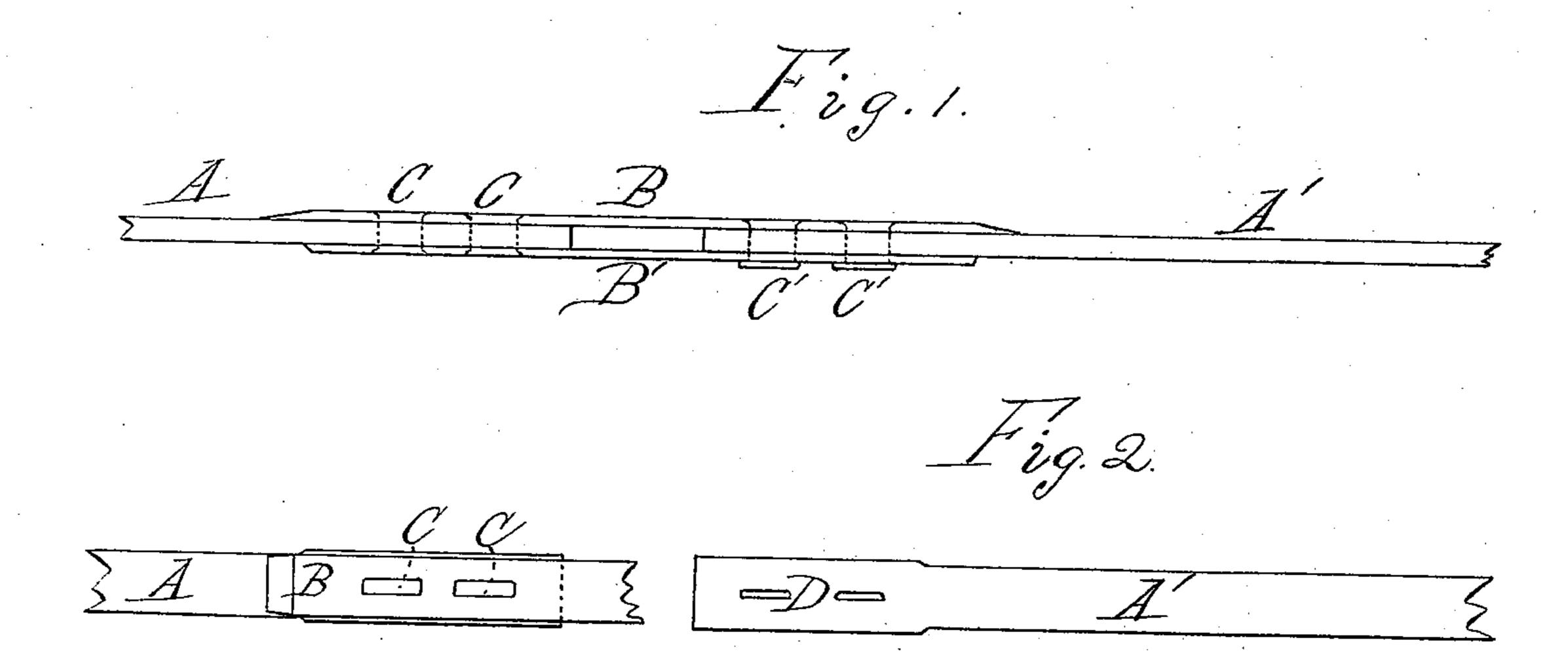
(No Model.)

A. H. DE CAMP.
TRAMWAY RAIL JOINT.

No. 450,614.

Patented Apr. 21, 1891.



WITNESSES:

M. a. Palante. H. b. Millis INVENTOR Ofher H. Dame

United States Patent Office.

ALFRED H. DE CAMP, OF BOONTON, NEW JERSEY.

TRAMWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 450,614, dated April 21, 1891.

Application filed October 15, 1890. Serial No. 368,248. (No model.)

To all whom it may concern:

Be it known that I, ALFRED H. DE CAMP, a citizen of the United States, and a resident of Boonton, county of Morris, and State of 5 New Jersey, have invented certain new and useful Improvements in Tramway - Rail Joints, of which the following is a specification.

The object of my invention is to provide a so simple and economical method of joining the sections forming the rails of aerial tramways.

Reference is to be had to the accompanying drawings, in which like letters indicate similar parts in each.

Figure 1 is a side or edge view of two contiguous rails joined by my method. Fig. 2 is a plan of the same with a part cut away.

The rail to which this joint is preferably to be applied and the way in which said rail may 20 be used is set forth in United States Letters Patent No. 411,584, issued to me September 24, 1889.

The ends of the rails to be joined are preferably, though not necessarily, indented a lit-25 tle, A', Fig. 2, and provided with longitudinal slot or slots D, Fig. 2. A pair of straps BB', Fig. 1, have equally spaced and similar slots toward their respective ends. The strap B, having tapered ends and countersunk slots, Fig. 1, 30 is placed above the strap B', which may also have countersunk slots, if preferred, is placed below the rails, and all are firmly joined by the rivets C C'. The ends of strap B being tapered, the wheels of carriages pass easily 35 from rail to strap, and vice versa. The heads of the rivets, being formed in the countersinks of strap B, also present smooth surfaces for the wheels of the carriages. As evenness on the under side of the rail may 40 not be essential, where not, headed rivets may

be used, as C' C', Fig. 1. The straps B B' may be of any desired length and the rivets C of any desired number.

While it is obvious that any sort of rivet 45 may be used to unite the straps and rails, the form of rivet shown provides metal to re-

to be removed transversely from the rails and straps to accommodate it.

Upsetting the ends of rails, making them either broader or thicker, compensates for the metal removed in the slots.

Having described my invention, I claim as new and desire to secure by Letters Patent 55 the following:

1. In a suspended tramway-rail, the several lengths forming the rail united by top and bottom straps and rivets, substantially as set forth.

2. A joint for uniting the several lengths of a tramway-rail, formed by longitudinally slotting the ends of contiguous sections and combining therewith top and bottom straps which embrace the said ends and which are 65 slotted to conform to the rail length and to each other, and rivets conforming to the shape of the slots, firmly securing the straps to the rails, substantially as shown and described.

3. The ends of two contiguous rail lengths of a tramway-rail slotted longitudinally, as shown, in combination with top and bottom straps slotted to match each other and to match the slots in the ends of the rail lengths, 75 the said top strap having tapered ends and countersunk slots, as described, and rivets shaped to conform to the slots in the rail lengths and straps, substantially as set forth.

4. Two contiguous rail lengths of a tram-80 way-rail, which is less in vertical section than. in its other dimensions, in combination with top and bottom straps and rivets thoroughly uniting the same, substantially as shown and described.

5. Two contiguous rail lengths of a tramway-rail, which is less in vertical section than in its other dimensions, the ends of said rails being upset, as described, in combination with top and bottom straps and rivets thor- 90 oughly uniting the same, substantially as shown and described.

6. Two contiguous rail lengths of a tramway-rail, which is less in vertical section than in its other dimensions, slotted longitudinally 95 sist shearing without requiring much metal I in their ends, as shown, in combination with

top and bottom straps slotted to match each other and to match the slots in the ends of the rail lengths, and rivets shaped to conform to the said slots, securing the said straps and rail lengths together, substantially as shown and described.

In testimony that I claim the foregoing as

my invention I have signed my name, in presence of two witnesses, this 7th day of October, 1890.

ALFRED H. DE CAMP.

Witnesses:

CLARENCE A. DE CAMP, SUSAN M. DE CAMP.