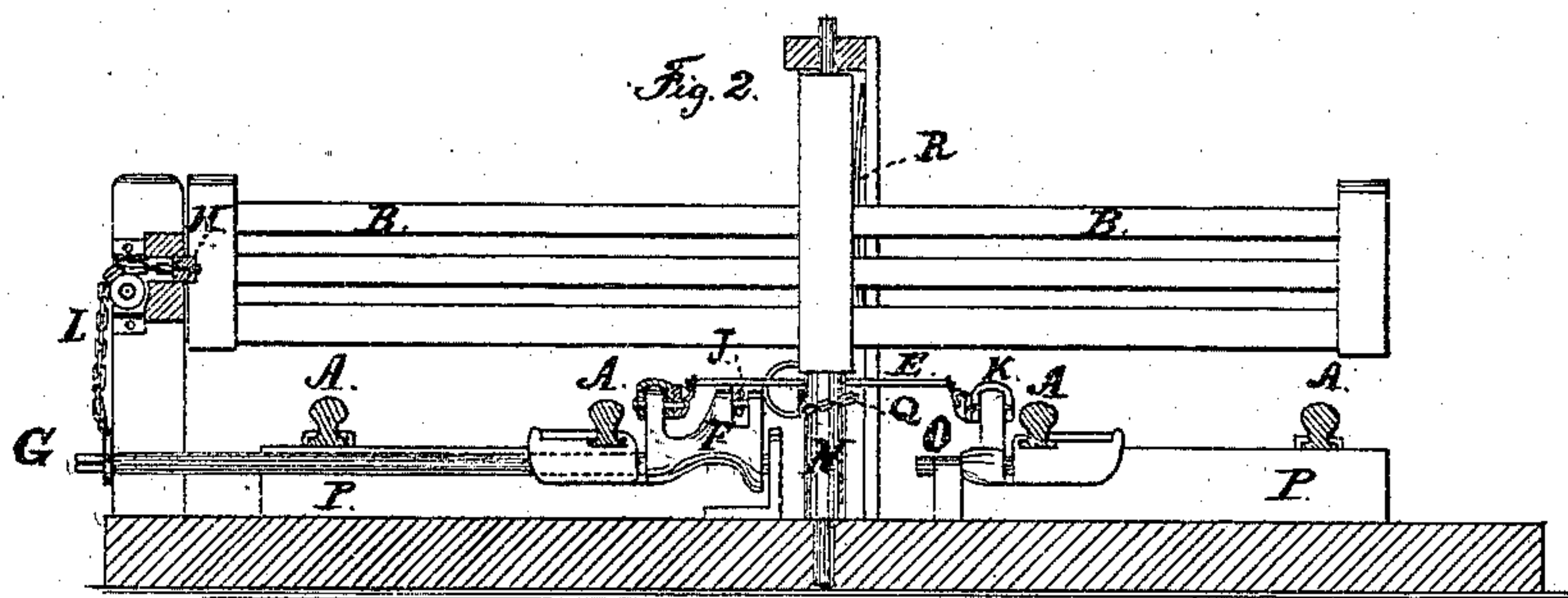
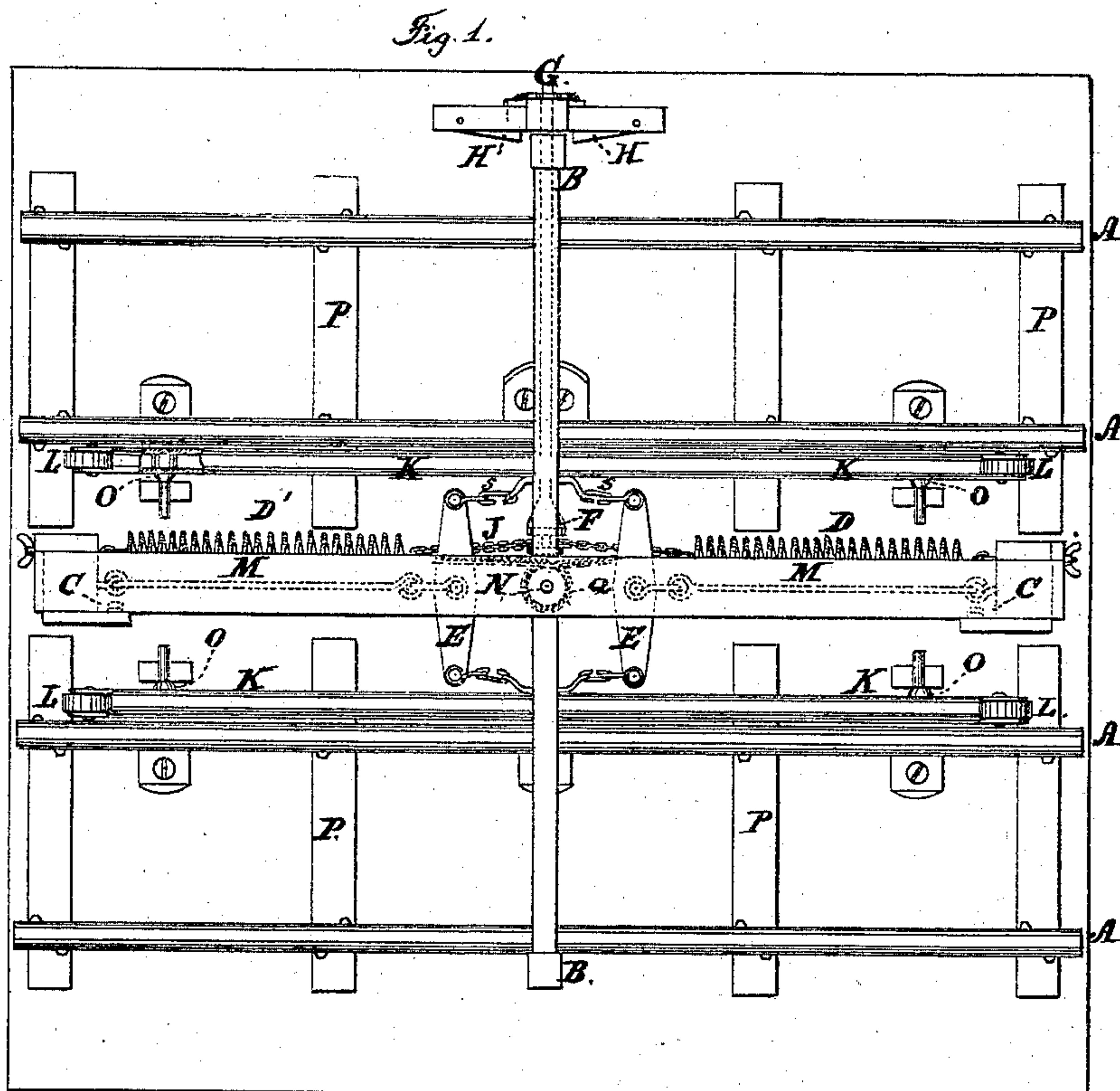


