

April 21, 1959

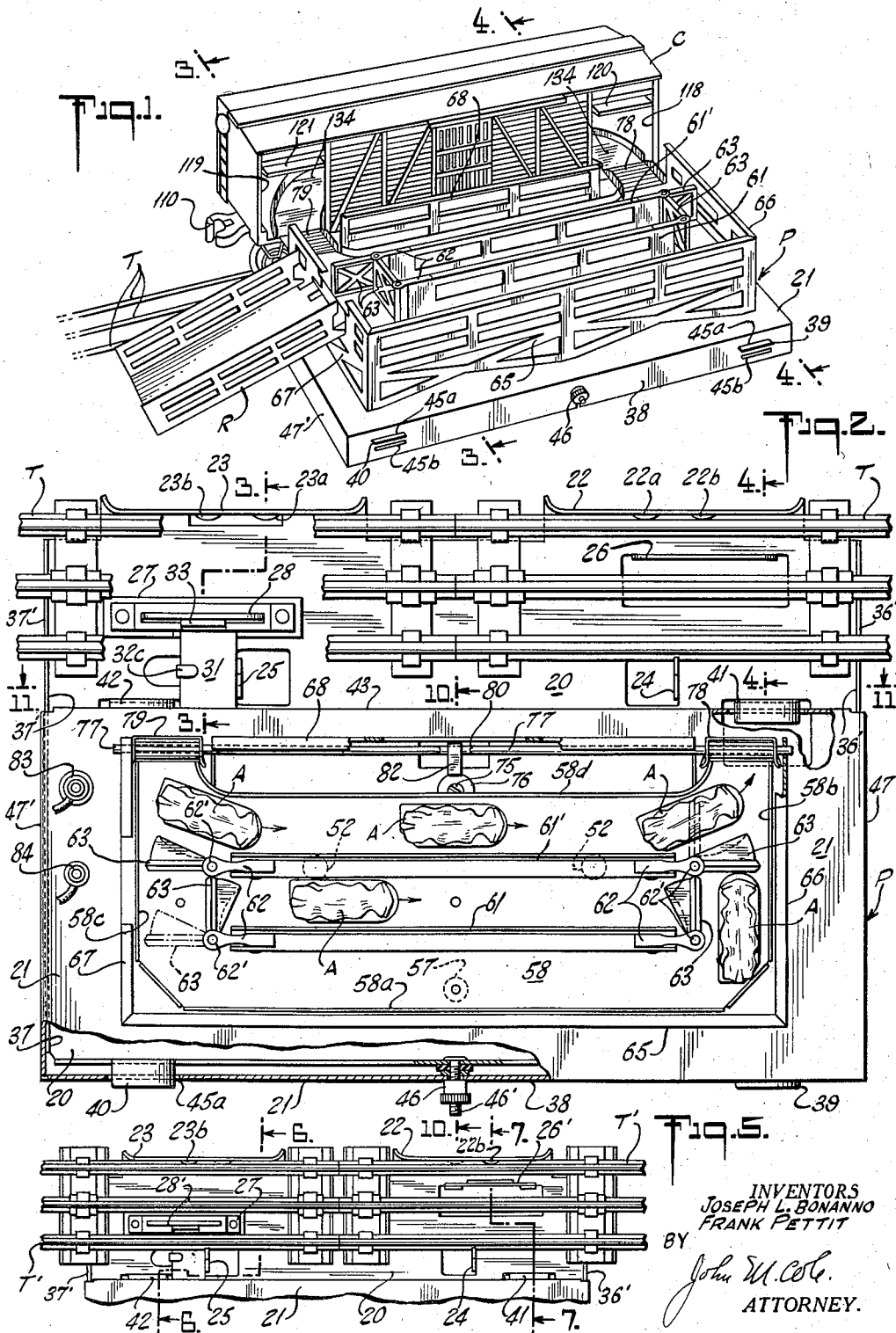
J. L. BONANNO ET AL

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TOY RAILROAD TRACKSIDE ACCESSORIES

