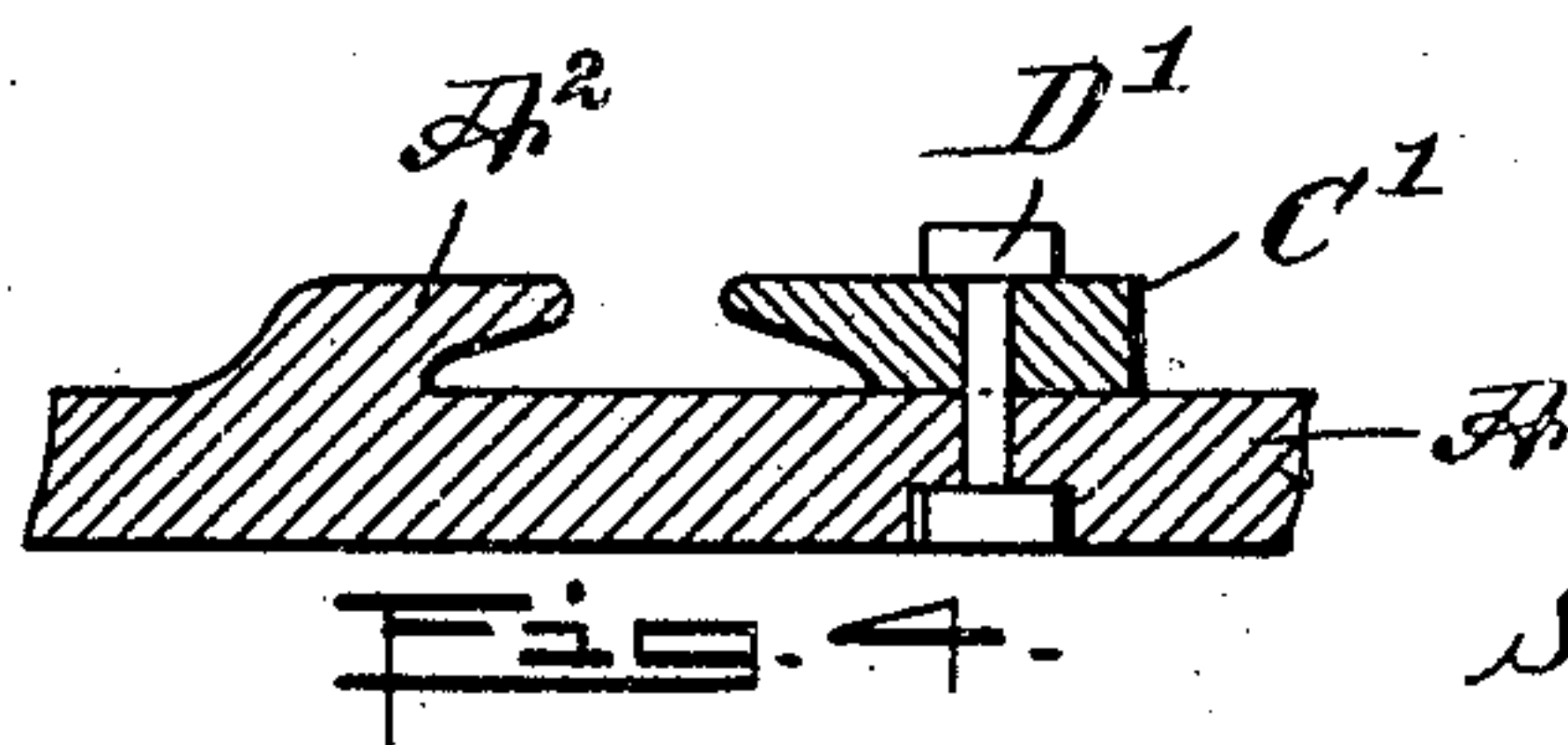
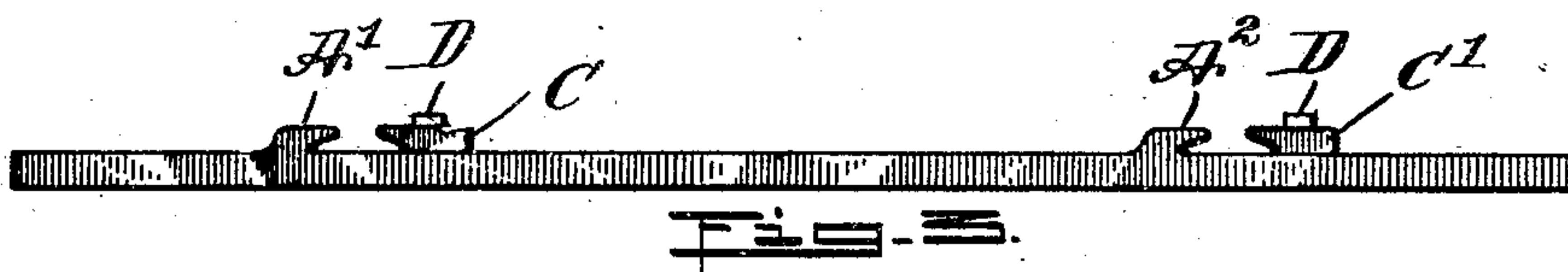
