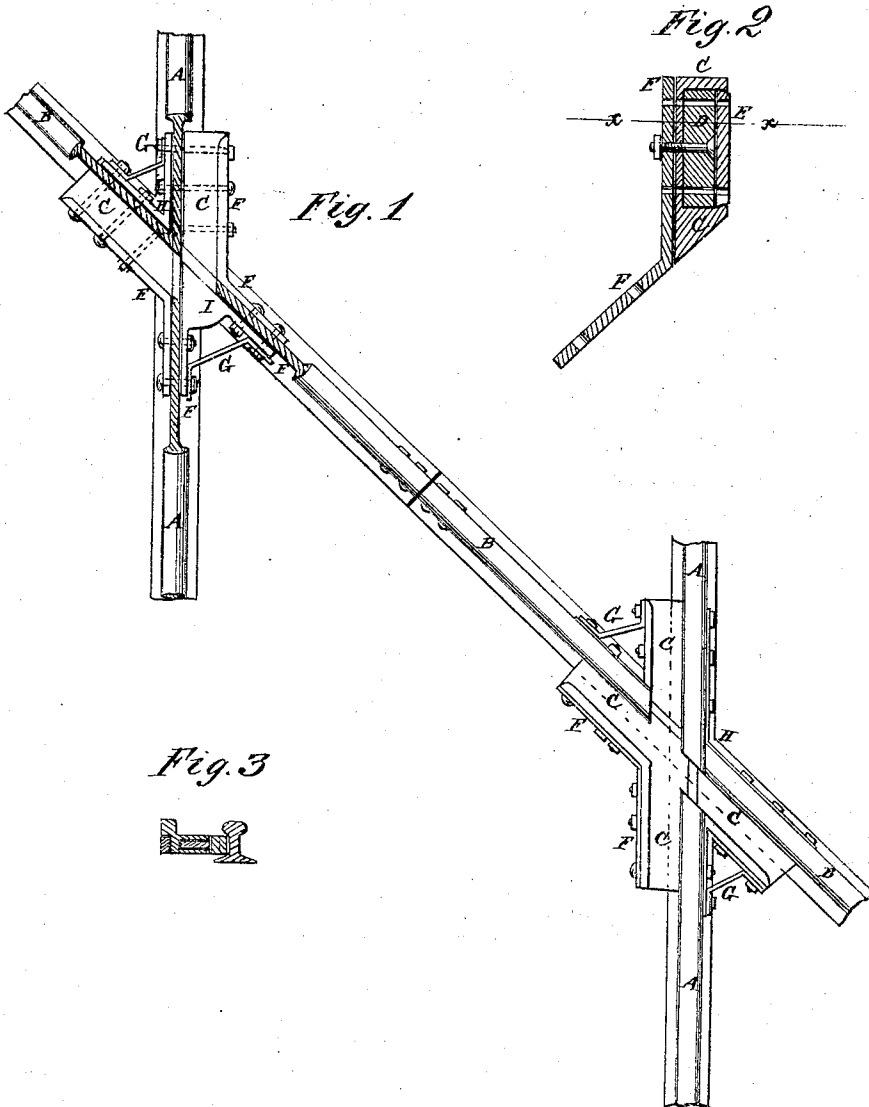


J. BRAHN.
Railway Crossings.

No. 145,781.

Patented Dec. 23, 1873.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES BRAHN, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN RAILWAY-CROSSINGS.

Specification forming part of Letters Patent No. **145,781**, dated December 23, 1873; application filed June 7, 1873.

To all whom it may concern:

Be it known that I, JAMES BRAHN, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Railroad-Crossing, of which the following is a specification:

Figure 1 is a top view of one-half of a railroad-crossing, illustrating my invention, parts being broken away to show the construction. Fig. 2 is a detail longitudinal horizontal section of one of the guard-blocks. Fig. 3 is a detail cross-section of the same taken through the line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved railroad-crossing, which shall be so constructed as to guard and strengthen the parts of the rails where the notches are formed for the passage of the wheel-flanges, and to prevent said notched rails from being battered by said wheels.

The invention consists in the slotted or hollow metallic blocks filled with wood, provided with wooden facing-blocks, and with a metallic guard-bar, in combination with the intersecting rails of a railroad-crossing.

A represents the rails of one of the tracks, and B the other track, of the crossing. C are metallic guard-blocks, which are bolted to the sides of the rails in the angles of a crossing, and are made hollow or are slotted upon the edge next the rails, which hollow or slot is filled with a wooden block, D. The end parts of the slotted edge of the blocks C project a little beyond the side edges to serve as stops to a second block-facing or strip, E, of wood, which rests against the neck of the rail. The blocks C are made with a metallic bar, F,

which projects above the top of the block C to serve as a flange or guard to guide the flange of the wheel into the notch in the intersecting rail, and prevent it from hitting and injuring the head of the rail at the side of said notch. The bar F projects from the beveled end of the block C along the side of the intersecting rail, and is bolted to said rail in the manner of a fish-plate, said bar being bent to fit against said rail, whether the angle be acute, obtuse, or a right angle. In case the angle be obtuse, and the flanges of the wheels pass along the adjacent sides of the rails that form the angle, the block C is made double, and the bar F does not project beyond the ends of the said block. The rails are further strengthened and kept in line by braces G, which cross said angles, and the ends of which are bent outward, and are bolted to the sides of the rails or to the edge of the block C, when one of said blocks happens to be in said angle. The crossing is also provided with angle fish-plates H, and angle-pieces I, which may be secured to the rail by the bolts that secure the blocks C or bar F, and which also serve to hold the rails in their places.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The slotted or hollow metallic blocks C, filled with wood D, provided with a wooden facing-block, E, and with a metallic guard-bar, F, in combination with the intersecting rails of a railroad-crossing, substantially as herein shown and described.

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Witnesses:

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