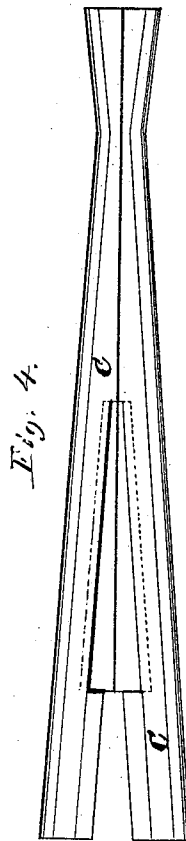
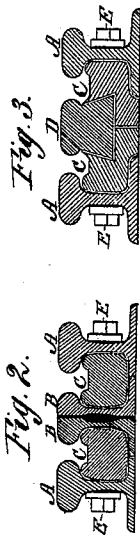
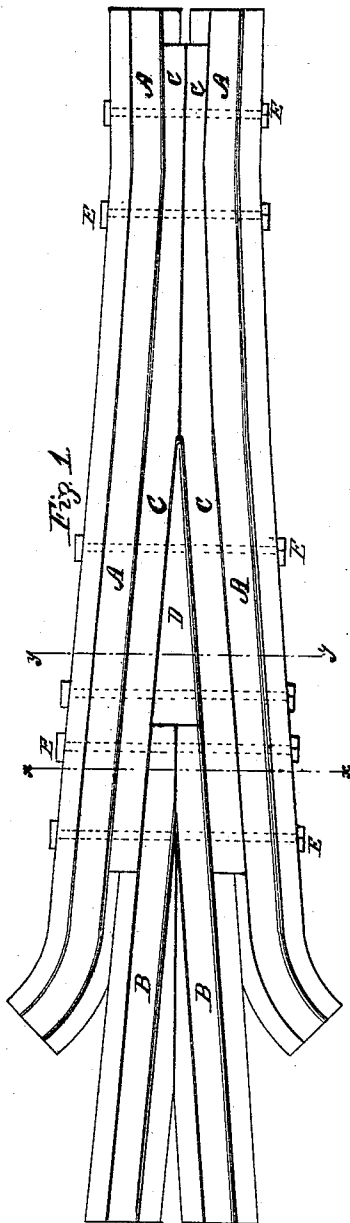


D. W. PAYNE.
RAILROAD FROG.

No. 180,369.

Patented July 25, 1876.



WITNESSES:
John Chamon
Chas. A. Pettit

INVENTOR:
David W. Payne
BY *Kenneth T. C.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

DAVID W. PAYNE, OF CORNING, NEW YORK.

IMPROVEMENT IN RAILROAD-FROGS.

Specification forming part of Letters Patent No. **180,369**, dated July 25, 1876; application filed June 13, 1876.

To all whom it may concern :

Be it known that I, DAVID W. PAYNE, of Corning, in the county of Steuben and State of New York, have invented a new and useful Improvement in Railroad-Frogs; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention is an improvement upon the combination-frog forming the subject of Letters Patent No. 138,835, and relates to a certain construction and arrangement of parts, as hereinafter described, whereby a frog is produced which has advantages in respect to cheapness, durability, and facility of handling and repair.

In the accompanying drawing, forming part of this specification, Figure 1 is a top-plan view of the frog. Figs. 2 and 3 are cross-sections on lines *xx* and *yy*, respectively, of Fig. 1. Fig. 4 is a plan view of the frog with the steel point detached.

The outer or guard rails A A have the usual form. The steel track-rails B B are cut off at the point where their webs meet or intersect. The iron bars or pieces C C are inserted between the said guard and track-rails, and completely fill the space throughout the length of the frog, except that occupied by the detachable point or tongue D. The latter is formed of cast-steel, and has a thick web or cross-section, as shown in Fig. 3, to enable it to en-

sure the hammering of the car-wheels for a long time without breaking down. As shown in Fig. 3, the point D has a dovetailed base, which is fitted into a corresponding cavity or recess formed in the meeting sides of the filling-pieces C, and its larger end abutting the ends of the track-rails B B. By this construction, when the guard-rails, filling-pieces, and track-rails are secured together by the bolts E, which pass horizontally through them, it is obvious the point D will be firmly clamped between the filling-pieces C, and prevented alike from lateral and lengthwise movement.

I do not claim, broadly, a railroad-frog having a detachable point, nor the use of blocks interposed between side or guard rails and the point of a frog; but

What I do claim is—

The detachable point D, having a dovetail base, in combination with the separate removable filling-pieces C C, provided with a recess to receive and support the same, and the bolts E, for securing pieces C C together, and thereby clamping the point between them, as shown and described.

The above specification of my invention signed by me this 12th day of June, 1876.

DAVID W. PAYNE.

Witnesses:

SOLON C. KEMON,
A. W. HART.