Filed Dec. 12, 1950

6 Sheets-Sheet 1



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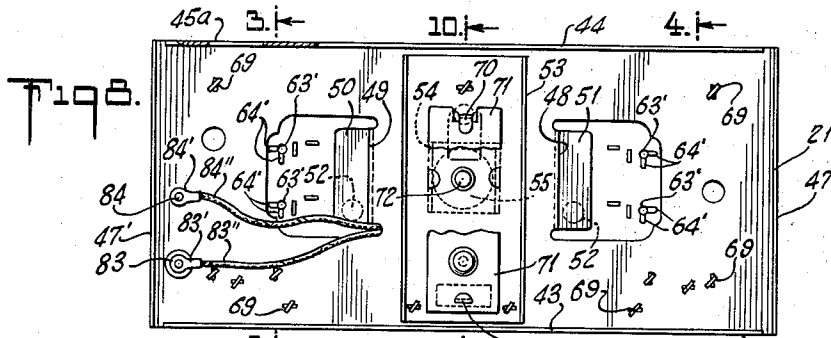
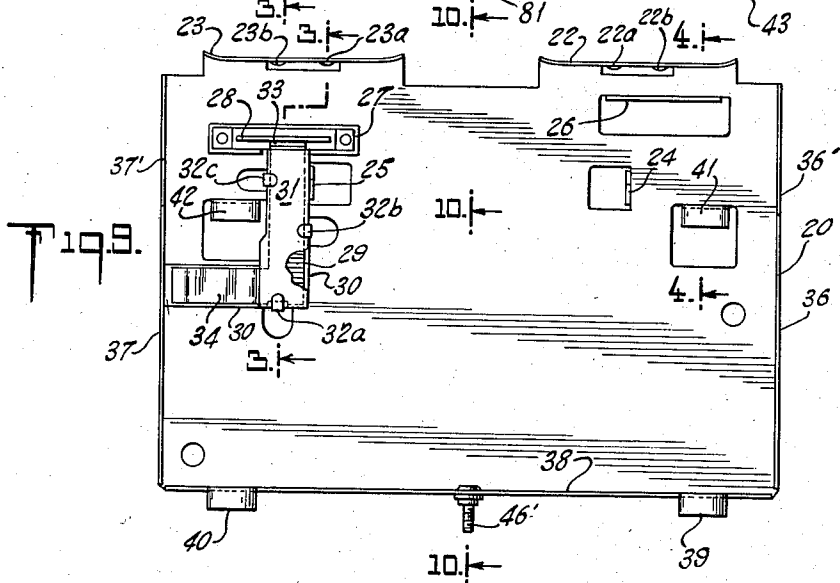
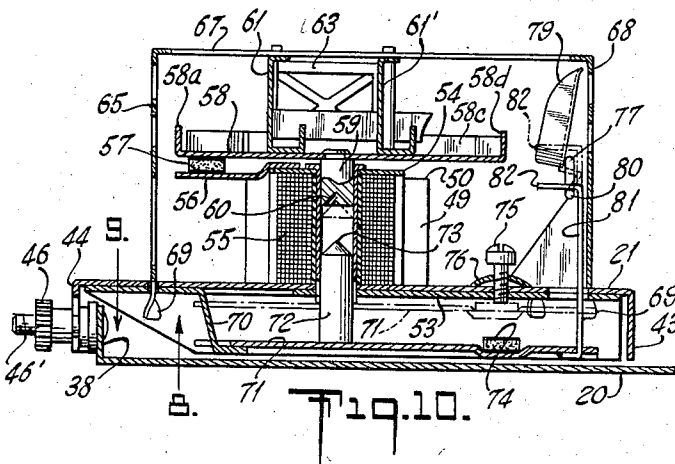
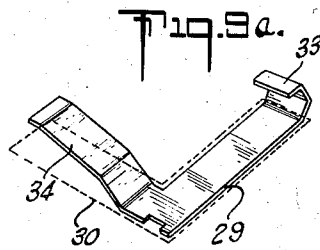
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TOY RAILROAD TRACKSIDE ACCESSORIES

