



PATENT SPECIFICATION

686,025

Date of filing Complete Specification: Feb. 2, 1951.

Application Date: May 6, 1950. No. 11265/50.

Complete Specification Published: Jan. 14, 1953.

Index at Acceptance—Class 132(iii), S19a4(ex : x).

COMPLETE SPECIFICATION.

Improvements in or relating to Model Railway Tracks.

ERRATUM

SPECIFICATION NO. 686,025

In the heading on Page 1, for "Feb. 2, 1951" read "Feb. 5, 1951".

THE PATENT OFFICE,
27th May, 1953

DB 29976/1(5)/3448 150 5/53 R

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ERRATA

SPECIFICATION NO. 686,025

In the heading on page 1, for "Feb. 2, 1951" read "Feb. 5, 1951".
Page 3, line 16, after "single" insert "unit".
Page 3, line 28, for "Mecanno" read "Meccano".

THE PATENT OFFICE,
23th August, 1953

DB 33939/1(21)/3493 150 8/53 R

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guided in the track rails and disposed to be moved longitudinally and angularly to bring a braking or reversing tab on the member from a lower inoperative to a raised operative position. The present invention concerns a simplified construction of a brake and reverse operating member for incorporation in the track rails of a model railway.

According to this invention the device for use in actuating the brake or reversing mechanisms of model railway rolling stock comprises a slidable member adapted to be guided for limited lateral movement relatively to the track rails and has an upward projection or tab for engaging the braking or reversing elements on the rolling stock, and a control spring for locating the slidable member with its projection or tab in a position intermediate of the track rails.

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In the preferred construction illustrated the slidable member 1 is incorporated in a section of the track rails 2 of a model railway, the rails being mounted upon any suitable form of sleepers 3. The slidable member consists of a strip of sheet metal which is guided for transverse movement across the rails 2 in slotted apertures 4 formed in the webs of the rails, one end of the strip being provided with an operating finger piece 5 formed, say, by bending up the end of the strip. On one edge of the slidable member 1 is an upwardly extending projection or tab 6, preferably formed integrally with the strip metal of the slidable member, and the extreme lateral positions to which the slidable member may be moved in either direction is determined by the shoulders 7 of

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COMPLETE SPECIFICATION.

Improvements in or relating to Model Railway Tracks.

We, FRANK FELIX EVENNETT, of 74 Glendevon Road, Broadgreen, Liverpool 16, British Nationality, FREDERICK DALE, of 9 Olive Grove, Wavertree, Liverpool 15, British Nationality, and MECCANO LIMITED, of Binns Road, Liverpool 13, a British Company, 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 :—

This invention relates to means for actuating the brake and reversing mechanism of model railway rolling stock by means of a device positioned in the track, which is adapted to engage braking or reversing elements on the rolling stock as the latter travels along the track. In such mechanisms, as previously proposed, a section of the track has been provided with pivotal tabs one or other of which was adapted to be raised to an operative position for actuating the braking or reversing elements of the rolling stock by moving a lever to engage selectively one or other of the tabs and raise them from a normal inoperative position to a vertical operative position; and in another arrangement a slidable and rotatable member guided in the track rails was adapted when moved longitudinally and angularly to bring a braking or reversing tab on the member from a lower inoperative to a raised operative position. The present invention concerns a simplified construction of a brake and reverse operating member for incorporation in the track rails of a model railway.

According to this invention the device for use in actuating the brake or reversing mechanisms of model railway rolling stock comprises a slidable member adapted to be guided for limited lateral movement relatively to the track rails and has an upward projection or tab for engaging the braking or reversing elements on the rolling stock, and a control spring for locating the slidable member with its projection or tab in a position intermediate of the track rails.

Further features of the invention relate to means for locating the slidable member in its terminal lateral movements, and for incorporating the device in a section of a model railway.

