Feb. 10, 1931. M. CARUSO 1,792,141

TOY RAILROAD TRACK CONSTRUCTION

Original Filed March 4, 1927

FIG. 1.

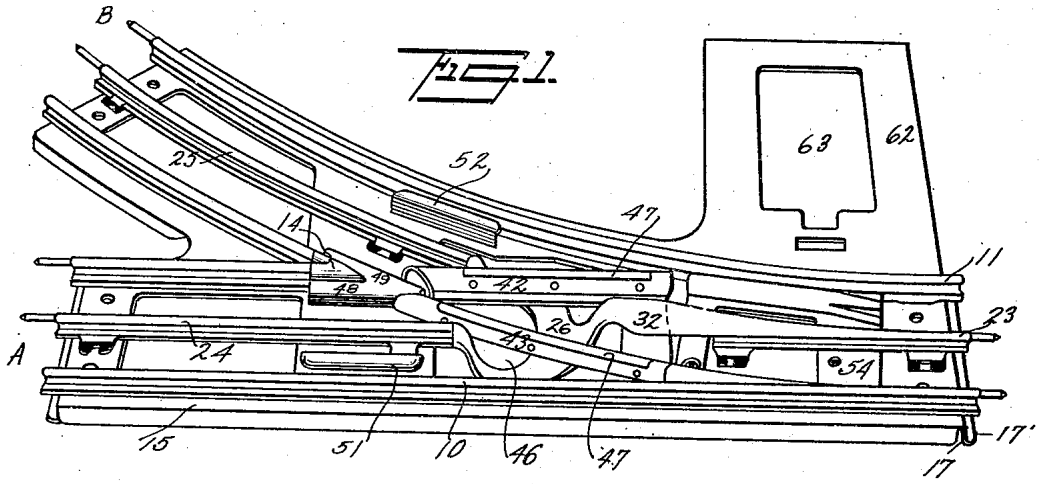


FIG. 2.

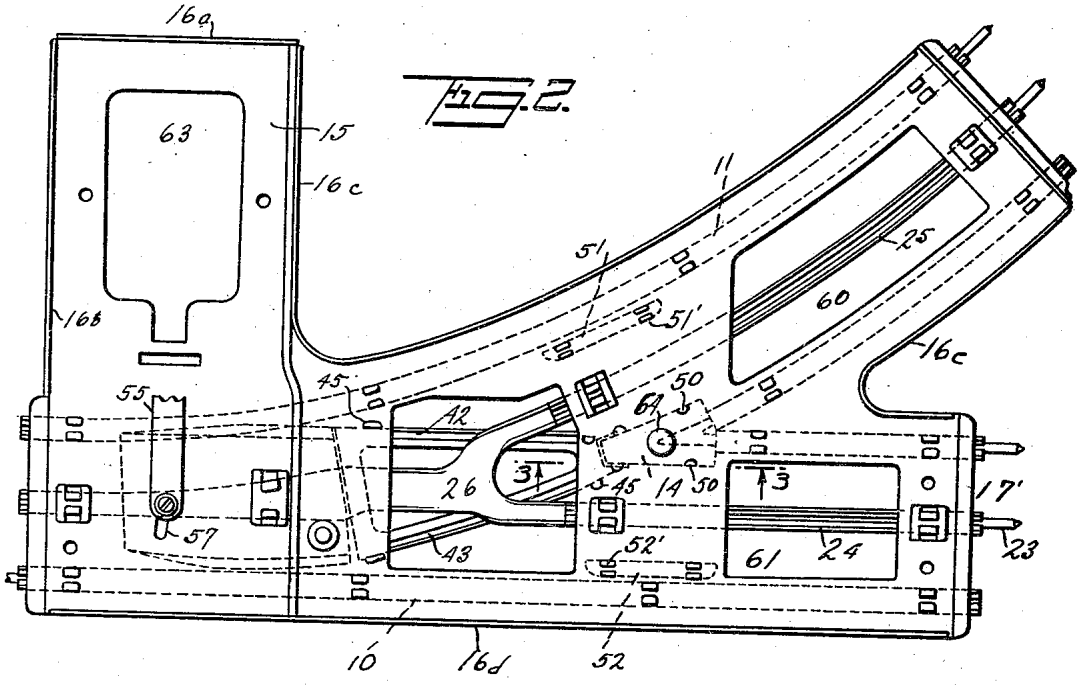
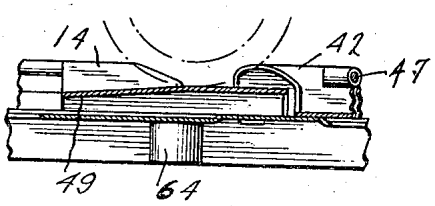


FIG. 3.



