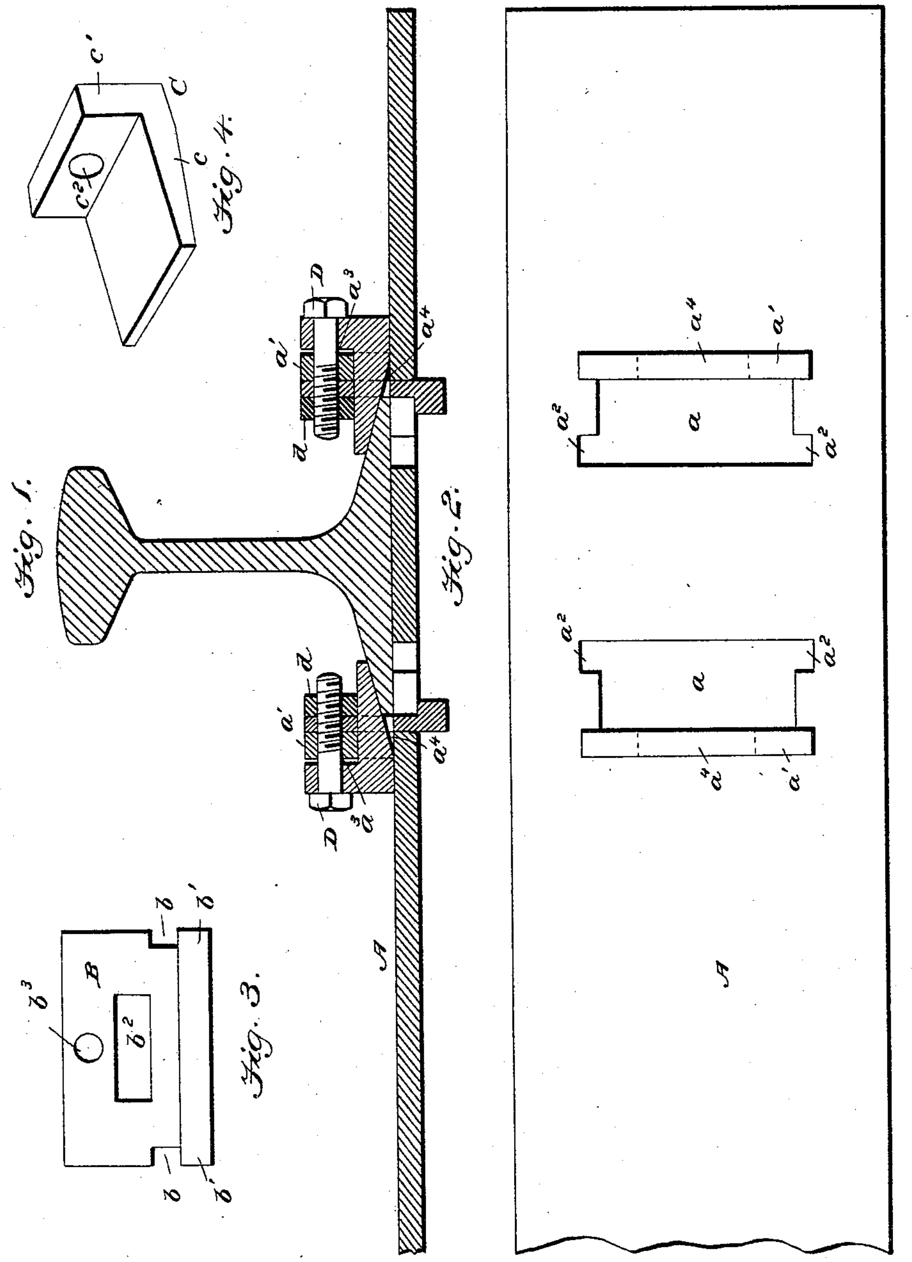
(No Model.)

F. S. KETCHUM.

TRACK FASTENER.

No. 453,886. Patented June 9, 1891.



WITNESSES:

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TRACK-FASTENER.

SPECIFICATION forming part of Letters Patent No. 453,886, dated June 9, 1891.

Application filed January 22, 1891. Serial No. 378,663. (No model.)

To all whom it may concern:

Be it known that I, FRANK S. KETCHUM, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Track-Fasteners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has relation to track-fasteners for railroad-rails, and the object is to provide a device of this kind for simply, effectually, and rigidly securing the rail to a metallic cross-tie; and to these ends the novelty consists in the construction, combination, and arrangement of parts of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same letters of reference refer to like parts of the invention.

Figure 1 is a transverse sectional elevation of a rail secured to the tie. Fig. 2 is a top plan view of the tie. Fig. 3 is a side view of the slotted gib, and Fig. 4 a perspective view of the locking-wedge.

A is a metallic cross-tie, preferably of wrought-iron or steel and having the recesses $a\,a$ formed therein, the metal struck from said recesses being bent upwardly at right angles to form the standards $a'\,a'$. These recesses $a\,a$ have extensions $a^2\,a^2$, which make the recesses wider at this point, while for the balance of its width back to the integral standard a' it is narrower.

B is the gib, and it is provided with recesses $b\,b$, which form heads $b'\,b'$, so that when said standard is inserted in the extensions $a^2\,a^2$ of the recess a and then pushed back against the standard it is firmly secured against displacement. This gib is further provided with a rectangular slot $b^2\,b^2$ and a bolt-hole b^3.

C is the locking wedge or key, its lower side having a beveled face c, its base projecting upwardly, terminating in an arm c', having a bolt-hole c^2.

D is an ordinary bolt passing through the hole c^2 in the wedge, the hole a^3 in the standard a', and the hole b^3 in the gib B, the end of said bolt D being fitted with an ordinary square nut d, one of the sides of which is parallel and in contact with the top surface of the wedge, which effectually prevents said nut turning.

In operation the gib is first inserted in the recesses in the tie and then pushed against the standards. The rail is then laid in place, and the wedge inserted through the slot a^4 in the standard and the slot b^2 in the gib. This causes the forward end of the beveled face of the wedge to project over and onto the flange of the rail, and by inserting the bolt and screwing it home into its nut the wedge is forced inwardly, so as to clamp the rail rigidly to the tie.

Having thus fully described my invention, what I claim is—

1. The combination, with the rail, the cross-tie provided with a recess, and an integral standard having a slot and a bolt-hole, of the gib having a slot and bolt-hole, the wedge provided with a beveled face and a bolt-hole, and the bolt provided with a nut so located that one side thereof will be engaged by the upper surface of the wedge, as and for the purpose set forth.

2. The combination, with the rail, the cross-tie provided with a recess, and an integral standard having a slot and a bolt-hole, of the gib provided with a slot and a bolt-hole, the wedge provided with a beveled face and a bolt-hole, and a bolt and nut adapted to secure the parts together, as set forth.

3. The combination, with the rail and cross-tie provided with the integral standard having a slot and a bolt-hole, of the wedge provided with a beveled face and adapted to be secured to said standard by a bolt and nut, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK S. KETCHUM.

Witnesses:
HENRY J. ENNIS,
C. W. DASHIELL.