In the accompanying explanatory drawings :—

Fig. 1 is a perspective view of the preferred form of slidable member for engaging and actuating the braking or reversing elements on the rolling stock of a toy railway;

Fig. 2 being a perspective view of the control spring for the slidable member;

Fig. 3 is a perspective view of a section of the track rails of a model railway in which the slidable member is integrally incorporated as a unit;

Fig. 4 is a plan view of such a rail section; and

Fig. 5 is a fragmentary side view of Fig. 4 showing the guide slots for the slidable member and the control spring;

Fig. 6 is an end view of the track rail section, Fig. 4, showing the slidable member with its actuating tab in the central position;

Fig. 7 being a similar end view with the tab moved to the extreme left; and

Fig. 8 a similar end view with the tab moved to the right.

In the preferred construction illustrated the slidable member 1 is incorporated in a section of the track rails 2 of a model railway, the rails being mounted upon any suitable form of sleepers 3. The slidable member consists of a strip of sheet metal which is guided for transverse movement across the rails 2 in slotted apertures 4 formed in the webs of the rails, one end of the strip being provided with an operating finger piece 5 formed, say, by bending up the end of the strip. On one edge of the slidable member 1 is an upwardly extending projection or tab 6, preferably formed integrally with the strip metal of the slidable member, and the extreme lateral positions to which the slidable member may be moved in either direction is determined by the shoulders 7 of

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a wider part 8 extending from the opposite edge of the strip. Fixed closely to and preferably beneath the slidable member is a light strip spring 9, the reduced tenoned ends 10 of which fit closely into recesses 11, preferably formed as local extensions of the slots 4 in the rails in which the slidable member moves. The spring is thus held against endwise movement. The spring 9 and the slidable member 1 are formed with transverse ridgings 12, 13 respectively, the ridge 12 of the strip spring 9 being adapted to engage in the under recess 14 formed by the ridging 13 of the slidable member and so locate the latter in a midway or intermediate position, Figs. 3, 4 and 6.

With such an arrangement if the braking or reversing elements are located at the sides of the model rolling stock the single tab 6 on the slidable member 1 may, by moving the latter, be brought to a medial neutral or inoperative position, Fig. 6, ineffective for operating either the braking or reversing elements on the rolling stock and be resiliently held in such inoperative position by the inter-engagement of the ridge 12 on the spring 9 with the corresponding recess 14 on the sliding member 1, or, by moving the sliding member to the extreme limiting position at one or other side of the track, as shown in Figs. 7 and 8, operate the braking or reversing elements on the rolling stock. As the spring 9 is of light construction the sliding member may, when required, be readily pushed out of engagement with the locating ridge on the spring, when the slidable member is pushed to either side, the spring is bowed downward and a frictional grip set up by pressure of the spring ridge 12 against the plain undersurface of the sliding member, which is thus retained with its upright tab 6 in the operative position to which it has been moved for effecting either a braking or reversing action on the rolling stock.

While the foregoing description applies to the operation of model rolling stock the braking or reversing mechanism of which is actuated from the track, in some arrangements only the braking of the model rolling stock is effected from the track, reversing being obtained by manual operation of a lever on the model locomotive itself. In such latter arrangements the braking element on the model locomotive is centrally situated relatively to the track and, consequently, when the device of the present invention is used with such model locomotives the central position in the track of the tab 6 on the sliding member 1 would be the operative position for actuating the brake, either of the side positions of the tab 6 being neutral or ineffective positions.

The sliding member 1 is preferably stamped from a single unit piece of sheet metal, as illustrated, the tab 6 at one edge and

the finger piece 5 at one end being pressed up from the strip of material, the wider part 8 extending from the edge of the strip opposite to that on which the upright tab 6 is formed and the transverse ridge 13 in the slidable member 1 being formed centrally of the extension 8 and the upright tab 6.

A device such as described, for use in model railways, may be very economically manufactured, the slidable member 1 and the control spring 9 being formed of strip sheet metal and the slots 4 for guiding the slidable member being formed in the webs of the rails 2 of a rail section. The device is suitable for incorporating in rail sections of either curved or straight formation, and while it is preferred to embody the slidable member as part of a special rail section, it may be made up in the form of a separate unit for attachment to, and use with, an ordinary rail section.

