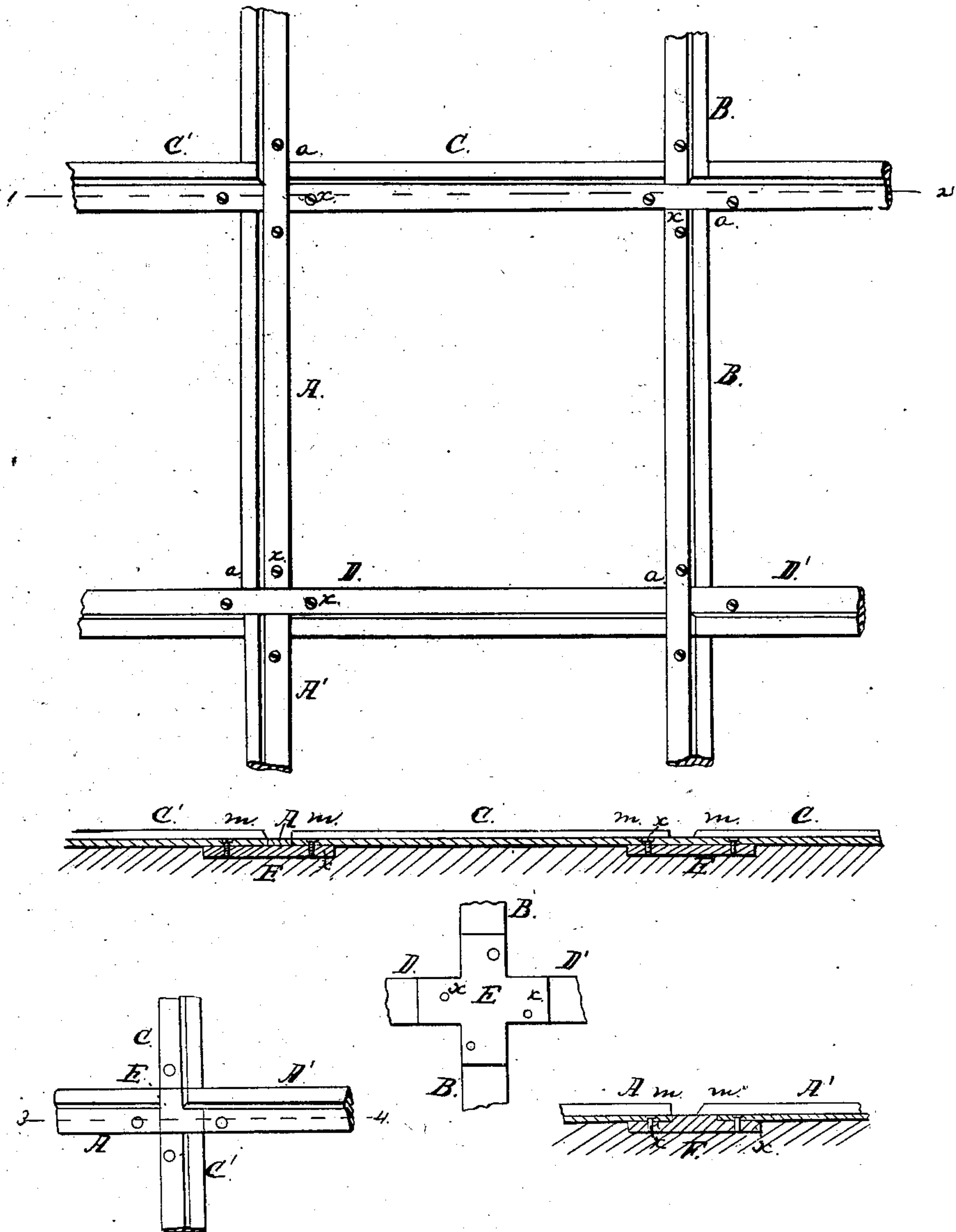


C. W. Jones,
Railroad Frog,
No 69,814, *Patented Oct. 15, 1867.*



Witnesses:

John Parker
J. B. Jordan

Inventor:

C. W. Jones
By his Atty
H. Horner

United States Patent Office.

CHARLES W. JONES, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
HIMSELF AND HIRAM W. STOUT, OF SAME PLACE.

Letters Patent No. 69,814, dated October 15, 1867.

IMPROVED CROSSINGS FOR STREET RAILWAYS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES W. JONES, of Philadelphia, Pennsylvania, have invented an Improvement in Railway-Crossings; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of certain plates secured to the rails of a street railway, at the intersection of the same, so as to firmly bind the whole together; and my invention further consists in so bevelling the treads adjacent to the points where the rails are connected as to prevent the shocks which are imparted to cars when moving over crossings constructed in the usual manner.

In order to enable others skilled in the art to make and apply my invention I will now proceed to describe the construction of the same, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a plan view of my improved railway-crossing.

Figure 2 is a section, on the line 1-2, fig. 1.

Figure 3, an inverted plan view, showing parts of the rails.

Figure 4, a plan view, illustrating a modification of my invention; and

Figure 5, a section on the line 3-4, fig. 4.

A A' and B B' are rails of one track, and C C' and D D' are rails of another track which crosses the first at right angles in the present instance. The end *a* of each rail, A B C D, bears against the inner edge of the rail, at right angles to it, at a point directly opposite a recess in the outer edge of the cross-rail, and into this recess fits one end of a second rail which is in a line with that bearing against the opposite edge of the cross-rail, as shown in the drawing. Beneath the rails, at each point where they meet or cross each other, is a cruciform metal plate, E, each arm of which extends beneath the end of one of the rails, the latter being secured to the plate by bolts or screws *x*. The treads of the rails are bevelled at their terminations, *m*, as shown in figs. 2 and 5, for a purpose described hereafter. By introducing the ends of some of the rails into recesses in the edges of others, any lateral movement of the former rails is prevented, while by bolting the rails to the plates E they are so firmly and steadily connected together that they serve to brace each other, and it will be impossible for one to become detached or loosened from the others, while one rail may be readily disconnected from the others, if necessary, by merely removing the bolts, and without the necessity of taking up any other portion of the track. Inasmuch as the treads of the rails are bevelled at their ends, *m*, the flanges of the wheels in traversing the rails at these points will rest upon the flanges or flat portion of the rails, and the usual jolting, which results from the wheels striking the ends of the treads in passing over the recesses between the ends of the rails, is prevented. In some instances, instead of recessing the rails, the ends of the latter may all bear against a projection, *e*, in the centre of the plate E, the arms of the plate projecting beneath, and being bolted to the ends of the rails, as shown in figs. 4 and 5.

I claim as my invention, and desire to secure by Letters Patent—

1. A cruciform plate, E, combined with the rails of a street railway, at the intersection of the same, substantially as described.

2. The bevelled ends *m m* of the treads, for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. W. JONES.

Witnesses:

CHARLES E. FOSTER,
W. J. R. DELANY.