INVENTOR
Mario Caruso
BY
Jacob Liberman
his ATTORNEY

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UNITED STATES PATENT OFFICE

MARIO CARUSO, OF IRVINGTON, NEW JERSEY, ASSIGNOR TO THE LIONEL CORPORATION, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK

TOY-RAILROAD-TRACK CONSTRUCTION

Original application filed March 4, 1927, Serial No. 172,777. Patent No. 1,701,947, dated February 12, 1929. Divided and this application filed August 4, 1928. Serial No. 297,439.

The present invention relates to toy railroad track construction and is more particularly directed toward improvements in the construction of special sections of toy electric railroad tracks such as switches, crossings and the like.

An object of the invention is to provide a switch section for toy railroads in which stationary converging wheel bearing rails are separated from one another and from the diverging wheel bearing rails, which carry the train away from the frog, a sufficient distance so that flanges on the car wheels may pass through, and to associate with the frog and converging rails, a short platform to receive the flanges on the wheels and maintain the wheels at substantially the same level they would be were the treads resting on a rail.

Another object of the invention is to provide a toy railroad track switch with suitable guards or anti-derailing devices to prevent the car trucks from becoming derailed when passing through the switch.

Other and further objects of the invention will be apparent as the description proceeds.

The accompanying drawings show, for purposes of illustrating the invention, one of the many possible embodiments in which the invention may take form, it being understood that the drawings are illustrative of the invention rather than limiting the same.

In these drawings:

Figure 1 is a perspective view of a track switch for toy electric railroads showing the wheel bearing rails, the third rails and switch tongues together with the rail support, but omitting the switch actuating mechanism;

Figure 2 is an inverted plan view of the track switch; and

Figure 3 is a sectional view on the line 3—3 of Figure 2.

As shown in the drawings, the track construction, exemplified in the form of a track switch for toy railroads, is made up in the form of an interchangeable section of railroad track adapted to be connected into track lay-outs having other sections of toy railroad track. As here illustrated the track switch has a main line designated by the letter "A" and a branch line designated by the letter "B". The main line A has a straight track or wheel bearing rail 10 extending through the length of the track switch section, while the branch line B has a curved outside track rail 11 which extends from the lower right-hand end of the switch as indicated in the drawings, out through the branch line. The main and branch lines also have wheel bearing rails 12 and 13 which diverge from a frog 14.

These rails as well as all the other parts of the section of track are mounted on a track support 15 which is preferably made in the form of a sheet metal stamping of the proper shape to support the rails and the operating device for the switch. As indicated in the drawings, this stamped rail support is provided with downwardly bent flanges 16*a*, 16*b*, 16*c*, 16*d* and 16*e* extending along the edges to stiffen the rail support, and with end flanges 17 having outwardly extending lower ends or feet 17′. These flanges 17 are for the purpose of supporting the track section and for facilitating coupling the section to other track sections by connecting ties customarily used in assembling toy track lay-outs.

The track switch shown in the drawings is also provided with a Y-shaped continuous third or power rail 23 for conducting current through both the main line and the branch line. This power rail is made up of three parts, including a straight third rail 24 between the wheel bearing rails 10 and 12, a curved power supply rail 25 between the rails 11 and 13, and a Y-shaped sheet metal stamping 26.

The track switch is also preferably provided with short converging wheel guiding rails 42 and 43. As here shown these rails are in the form of a triangular shaped sheet metal stamping 44 bent up along the sides to provide the rails. This stamping is fastened to the supporting plate 15 by prongs 45 so as to locate the rails 42 and 43 in line with the rails 12 and 13 respectively. The stamping 44 has an opening in the center as indicated at 46 to permit the third rail member 26 to pass downwardly through it, this third

rail member being carried underneath the rails 42 and 43. The rails 42 and 43 are brought adjacent the frog 14 and if desired may include insulators 47 to prevent grounding the moving contact on the locomotive as it passes from the broadened portion 32 of the power rail to the portions 24 or 25.