What we claim is:—

1. A device for use in actuating the brake or reversing mechanisms of model railway rolling stock comprising a slidable member adapted to be guided for limited lateral movement relatively to the track rails and having an upward projection or tab for engaging the braking or reversing elements on the rolling stock, and a control spring for locating the slidable member with its projection or tab in a position intermediate of the track rails.

2. A device for use in actuating the brake or reversing mechanisms of model railway rolling stock as claimed in Claim 1 in which the terminal lateral movement of the slidable member to either side is limited and located by abutments on the slidable member adapted to engage the track rails or other stops.

3. A device for use in actuating the brake or reversing mechanisms of model railway rolling stock as claimed in Claim 1 in which the slidable member is located in a medial position by means of a ridge or like projection on the control spring adapted to engage a recess or the like in the slidable member.

4. A device for use in actuating the brake or reversing mechanisms of model railway rolling stock as claimed in Claim 1 or 2 in which the slidable member is formed with an extension the shoulders of which determine and locate the lateral positions to which the slidable member may be moved in either direction.

5. A track rail section for a model railway incorporating a brake or reversing mechanism as claimed in Claim 1.

6. A track rail section for a model railway as claimed in Claim 5 in which the slidable member is adapted to be guided for lateral movement in apertures formed in the webs of the track rails.

7. A track rail section for a model railway as claimed in Claim 5 in which the control

spring for the slidable member is in the form of a metal strip having reduced ends forming tenons fitting into apertures in the webs of the track rail and holding the spring against end-wise movement.

8. A track rail section for a model railway as claimed in Claim 7 in which the apertures for the ends of the spring form smaller extensions of the apertures in the webs of the track rails for the slidable member.

9. A device for use in actuating the brake or reversing mechanisms of model railway

rolling stock as claimed in Claim 4 in which the slidable member with the tab and shouldered extension thereon is formed as a single sheet metal pressing.

10. A device for use in actuating the brake or reversing mechanisms of model railway rolling stock substantially as described and shown in Figs. 1 to 8 inclusive of the accompanying drawings.

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PROVISIONAL SPECIFICATION.

Improvements in or relating to Model Railway Tracks.

We, FRANK FELIX EVENNETT, of 74 Glendevon Road, Broadgreen, Liverpool 16, British Nationality, FREDERICK DALE, of 9 Olive Grove, Wavertree, Liverpool 15, British Nationality, and MECANNO LIMITED, of Binns Road, Liverpool 13, a British Company, do hereby declare this invention to be described in the following statement:—

This invention relates to means for actuating the brake and reversing mechanism of model railway rolling stock by means of a device incorporated in the track, which is adapted to engage braking or reversing elements on the rolling stock as the latter travels along the track. In such mechanisms, as previously proposed, a section of the track has been provided with pivotal tabs one or other of which was adapted to be raised to an operative position for actuating the braking or reversing elements of the rolling stock by moving a lever to engage selectively one or other of the tabs and raise them from a normal inoperative position to a vertical operative position; and in another arrangement a slidable and rotatable member guided in the track rails was adapted when moved longitudinally and angularly to bring a braking or reversing tab on the member from a lower inoperative to a raised operative position. The present invention concerns a simplified construction of a brake and reverse operating member for incorporation in the track rails of a model railway.

According to this invention the device comprises a slidable member guided for limited lateral movement relatively to the track rails and having an upward projection or tab for engaging the braking or reversing elements on the rolling stock, and a spring control adapted to locate the slidable member with the projection or tab in an intermediate neutral or inoperative position, the terminal positions of the slidable member being determined by abutments thereon adapted to engage the track rails or other stops.

