

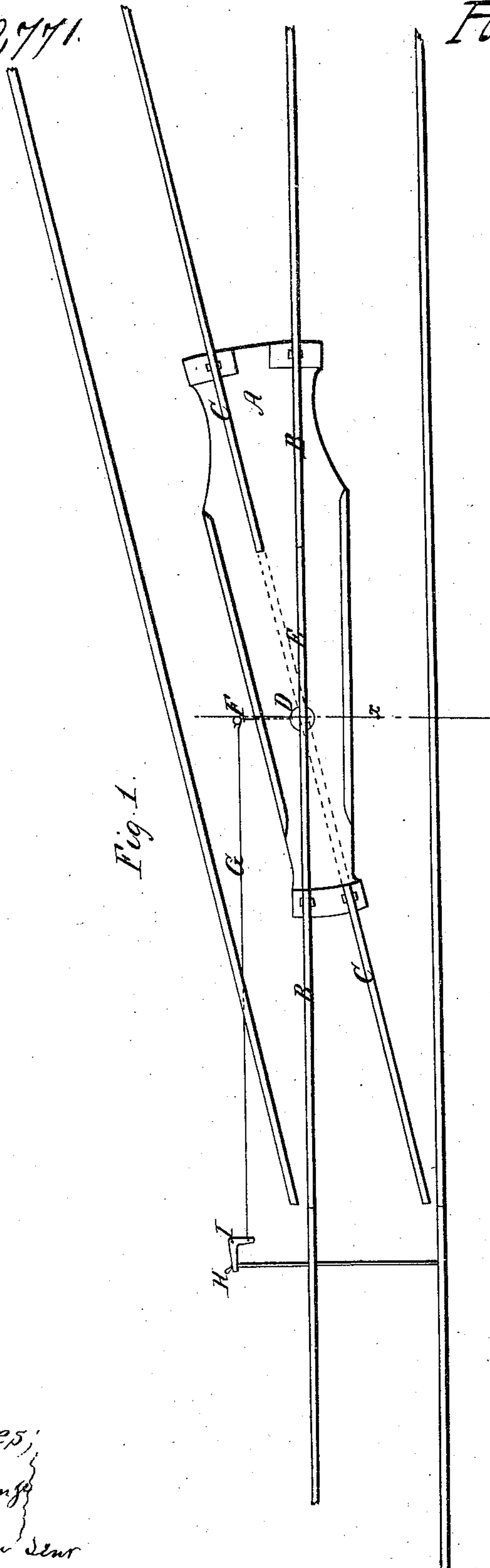
*T. Sharp.*

*Railroad Switch.*

*N<sup>o</sup> 40,771.*

*Patented Dec. 1, 1863.*

*Fig. 1.*



*Fig. 2.*



*Witnesses;*  
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*Inventor;*  
*Thomas Sharp*  
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*att'y*

# UNITED STATES PATENT OFFICE.

THOMAS SHARP, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN RAILROAD-FROGS.

Specification forming part of Letters Patent No. 40,771, dated December 1, 1863.

*To all whom it may concern:*

Be it known that I, THOMAS SHARP, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Frogs for Railroad-Switches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters and figures marked thereon, which form part of this specification.

In the said drawings, which are hereunto annexed, Figure 1 represents a plan or top view of my invention, and Fig. 2 shows a sectional view of the same at the line *x* in Fig. 1.

The nature of my invention consists in constructing a railroad-frog with an adjustable rail revolving at the center or middle point thereof upon a pivot passing through the bed of the frog at the point where the lines of the two tracks cross each other, so that it can readily be adjusted so as to render either track continuous when desired, and thus avoid any break or interruption in the track over which the cars may pass, which is caused by the grooves cut for the flange or flanges of the wheels when the frogs are constructed in the usual manner.

To enable those skilled in the art fully to understand how to construct and make use of my invention, I will proceed to describe the same with particularity, reference being made to the annexed drawings.

In the said drawings, A represents the cast-iron bed or base of the frog, and B B represent the main-track rail, and C C the side-track rail, with a portion of both removed at the point of their intersection, as shown in the drawings.

At that point on the bed A where lines drawn longitudinally through the rails B and C intersect each other is the center of a movable revolving circular table passing through the bed A and projecting down below it. The top of said turning-table (marked D) is on a level with the upper side of the bed A. This turning-table or short upright shaft D may be of any suitable size.

E represents a short rail or bar of the same material and dimensions as the rails B and C, and of such length as to fit accurately into either of the spaces left in said rails. The said bar E is fastened firmly to the top of the said revolving shaft or table D by bolts or other suitable means, so as to revolve or turn with it; or the rail E and shaft D may be forged from the same piece of metal. By this arrangement of the turning or pivoted rail E with the spaces left in the rails of the side track and also of the main track, either track may be made continuous for the train to pass over, as may be desired, by simply revolving the adjustable rail E into line with the track so desired to be rendered continuous, as aforesaid, thus obviating the unpleasant jolting and the wear of the frog occasioned by the usual groove or notch cut in the rails for the flange or flanges of the car-wheels.

F represents a rod or bar rigidly attached to the revolving shaft D, to which is attached the rod G, which is connected to the switch-lever H by the elbow-lever I or any other device, whereby the motion of the lever may be changed from a direction at right angles with the track to a direction parallel with the track, so that the said adjustable rail E may be moved to the required position with regard to the two tracks by the operation of the switch-lever in adjusting the track to the required position to run the train on the side or main track, as desired.

Having now described the nature and operation of my improved frog for railroad-switches, I will now proceed to specify what I claim as new therein and desire to secure by Letters Patent—

Operating the adjustable bar E by means of the projection D thereon, the rods F G, and elbow-lever I, when constructed, arranged, and operated in connection with the switch-lever H, as and for the purposes herein specified.

THOMAS SHARP.

Witnesses:

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