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6 Sheets-Sheet 3



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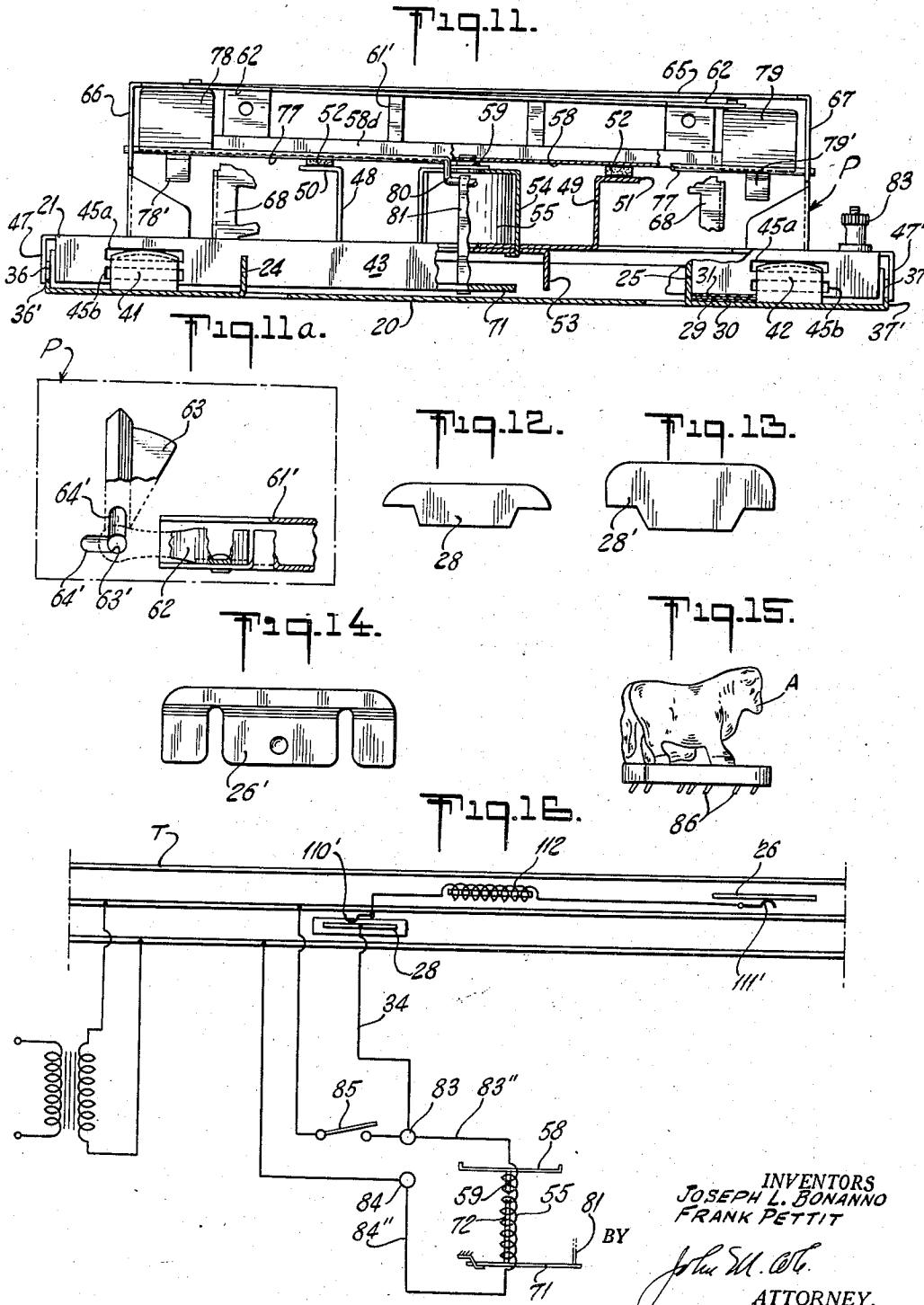
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TOY RAILROAD TRACKSIDE ACCESSORIES

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6 Sheets-Sheet 4



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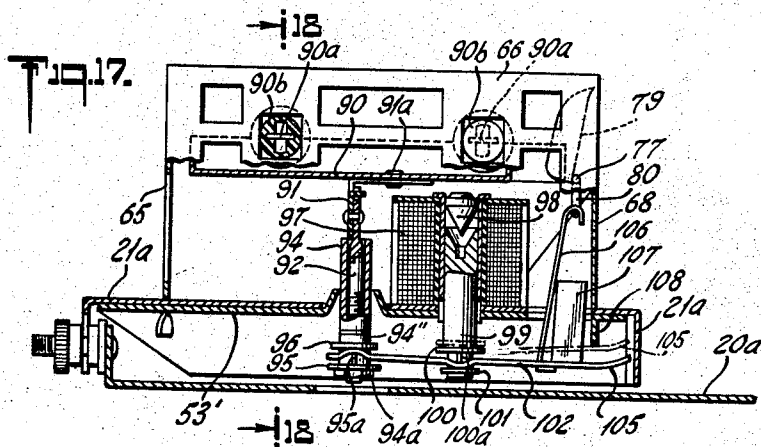
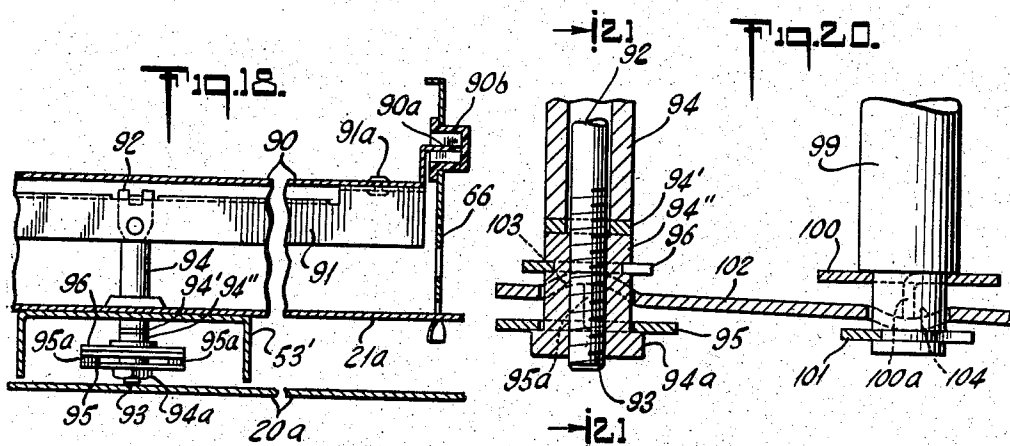
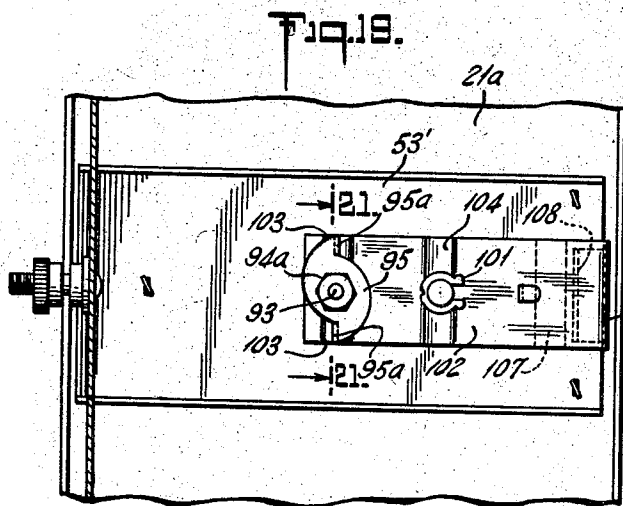
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TOY RAILROAD TRACKSIDE ACCESSORIES