In the preferred construction the slidable

member is incorporated in a section of the track rails of a model railway and consists of a strip of sheet metal which is guided for transverse movement across the section in slotted apertures formed in the rails of the section, the end of the strip being provided with an operating finger piece formed, say, by bending the end of the strip. On one edge of the strip is an upwardly extending projection or tab, preferably formed integrally with the strip, and the extreme lateral positions to which the strip may be moved in either direction is determined by the shoulders of a wider part extending from the opposite edge of the strip. Fixed closely and preferably beneath the slidable member is a light strip spring, the tenoned ends of which are entered into recesses, preferably formed as local enlargements of the slots in the rails in which the slidable member moves. The light strip spring and the slidable member are each formed with a transverse ridging, the ridge of the strip spring being adapted to engage in the recess formed by the ridging of the slidable member and locate the latter in a midway or intermediate position.

With such an arrangement the single tab on the slidable member may, by moving the latter, be brought to a medial neutral or inoperative position ineffective for operating either the braking or reversing elements on the rolling stock and be resiliently held in such inoperative position by the inter-engagement of the ridge on the spring with the corresponding ridge recess on the sliding member, or, by moving the sliding member to the extreme limiting position at one or other side of the track operate the braking or reversing elements on the rolling stock, the sliding member being readily pushed out of engagement with the locating ridge on the spring. The light frictional grip then set up by pressure of the spring ridge against the plain surface of the sliding member when the latter is pushed to one or other side retains the sliding member and its upright tab in the

operative position to which it has been moved for effecting either a braking or reversing action on the rolling stock.

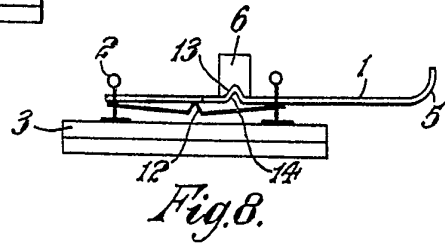
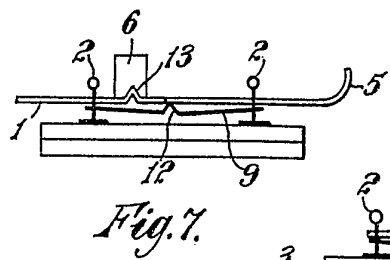
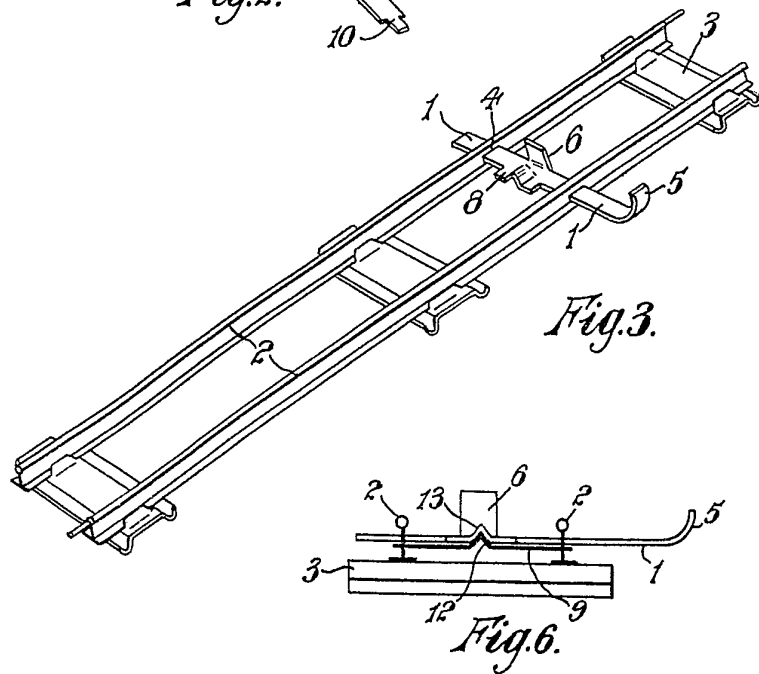
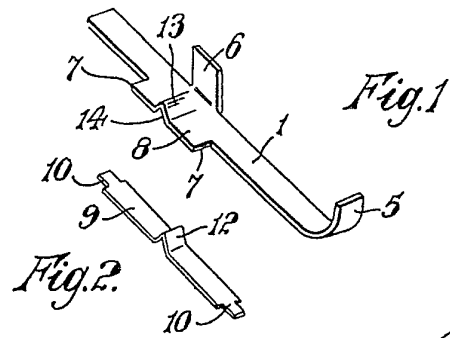
5 The sliding member is preferably stamped from a single unit piece of sheet metal, the tab at one edge and the finger piece at one end being pressed up from the strip of material, the wider part extending from the edge of the strip opposite to that on which the upright
10 tab is formed and the transverse ridge in the slidable member being formed centrally of the extension and the upright tab.

