(No Model.)

R. S. SEA.

METALLIC CROSS TIE FOR RAILROADS.

No. 354,250. Patented Dec. 14, 1886.

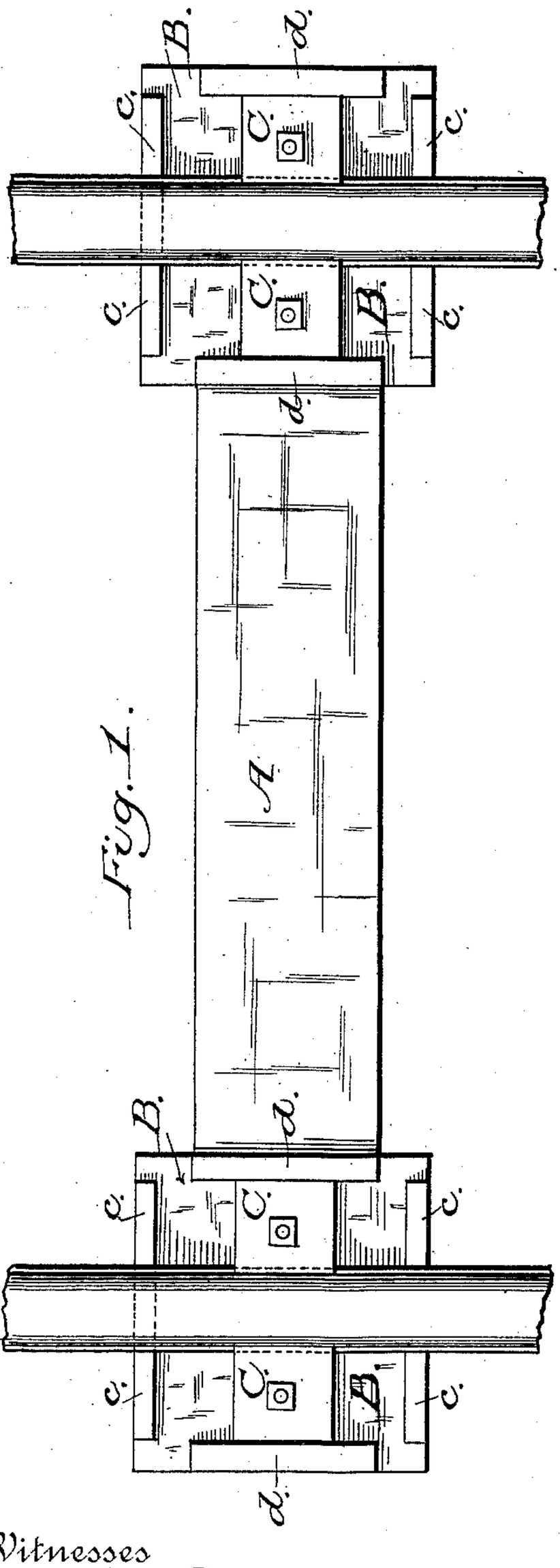

Fig. 1.