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6 Sheets-Sheet 5



April 21, 1959

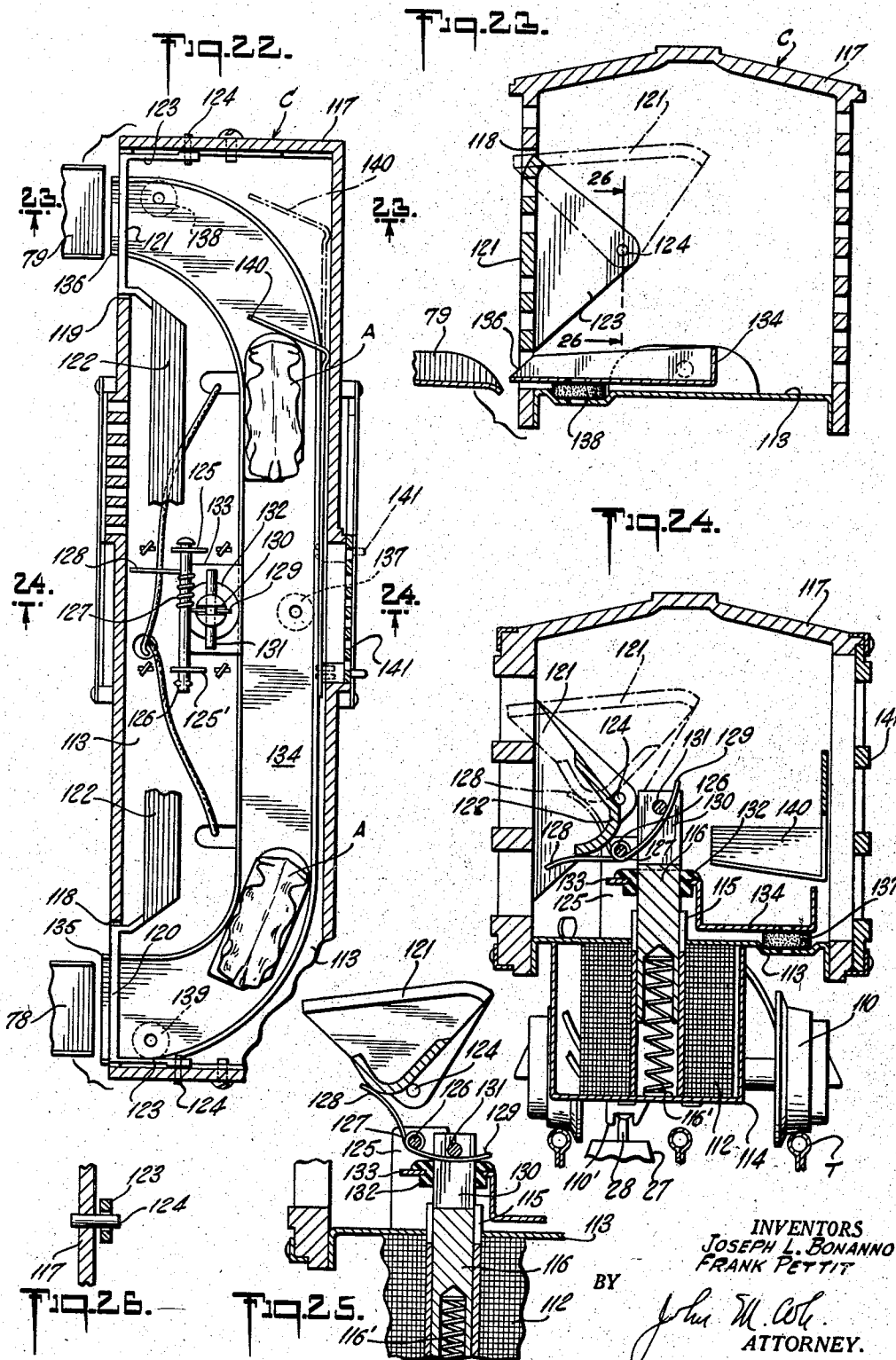
J. L. BONANNO ET AL

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TOY RAILROAD TRACKSIDE ACCESSORIES

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TOY RAILROAD TRACKSIDE ACCESSORIES

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18 Claims. (Cl. 46—40)

The present invention relates to toy railroad trackside accessories, and is more particularly directed toward stock loading platforms by which one can simulate the loading and unloading of the railroad stock car as usually carried out in ordinary railroad operations involving the loading and unloading of live animals.

The present invention contemplates a trackside accessory in the form of a platform or stockyard adapted to receive the toy stock from a toy stock car or deliver it to the stock car, and means to properly align and fix the position of the platform in relation to the toy railroad trackage and the toy stock car arranged to cooperate with the toy platform for the loading and unloading of the toy stock when located on the trackage opposite the platform. It also contemplates the provision of cooperable electrical connections whereby, when the car is opposite the platform, loading and unloading operations can be remotely controlled.

The present invention contemplates that the unloading and loading platform unit or stock yard will be a completely assembled device adapted for ready securement to, or disconnection from, standard forms of toy railroad track so that it can have a fixed position laterally relative to the track and preferably so that it may be adjusted to cooperate with different forms of track, normally employed in toy railroad layouts so as to locate the operative parts at the proper elevation for use with the stock car when used on the selected form of track.

The present invention also contemplates that the stock car be provided with means whereby, when placed opposite the loading and unloading platform, mechanism therein can be actuated to effect loading or unloading of the stock by remote control, this control being effected through properly located, platform carried contactors.

The invention also contemplates providing the car with a normally closed door which remains closed except when the unloading mechanism of the car is energized.

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

The accompanying drawings show, for purposes of illustrating the present invention, one embodiment in which the invention may take form, together with modifications of certain parts, it being understood that the drawings are illustrative of the invention rather than limiting the same.