An arrangement such as described may be very economically manufactured, the slidable

member and the spring being formed of strip sheet metal and the slots for guiding the slidable member being formed in the webs of the rails of a rail section. The device is suitable for embodying in rail sections of either curved or straight formation, and
20 while it is preferred to embody the slidable member as part of a rail section, it may be formed as a separate unit for attachment to and use with an ordinary rail section.

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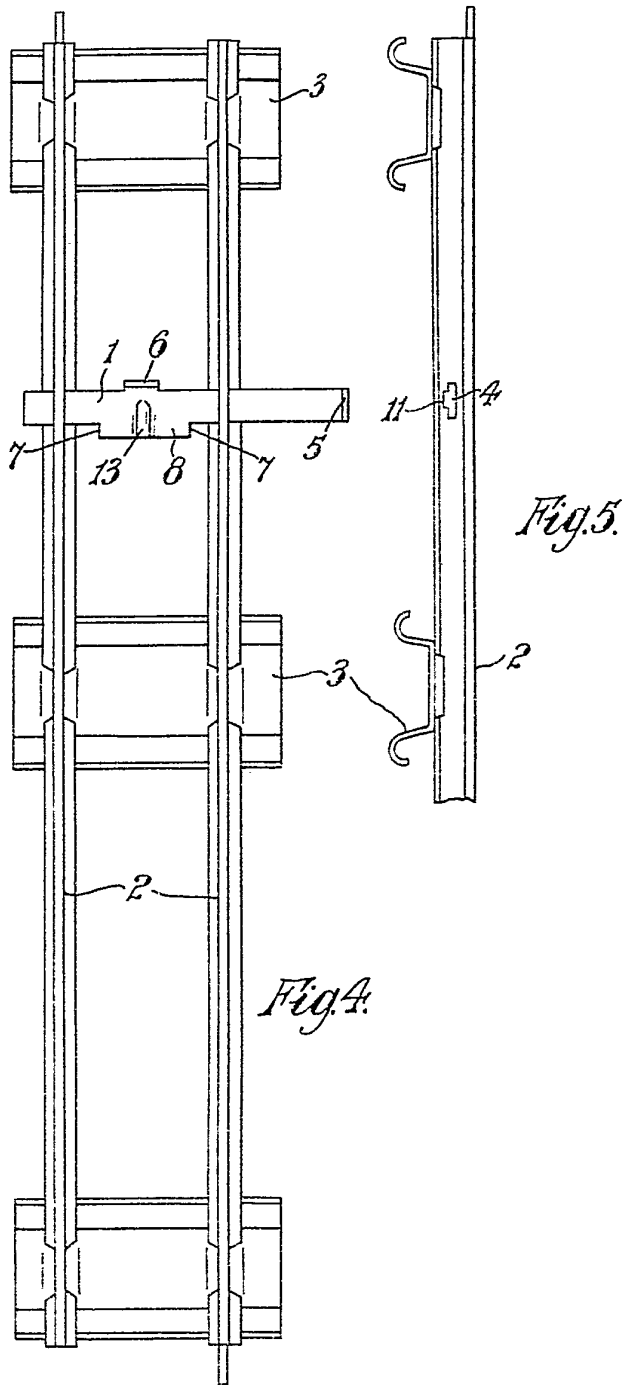
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686,025 COMPLETE SPECIFICATION

2 SHEETS This drawing is a reproduction of the Original on a reduced scale.

SHEETS 1 & 2



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