer its adjacent end of the section than is the other shoulder. As best indicated in Fig. 3, the inner side of the section 1 is provided with a longitudinal rib or tongue

4, extending the entire length of the section and located intermediate of the upper and lower faces thereof. The other section 2 is provided with a complementary groove 5, which also extends throughout the entire length of the section and is adapted to receive the tongue or rib 4, as best indicated in Fig. 5.

To assemble the sections together, the shoulders 3 at opposite ends of the respective sections are positioned between the opposite rail-sections 6 and then the tongue 4 is registered with the groove 5, after which the sections are moved longitudinally upon each other until the adjacent shoulders 3 embrace the opposite sides of the flanges of the respective rails. It will be understood, when assembling the sections, that the latter are turned end for end, so that the shoulders 3 of the respective sections may extend in opposite directions, and thereby embrace the flanges of the rails, as described. Thus it will be seen that separate track-fastenings are dispensed with, and the integral shoulders 3 form a positive and durable fastening means which cannot be loosened by the action of the trains passing over the rails. Furthermore, the tongue or rib being smooth and unbroken and fitting a complementary smooth and unbroken groove permits of the sections being moved longitudinally upon each other, so as to facilitate the positioning and assembling of the same. The sections are further connected together by means of a bolt 7, located between the rails and extending transversely through the sections and through the tongue 4, so as to prevent lateral displacement in a horizontal direction. A single bolt is sufficient to prevent horizontal lateral displacement of the sections, as the strain is longitudinal upon the bolt, and longitudinal separation is prevented by the engagement of the respective shoulders 3 at opposite sides of the rails.

The present invention provides an exceedingly simple and durable cross-tie which is constructed so as to be readily positioned in an accurate and effective manner and fastens the rails to the tie without the employment of separate track-fastenings, whereby the rails are maintained in a solid position and are effectively prevented from becoming loosened upon the tie.

What I claim is—

A cross-tie formed in longitudinal sections, having integral overhanging shoulders provided upon the upper faces thereof, the contiguous inner face of one of the sections being provided with a smooth and unbroken longitudinal rib or tongue, the adjacent face of the other section being provided with a complementary smooth and unbroken groove receiving the tongue or rib of the former section, said sections being slidable longitudi-

nally upon each other, to facilitate the assembling and positioning thereof, and means for preventing lateral separation of the sections, substantially as shown and described. 15

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALVY DIXON.

Witnesses:

FRANK O. HARRISON,  
SAMUEL PILLMAN.