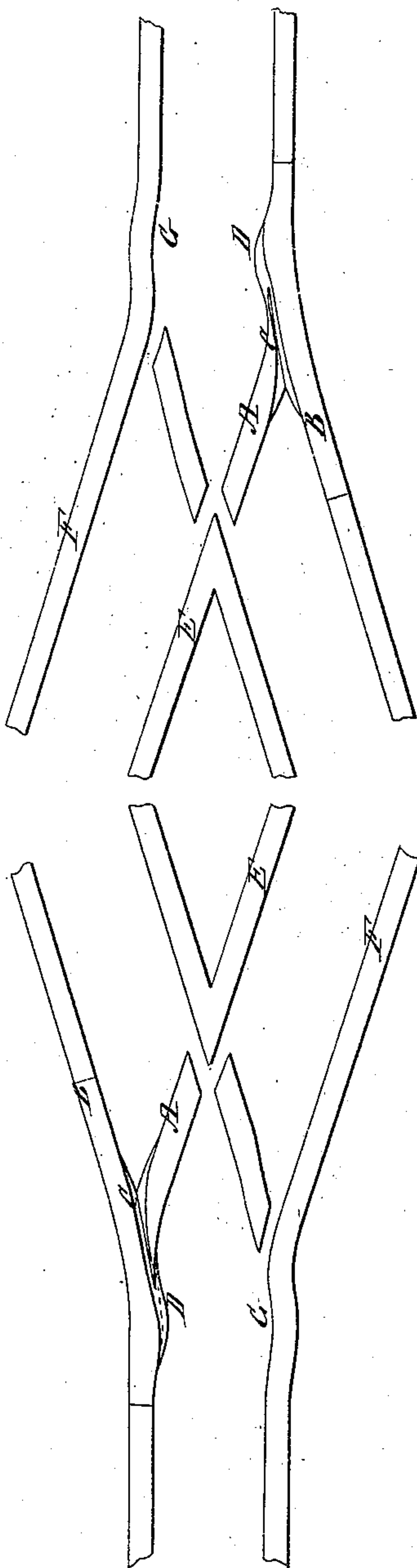


*H. Tupper,*

*Railroad Switch,*

*N<sup>o</sup> 30,940.*

*Patented Dec. 18, 1860.*



*Witnesses.*  
*E. B. Torbush*  
*R. W. Haskins*

*Inventor*  
*Horace Tupper*

# UNITED STATES PATENT OFFICE.

HORACE TUPPER, OF BUFFALO, NEW YORK.

## TURNOUT FOR STREET-RAILROADS.

Specification of Letters Patent No. 30,940, dated December 18, 1860.

*To all whom it may concern:*

Be it known that I, HORACE TUPPER, of the city of Buffalo and State of New York, have invented certain new and useful Improvements in Switch-Rails or Turnouts for Street-Railroads; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon.

The nature and principle of my invention will be understood from the following description.

Having reference to the drawing A, B, represents a switch rail embracing the principle of my improvement.

D, represents an inclined wave or swell formed on the rail for the purpose of directing the car on to the right hand, or turnout track E, F. As the car approaches the "turnout" the flange of the wheels on the left will strike this swell in a glancing manner, so as to incline the car to the right by its gravity and direct the wheels on to the right hand or turnout track E, F. The opposite rail is slightly bent or curved in an opposite direction to that of the swell on the switch rail as shown at G so as to allow of the lateral movement of the wheels caused by the swell D. The rail A, B may be formed with a bend or curve inclined on its inner face so as to be an equivalent of the swell D.

C, represents a groove formed in the crotch of the rail having sloping sides and a gradually rising bottom, so that as the car

passes over, in the direction to leave the turnout, the flange of the wheels will bear on the bottom of the groove until the wheel passes over, and the flange strikes and slides on the swell D of the rail by which the car will be slightly inclined to the left, and easily regain the main track.

It will be understood that my improvement is stationary, and self-acting. There is no movement of the switch, and no attendant is required. It is at all times ready for the cars to pass in either direction. My improvement being placed at appropriate distances along the line of a single track railroad, will allow the road to be used by any requisite number of cars running in opposite directions, the proper timing being observed so that the cars will pass each other at the turnouts. It will also be seen that the car must always be directed on to the right hand track, and that in no case can it be directed on to the left hand track. It is perfectly safe and reliable at all times. The device is also applicable for the terminus of double track rail roads, for directing the cars from one track to the other, so that the cars will at all times run upon the right hand track.

I claim as new and of my invention herein—

The inclined wave or swell D in combination with the rails A, B, and F, operating in the manner and for the purposes set forth.

H. TUPPER.

Witnesses:

E. B. FORBUSH,  
R. W. HASKINS.