

(No Model.)

T. A. DAVIES.

RAILROAD TIE.

No. 344,168.

Patented June 22, 1886.

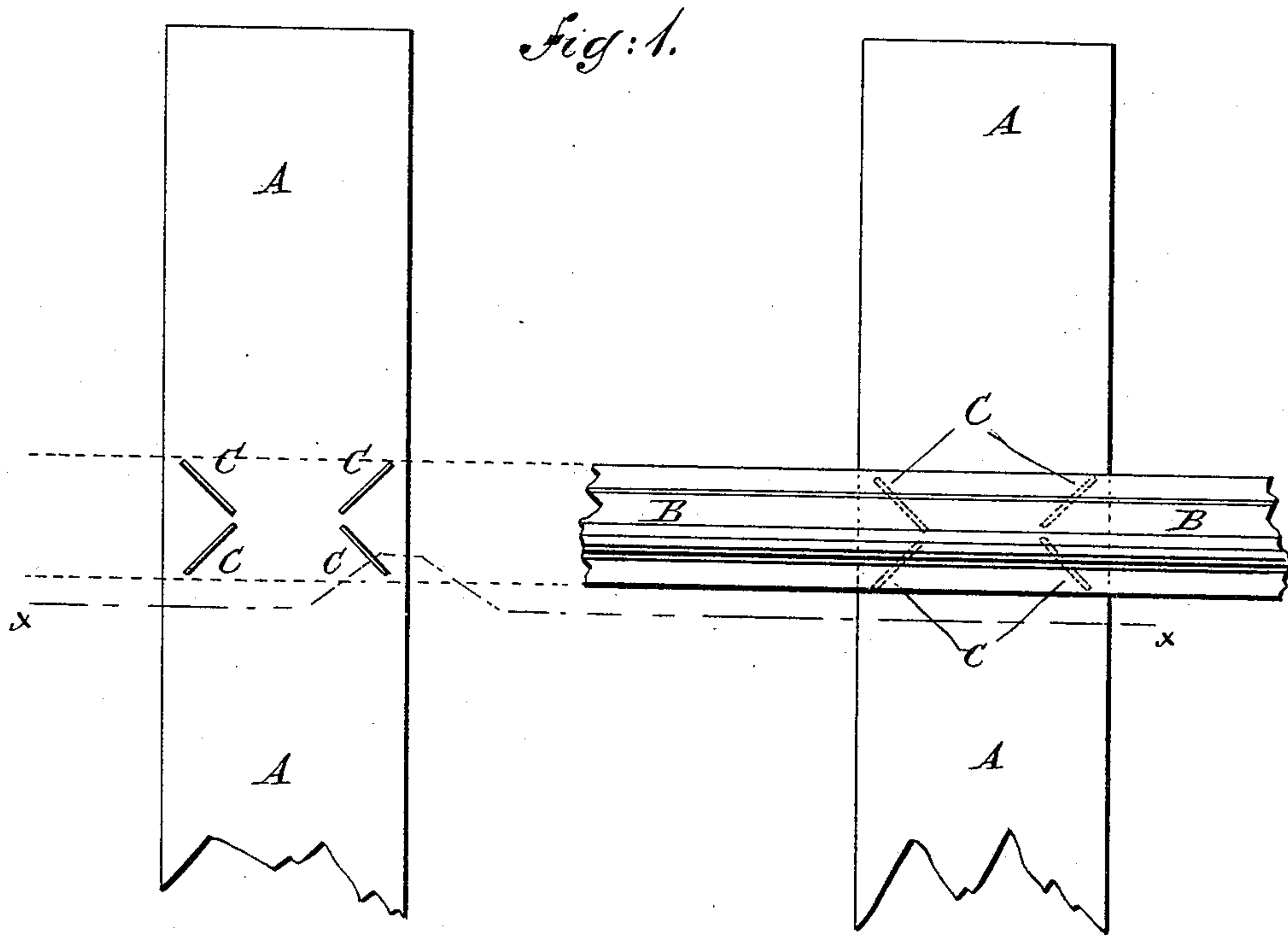


Fig: 2.