As the rails 42 and 43 are stationary, it is necessary to separate them sufficiently from the ends of rails 12 and 13 to permit the flanges of the car wheels to pass through both the main line and the branch line without interference. In order to prevent the wheel of the car from dropping on account of the gap between the wheel bearing rails, the present invention contemplates the provision of platforms 48 and 49 which may be parts of the stamping forming the frog 14. These platforms are so arranged that the flange of the wheel rolls across the platform and the wheel is carried at substantially the same elevation it would have been carried were the tread of the wheel on a wheel bearing rail. The position of the wheel is indicated by dotted lines in Figure 3. This frog or platform may be in the form of a stamping held in place by prongs 50 bent up underneath the rail support.

In order to keep the toy train on the track while it is passing through the switch, wheel guards 51 and 52 are provided adjacent the rails 10 and 11 and placed so that they engage the flanges of the wheels carried on these rails at the time the flanges on the opposite wheels of the car truck are passing over the platforms 48 and 49. These wheel guards are held in place by prongs 51′ and 52′.

The toy train may be guided through the main line A or onto the branch line B by means of a movable switch tongue 54 and of the proper shape to guide the flange of a car wheel from the rail 10 onto the rail 43 or from the rail 11 onto the rail 42 depending upon the position of the switch tongue. This switch tongue may be operated by a shift bar 55 connected to the tongue by a member 56 passing through a slot 57 in the stamping 15. The stamping may be cut away as indicated at 60 and 61 to reduce the weight if desired and may be provided with a lateral extension 62 for the support of the switch actuating mechanism which may be mounted in an aperture 63 if desired. The central part of the track switch may be provided with a supporting block 64 arranged underneath the frog of the switch.

It is obvious that the invention may be embodied in many forms and constructions, and I wish it to be understood that the particular form shown is but one of the many forms. Various modifications and changes being possible, I do not limit myself in any way with respect thereto.

This application is a division of my application Serial Number 172,777, filed March 4, 1927, granted February 12, 1929, as Patent Number 1,701,947.

What is claimed is:

1. In a track switch section for toy electric railroads, a through wheel bearing rail in the main line, a through wheel bearing rail in the branch line, two lengths of wheel bearing rail arranged parallel with each of the through rails, said rails being spaced to permit the flange of a car wheel to pass through and being supported on a sheet metal frame, and a sheet metal platform secured to the frame and over which the flange of the car wheel rolls to carry the tread of the wheel from one length of rail to another.

2. In a track switch section for toy electric railroads, a through wheel bearing rail in the main line, a through wheel bearing rail in the branch line, two lengths of wheel bearing rail arranged parallel with each of the through rails, said rails being spaced to permit the flange of a car wheel to pass through and being supported on a sheet metal frame, a sheet metal platform secured to the frame and over which the flange of the car wheel rolls to carry the tread of the wheel from one length of rail to another, and sheet metal guards adjacent each of the through rails to hold the wheels on said through rail while the opposite wheel flanges are on the platform.

3. In a track switch section for toy railroads, a sheet metal base carrying two adjacent lengths of wheel bearing rail in the main line, two similar lengths of wheel bearing rail in the branch line arranged at an acute angle to the first lengths of rail, two of the rails converging toward one another, the ends of the other two rails being separated from one another and from the other rails to permit car wheel flanges to pass through, and sheet metal member secured to the base and forming a platform and frog point between the pairs of rails to carry the flange of a car wheel.

4. In a track switch section for toy railroads, a sheet metal base carrying two adjacent lengths of wheel bearing rail in the main line, two similar lengths of wheel bearing rail in the branch line arranged at an acute angle to the first lengths of rail, two of the rails converging toward one another, the ends of the other two rails being separated from one another and from the other rails to permit car wheel flanges to pass through, other wheel bearing rails in the main line and branch line and parallel with the first mentioned rails, and sheet metal guards adjacent said other wheel bearing rails to engage the flanges of car wheels opposite the frog.

5. In a toy railroad track section, two converging wheel bearing rails for main and branch lines, a sheet metal base to which these rails are secured, and a sheet metal platform secured to the base and having wheel bearing portions adapted to receive the flange of a toy

car wheel and raised portions merging to form a frog point.

6. In a toy railroad track section, two converging wheel bearing rails for main and branch lines, a sheet metal base to which these rails are secured, a sheet metal platform secured to the base and having wheel bearing portions adapted to receive the flange of a toy car wheel and raised portions merging to form a frog point, other wheel bearing rails in the main line and branch line and parallel with the first mentioned rails, and a sheet metal guard having a plurality of prongs passing through the base, the guards being opposite the platform.

Signed at New York, New York, this 2nd day of August, 1928.

MARIO CARUSO.