In the accompanying drawings:

Figure 1 is a perspective view of the track-carried toy railroad stock car and associated loading platform arranged for transfer of movable toy figures or the like from car to platform and from platform to car;

Figure 2 is a top plan view and Figures 3 and 4 are transverse sectional views on the lines 3—3 and 4—4, respectively, of Figures 1, 2, 8 and 9, showing the parts in position for cooperation with one form of track having relatively low rail height, the car being omitted from Figure 2, other parts broken away and others in section. Figure 3 showing exit of toy stock from the car and Figure 4 its entrance into the car;

Figures 5, 6 and 7 are fragmentary views similar to

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Figures 2, 3 and 4, respectively, showing the parts in position for cooperation with another form of track having relatively high rail height;

Figures 8 and 9 are inverted and plan views, respectively, of the cover assembly and the sub-base assembly of the loading platform, and taken in the direction of the arrows 8 and 9, respectively, of Figures 3, 4, 6, 7 and 10;

Figure 9a is a fragmentary perspective view of a current conducting strip and cooperative shiftable contact;

Figure 10 is a section through the platform on the line 10—10 of Figures 2, 8 and 9;

Figure 11 is a side elevational view of the loading platform taken from the track side, parts being in section, on the line 11—11 of Figure 2;

Figure 11a is a fragmentary view illustrating the supports for the gates;

Figures 12 and 13 are side elevational views of two forms of insulated contact blades, one for use with the track having relatively low rail height and the other for use with the track having the relatively high rail height;

Figure 14 is a side elevational view of the supplemental grounding contact for use with the track with relatively high rail height;

Figure 15 is a side elevational view of a movable toy figure or stock or replica of a domestic animal (cow) such as shipped in a stock car;

Figure 16 is a wiring diagram;

Figure 17 is a transverse sectional view similar to Figure 10, showing a modified form of construction of the platform, parts being in elevation;

Figure 18 is a fragmentary sectional view on the line 18—18 of Figure 17;

Figure 19 is an inverted plan view of the structure of Figures 17 and 18;

Figure 20 is a fragmentary sectional view on an enlarged scale in the same plane as Figure 17;

Figure 21 is a vertical sectional view on the line 21—21 of Figures 19 and 20.

