

AMENDED SPECIFICATION

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PATENT SPECIFICATION

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COMPLETE SPECIFICATION

Device for guiding the wheels of Rolling Stock of Toy or Model Railways into position on the Rails of the Track

We, MECCANO LIMITED, of 236, Binns Road, Liverpool 13, a British Company, and FRANK FELIX EVENNETT, of 74, Glendevon Road, Liverpool 16, British Nationality, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

10 In toy or model railways difficulty is experienced in setting the wheels of the rolling stock into position on the rails of the track because of the small size of the wheels and the rails, and the difficulty is increased when the miniature rolling stock is fitted with bogies, as owing to the pivotal connection of the bogies they require to be held in approximate alignment in order to place all the wheels in correct engagement on the track rails. The object of the present invention is to provide a simple device for use with miniature toy or model railways whereby the wheels of the rolling stock may be quickly and accurately guided into correct alignment, and ultimate engagement, with the rails.

30 According to the present invention, a device for guiding the wheels of miniature rolling stock on to the track rails of a toy or model railway, includes an elongated platform tapered and inclined in a direction towards the delivery end thereof, such that said delivery end is supported at a distance below the rail tops, in which said platform is provided on its longer opposite sides with corrugations formed integrally with and as continuations of said sides to act as wheel guiding ridges, and the opposing inner walls of said ridges change in shape from a flared or lateral outward slope at one end of the platform to an approximately vertical condi-

tion at said delivery end, said opposing inner walls converging at said delivery end to a width apart corresponding to the gauge of said railway.

45 Preferably the crests of the corrugations, at the delivery end of said platform, are adapted to lie close upon the tops of the track rails when the device is in position over the track.

50 A further feature of the invention resides in means for supporting the platform in its inclined position over the rails.

In the accompanying explanatory drawings:—

55 Fig. 1 is a side elevation of the guiding device in position over the track rails with model rolling stock thereon.

60 Fig. 2 is a plan of Fig. 1 the wheels of the model rolling stock being indicated in dotted lines.

Fig. 3 is an end view looking to the right of Fig. 1, showing only the end contour of the guiding device, the interior being omitted for clarity.

65 Fig. 4 is an end view looking to the left of Fig. 1 showing only the end contour of the device.

Fig. 5 is a complete end view of the device looking to the right of Fig. 1.

70 Fig. 6 is a complete end view of the device looking to the left of Fig. 1.

Fig. 7 is a perspective view of the guiding device in position over a section of rail track.

75 The guiding or railing device for miniature rolling stock comprises an elongated platform 1, tapering in width from the larger or receiving end 1a to the narrower or delivery end 1b, upon which the rolling stock, such as 2, is placed for guiding on to the track rails 4. In the construction shown, the platform 80

1 is formed by the base of a recess of shallow channel cross-section, along both tapering sides of which are ridges 3, their opposing walls 3a converging at the delivery end 1b of the platform to approximately the gauge of the rails 4. The platform is adapted to be positioned and supported over the rails of the track with the opposing walls 3a of the ridges at the delivery end 1b of the device lying closely against and between the rails, so that rolling stock 2 when placed on the wider receiving end 1a of the platform, even if the wheels 5 be out of alignment with the track as indicated in Fig. 2, and the rolling stock then run along towards the end 1b, the wheels 5 will be guided by the walls 3a of the ridges 3 into alignment with the track rails 4, the treads of the wheels riding on the crests of the ridges 3 while the flanges of the wheels are guided and finally aligned with the track rails 4 by reason of the opposing walls at the delivery end lying closely between the rails 4, the wheels ultimately passing off the platform and ridges on to the rails 4 of the track. This alignment of the rolling stock wheels will occur even in the case of miniature rolling stock fitted with pivotal bogies.

The platform 1 of the guiding device is so supported at an inclination, as shown in Fig. 1, that it slopes down towards the delivery end 1b, and the guiding ridges 3 are formed as corrugations, Figs. 5 and 6, extending along the sides of the platform; the crests of the channels beneath these corrugations fitting, at the delivery end of the device, closely upon the tops of the track rails, Fig. 4, so that the treads of the wheels of the rolling stock pass easily off the ridges on to the rails 4.

