

(No Model.)

A. BIDWELL.
RAILROAD CROSS TIE.

No. 571,316.

Patented Nov. 10, 1896.

Fig. 1.

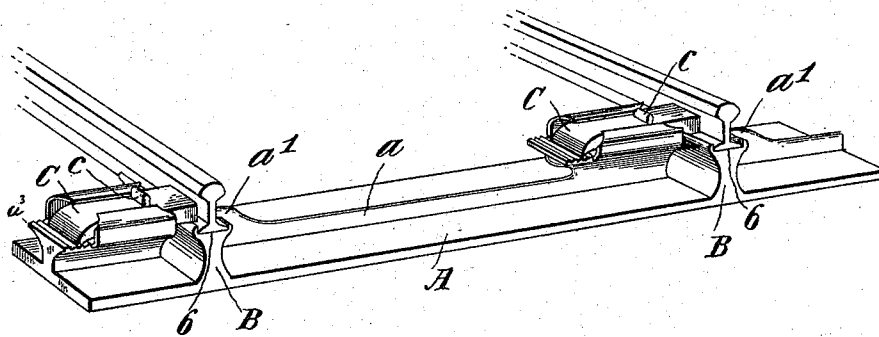


Fig. 3.

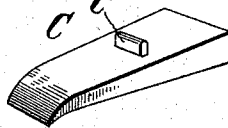
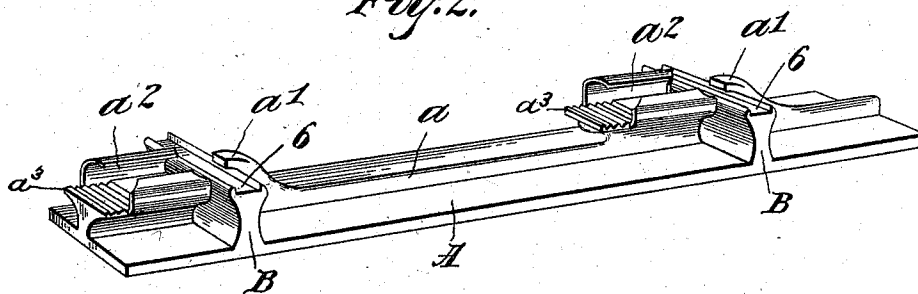


Fig. 2.



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UNITED STATES PATENT OFFICE.

ALONZO BIDWELL, OF SEDGWICK, ARKANSAS, ASSIGNOR OF SEVEN TWENTY-FOURTHS TO JAMES V. DABBS, JOHN GLUNZ, AND M. V. BARNETT, OF FORT SCOTT, KANSAS.

RAILROAD CROSS-TIE.

SPECIFICATION forming part of Letters Patent No. 571,316, dated November 10, 1896.

Application filed May 20, 1896. Serial No. 592,245. (No model.)

To all whom it may concern:

Be it known that I, ALONZO BIDWELL, a citizen of the United States, residing at Sedgwick, in the county of Lawrence and State of Arkansas, have invented certain new and useful Improvements in Railroad Cross-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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The invention relates to metallic cross-ties for railroads; and it consists in the improvement thereof, as hereinafter described, and pointed out in the claim.

Figure 1 of the drawings is a perspective view of a section of railroad-track with my invention applied thereto; Fig. 2, a similar view of the cross-tie alone; Fig. 3, a detail view of the spring-clamp.

In the drawings, A represents the base of the tie, which is flat on the bottom and provided on top in a median longitudinal line with the rib *a*. On one end of this rib is a fixed overhanging rail-fastener, under which one of the rail-flanges is held, while at the other end are formed the longitudinal overhangs *a*² *a*² and at a proper distance therefrom another overhanging fastener *a*¹.

B B are the supports upon which rests the bottom of the rail. They are preferably made concave on the sides and provided with a flat

top corresponding in width with the bottom surface of the rail. 35

C is a clamp made with a vertical stud *c* on top in order that it may be driven with a hammer under the guide-grooves *a*² *a*².

The clamp C is made on the outer end into a down-spring curved downwardly just enough to catch readily into the ratchet-teeth *a*³, which are made across the tie in the rear of the overhangs or guide-grooves *a*² *a*². 40

It will be readily seen that my cross-tie is reversible, so that no two adjacent ties will be arranged alike with respect to the rails, while the rail is snugly supported and secured on the supports and under the fasteners in a groove of the tie even without the spring-clamp. The rail-supports B are sunk down in the tie, so as to form the rail-groove *b* and so as to make the rail spreading laterally an impossibility. This is sometimes very important. 45 50 55

What I claim as new, and desire to protect by Letters Patent, is—

A railroad cross-tie having the base A, rail-supports B and the median rib *a* the said rib being provided with overhangs *a*¹ *a*², ratchet *a*³ and the spring-clamp C curved in front as shown and described. 60

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

ALONZO BIDWELL.

Witnesses:

LEROY MOORE,
J. M. SANGER.