Figure 22 is a horizontal sectional view through the body of a stock car taken above the runway over which the stock moves;

Figure 23 is a transverse sectional view on the line 23—23 of Figure 22 showing the door closed;

Figure 24 is a central transverse sectional view on the line 24—24 of Figure 22 showing in full lines the armature released and the position of the parts when the door is closed, and in dotted lines showing the door in open position;

Figure 25 is a fragmentary sectional view similar to Figure 24 showing the position of parts when the armature is energized and the door is held open; and

Figure 26 is a fragmentary sectional view on the line 26—26 of Figure 23 showing a detail.

In the perspective view of Figure 1, the usual toy railroad track is indicated at "T," the stock car at "C" and the platform or stock yard at "P," and these letters are used to designate these three components in the other figures of the drawing.

The present invention is adaptable for use with two common forms of toy railroad track and to facilitate description of the cooperation of the car and platform with either form of track, the track will first be described.

In Figures 2, 3 and 4 a form of three rail track T, known as "027 track" is shown, while in Figures 5, 6 and 7 another form of three rail track, known as "O-gauge" track is shown at T'. These tracks are of the same gauge and used with the same rolling stock. The principal difference between the two tracks, involved here, is that track T has a lower rail height above the base than track T'. Owing to the difference in rail height above the base of the track the rolling stock on one

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track travels at a different elevation above the track support than when it is on the other track.

The loading and unloading platform or stockyard has a sheet metal sub-base 20 shown more clearly in Figure 9, and an inverted base or cover 21 shown more clearly in Figure 8. The sub-base supports the track T or T' and the cover, while the cover 21 supports a vibrating platform, corral, gates and other mechanism to be described.

The sub-base 20 has along one edge (the upper edge of Figure 9) two upwardly bent longitudinally extending flanges 22 and 23 and properly spaced from these two flanges two transversely extending flanges 24 and 25. Each flange 22, 23, 24 and 25 has two prongs or teeth designated 22a, 22b, 23a, 23b, 24a, 24b and 25a, 25b which face inwardly and form pairs of superposed notches. These prongs or teeth are at common elevations and arranged so that the flanges of the rails of track T or T' may be received and located at definite elevations as will be obvious from comparison of Figures 3 and 4 showing track T in position and Figures 6 and 7 showing track T' in position. The flanges are so spaced as to accommodate the cross-ties of the track sections as is obvious from Figures 2 and 5.

The sub-base 20 has an upwardly bent flange 26 in the right position to project up between one of the track rails and the power rail, as shown in Figure 2, and form a contact rail for cooperation with the off center current collector of one of the trucks of the toy car C, as illustrated in Figure 4—the same to be described more fully below. The base 20 also carries an insulating contactor case 27 which carries a removable, insulated blade contact 28 (see Figure 12). This blade contact projects up between the power rail and the other track rail and is in position to act as another contact rail and to be engaged by the off center collector of the other truck of the toy car C, as illustrated in Figures 3 and 4 and as will be more fully described below. Flange 26 and insulated contact 28 form a pair of contact rails having a height corresponding with the rails in Figs. 3 and 4, and extension 26' and wider blade contact 28' form a pair of contact rails having a height corresponding with the rails in Figs. 6 and 7.

A current conducting strip 29 shown more clearly in Figure 9a is located between lower insulating sheet 30 and upper insulating sheet 31 and the conducting strip and insulation are held in place on the sub-base by prongs 32a, 32b and 32c. The conducting strip 29 has an upwardly bent end 33 which extends up through an opening in the insulating contactor case 27 so as to frictionally bear against the contact blade 28. The conductor strip 29 has a laterally extending spring contact 34 which lies above the sub-base as will be clear in Figure 3. The sub-base has end flanges 36, 37 cut back at 36' and 37' to accommodate the track, and a rear flange 38 provided with rearwardly extending, horizontal guide lugs 39 and 40. The sub-base 20 also has another pair of similar lugs 41 and 42, preferably at the same elevation as the lugs 39 and 40 and having the same spacing.