In the form of the invention illustrated, the device consists of a unit sheet metal pressing, the ridges 3 being formed by corrugations, as described, and the opposing walls 3a of the ridges changing in shape from a flared outward slope 3b at the larger receiving end of the platform to a vertical wall 3c at the delivery end. The outer walls 6 of the ridges depend to a greater depth than the inner walls, and decrease in height towards the delivery end 1b, and may be flanged at 7 along their lower edges to form side supports for the guide railing device maintaining it at an inclination such that the crests of the ridges 3 at the delivery end just rest upon the tops of the track rails, the spacing apart of the opposing vertical walls 3c of the ridges at this end conforming to the gauge of the rails.

A central part of the platform at the delivery end is upwardly embossed at 8 to clear the middle rail 4a of the toy railway track, the crest of the embossing being horizontal when the device is in position. The side edges of this embossing then form with the opposing walls 3c of the ridges tapering

grooves 9, which further assist the guiding of the rolling stock wheels into alignment with the track rails. When in position over the track rails, the terminal edge of the delivery end 1b of the platform lies below the rail tops, see Fig. 4, at a depth approximately that of the flanges of the rolling stock wheels 5 so that the wheel treads running on the ridges 3 are at rail top level and pass off the ridges on to the rails.

When such a device is placed over the rails of a toy or model railway with the channels of the ridges 3 at the delivery end over the rails 4 and the opposing walls 3c of the ridges fitting closely between the rails, if the rolling stock be placed on the receiving end 1a of the platform and then pushed down towards the other end, the wheels will be automatically guided into alignment with the rails, the rolling stock being thus positioned without difficulty on the track. The flaring 3b of the opposed walls at the receiving end of the platform assists in directing the wheels centrally on to the platform at the receiving end.

While the device would preferably be made as a sheet metal pressing it could be made as a die-casting, or of some plastic material.

As the device is a unit structure adapted to fit over both rails of the track it can be readily set in position over the rails for guiding rolling stock thereon by engaging the narrower delivery end over and between the track rails to position the delivery end of the device, the wider receiving end permitting some divergence on either side of the track. The device is thus suitable for positioning over and guiding rolling stock on to either straight or curved sections of track rails.

Though the continuous side walls 6 impart rigidity to the device, a simpler construction would be possible by omitting the side walls the delivery end of the platform being supported from the rails and the receiving end having short support members for raising that end to give an inclination to the platform.

What we claim is:—

1. A device for guiding the wheels of miniature rolling stock on to the track rails of a toy or model railway, including an elongated platform tapered and inclined in a direction towards the delivery end thereof, such that said delivery end is supported at a distance below the rail tops, in which said platform is provided on its longer opposite sides with corrugations formed integrally with and as continuations of said sides to act as wheel guiding ridges, and the opposing inner walls of said ridges change in shape from a flared or lateral outward slope at one end of the platform to an approximately vertical condition at said delivery end, said opposing inner walls converging at said delivery end to a width apart corresponding to the gauge of said railway.

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2. A device as claimed in claim 1 in which the crests of the corrugations, at the delivery end of said platform, are adapted to lie close upon the tops of the track rails when the device is in position over the track. 20
3. A guiding device as claimed in Claim 1 or 2, in which the platform is supported upon extensions or outer walls depending from the side ridges, such supports decreasing in height towards the delivery end of the device. 25
4. A guiding device as claimed in any of the preceding claims in which the platform is upwardly embossed to provide a clearance for a middle rail.
5. A guiding device as claimed in Claim 1 in which the delivery end of the platform, when the device is in position over the track rails, lies below the tops of the rails at a depth approximately that of the wheel flanges of the miniature rolling stock. 20
6. A guiding device, as claimed in any of the preceding claims, made as a unit sheet metal pressing.
7. A device for guiding the wheels of miniature rolling stock on to the rails of a toy or model railway substantially as described with reference to, and shown in, Figs. 1 to 7 inclusive of the accompanying drawings. 25
- A. J. DAVIES,
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PROVISIONAL SPECIFICATION