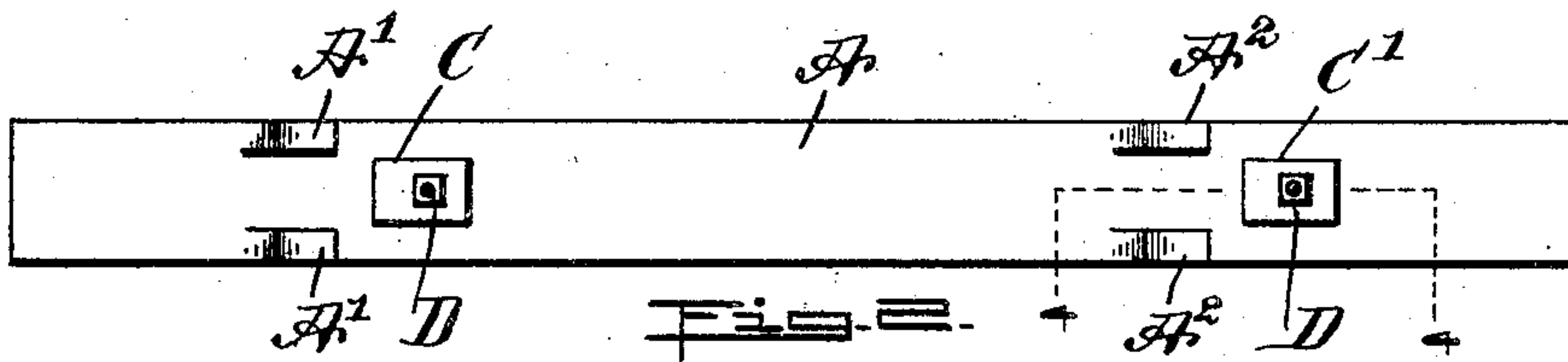
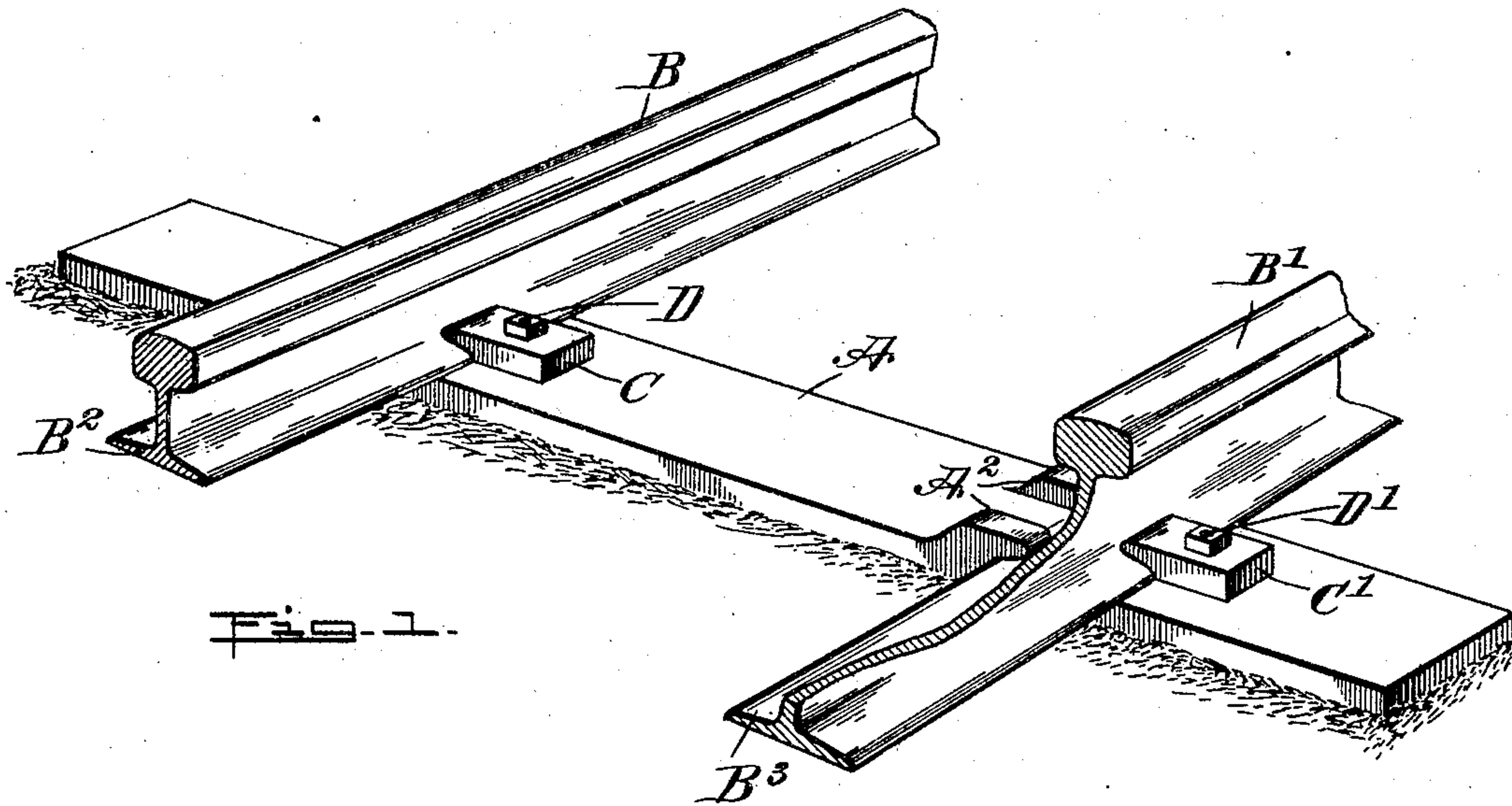


