# PATENT SPECIFICATION

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#### PROVISIONAL SPECIFICATION

## Improvements in or connected with Tracks for Toy Railways.

We, TRIX LIMITED, of 91, Regent Street, London, W.1, a British Company, and FRANCIS JOHN PRIOR, of the Company's address, British Subject, do hereby declare 5 the nature of this invention to be as follows:—

This invention relates to tracks for toy railways in which the rails of one section of the track are connected to the rails of 10 another section of track by a pin secured in the end of one rail detachably engaging in the hollow end of the contacting rail.

A track is known composed of track members, each of which is made of moulded 15 insulating material provided on the upper face with continuous ribs on which are positioned the rails consisting of sheet metal bent to channel shape with projecting side flanges, the rails being attached at the ends to the 20 track members by metal clamps passing through slots in the top of the track member and engaging with the flanges of the rail.

The top surface of the track member has been formed with cross projections repre-25 senting sleepers but the flanges of the rail and absence of chairs does not give a true representation of a real railway track.

The object of the present invention is to provide a track in which a real and proper 30 railway track is more truly simulated and to generally improve and simplify the construction of such tracks.

According to this invention, each track member or section is made of suitable 35 material with cross projecting portions representing sleepers, projections on the sleepers representing chairs, and ribs connected between the sleepers and the end sleepers and ends of the track section on which the 40 rails can be engaged between the pairs of chairs

Further according to this invention, the rails are of substantially U-shape in cross-section and in them are secured Tee-shaped 45 members having their cross members formed as pins and positioned so that each running

rail has a pin projecting at one end and at the other end a socket, the track being formed with slots in stepped relation through which the legs of the Tee-shaped members 50 can be passed and engaged with the tracks.

The invention can be carried into effect in various ways as to detailed construction, and as one example for a toy electric railway employing two running rails and a centre 55 conductor rail insulated from one another, each track section is made of insulating material, pressed or moulded to form in cross-section a track surface with depending side flanges at an outward angle to the track 60 surfaces. The upper face of the track surface is formed with projecting cross strip shaped portions arranged at suitable distances apart to simulate sleepers, and between each of the sleepers and ends of the track 65 are longitudinal ribs for receiving the rails, that is three longitudinal ribs broken at the sleepers.

On each sleeper and on each side of the gaps in the ribs for the running rails are 70 formed projections shaped to simulate chairs and similar projections on certain of the sleepers for the conductor rail.

The rails each consist of a length of U-shaped metal without side flanges, 75 adapted to be engaged over the respective ribs and between the chairs, the chairs being at a distance apart to allow of the rails being located between the chairs.

The preferred method of connecting the 80 rails to the tracks is by providing substantially flat Tee-shaped members, the ends of the cross piece being formed as pins. One of the Tee members is secured in the end of each rail with the leg projecting below the 85 rail, such as by forming a hole in the member and burring the edge of the rail into the hole. For the running rails the member is positioned at one end so that the pin projects and at the other end a space being left 90 between the end of the member and the end of the rail forming the socket. For the con-

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ducting rails the members are secured so that the ends of the members are flush with the ends of the rail.

Slots are formed in the track through 5 which the legs of the Tee members can be passed and secured by butting over to known spring locking members on the under side of the track.

The slots are stepped in position in rela-10 tion to the ends of the track so that the rails are positioned with their ends in line but with the pins projecting from one running track at one end and from the other rail at the other end of the track.

By this construction the running rails can 15 all be of the same construction and by stepping the slots the rails can be positioned in place with a pin and socket at each end of the track.

Dated this 8th day of February, 1946. H. GARDNER & SON. Chartered Patent Agents, 173-4-5, Fleet Street, London, E.C.4. Agents for the Applicants.

### COMPLETE SPECIFICATION

## Improvements in or connected with Tracks for Toy Railways.

We, TRIX LIMITED, of 91, Regent Street, London, W.1, a British Company, and FRANCIS JOHN PRIOR, of the Company's address, British Subject, do hereby declare the nature of this invention and in what 25 manner the same is to be performed, to be particularly described and ascertained in and by the following statement:

This invention relates to tracks for toy railways in which the rails of one section of 30 the track are connected to the rails of another section of track by a pin secured in the end of one rail detachably engaging in the hollow end of the contacting rail.

A track is known composed of track mem-35 bers, each of which is made of moulded insulating material provided on the upper face with continuous ribs on which are positioned the rails consisting of sheet metal bent to channel shape with projecting side flanges, 40 the rails being attached at the ends to the track members by metal clamps passing through slots in the top of the track member and engaging with the flanges of the rail.

The top surface of the track member has 45 been formed with cross projections representing sleepers but the flanges of the rail and absence of chairs does not give a true representation of a real railway track.

The object of the present invention is to 50 provide a track in which a real and proper railway track is more truly simulated and to generally improve and simplify the construc-

tion of such tracks.

According to this invention, each track
55 member or section is made of insulating material with cross projecting portions representing sleepers, projections on the sleeper representing chairs, and ribs connected between the sleepers on which the rails can 60 be engaged between the pairs of chairs.

