

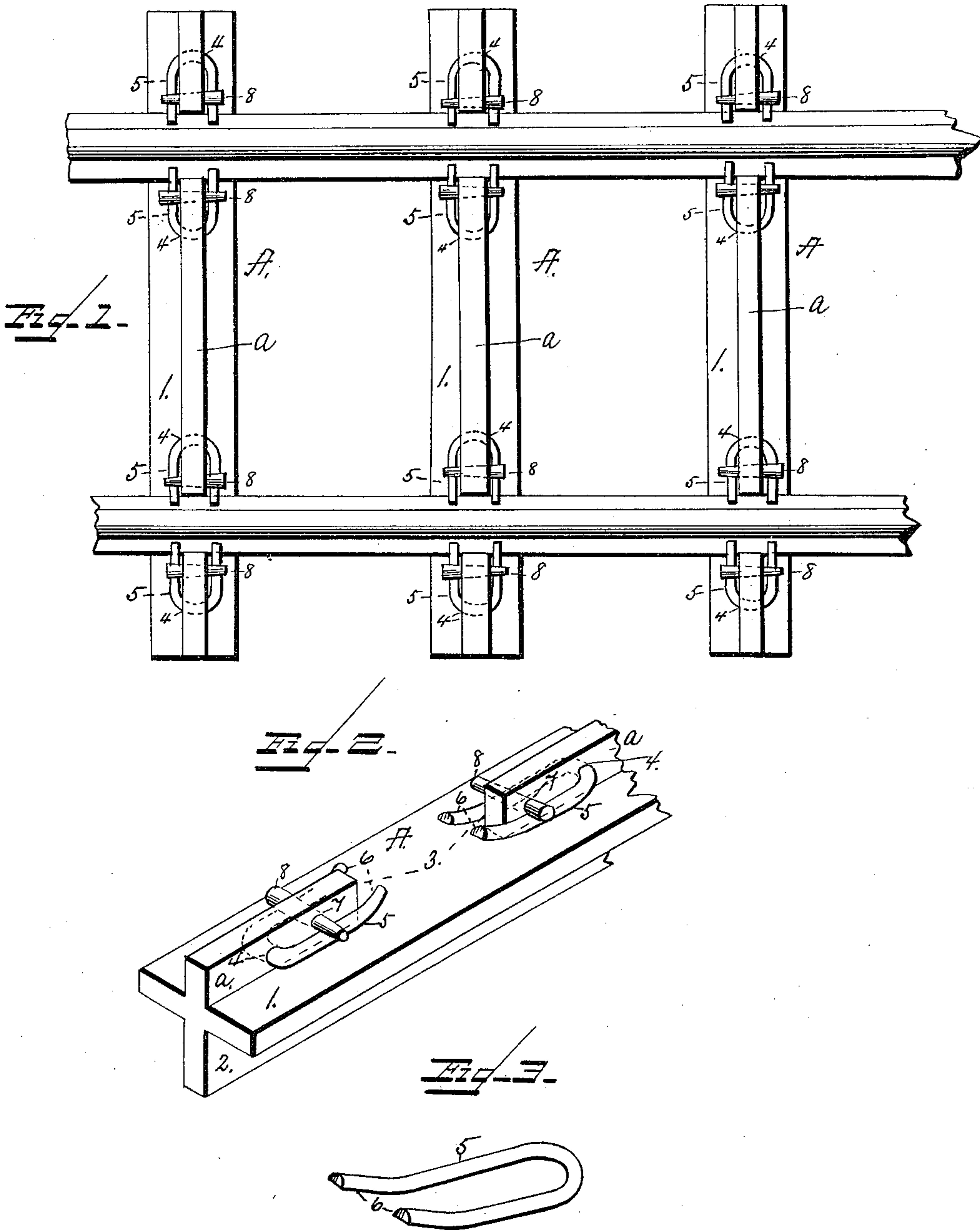
(No Model.)

C. G. SINGER.

METALLIC RAILROAD TIE AND CHAIR.

No. 379,612.

Patented Mar. 20, 1888.



WITNESSES.

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CHRISTIAN G. SINGER, OF LEBANON, PENNSYLVANIA, ASSIGNOR TO HIMSELF,
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METALLIC RAILROAD TIE AND CHAIR.

SPECIFICATION forming part of Letters Patent No. 379,612, dated March 20, 1888.

Application filed August 20, 1887. Serial No. 247,451. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN G. SINGER, a citizen of the United States of America, residing at Lebanon, in the county of Lebanon, State of Pennsylvania, have invented a new and useful Improvement in Metallic Railroad Ties and Chairs or Rail-Locks, of which the following is a specification.

My invention has relation to means for sustaining and holding in position the rails of a railway; and the object is to improve and simplify the existing devices used for these purposes.

I have fully illustrated my improvements in the accompanying drawings, wherein—

Figure 1 is a view of a track having my improvements applied. Fig. 2 is a perspective of the tie and rail-locking means; and Fig. 3 is a perspective of one of the rail-locks detached.

Reference being had to the drawings, which are to be taken as a part hereof, and wherein the same parts appearing in the different figures are designated by similar notations, A designates the cross-tie, which consists of a substantial metal body, 1, made of such width as to well serve the purposes intended, and having depending from the under face, at about the middle line, a flange, 2. This flange serves to keep the tie in its seat and to permit the tamping to be made firm and solid by affording a backing to the tamp from both directions. On the upper face of the tie is formed a vertical flange, *a*, in which are formed rail-seats 3, which consist of ways having vertical sides.

The construction of my rail-lock is such that the usual flanges and ears of a made chair can be dispensed with and the rails laid in simple ways through the flange to keep them from lateral displacement. In the flange *a*, on each side of the rail-seats, are holes 4, in which are pivotally arranged the rail-locks 5. These rail-locks consist of substantial metal bars bent into a staple or long U shape, substantially as shown, and having the under face of the lugs slightly inclined or struck up, as at 6, to set snugly above and over the flanges of the rails. Between the holes 4 and the wall of the

rail-seats are holes 7, somewhat elongated vertically to give room for ready insertion of a locking-pin, 8. The ends of these locking-pins reach over and bear upon the arms of the rail-locks, and thus keep them down on the flanges of the rails. The locking pins 8 may be a split-key bolt, and after insertion the ends may be turned, and thus withdrawal by jars or other accidents guarded against.

It will be perceived that the rails may be laid in the ways designed for them with great convenience, and then the rail-locks simply turned down, with their ends resting on the flanges of the rail, and the locking-pins inserted and driven home, when the rails have a solid foundation and are held firm in their seat by a very simple means.

The device is easily and readily detached by drawing out the locking-pin, when the rail is free.

What I claim is—

1. The railway tie and rail-lock herein described, consisting of a metallic plate, A, formed with a vertical projecting flange, *a*, having rail-seats 3 formed therein, U-shaped rail-locks 5, pivotally seated in the flange *a*, with their free ends to project over and rest upon the rail-flanges, and locking-pins 8, passed through the vertical flange over the rail-locks to hold them on the rail-flange, substantially as described.

2. The rail-tie and rail-lock herein described, consisting of a metallic plate, A, formed with a vertical depending flange, 2, and a vertical projecting flange, *a*, the flange *a* having rail-seats formed therein, U-shaped rail-locks 5, pivotally seated in the flange *a*, with their free ends to project over and rest upon the rail-flanges, and locking-pins 8, passed through the flanges *a* over the rail-locks to hold them on the rail-flange, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two attesting witnesses.

CHRISTIAN G. SINGER.

Attest:

LEWIS REHR,
ADAM ALLWEIN.