C. S. CURRIE.  
Railroad Gates.

No. 137,534.

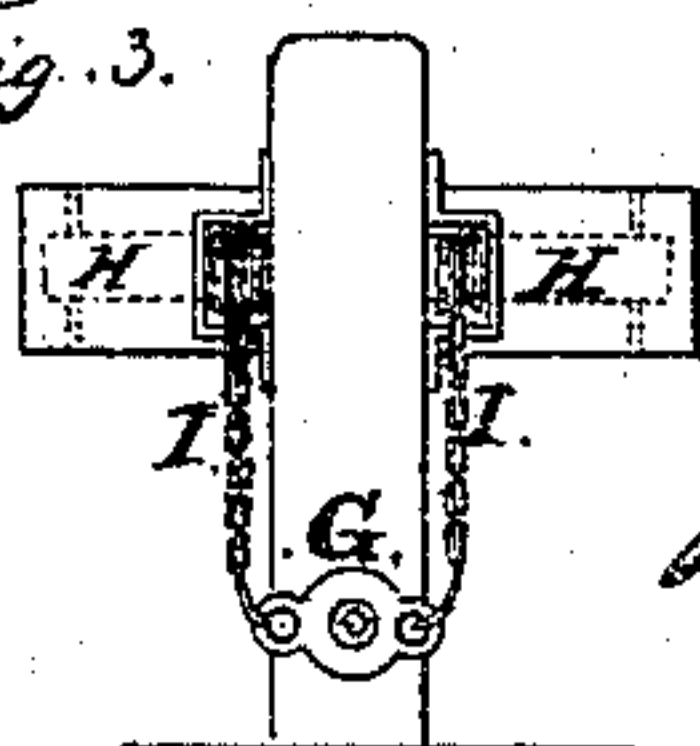
Patented April 8, 1873.