Device for guiding the wheels of Rolling Stock of Toy or Model Railways into position on the Rails of the Track

- We, MECCANO LIMITED, of 236, Binns Road, Liverpool 13, a British Company, and FRANK FELIX EVENNETT, of 74, Glendevon Road, Liverpool 16, British Nationality, do hereby declare this invention to be described in the following statement:—
- In toy or model railways difficulty is experienced in setting the wheels of the rolling stock into position on the rails of the track because of the small size of the wheels and the rails, and the difficulty is increased when the miniature rolling stock is fitted with bogies, as owing to the pivotal connection of the bogies they have to be held in approximate alignment in order to place all the wheels in correct engagement with the track rails. The object of the present invention is to provide a simple device for use with miniature toy or model railways whereby the wheels of the rolling stock may be quickly and accurately guided into correct alignment, and ultimate engagement, with the rails.
- According to this invention the guiding or railing device comprises an elongated platform of tapering width, for receiving the miniature rolling stock, formed by the base of a recess of shallow channel cross-section, having along both tapering sides upstanding ridges, flanges or the like converging to approximately the rail gauge at the narrower end of the platform, the platform being adapted to be positioned and supported over the rails of the track with the opposing walls of the ridges, or flanges, of the narrower end lying close against and between the rails, in such manner that rolling stock placed on the tapering platform at the wider end and run along on its wheels towards the narrower end will have the wheels guided by the side ridges or flanges, into alignment with the track rails, the wheels ultimately passing from the platform and ridges on to the rails.
- The platform as well as tapering in width is also preferably inclined, sloping towards the narrower end, and the guiding ridges may be formed by the opposing walls of corrugations extending along the tapering sides of the platform, the channels underneath the corrugations fitting closely on the tops of both rails of the track.
- In a suitable construction the device consists of an elongated sheet metal pressing having a central flat platform tapering in width and inclining downwardly towards the narrower end. Extending along each side of the platform is an upstanding ridge or corrugation, formed by channelling the metal beneath, the opposing walls of the ridges changing from a flared outward slope at the wider end of the platform to a vertical wall at the narrower end. The outer walls of the ridges depend downwardly to a greater depth than the inner walls and may be flanged along their lower edges to form side supports for the guiding or railing device with the crests of the ridges fitting close upon the tops of the track rails, while the spacing apart of the opposing vertical walls of the ridges at the narrower end conforms to the gauge of the rails. A central part of the platform at the narrower end may be embossed locally to clear the centre rail of the toy railway track, such embossing tapering in height from its inner part to the narrow end of the platform so that the crest of the embossing is horizontal although the platform inclines gradually towards the track rails. The side edges of this embossing form with the opposing walls of the ridges tapering grooves which further assist the guiding of the wheels into alignment with the track rails. When in position over the track rails, the terminal edge of the narrow

5 end of the platform lies below the rail tops at a depth approximately that of the wheel flanges of the rolling stock so that the wheel treads running on the ridges are at rail top level and pass off the ridges on to the rails.

10 When such a device is placed over the rails of a toy or model railway with the channels of the ridges at the narrower end over the rails and the opposing walls of the ridges fitting closely between the rails, if the rolling stock be placed with its wheels in any position on the wider and higher end of the platform and then pushed down towards the narrower end of the device, the wheels, even if mounted on bogies will, as they approach the narrow end of the device, be guided towards and become aligned with the rails, the wheels ultimately running off the ridges on to the rails with their flanges engaging between the rails.

20 The device would preferably be made as a sheet metal pressing but it could be made as a thin die-casting, or of some plastic material, and while it is desirable that the platform of the device be inclined so as to

slope down gradually towards the narrower end, such inclination is not necessary as the device would be effective if the platform were made horizontal. Further, while the opposing guiding ridges or flanges at both sides of the platform have been described as changing in their cross-sectional inclination from a lateral flare at the larger end to an approximately vertical wall at the narrower end, these opposing converging walls of the platform could be vertical throughout their extent.