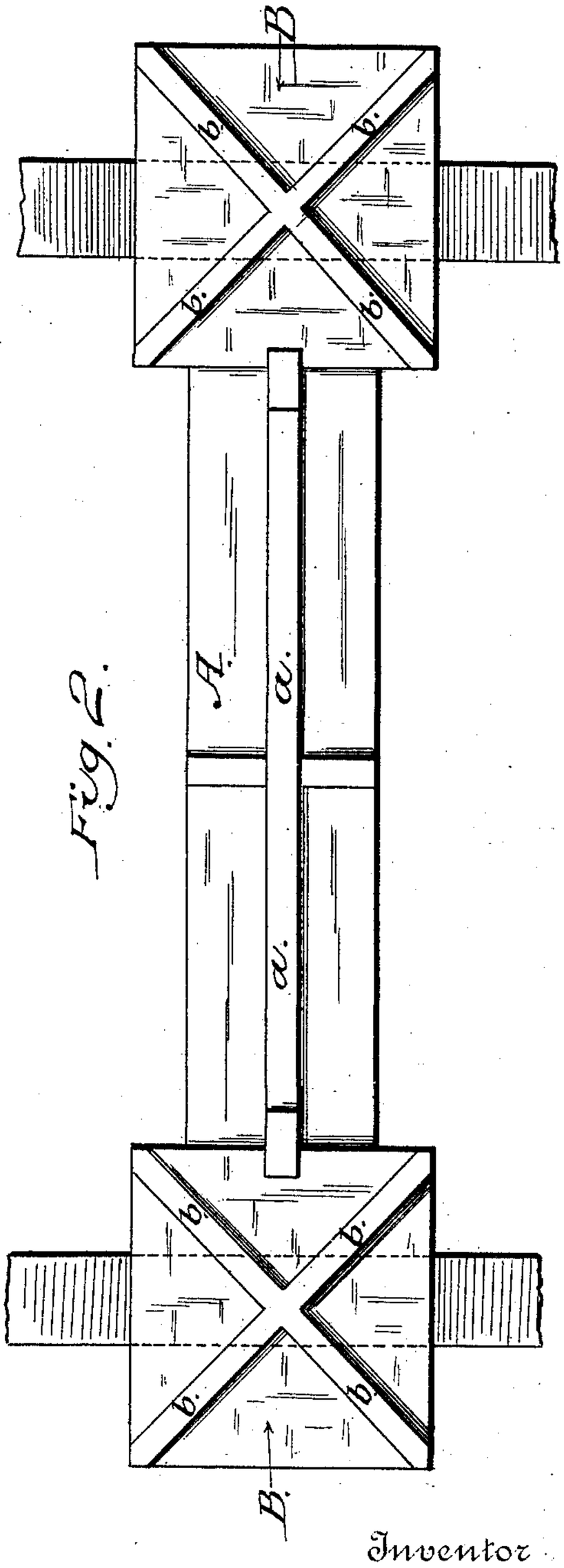

Fig. 2.

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METALLIC CROSS-TIE FOR RAILROADS.

SPECIFICATION forming part of Letters Patent No. 354,250, dated December 14, 1886.

Application filed April 29, 1886. Serial No. 200,596. (No model.)

To all whom it may concern:

Be it known that I, ROBERT S. SEA, a citizen of the United States, residing at Salvisa, in the county of Mercer and State of Kentucky, have invented a new and useful Improvement in Metallic Cross-Ties for Railroads, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of a metallic cross-tie with my improvement attached. Fig. 2 is a bottom view of the same.

My invention relates to metallic cross ties for securing the rails on railroads; and it consists in the combination of devices hereinafter explained and claimed.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A represents a metallic cross-tie of any well-known form or design, and provided on its under surface with the longitudinal flange or strengthening-rib *a*. Each end of the tie is provided with an enlarged head, B, which forms a chair or seat for the rails. The under surface of each head is provided with diagonally-arranged flanges *b b*, as shown in Fig. 2, for the purpose of strengthening the head and holding it steadily in position. On the upper surfaces of the heads are the flanges *c c*, provided with recesses near their centers, in which the flanges of the rails are seated; and in order that the rails may be securely held in position, and to prevent the possibility of the rails spreading, I secure to the heads B the plates C, the said plates being confined between the flanges of the rails and the flanges *d*, which rise upwardly from the head of the tie and at right angles to the flanges *c c*, as shown in Fig. 1. These plates are secured rigidly to the heads B by bolts and nuts or other suitable means.

From this explanation it will be evident to any one skilled in the art to which my invention appertains that I am enabled to construct a cheap and at the same time a substantial cross-tie, and one that will afford a firm and safe seat for the rails.

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

As an improvement in metallic cross-ties for railroads, the tie A, provided with a strengthening-rib, *a*, and the enlarged heads B, having on their under surfaces the diagonally-arranged flanges *b*, and on their upper surfaces with the flanges *c d*, in combination with the plates C, all constructed and arranged substantially as and for the purpose set forth.

ROBERT S. SEA.

Witnesses:
S. B. WILSON,
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