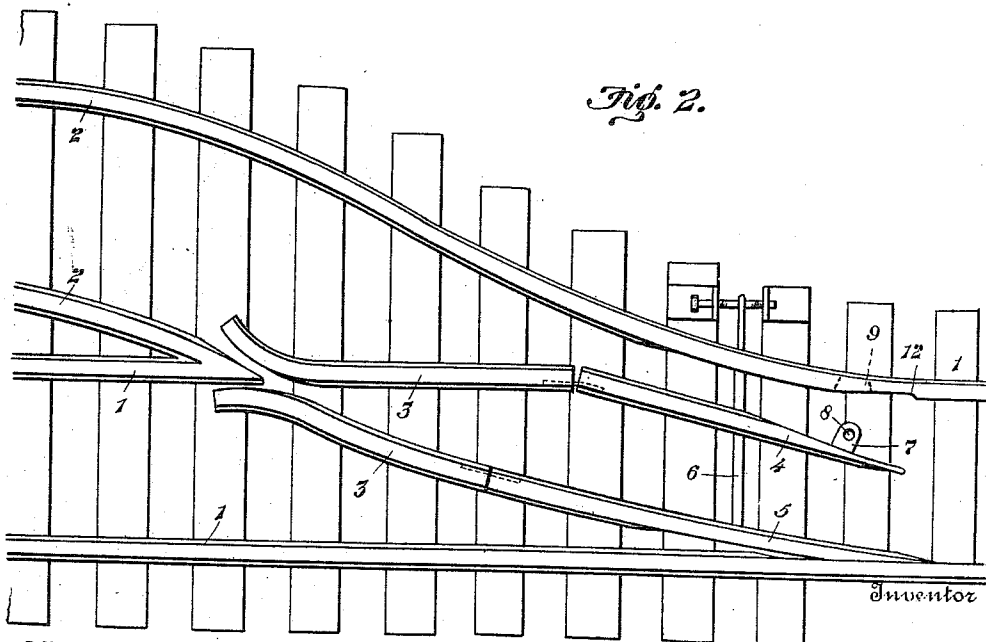
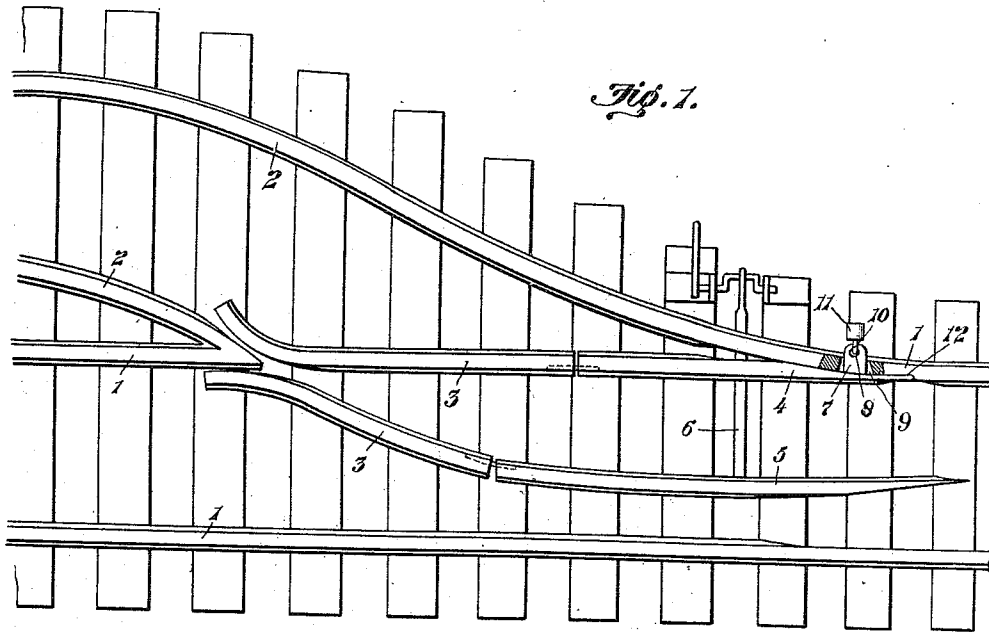


E. R. HANNA.
RAILWAY SWITCH.
APPLICATION FILED MAR. 10, 1911.

995,535.