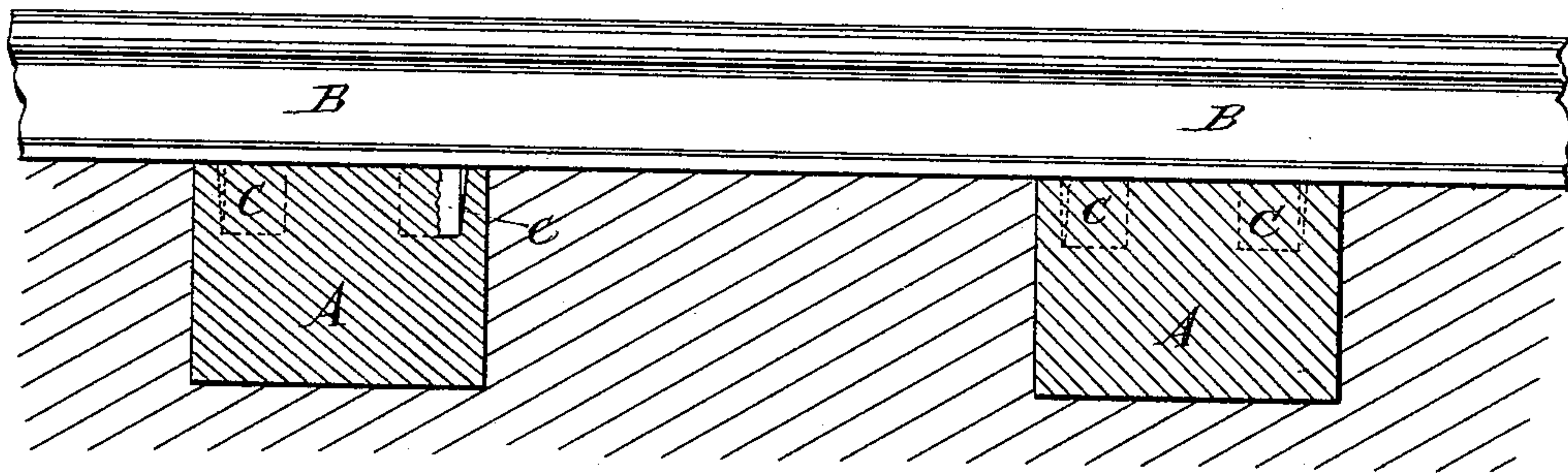
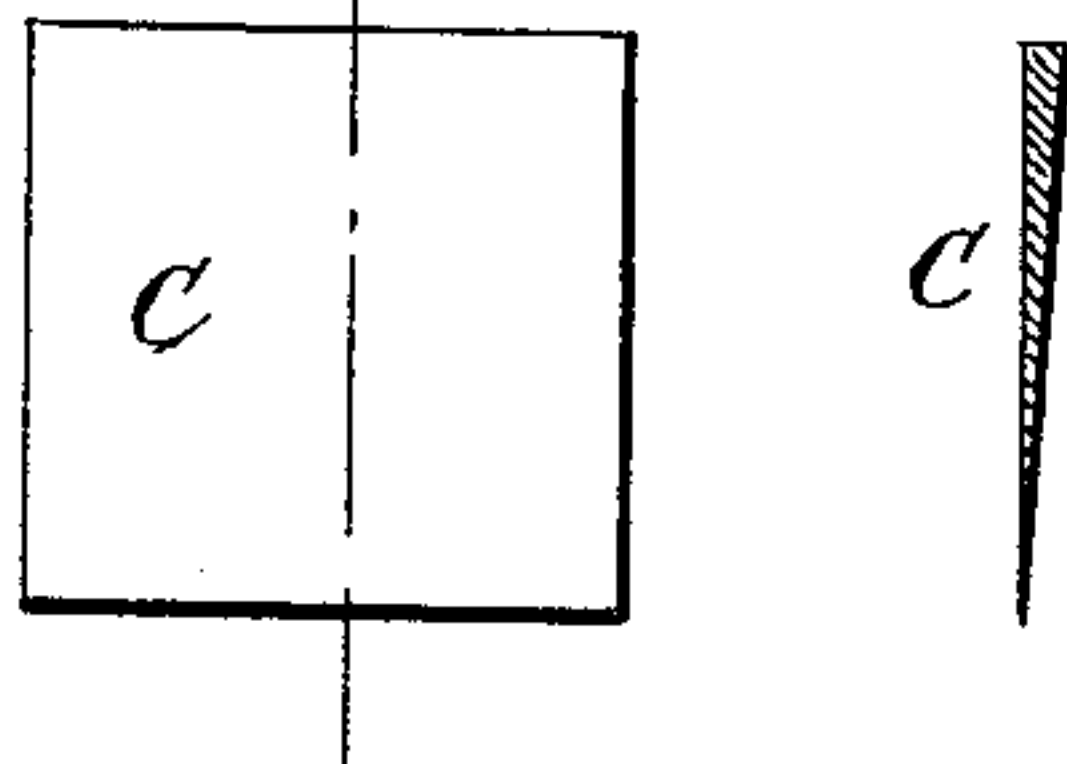


Fig: 3.

WITNESSES:
Chas. Niles
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UNITED STATES PATENT OFFICE.

THOMAS A. DAVIES, OF NEW YORK, N. Y.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 344,168, dated June 22, 1886.

Application filed December 10, 1885. Serial No. 185,312. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. DAVIES, of the city, county, and State of New York, have invented a new and useful Improvement in 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 parts of two ties and of a part of a rail attached thereto, part of the rail being broken away. Fig. 2 is a sectional elevation of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a side view and a sectional elevation of one of the friction-plates.

The object of this invention is to provide railroad-ties protected in such a manner that they will not be worn by the rails attached thereto.

The invention consists of the combination of parts, including the construction of the same, substantially as hereinafter described, and pointed out in the claim.

A represents the ties, and B the rails, of a railroad-track. C are plates of steel or iron about two inches square, and which are tapered or made wedge-shaped. The plates C are driven into the ties A beneath the base of the rails B, and to such a depth that the outer edges of the said plates will be flush with the surface of the said ties. The plates C are preferably arranged with their planes at an inclination with the grain of the wood and one or more beneath the base of each rail.

In the illustration given in the drawings, four of the friction-plates, C, are driven into each tie A beneath the base of each rail B, and the said plates are arranged two near each side of the tie, and inclined to the grain of the wood and to each other; but the said plates can be differently arranged without departing from my invention, the essential feature of which is the embedding of one or more iron or steel plates in the bodies of the ties beneath the bases of the rails. With this construction the plates C will take the wear and will prevent the ties A from being worn by the movement of the rails B upon the ties and the grinding of sand which may work in between the said ties and rails, so that the ties will last much longer than is possible with the arrangement now in use, and the rails will still have the advantage of resting upon a wooden cushion.

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

The combination, with a railroad tie, A, of friction-plates C, driven into the said tie beneath the bases of the rails, substantially as herein shown and described, whereby the tie is guarded against wear by the rails, as set forth.

THOMAS A. DAVIES.

Witnesses:

JAMES T. GRAHAM,
C. SEDGWICK.