30 As the device is a unit structure adapted to fit over both rails of the track, and is wider at the rear end, it can be readily set in position over the rails for guiding or railing rolling stock thereon by engaging the narrower end over and between the track rails to position the delivery end of the device, the wider end permitting some divergence from alignment on either side of the track.

Dated this 27th day of October, 1950.

A. J. DAVIES,
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FIG.4

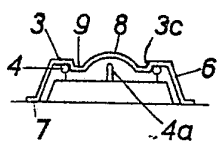


FIG.1

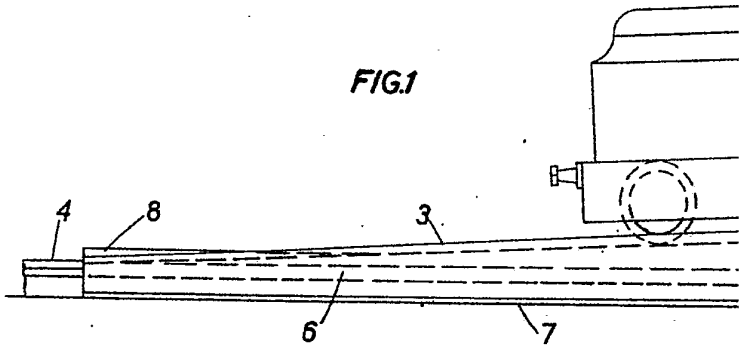


FIG.6

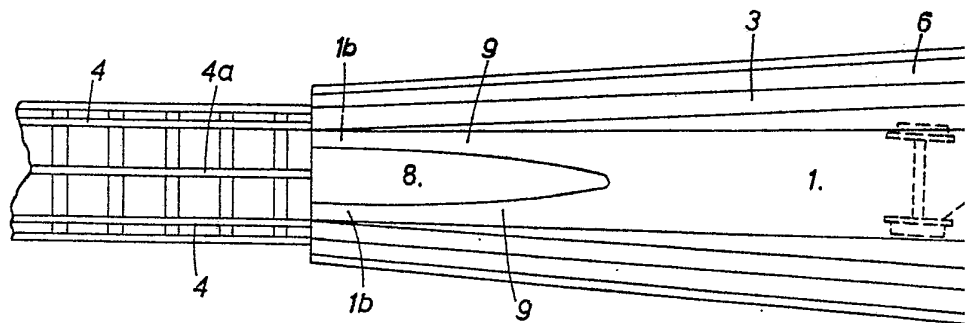
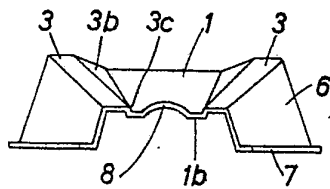
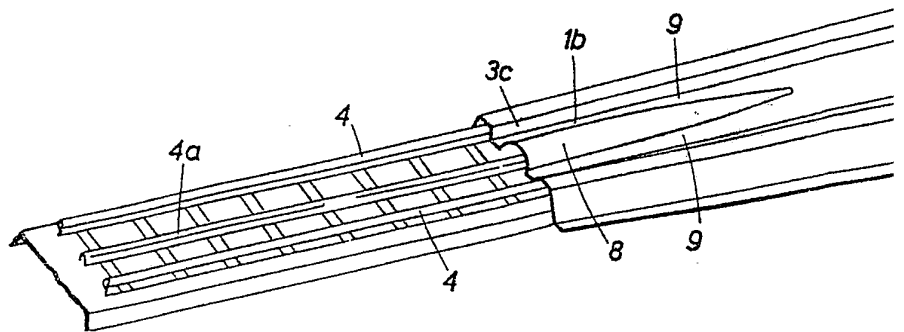


