

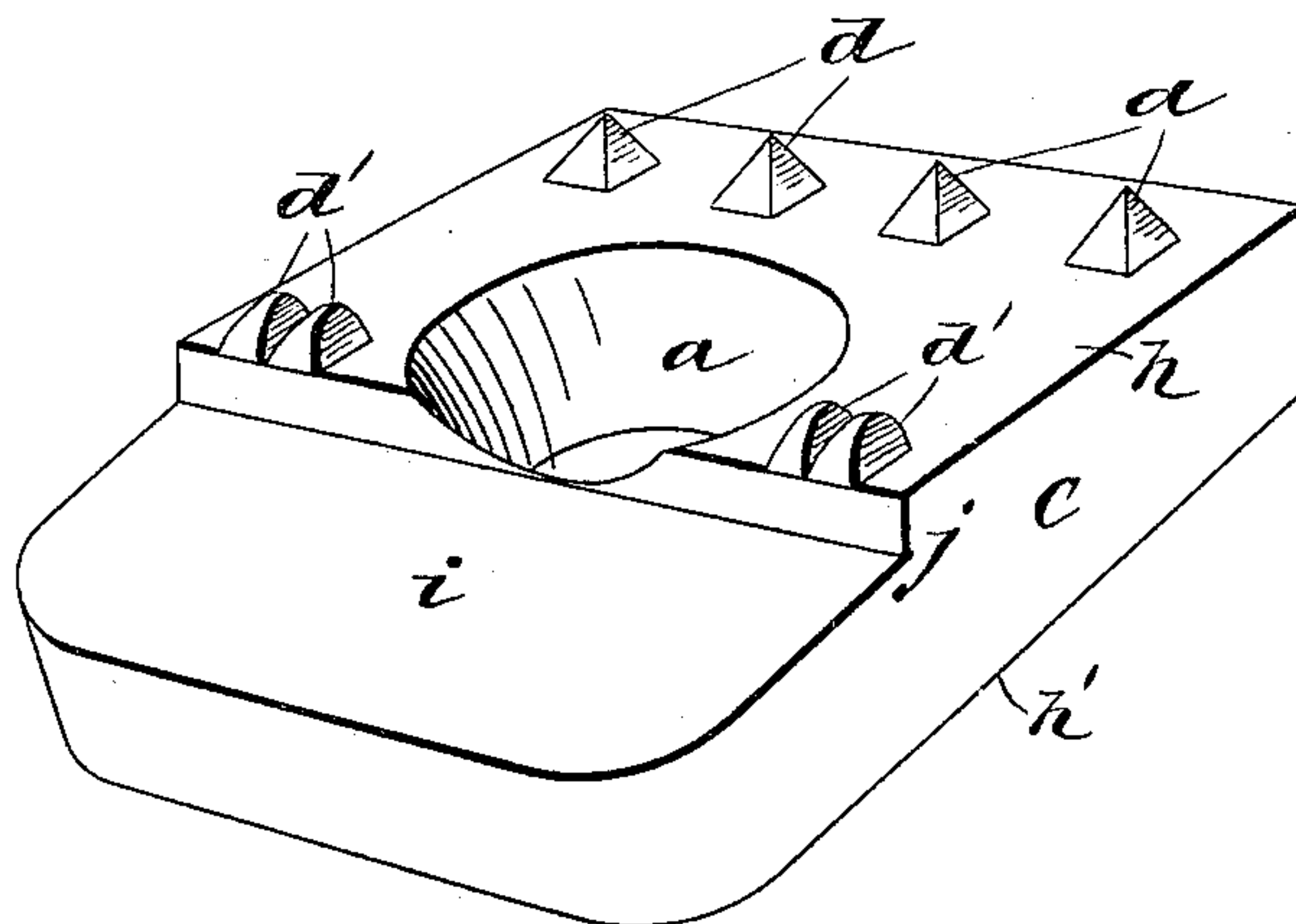
(No Model.)