Further according to this invention, the rails are of substantially U-shape in crosssection and in them are secured Tee-shaped members with bifurcated legs having their 65 cross members formed as pins and positioned so that each running rail has a pin projecting at one end and at the other end a socket, the track being formed with slots in stepped relation through which the legs of the Tee-shaped members can be passed 70 and engaged with the tracks.

The invention will be clearly understood from the following description aided by the accompanying drawings in which one example of carrying the invention into effect 75 is illustrated, and in which:-

Fig. 1 is a plan of a track member or section. Fig. 2 is a section on the line II-II, Fig. 3 a section on the line III-III, Fig. 4 a section on the line IV-IV all of Fig. I, and so Fig. 5 is an underview of one end of the track member or section.

The invention can be carried into effect in various ways as to detailed construction.

In the example shown on the accompany- 85 ing drawings a track member 1 for a toy electric railway is illustrated employing two running rails 2, 3 and a centre conductor rail 4 insulated from one another. Each track section 1 is made of insulating material 90 pressed or moulded to form in cross-section a track surface with depending side flanges 5 at an outwards angle to the track surface. The upper face of the track surface is formed with projecting cross strip shaped portions 95 aranged at suitable distances apart to simulate sleepers 6, and between each of the sleepers, except the end sleepers, are longitudinal ribs 7 for receiving the rails 2, 3, 4, that is, three longitudinal ribs 7 broken at the 100 sleepers.

On each sleeper 6 and on each side of the gaps in the ribs 7 for the running rails 2, 3 are formed projections shaped to simulate chairs 8 and similar projections 9 on 105 certain of the sleepers 6 simulating insulators

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9 for the conductor rail 4.

The rails 2, 3, 4, each consist of a length of U-shaped metal without side flanges, adapted to be engaged over the respective 110 ribs 7 and between the chairs 8 or insulators 9, the chairs 8 or insulators 9 being at a distance apart to allow of the rails being located between the pairs of chairs 8 and 115insulators 9.

The preferred method of connecting the rails, 2, 3, 4 to the track members 1 is by providing substantially flat Tee-shaped members 10 having the legs 11 bifurcated, the 5 ends of the cross piece 10 being formed as One of the Tee-members 10 is secured in the end of each rail 2, 3, 4 with the leg 11 projecting below the rail, 2, 3, 4, such as by burring the edge of the rail into 10 the end of the opening between the legs. For the running rails 2, 3 the member 10 is positioned at one end so that the pin projects, as shown in Fig. 3, and the member 10 at the other end so that a space is left between the 15 end of the member 10 and the end of the rail 2, 3 forming the socket, as shown in Fig. 4. For the conductor rail 4 the members 10 are secured so that the ends of the

members are flush with the ends of the rail 4.
20 Slots 12, 13, 14 are formed in the track member 1 through which the legs 11 of the Tee members 10 can be passed and secured by butting over to known spring locking members 15 on the under side of the track 25 member 1.

The slots 12, 13, 14 are stepped in position in relation to the ends of the track member 1 so that the rails 2, 3, 4 are positioned with their ends in line but with the pins of 30 the members 10 projecting from one running rail 2 at one end and from the other running rail 3 at the other end of the track member 1.

By this construction the running rails 2, 3 can all be of the same construction and by 35 stepping the slots 12, 13, 14 the running rails 2, 3 can be positioned in place with a pin and socket at each end of the track member 1, and the conductor rail 4 without a pin and socket.

40 Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. Tracks for toy railways in which each 45 track member or section is made of insulating material with cross projecting portions representing sleepers, projections on the sleepers representing chairs and ribs connected between the sleepers on which the 50 rails can be engaged between the pair of

chairs.

2. Tracks for toy railways as claimed in Claim 1 wherein the rails are substantially of U-shape in cross-section and in which are secured Tee-shaped members with bifurcated 65 legs having their cross members formed as pins and positioned so that each running rail has a pin projecting at one end and at the other end a socket, the track member being formed with slots in stepped relation 70 through which the legs of the Tee-shaped member can pass and engage with the track member.

3. Tracks for toy railways as claimed in Claims 1 or 2, wherein some of the 75 sleepers are formed with central projections simulating insulators and a central rib between the sleepers for receiving a third or conductor rail.

4. Tracks for toy electric railways in 80 which the track members or sections are formed of moulded insulating material with cross strip projections on the upper face representing sleepers, three sets of longitudinal ribs between the sleepers for receiv- 85 ing running rails and a conductor rail, projections on the sleepers coinciding with the ribs for the running rails simulating chairs, projections on some of the sleepers coinciding with the ribs for the conductor rail 90 simulating insulators, U-shaped metal rails located on said ribs and between the projections, Tee-shaped members secured in the rails with the legs projecting through and secured in slots in the track member, said 95 slots being stepped so that the end of a Tee member projects from the end of a running rail to form a pin and is positioned in the other end of the rail to leave a socket, substantially as set forth.

5. Tracks for toy railways constructed substantially as described with reference to

the accompanying drawings.

Dated this 8th day of February, 1947.
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