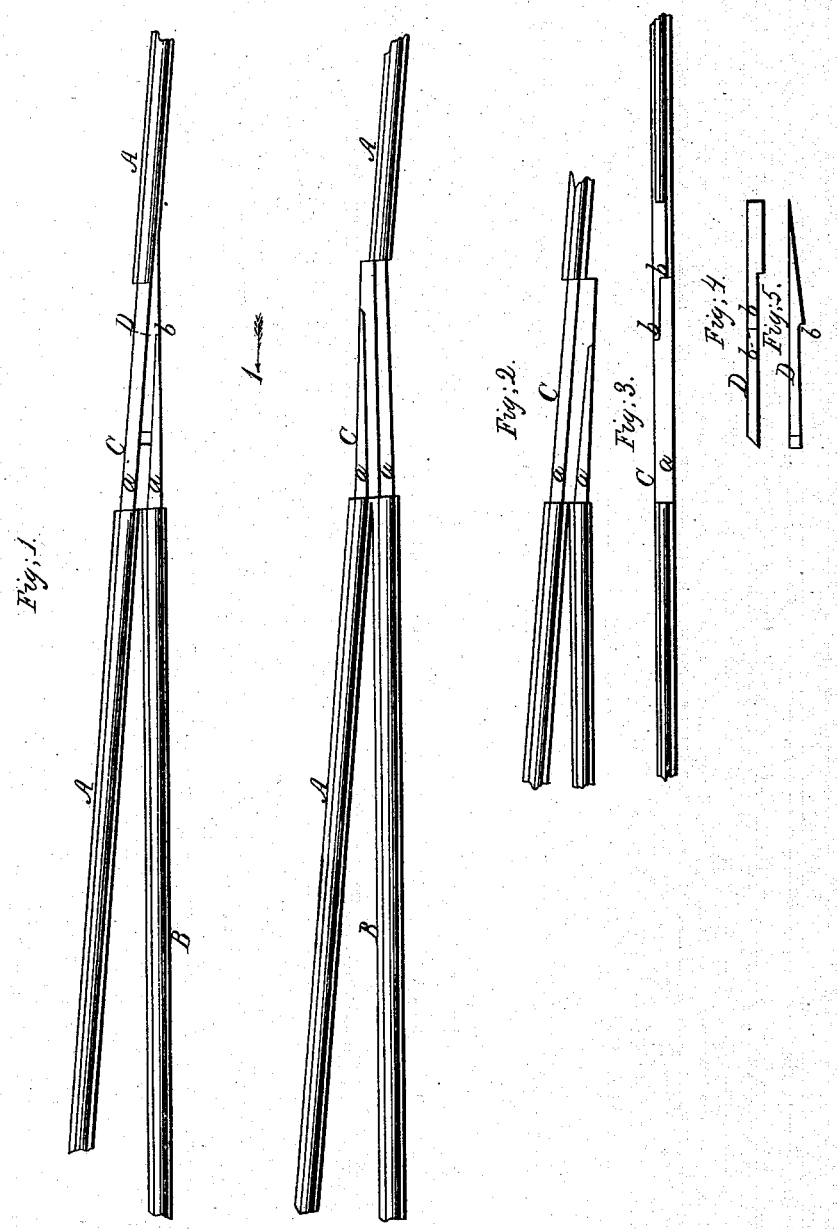
T. Shartz.

Railroad Frogs.

No. 49,162. Patented Aug. 1, 1865.



Witnesses.
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UNITED STATES PATENT OFFICE.

THEODORE SHARTS, OF ALBANY, NEW YORK.

IMPROVEMENT IN RAILWAY-FROGS.

Specification forming part of Letters Patent No. **49,162**, dated August 1, 1865.

To all whom it may concern:

Be it known that I, THEODORE SHARTS, of Albany, in the county of Albany and State of New York, have invented a new and Improved Portable Frog for Railroads; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan or top view of my invention applied to a track; Fig. 2, a detached plan view of the permanet portion of the frog, the tongue being removed from it; Fig. 3, a detached side view of the frog with the tongue fitted in it; Fig. 4, a detached side view of the tongue; Fig. 5, a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved frog for single-track railroads; and it has for its object the dispensing with the ordinary switch, and consequently with a switchman.

Single-track railroads, it will be understood, are provided with turn-outs at points where trains traveling in opposite directions may pass each other, and these turn-outs have been hitherto provided with switches for allowing one of the trains to pass on the turn-out, while the other moves on the direct or main track. By my invention these switches are avoided, as will be understood from the following description.

A A represent the rails of a main track, and B B the rails of a turn-out, C C′ being frogs at the junction of the two tracks, said frogs being composed of two parallel flanges, *a a′*, one of which is a trifle longer than the other, as shown in Figs. 1 and 2. The frogs C C′ are permanent, and, it will be seen, do not afford in themselves any means for guiding a train on the turn-out. In order to effect this result I employ what I term a "tongue," D, which may be made of steel—that, at least, would be the preferable material. This tongue D is made of such a form that it may be fitted between the two flanges *a a′* of the frog C, and it is provided with two shoulders, *b b*, to abut against the end of the short flange *a′*. (See Fig. 3.) This tongue, when adjusted in the frog C, forms a continuation of one of the rails B, and hence causes a train, when moving in the direction indicated by the arrow 1, to pass from the rails A to the rails B, and when said tongue is removed from the frog C the train will continue on the rails A. This tongue may be carried on the tender, or in any other car of a train, or it may be kept by the side of the track, and adjusted by the engineer or his attendant in a moment of time.

The invention will prove to be an economical one, not only as regards the difference in cost between it and a switch, but also in the saving of the wages of a switchman.

I claim as new and desire to secure by Letters Patent—

The employment or use of a movable or detachable tongue applied to a frog in the manner substantially as and for the purpose herein set forth.

THEODORE SHARTS.

Witnesses:

M. M. LIVINGSTON,

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