

W. J. MORDEN.
Railway-Crossings.

No. 155,808.

Patented Oct. 13, 1874.

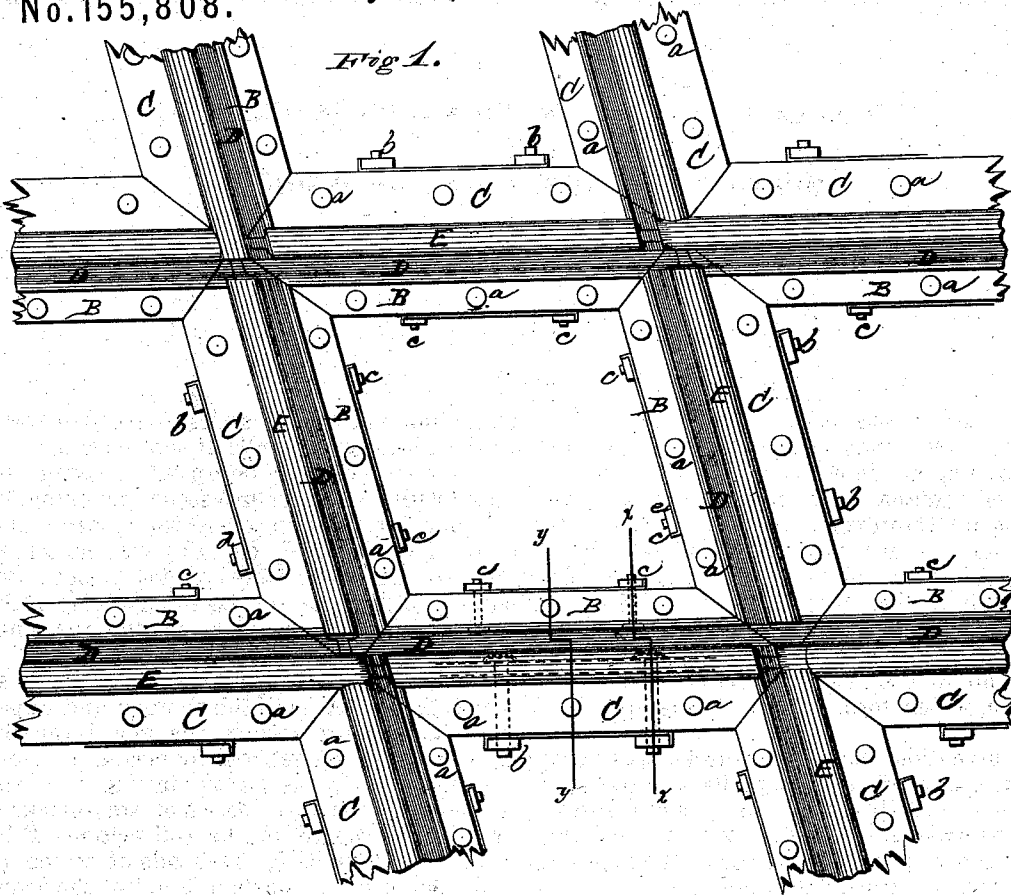


Fig 2.

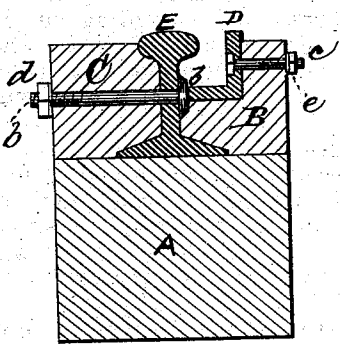
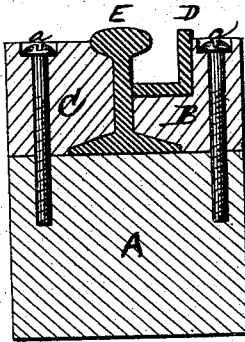


Fig. 3.



WITNESSES

Harry King 202
Wm. E. Clark

Wm. J. Morden INVENTOR

By H. H. Young
Attorney

UNITED STATES PATENT OFFICE

WILLIAM J. MORDEN, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN RAILWAY-CROSSINGS.

Specification forming part of Letters Patent No. **155,808**, dated October 13, 1874; application filed March 27, 1874.

CASE A.

To all whom it may concern:

Be it known that I, WILLIAM J. MORDEN, of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Railroad-Crossings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains 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 relates to railroad-crossings; and consists of the ordinary sills or base-frame to which the rail-sections are secured, and in order to make the crossings compact in form, and at the same time possessed of the required elasticity, I furnish the rail-sections with wooden brace or stay bars, mitered to fit in the corners, and fashioned on the sides which lie against the rails, so as to conform exactly to the shape thereof, and each series rigidly secured by vertical rag-screws to the sills or base-frame, and bolted or otherwise firmly secured to the rail-sections.

I provide the upper face of the inside series of wooden stay-bars with wrought-iron guard-plates, which are secured to said wooden stay-bars by countersunk bolts running horizontally through them into and through the inner series of wooden stays, and retained in position by their respective taps or draw-keys.

In the drawings, Figure 1 is a plan or top view of my improved crossings, and Figs. 2 and 3 transverse vertical sections taken in the lines *xx* and *yy*; the first, through lines *xx*, shows the position of the horizontal bolts used for fastening the blocks of wood in position on the rail-sections, and Fig. 3, through line *yy*, illustrates the relative position of the vertical rag screws or bolts used for securing the

said inner and outer series of wooden stays to the base-frame or sills of the crossing.

In constructing my improved crossing, the base or sills A constitute a secure fastening for the inner and outer wooden stay-blocks B and C, to which they are secured by vertical screw-bolts *a*. The outer series of stay-blocks C are shaped to conform to the sides of the rails, against which they are placed, and the inner series B are fitted to conform to that part of the sides and base of the rail-section against which they abut, and their inner and upper face channeled to receive the guard-irons D, to which they are secured by means of countersunk bolts *c*, as shown in Fig. 2 of the drawings. The outer series of stay-blocks C are rigidly secured to the rail-sections E by means of the bolts *b*, the heads of which occupy the position shown in Fig. 2 of the drawings, and, by lightening the series of tops or nuts *d* and *e*, the entire crossing is made one rigid structure, capable of any part thereof being detached, and presenting no obstruction whatever to the passage of the wheels. On the contrary, it furnishes the requisite even channels for the passage of the flanges of the wheels.

I claim—

The wooden blocks B and C, in combination with the guard-irons D and bolts *c*, and vertical and transverse bolts *a* and *b*, all constructed and arranged substantially in the manner and for the purpose as herein described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

W. J. MORDEN.

Witnesses:

H. H. YOUNG,
W. B. DARRELL.