No. 788,260.

PATENTED APR. 25, 1905.

S. HOAGLAND.
RAILROAD CROSS TIE.
APPLICATION FILED OCT. 15, 1904.



WITNESSES:
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UNITED STATES PATENT OFFICE.

SEMON HOAGLAND, OF ASTOR, FLORIDA.

RAILROAD CROSS-TIE.

SPECIFICATION forming part of Letters Patent No. 788,260, dated April 25, 1905.

Application filed October 15, 1904. Serial No. 228,541.

To all whom it may concern:

Be it known that I, SEMON HOAGLAND, a citizen of the United States, and a resident of Astor, in the county of Lake and State of Florida, have invented a new and Improved Railroad Cross-Tie, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved railroad cross-tie which is simple and durable in construction, cheap to manufacture, and arranged to properly support and securely hold the rails in position, to avoid spreading of the rails, and to allow of conveniently placing the tie and rails in position.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claim.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improvement, showing the rails in position on a tie. Fig. 2 is a plan view of the improvement. Fig. 3 is a side elevation of the same, and Fig. 4 is an enlarged sectional side elevation of the improvement on the line 4 4 of Fig. 2.

The body A of the metallic cross-tie is adapted to support on its upper face rails B and B', and from the said upper face rise integrally sets of lugs or catches A' and A², of which the lugs A' are undercut to engage and fit the outer edge of the base B² of the rail B, and the lugs A² are similarly undercut to engage and fit the inner edge of the base B³ of the rail B', the lugs in each set being spaced apart to engage the base of the corresponding rail at two points to maintain a right-angle position between the tie and the rails at all times.

An undercut removable lug or catch C engages and fits the inner edge of the base B², and this lug or catch is secured in position on the body A by a bolt D. A similar removable lug or catch C' engages and fits the outer

edge of the base B³ of the rail B' and is secured in position on the body A by a bolt D'. The bolts D and D' are held against turning on the body A by fitting the polygonal heads of the said bolts into correspondingly-shaped recesses formed in the bottom of the body A, as plainly indicated in Fig. 4. By the arrangement described the nuts of the bolts D and D' can be readily and firmly screwed down onto the upper faces of the lugs C and C' when fastening the latter in place. The removable lugs C and C' alternate with the integral lugs of the sets of lugs A' and A², as plainly shown in Fig. 2, to hold the rails in firm engagement with the two lugs in each set of lugs A' and A². Now by arranging the sets of lugs A' and A² as described the cross-tie can be readily slipped in position under the rails, it being understood that the lugs C and C', being mounted on the flat surface of the tie, can be twisted or turned for this purpose, as the lugs C and C' are not fastened in position until the flanges B² and B³ of the rails fit with their corresponding edges under the sets of lugs A' and A².

For double tracks the body A of the cross-tie may be sufficiently long to support two sets of rails, it being understood that in this case the body is provided with additional sets of lugs A' and A² and corresponding removable lugs C and C'.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A metallic railroad cross-tie comprising a body having sets of integral lugs, one set being arranged for engaging the outer edge of the base of one of the track-rails and the other set being arranged for engaging the inner edge of the base of the other track-rail, removable lugs, one for each rail, to engage the opposite edge of the base engaged by the corresponding set of lugs and each removable lug alternating with the integral lugs in the corresponding set, bolts for removably securing the said removable lugs in position on the said body, the said bolts extending through the body of the cross-tie and said lugs having polygonal heads engaging correspondingly-shaped recesses in the bottom of the body of

the cross-tie, and nuts on the upper ends of
the bolts and engaging the upper faces of
said removable lugs, the said lugs resting on
the upper flat surface of the body of the tie
5 and mounted to turn on the bolts when the
nuts are loosened, so that the tie can be read-
ily slipped into position under the rails.

In testimony whereof I have signed my name

to this specification in the presence of two sub-
scribing witnesses.

SEMON ^{his} × HOAGLAND.
mark

Witnesses:

R. J. BISHOP,
S. W. BISHOP.