T. J. BUSH.  
RAILWAY CLAMP PLATE.

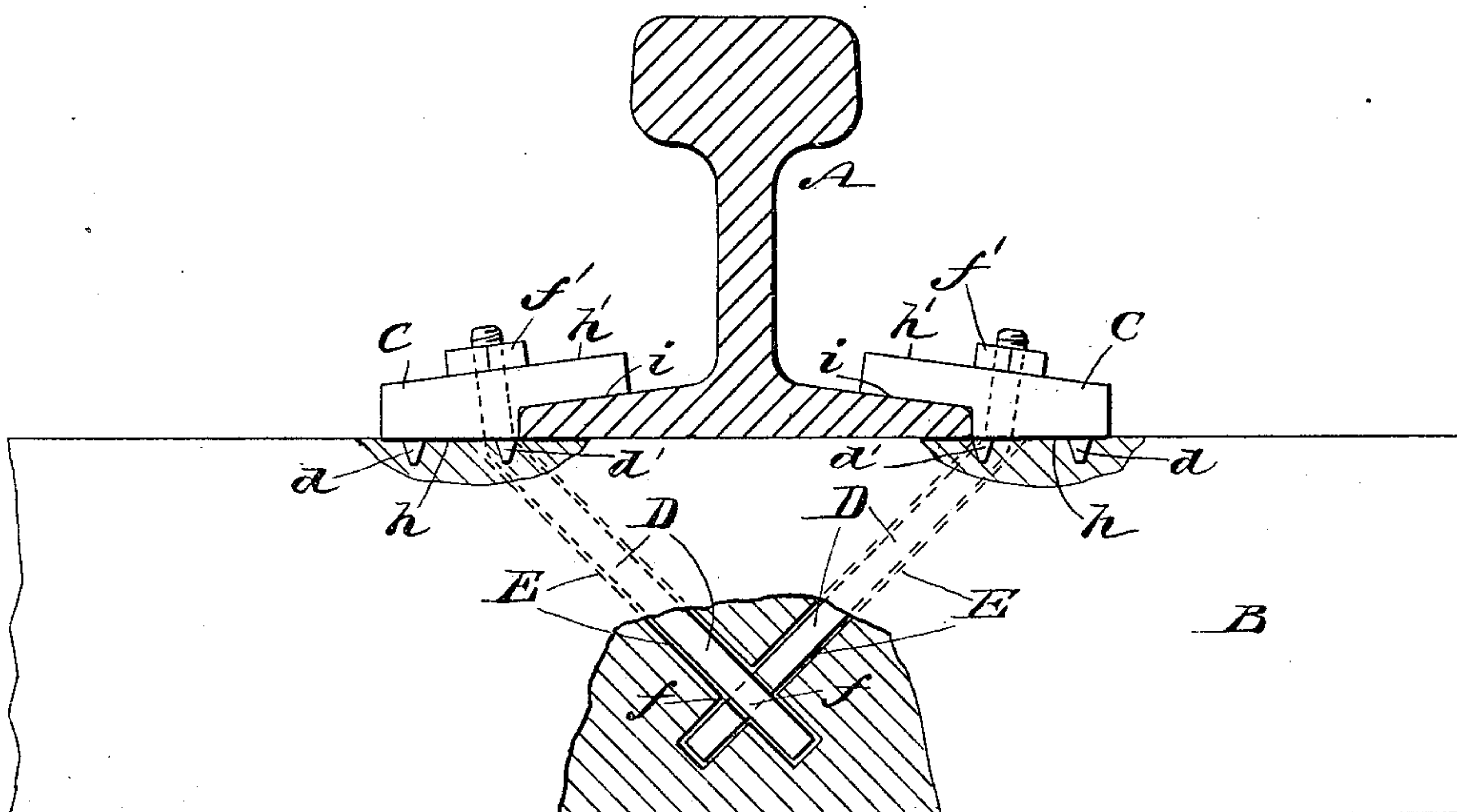
No. 373,641.

Patented Nov. 22, 1887.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

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John H. Deemer

C. Sedgwick

INVENTOR:

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BY

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# UNITED STATES PATENT OFFICE.

THOMAS J. BUSH, OF LEXINGTON, KENTUCKY.

## RAILWAY CLAMP-PLATE.

SPECIFICATION forming part of Letters Patent No. 373,641, dated November 22, 1887.

Application filed February 8, 1887. Serial No. 236,947. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS J. BUSH, of Lexington, in the county of Fayette and State of Kentucky, have invented a new and Improved Railway Clamp-Plate, of which the following is a full, clear, and exact description.

The invention consists of the special construction of the plate and of the combination therewith of interlocking bolts inserted into diagonal intersecting holes made in the cross-tie, as disclosed in my Patent No. 257,287, dated May 2, 1882.

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 both the figures.

Figure 1 is a perspective view of my new and improved railway clamp-plate; and Fig. 2 shows a pair of plates applied to a railway-rail and cross-tie in accordance with my invention, the tie being broken away.

A represents the rail held to the cross tie B by the clamp-plates C and bent bolts D, passed through the openings *a* in the plates and inserted into diagonal intersecting holes E, made in the cross-tie. The lower ends of the bolts are notched at *f f* and interlock with each other within the tie, and are provided at their outer ends with the nuts *f' f'*, the same as in my above-mentioned patent.

The clamp-plates C are duplicates of each other, each being formed upon its under surface with one or more studs or penetrating-

points, *d*, to embed in the tie, and thus prevent the plate from moving upon the tie. I prefer to form a row of points or studs, *d*, at or near the outer edge of the plate, and also to form a pair of studs, *d'*, each side of the opening *a* near the flange of the rail. The opening *a* through the plate is by preference countersunk from the under surface of the plate, to permit the free insertion of the bent bolt D, and the lower surface, *h*, on which the penetrating points or studs are formed, is flat, to set squarely upon the tie. The upper surface, *h'*, of the plate is slightly inclined, as shown in Fig. 2, so that when the nuts *f'* are turned home upon the bolts they will exert a drawing action upon the plates toward the rail. Near the center of the plate is formed an offset, *j*, to form a clearance for the flange of the rail, and from this offset the plate is slightly inclined at the under surface, as shown at *i*, to fit the pitch of the upper surface of the flange of the rail, as shown clearly in Fig. 2.

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

The plate C, formed with the opening *a*, countersunk from the under surface of the plate to permit the passage through the plate of the bent bolt D, substantially as described.

THOMAS J. BUSH.

Witnesses:

H. A. WEST,  
C. SEDGWICK.