FIG.2



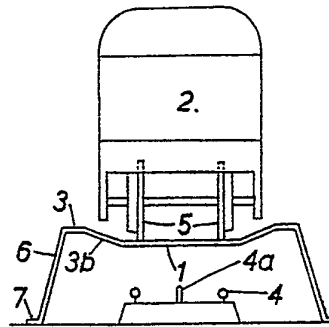
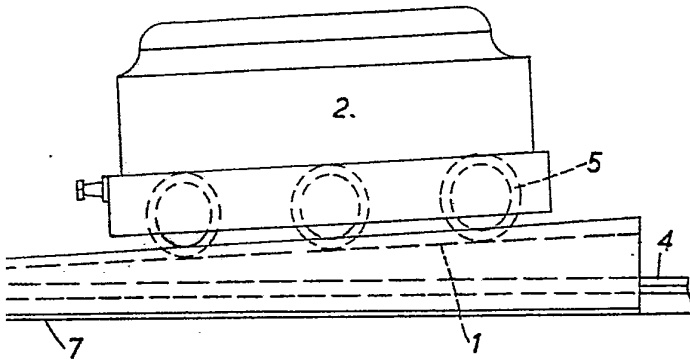


FIG. 3

FIG. 5

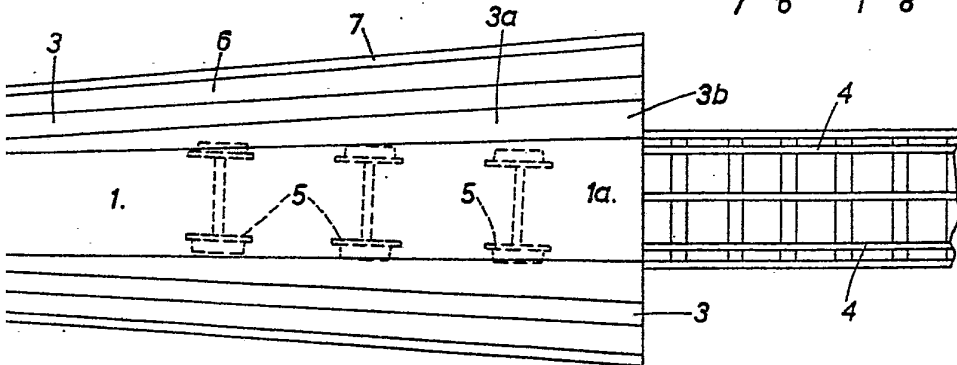
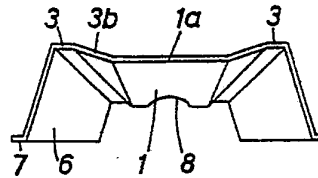


FIG. 2

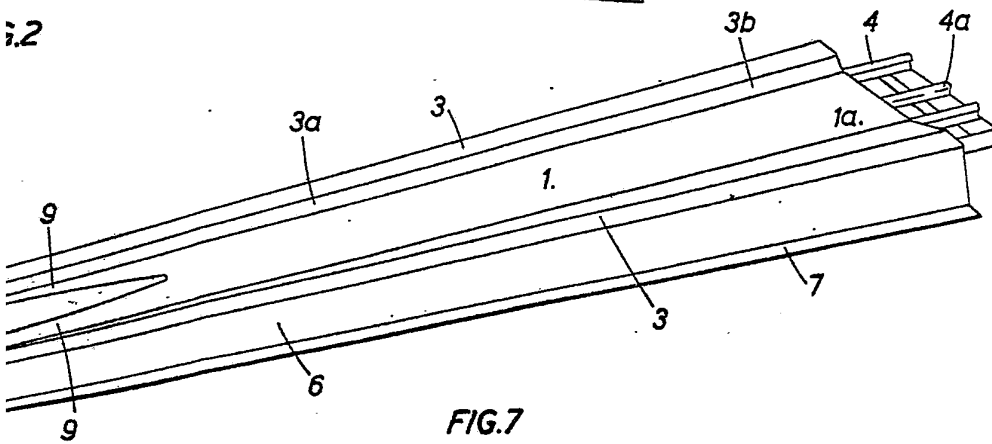


FIG. 7

