

(No Model.)

E. C. DAVIS.
METALLIC RAILROAD TIE.

No. 351,498.

Patented Oct. 26, 1886.

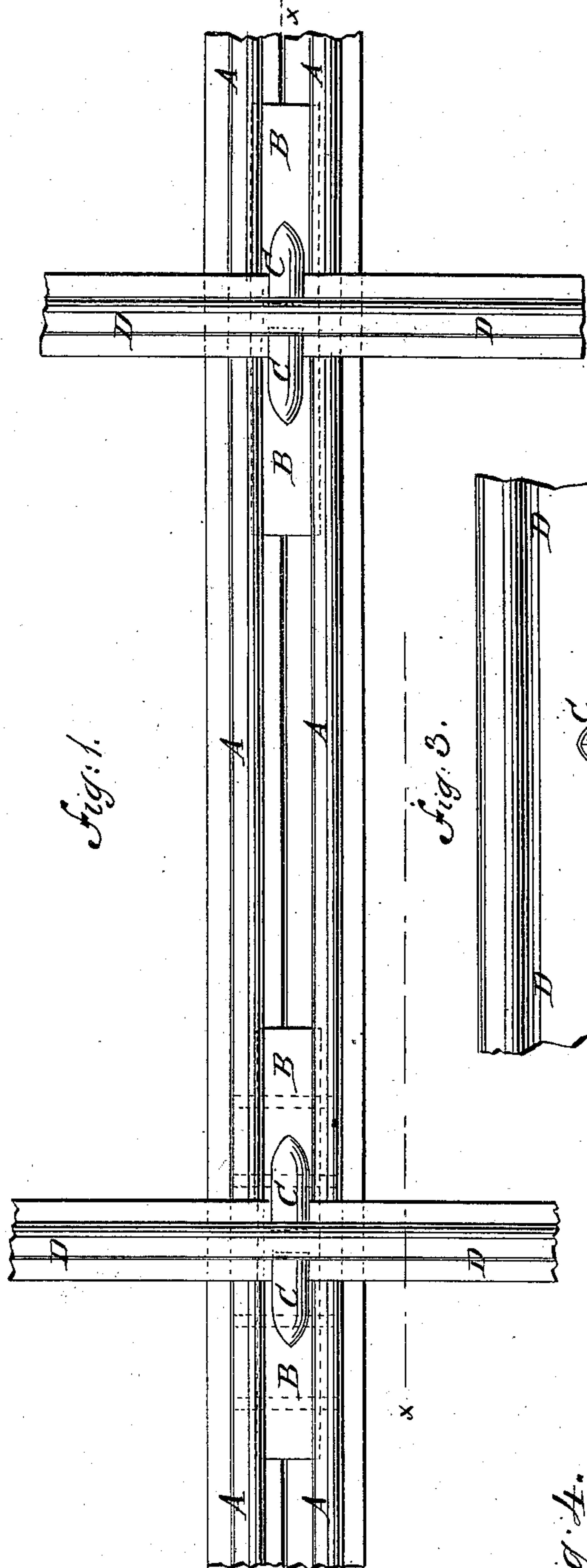


Fig. 1.