WITNESSES:

*Herm. Lauten*  
*H. S. Abbot*

Fig. 3.



INVENTOR:

*Chas. S. Currie*  
*By: Wells W. Leggett,*  
*Attorney.*



# UNITED STATES PATENT OFFICE.

CHARLES S. CURRIE, OF CALDWELL, OHIO, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO JONATHAN DILLEY, OF SAME PLACE.

## IMPROVEMENT IN RAILROAD GATES.

Specification forming part of Letters Patent No. **137,534**, dated April 8, 1873; application filed  
August 26, 1872.

*To all whom it may concern:*

Be it known that I, CHARLES S. CURRIE, of Caldwell; in the county of Noble and State of Ohio, have invented certain new and useful Improvements in Automatic Gate; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing and to the letters of reference marked thereon, which form a part of this specification.

In the drawing, Figure 1 is a plan of the gate and its working mechanism. Fig. 2 is a view in section and elevation of Fig. 1 along B B. Fig. 3 is view of mechanism for locking and unlocking the gate, as shown in section at the left of Fig. 2.

A in the above drawing represents the rails of a railroad—double track—the gate B crossing them both. C are posts, against which the gate swings in opening. O are levers, which support the pressure-rails K, and when the gate is closed, the springs D D' being in equilibrium, these levers are vertical, and hold the pressure-rails K above the level of the track.

The gate is now opened as follows: As the train of cars approaches, the rims of the wheels strike the rollers L, pressing the levers O forward, and the wheels pass upon and hold down the rails K. The forward motion of the rail K communicates its action to the levers E, which are suspended at their middle points to the stationary rods M, the other ends being fastened by means of the links to the other rail K and lever F. The lever F, being pressed, carries with it the chain J. This adds tension to one of the springs, and, therefore, permits the other spring to close together to assume an equilibrium. In thus closing, it takes up the slack on the chain Q, which passes around the post N, and swings the gate into the recess c of posts between the tracks. Upon the posts C, in order to break the impact, I place springs R, of metal, rubber, or of other suitable material. When the train passes beyond the rails K, the springs D D' are again permitted to assume their natural equilibrium, and in doing so the gate B is brought again across the tracks.

As will be seen, this gate will operate alike for trains passing over either track, in either direction, and will always open from the train.

To apply this same principle to a single track or carriage-way, all that is necessary is to do away with the links S, rods M, and levers E, communicating motion directly to the springs D D', through the chain J attached to lever F, as shown in Fig. 2 at the left.

In order to fasten the gate across the track, I propose to employ the rod G, arbored into a metal plate at the end, which bears the chains I; these chains, passing up over the small pulleys, are attached to spring-latches H, which are opened by the action of lever F.

This same principle may be applied to a carriage-way gate by an obvious formation of the lever F, so that the wheels may press it down.

I do not limit myself to the materials of which this gate is constructed; but it should be light, with its gravity preponderating near the post N.

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

1. The railroad gate B, poised at N and made to open and close by the traction of the springs D D' and chain Q, in the manner substantially as set forth.

2. The combination of the pressure-rails K, provided at the ends with rollers L, levers E, rods M, lever F, chain J, springs D and D', chain Q, and post N, for the purpose of opening and closing the gate B by the action of car-wheels on the pressure-rails K, all substantially as set forth.

3. The combination of lever F, rod G, chains I, and latches H, for fastening and releasing the gate B, substantially as set forth.

4. The springs D D' and lever F, in combination with the rails K K and levers O, for the purpose of raising the pressure-rails K above the track.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of August, 1872.

CHARLES S. CURRIE.

Witnesses:

RUBEN SUMMERS,

WILLIAM L. MOSELEY.