The cover 21, shown more clearly in Figure 8, is made of sheet metal and is adapted to cover the portion of the sub-base not occupied by the tracks, and support the operating mechanism and upper parts of the platform. The cover is rectangular and has a front flange 43 and rear flange 44 each provided with two sets of superposed apertures 45a, 45b. These apertures in the side walls 43 and 44 of the cover are spaced so as to receive the four rearwardly extending prongs 39, 40, 41 and 42 on the sub-base and support the cover member 21 at one elevation or the other, as apparent from Figures 3, 4, 6 and 7. When in either position the sub-base and cover are held against sliding movement by the nut 46 on stud 46'. The cover 21 also has end flanges 47, 47' which

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extend down outside the flanges 36 and 37 of the sub-base.

Midway between the front and rear edges of the cover member 21 it is provided with upwardly bent members 48 and 49 flanged outwardly as indicated at 50 and 51. Each flange carries near the front an adhesive coated washer 52, made of resilient material such as sponge rubber or the like.

Midway between the members 48 and 49, the cover member 21 carries a downwardly facing, channel-shaped reinforcing member 53, these parts being welded together so as to stiffen the cover. Secured above the central part of the cover member 21 is a coil housing 54 carrying a coil 55. The coil housing 54 has a rearward extension 56 which carries another resilient adhesive washer 57. The washers 52 and 57 provide a three point support for a vibrating platform or metal plate 58. The adhesive secures the washers to the plate 58 and flanges 50 and 51 and extension 56. The plate 58 has a rear flange 58a, side flanges 58b, 58c and a front flange 58d. The latter curves forwardly, as indicated in Figure 2, and its ends are spaced from the side flanges 58b, 58c for the passage of the toy stock. The plate 58 carries a downwardly extending vibrating core 59 of magnetizable material, this core extending part way into the coil 55 and preferably having a conical recess at its lower end, as indicated at 60.

The platform 58 carries two longitudinally extending fences indicated at 61, 61'. These, together with the flanges 58a, 58d, provide narrow lanes. At the ends of these fences 61 and 61' are springs 62 and gates 63. The gates are pivotally mounted in holes 62' in the springs and 63' in the vibrating platform (see Figures 8 and 11a) and are held in position against unintentional movement by lugs 64 entering notches 64' in the platform 58. The gates and fences form a corral. The vibrating platform 58 is surrounded by a fixed fence having a rear portion 65, end portion 66, an end portion 67, all formed in one piece, and a front fence indicated at 68. These fence portions have prongs extending down through the cover portion 21 which are twisted to secure the parts in place as indicated at 69 in Figure 8. A ramp R extends downwardly from the end 67.

The reinforcing channel 53 under the cover 21 has a downwardly and forwardly bent element 70, Figures 8 and 10, which guides and supports an armature plate 71 carrying a magnetizable lower core 72. This core extends up into the coil and preferably has a cone-shaped upper end 73 as indicated. The armature plate 71 carries a resilient button or washer 74 opposite an adjustable stop screw 75 carried by the cover member 21. This screw is held against movement by a spring washer 76 and is available to adjustably limit the extent to which the coil can lift the lower core 72 and keep it spaced from armature core 59 providing an air gap.

The end fence members 66 and 67 pivotally support near the front a bridge assembly which includes bent rod 77 and two bridging members 78 and 79 having rearwardly extending stops 78', 79' adapted to extend under the forward edge of the vibrating platform 58. The central portion of the rod 77 is bent to crank formation as indicated at 80, Figure 11. The forward end of the armature plate 71 is fixedly secured to an upwardly extending strap 81, rearwardly bent as indicated at 82 so as to overlie the crank portion 80 of the rod 77. When the armature is deenergized, as indicated in Figures 2, 10 and 11 of the drawings, the hook 82 engages the crank portion of the shaft or rod 77 and holds the bridge members 78 and 79 in the elevated position shown in these figures so that cars can pass by the platform without interference. When the coil is energized, the armature 71 is elevated, the bridge members 78 and 79 fall to the lowered position as indicated in Figures 3, 4, 7 and 22.

The cover member 21 carries an insulated binding post 83 and a grounded binding post 84 having downwardly

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extending soldering lugs 83' and 84' connected to wires 83'' and 84'' connected to the coil 55. The wires provide a reliable circuit and insure the grounding of the structure. It also makes it possible to operate the vibratory mechanism without a track return. The soldering lug 83 connected to the binding post 83' is low enough to engage with the upper surface of the contact strip 34 and bear against it when the cover 21 is in either of its positions. The contact 34 is flexible enough to press against the soldering lug in either of these positions, and is wide enough to permit the sliding necessary in assembly of the two parts. The coil 55 may be energized by a switch such as indicated at 85, Figure 16.