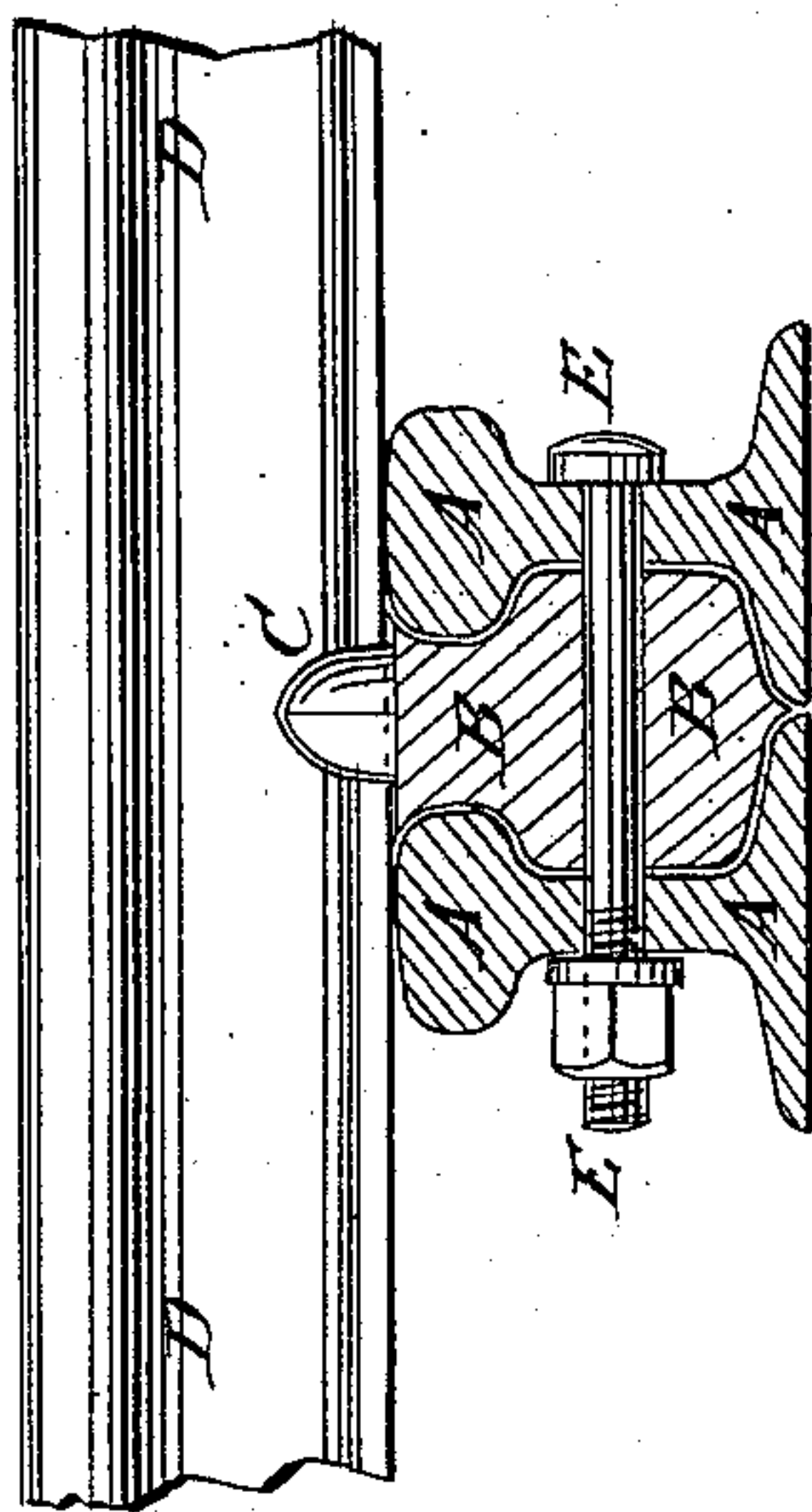


Fig. 3.

Fig. 4.

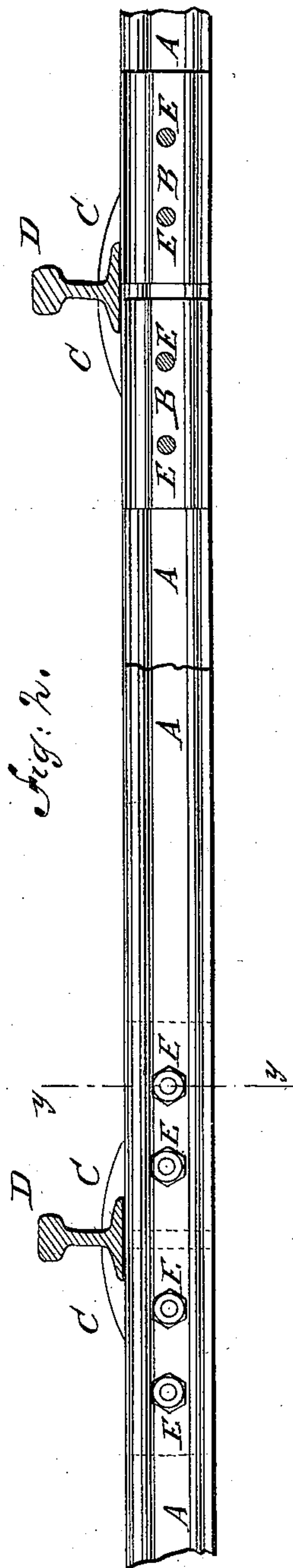
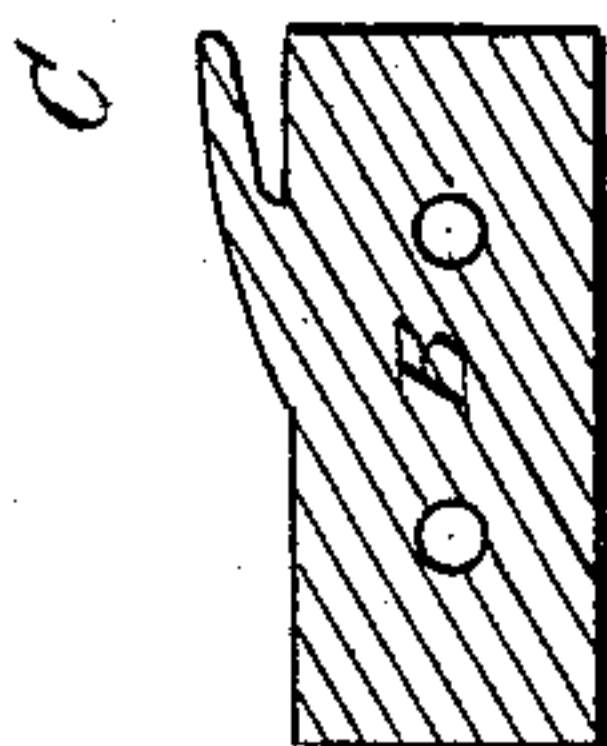


