

J. L. Shaw,

Railroad Frog,

Patented Sep. 4, 1866.

N^o 57,779.

Fig. 1.

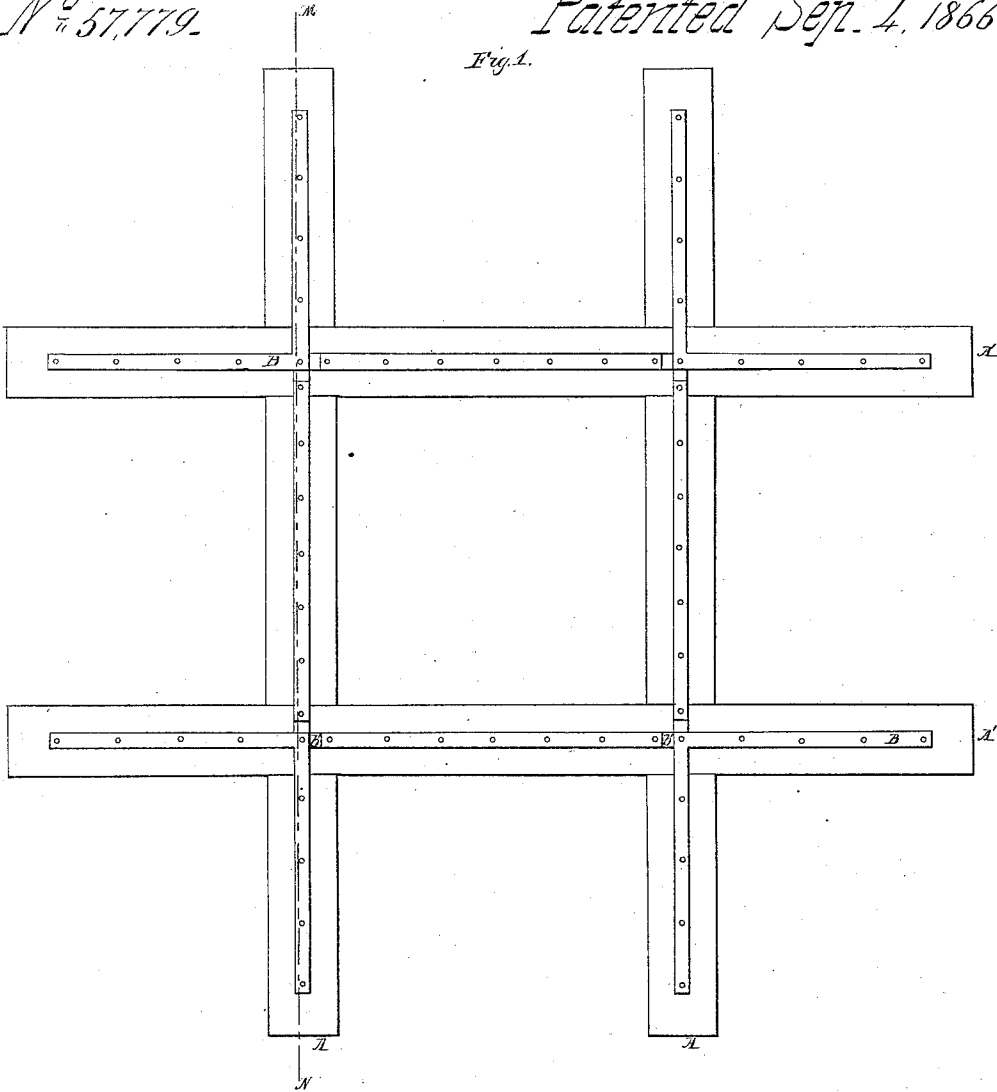
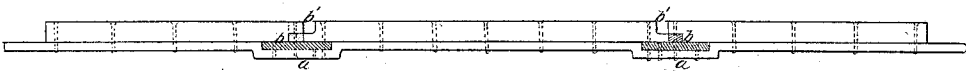


Fig. 2.



Witnesses:
L. B. Swisher
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UNITED STATES PATENT OFFICE.

JOHN L. SHAW, OF FORT WAYNE, INDIANA.

IMPROVED RAILWAY-CROSSING.

Specification forming part of Letters Patent No. 57,779, dated September 4, 1866.

To all whom it may concern:

Be it known that I, J. L. SHAW, of Fort Wayne, in the county of Allen, State of Indiana, have invented a new and useful Improvement in Railroad-Crossings; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents ground plan of plates and bars, and Fig. 2 represents the section of the same along the line M N.

The object of my invention, which I call "combination crossing-plate or frog," is to produce a combination of wrought-iron plates and steel or wrought-iron bars, to be used at the crossings of the railroads, and so constructed and arranged as to be able to withstand an immense wear and tear and an enormous pressure from the railroad-trains, which destroy in a very short time the present arrangement of the railroad-crossings, consisting of boiler-iron plates and common rails or cast-iron crossings.

To enable others to make and use my invention, I will describe its construction and arrangement.

I take one-inch wrought-iron plates, ten inches wide, A A, intended for one track, and at the joints, where similar plates, A' A', of the other track have to cross them, I bend them in such a way as to form a kind of a bed, a a, Fig. 2, for the plates A' A' of the cross-track, thus lapping the plates one over the other at and under the angle formed by the bars. The plates being securely riveted or welded at the lapping, thus form a very strong bed under the point of the crossing of the bars,

where the greatest jolting-pressure from the continuously-running trains is produced, and where the present used boiler-plates generally give way.

I use steel or wrought-iron solid bars, instead of rails, for the purpose, although common rails may be used also. The bars for the angles B B are made in shape of an L, and the bars for the interior square of the railroad-crossing are straight ones, these last being tongued out at their ends, and the tongues *b b*, Fig. 2, being welded into the angle-bars, leaving spaces *b' b'* for the passage of the wheel-flanges. The straight and the angle bars thus make continuous bars, crossing each other, and as if made of one piece. The bars are securely riveted to the bed-plates.

It will be perceived from the above description that, the bed-plates being lapped and riveted or welded, and the bars being welded together and riveted to the plates, the whole combination of crossing-plate or frog presents one solid piece of wrought-iron and steel, and can withstand, with far greater ease and for a far longer time, the wear and tear of the bars and the breaking of the bed-plates at the railroad-crossings.

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

The railway-crossing consisting of the bed-plates A, lapped and united as described, and used in combination with the rails B, substantially as described.

JOHN L. SHAW.

Witnesses:

J. B. TURCHIN,
J. R. HAYDEN.