## PATENT SPECIFICATION



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## COMPLETE SPECIFICATION

## Improvements in or connected with Tracks for Toy Railways

We, Trix Immited, of St. John's House, 45 and 47, Clerkenwell Road, London, E.C.1, a British Company, and Robert Bindon Blood, of 20, Bedford 5 Mansions, Derngate, Northampton, British Subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained 10 in and by the following statement:—

This invention relates to tracks for toy railways of the type in which the rails are constructed of inverted U-shaped strips of sheet metal secured to a base or 15 sleepers, the strips in some cases being formed with a continuous base flange on each side. In both cases the rails lack the proper appearance of a true rail as there are no chairs, the flanged rails 20 usually being secured to the base or sleepers by clamps engaging the flanges, and the object of this invention is to improve the appearance of such types of rails so as to more closely simulate a rail of the standard type and also to provide improved means for securing the rails to a base, whereby the securing means are not visible from the top face of the track.

According to this invention, an in30 verted U-shaped sheet metal rail for toy
railways is formed integrally along the
lower edges with spaced projecting side
tags or projections shaped to simulate rail
chairs, and is secured to the base or
35 sleepers by means invisible from the top
face of the track.

Further, according to this invention, the means for securing the rails to the base or sleepers may comprise flat metal 40 members securable in the rails with the lower part projecting below the rail, each member being formed at the upper edge with a projection forming the usual pin for locating the next rail, and with the upper edge and pin shaped to the contour of the inside of the top edge of the rail, and adapted for the lower parts of the members to be passed through slots in the base or sleepers and secured therein.

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 is illustrated, and in which:
Figure I is a plan of a complete section 55
of a track for an electric toy railway
according to this invention.

Figure 2 is a side view.
Figure 3 is a section on the line III—
III, and

Figure 4 a section on the line IV—IV. both of Figure 1.

Figure 5 is a perspective view (broken) of one of the running rails shown in Figure 1.

Figure 6 is a perspective view of one end of the track section shown in Figure 1.

Figure 7 is a perspective end view of the pin end of one of the rails.

Figure 8 a similar view of the spigot 70 end of a rail.

Figure 9 is a part sectional elevation of the end of a track section showing the pin end of a rail, and

Figure 10 a similar view showing the 75 spigot end of a rail, and

Figure 11 a section on the line XI—XI of Figure 9.

In the drawings the invention is shown applied to a track section for toy electric solutions and the track section set forth in the specification and drawings of British Patent No. 459,744, and comprising a base 1 of pressed insulating material, such as artificial resin, provided with raised cross strips 1a simulating sleepers and longitudinal ribs 1b on which the inverted **U**-shaped running rails 2, 2, and "third" rail 3 are positioned.

Adjacent track sections are detachably connected by teeth 4 and indentations 5, and by rigid and spring interlocking members 6 and 6a in electrical connection with the running rails 2, 2, the "third" rail 95 3 being in electrical connection with spring members 7 which abut against each other when the sections are joined together

According to this invention, the inverted U-shaped metal strips forming the running rails 2 are formed integrally with side tags 2a or flat projections in corresponding positions on both sides of the bottom edges, said tags 2a being shaped to 105 simulate rail chairs and are spaced at

distances apart to correspond with the spacing of the raised cross strips 1a of the base, so that when the rails are located on the ribs 1b the tags 2a are positioned on the cross strips la and give the appearance of chairs holding the rails. The "third" rail is similarly constructed but in this case the tags 3a are at greater distances apart so as to engage with only 10 a few of the strips la.,

In practice the rails and chairs would be stamped out in the flat and then bent

to shape.

In place of the clamps hitherto em-15 ployed for securing the rails to the base, members 8 are employed, each of which consists of a rectangular piece of metal formed at the upper edge with a projection forming a pin 8a, and at the lower 20 edge with two projecting ears 8b and with a hole 8c. The top edge of the member 8 and pin 8a is curved or semi-circular to correspond to the curvature of the inside of the top edge of the rail.

One member 8 is secured in each end of a rail by pressing the lower edge of the rail into the holes 8c, the member 8 being positioned at one end of the rail so that the pin 8a projects beyond the end of the 30 rail and forms the usual end pin of a rail for locating the next rail, as will be seen in Figures 7 and 9, whilst the member 8 at the other end is arranged so that the pin 8a lies in the rail, the open end 35 of the rail forming the spigot for the pin of the rail in the next section as will be

seen in Figures 8 and 10.

The ribs 1b are stopped at suitable distances from the ends to accommodate the 40 members 8, the lower ends of which when the rails are located on the ribs 1b. pass through slots in the base 1 and the connecting members 6, 6a or 7, and the ears 8b burred over below the connecting 45 members to secure the rails, and the connecting members to the base 1, the metal members 8 also forming the electrical connections between the rails and connecting members.

By forming the upper edge of the members 8 of the same curvature or shape as the inside of the top edge of the rail,

damage or flattening of the top edge of the rail is prevented when resting the rail on a support to burr over the ears 8b, and 55 the securing means are not visible from the upper face of the track so that the rails appear to be secured to the base by the chairs.

With clockwork or non-electrical trains 60 only the running rails would be employed. The invention is also applicable to other types of tracks in which inverted U-shaped strip metal rails are secured to bases or sleepers, and to curved as well as straight track sections.

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 70

claim is:-

1. In tracks for toy railways, in which the rails are of inverted U-shaped sheet metal, forming the rails integrally with spaced projecting side tags or projections 75 along the lower edges shaped to simulate rail chairs, and securing the rails to the base or sleepers by means invisible from the top face of the track.

2. In tracks for toy railways as claimed 80 in Claim 1, wherein the means for securing the rails to the base or sleepers comprises flat metal members securable in the rails with the lower part projecting below the rail, each member being formed at the upper edge with a projection forming the usual pin for locating the next rail, and with the upper edge and pin shaped to the contour of the inside of the top edge of the rail and adapted 90 the lower part of the members to be passed through slots in the base or sleepers and secured therein, substantially as set forth.

3. Tracks for toy railways constructed 95 substantially as described with reference

to the accompanying drawings.

Dated this 7th day of April. 1941. H. GARDNER & SON, Chartered Patent Agents, 173-4-5, Fleet Street, London, E.C.4, Agents for the said Applicants.