Fig. 2.

WITNESSES:

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ELLERY C. DAVIS, OF CROOKSTON, MINN., ASSIGNOR TO HIMSELF, GEORGE WATSON LEWIS, AND MILTON VAN DYKE, ALL OF SAME PLACE.

METALLIC RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 351,498, dated October 26, 1886.

Application filed April 13, 1886. Serial No. 198,709. (No model.)

To all whom it may concern:

Be it known that I, ELLERY C. DAVIS, of Crookston, in the county of Polk and State of Minnesota, have invented a new and useful Improvement in Metallic Railroad-Ties, of which the following is a full, clear, and exact description.

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

Figure 1 is a plan view of my improved tie, showing parts of two rails secured to it, the ends of the tie being broken away. Fig. 2 is a side elevation of a part of the same, and part being shown in section through the broken line *xx*, Fig. 1. Fig. 3 is a sectional end elevation of the same, taken through the line *yy*, Fig. 2, and showing a part of a rail in side elevation. Fig. 4 is a sectional side elevation of one of the rail-holding blocks.

The object of this invention is to provide metallic railroad-ties constructed in such a manner as to hold the rails securely from spreading, and which shall be simple in construction and strong and durable in use.

The invention consists in the construction and combination of the various parts of the tie, as will be hereinafter fully described.

A are two parallel bars, which may be pieces of old railroad-rails or bars rolled expressly for this use. In the latter case the adjacent sides of the heads of the bars A can be omitted, so as to form between the said bars a channel with vertical sides to receive the fastening-blocks B. The fastening-blocks B are made of such a length as will give them a stable bearing of such a size as to enter the channel between the bars A, and of such a shape at their sides and bottom as to fit snugly in the said channel.

Upon the upper side of each block B is

formed a hook projection, C, of such a shape as to overlap and fit snugly upon the base-flange of a railroad-rail, D, as shown in Fig. 2. Four of the blocks B are used on each tie, two for each rail, and which are so arranged that the projections of each pair of blocks will engage with the opposite flanges of a rail. The blocks B are secured in place in the ties by bolts E passing through them and through the bars A. Two of the blocks B—viz., the outer block at one end and the inner block at the other end—are secured in place in the bars B at the shop where the ties are made. The other blocks B are left loose. In setting the ties the said ties are placed upon the ground and the rails are arranged in place. The ties are then moved longitudinally to bring the hook projections of the permanent blocks into place upon the flanges of the rails. The other blocks are then moved into place, and are secured by the bolts E. With this construction the rails will be held securely in place, and the spreading of the rails will be prevented.

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

A metallic railroad-tie constructed substantially as herein shown and described, and consisting of two parallel bars, A, having a channel between them, the blocks B, fitted into the said channel and provided with hook projections C, to fit upon the base-flanges of the rails, and the bolts E, securing the said blocks to the said bars, whereby railroad-rails can be readily secured to the said ties and will be held securely in place, as set forth.

ELLERY C. DAVIS.

Witnesses:

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