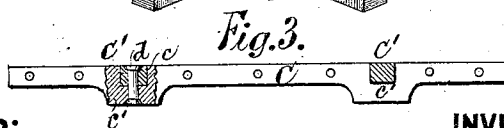
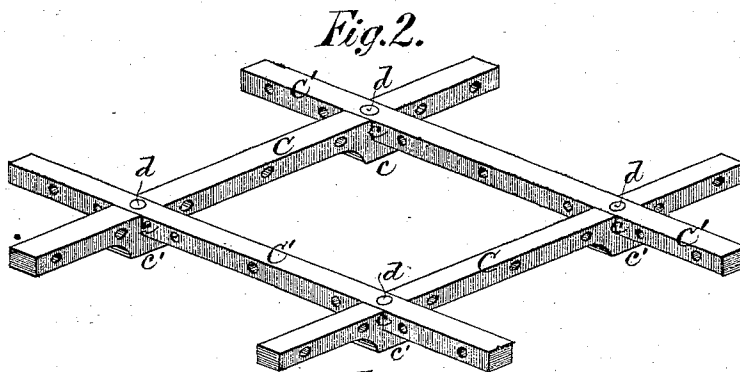
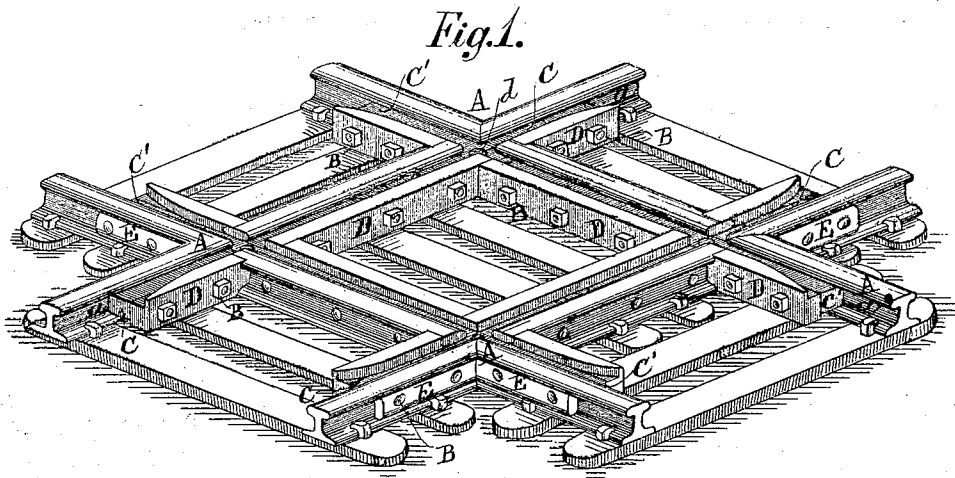


G. ELLIOT.

Railroad Crossings.

No. 136,227.

Patented Feb. 25, 1873.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE ELLIOT, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN RAILROAD CROSSINGS.

Specification forming part of Letters Patent No. 136,227, dated February 25, 1873.

To all whom it may concern:

Be it known that I, GEORGE ELLIOT, of the city and county of St. Louis and State of Missouri, have invented a certain Improvement in Railway Crossings, of which the following is a specification:

My invention consists in forming the crossing with an open wrought-iron or steel frame, to which the rail sections are attached, as hereinafter described.

Figure 1 is a perspective view of my crossing. Fig. 2 is a perspective view of the frame. Fig. 3 is a side view of one of the bars of the frame, showing the preferred manner of forming the same and of jointing the bars at the intersections, (one joint being shown in section.)

A are sections of common railway rail, (steel being preferred.) These sections are attached, by horizontal bolts or rivets B, to the frame C C'. The frame consists of bars C and cross-bars C'. The bars C have upon the upper side notches, c, of suitable size and form to receive the cross-bars C'. These notches may be made transverse to the bars C or inclined at any angle, according as the crossing may be of rectangular or lozenge form, as when the intersecting tracks do not cross at right angles. At the points of intersection the bars C are re-enforced by blocks c' welded to the bottom side, so that the notch c may be made the full size of the cross-bars C' without rendering the rails C weaker at the point of intersection than at any other part. The bars C C' at the point of intersection may be secured together by

vertical rivets, d, or by welding. The sides of the frame enter the side recesses a in the rail sections and fit tightly against the web or upright portion of the rail. D are guard-rails, which are made either of wood or metal, and which may be secured to the frame by the same bolts B that are used to attach the rails A to the frame. E are angle fish-plates that are bolted in the corners shown to give additional strength to the structure. The upper surface of the frame C C' is, of course, so far beneath the top of the rails A that it will be clear of the rim-flanges of the car-wheels.

In railroad crossings certain of the corners are subject to become mashed down by the frequent blows of passing wheels; and my frame has special value in this connection, as it gives support to the rail-head on the inside. In this crossing any of the rail sections A may be very readily removed (when worn) and a new one substituted, and this without disturbance of any of the other sections.

I claim as my invention—

1. The frame C C', constructed to enter the recesses a, between the base and cap of the rails A, so as to enable the attachment thereto of the rails by means of bolts or rivets B passing through the web of the rails.

2. The combination of the rail-sections A, bolts or rivets B, frame C C', and angle fish-plates, substantially as set forth.

GEORGE ELLIOT.

Witnesses:

SAM'L KNIGHT,
ROBERT BURNS.