Patented June 20, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

EUBIUS R. HANNA, OF SALEM, OHIO.

RAILWAY-SWITCH.

995,535.

Specification of Letters Patent. Patented June 20, 1911.

Application filed March 10, 1911. Serial No. 613,520.

To all whom it may concern:

Be it known that I, EUBIUS R. HANNA, a citizen of the United States, residing at Salem, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Railway-Switches, of which the following is a specification.

My invention relates to improvements in switches designed to be actuated by the ordinary switch stand mechanism of any desired construction.

The object of the present invention is to securely hold the pivoted switch tongues in a closed position, thereby preventing what is known as splitting the switch during the time a train is passing over the same. It is well understood that when the flanges of railway wheels have become worn so as to produce thin flanges or flanges having dull peripheries, such flanges are liable to be forced between the main rails and the switch tongues unless the switch tongues are securely held in close contact with the abutting faces of the rails.

In the accompanying drawings—Figure 1 is a top view showing the switch closed. Fig. 2 is a top view showing the switch open.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawing, 1 represents the main track rails and 2 the switch rails, which rails are arranged in the usual manner as well as the short rails 3. To the short or stub rails 3 are pivotally connected the switch tongues 4 and 5, which switch tongues are tied together in the usual manner by means of the ordinary tie bar 6, which tie bar is moved by any switch stand mechanism in common use. To the switch tongue 4 is securely attached the lock bolt or bar 7, which lock bolt or bar is provided with the aperture 8. One of the switch rails 1 continued to form a part of the main track rail is provided with the slot 9 formed in the web of the rail and of sufficient size to allow the entrance of the lock bolt or bar 7.

For the purpose of insuring the proper entrance of the lock bolt or bar 7, the side walls of the slot 9 are beveled as best illustrated in Fig. 1, and the end of the lock bolt or bar 7 rounded thus insuring the proper entrance of the lock bolt or bar when the tongue 4 is brought into the position to close

the switch. The bolt or bar 7 is formed of sufficient length to allow the shackle 10 of the lock 11 to be placed through the aperture 8. It will be understood that the switch tongue 4 should be moved a sufficient distance when the switch is opened to bring the bolt or bar 7 far enough away from the rail adjacent said switch tongue to provide sufficient clearance for the wheels of a railway train and in order to provide for this the switch tongue 4 is pivoted at a point nearer its ends than the switch tongue 5 so that the free end of the switch tongue 5 will move in the arc of a circle less in diameter than the switch tongue 5, which is pivoted at a greater distance from its point than the switch tongue 4.

It will be understood that when the switch is closed and the lock 11 placed in proper position to lock the switch there can be no accidental or relative movement as between the switch tongues and the track rails, thereby preventing any splitting of the switch or in other words preventing the flanges of the wheels crowding in between the switch tongues and the track rails. For the purpose of protecting the extreme point of the tongue 4, the track rail is provided with a slight recess 12, formed in the side of the track rail so that as the trains pass over the switch tongue 4 its point will not be injured.

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

1. The combination of main track rails and switch rails, switch tongues pivotally connected to the short rails, one of the switch tongues provided with a lock bolt, said lock bolt provided with an aperture adapted to receive the shackle of a lock and the switch tongues pivoted at points, the switch tongue provided with the lock bolt pivoted at a point nearer its free end than the opposite switch tongue, substantially as and for the purpose specified.

2. In a switch of the class described, the combination of main track and switch rails, switch tongues tied together, one of said switch tongues provided with a lock bolt and one of the main track rails provided with a slot adapted to receive the switch tongue lock bolt, the switch tongue provided with the lock bolt pivoted at a distance less than the distance of the pivotal point of the opposing or opposite switch

tongue, substantially as and for the purpose specified.

3. In a switch of the class described, the combination of main track and switch rails, switch tongues tied together, one of said switch tongues provided with a lock bolt and one of the main track rails provided with a slot adapted to receive the switch tongue lock bolt, the switch tongue provided with the lock bolt pivoted at a distance less than the distance of the pivotal point of the opposing or opposite switch tongue, and the main

track rail provided with a shouldered recess adapted to cover the point of the switch tongue provided with the lock bolt, substantially as and for the purpose specified. 15

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

EUBIUS R. HANNA.

Witnesses:

G. M. THOMAS,
E. E. HANNA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
