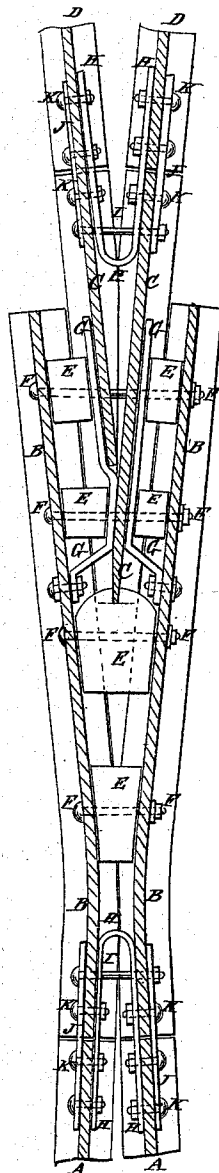


J. BRAHU.
Railroad Frogs.

No. 139,291.

Patented May 27, 1873.



Witnesses:

A. W. Almqvist
C. S. Quinn

Inventor:

J. Brahu
Per *Munroe*
Attorneys.

UNITED STATES PATENT OFFICE.

JAMES BRAHN, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN RAILROAD FROGS.

Specification forming part of Letters Patent No. **139,291**, dated May 27, 1873; application filed April 26, 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 Railway Frog, of which the following is a specification:

The figure is a horizontal section of my improved frog.

My invention has for its object to furnish an improved railway frog, made of ordinary rails, which shall be simple in construction, strong, and durable. The invention consists of the brace-bars in combination with the point and guard-rails of the frog, and in the U-shaped bars in combination with the rails of the track and the rails of the frog at either or both ends of said frog, as hereinafter fully described.

A are the rails of the track. B are the guard-rails of the frog. C is the point, and D are the rails connected with the branches of the point C. The guard-rails B and the point C are connected with each other and supported in their proper relative positions by blocks E, of wood or metal, or of wood and metal, and by bolts F passing through said blocks, guard-rails, and point, as shown in the figure.

G are bars which extend along the sides of the point and between said sides and the blocks E, and are secured in place by the bolts F that pass through the said point, its supporting-blocks E and the guard-rails B, and also by rivets. At or near the extreme end of the point C the ends of the bars G are

bent outward and are bolted to the guard-rails B, as shown in the figure, to strengthen the said point and hold it more securely in place. The inner bars H, that connect the rails D with the branches of the point C, and that connect the guard-rails with the rails A, or in other words, that connect the rails of the track with the rails of the frog, are made U-shaped, as shown in the figure, their bend being toward the frog. Each of the U-shaped bars H is secured in place by one long bolt, I, that passes through it near its bend, through the rails of the frog, and through the outer bars J of the joints. The arms of the U-shaped bars H are secured to the rails and to the outer bars J by short bolts K, as shown in the figure. The U-shaped bars thus act as fish-plates in forming the joints, and they also act as braces to hold the rails in their proper relative positions.

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

1. The brace-bars G in combination with the point C, and guard rails B of the frog, substantially as herein shown and described.

2. The U-shaped bars H, in combination with the rails of the tracks, and with the rails of the frog, at either or both ends of said frog, substantially as herein shown and described.

JAMES BRAHN.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.