Whenever the switch 85 is closed, the coil 55 is energized so as to lift the armature 71 as high as the adjusting screw 75 permits. This releases the bridge assembly so that the bridge members 78 and 79 lower by gravity. Third rail potential is also brought to the insulated contact blade 28 supported between the near track rail and the third rail. The alternating current in the coil 55 will then exert a varying attraction for the movable armature 59 and as the platform 58 is supported on the three resilient buttons, the platform 58 and all parts carried by it will vibrate at a corresponding frequency.

The vibration of platform 58 will cause movement of the toy animals A anywhere on the platform. These toy animals A, as shown more clearly in Figures 3, 4 and 15, have resilient supporting elements or fingers 86 which are effective to propel the animal in the direction indicated by the arrows in Figures 2, 3 and 4. Inasmuch as the toy is intended to have the animals move to the right as viewed in Figure 2 for loading purposes and be discharged over the unloading bridge 78, and the bridge 79 is intended for use to receive animals unloaded from the car, the platform 58 is, as more clearly shown in Figure 11, supported on the base so that the platform is slightly lower at the receiving end than at the discharging end. This makes it possible for stock to be discharged from the higher bridging member 78 into the car as indicated in Figure 4 and to be received from the car over the lower bridging member 79 as indicated in Figure 3.

The paths through which the toy animals travel may be varied by closing and opening the gates 63, and the toy animals may be kept between any of the fences as desired or can be kept from moving off the platform.

When the device is intended for use as a trackside structure with the track T, having a relatively low rail height, the prongs 39, 40, 41 and 42 are, as shown in Figures 3 and 4, in the upper holes 45a of the flanges of the cover member 21 and the platform is at the proper elevation to cooperate with the car C on such track. At the same time, the relatively low contact blade 28 of Figure 12 is in place in an insulating contactor case 27. The tracks can be readily secured to the sub-base by slightly springing in or bending the rails between the crossties so that the flanges can be snapped underneath the appropriate prongs 22a, etc.

When, however, it is intended that the platform should be used with track having relatively high rails, as shown at T' in Figures 5, 6, and 7, the track T' is snapped underneath prongs 22b, etc., and the insulated and grounding contacts are change. The relatively low contact blade 28, which is held in insulating case 27 by frictional engagement with contact spring 33 is withdrawn and a relatively high similar contact blade 28', Figure 13, is substituted. The flange 26, which forms the ground or return contact is provided with a removable grounding fitting or clip 26', Figures 7 and 14, so as to provide a grounded contact at the same height as the insulated contact 28'.

In the trackside structure of the modified form of construction shown in Figures 17 to 21, the sub-base 20a and cover 21a are similar to the corresponding parts previously described so far as they relate to the means

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for supporting the two forms of track and the support of the cover 21a at different elevations with respect to the sub-base 20a. They may employ the same or different means for electrically grounding the sub-base and supplying the current to the insulated blade corresponding to the blade 28. The cover supports outer fences 65, 66, 67 (not shown), and 68 similar to the outer fences previously described. The end members of the fence 66 support the bridge assembly similar to that above described and corresponding reference characters are employed for these parts. The sub-base is similarly reinforced by channel 53'.

Vibratory platform 90 corresponding with the vibratory platform 58 is provided with four supporting prongs 90a, which enter into resilient plug-like members 90b carried by end fence members 66 and 67 (not shown). The vibratory support 90 is able to vibrate up and down in these resilient supports and carries the corral and gates above discussed. The vibratory platform 90 carries longitudinally extending bridge member 91, these parts being riveted together as indicated at 91a. This bridging member 91 is secured to a downwardly extending connecting rod 92 threaded at its lower end as indicated at 93. The rod 92 passes through a tube 94, washer 94', an internally threaded bushing 94'' having a hexagonal head 94a and carrying a spring washer 95. When the bushing is tightened up, these parts are clamped tightly in place and the tube 94 pressed against the bottom of the bridging member 91. The bushing 94'' is undercut so as to carry a split or C-washer 96 spaced from the spring washer 95. The spring washer 95 extends laterally of the axis of the rod 92 and has two upwardly bent prongs 95a, 95a which terminate slightly below the C-washer 96.

A coil 97 connected in the circuit in a manner similar to coil 55 is carried on the upper side of the cover member 21a. This coil has a fixed pole piece 98 and receives a movable armature 99, these parts having cone-shaped end and recess as indicated in the drawing. The lower end of the armature 99 carries a spring washer 100 similar to the washer 95 and having downwardly extending prongs 100a spaced above a C-washer 101. A lever 102 has downwardly facing groove 103 to receive the prongs 95a of the spring 95 and an upwardly facing groove 104 to receive the downwardly facing prongs 100a of the spring 100. The lever extends forwardly as indicated at 105 and a loose link 106 connects this end of the lever with the crank 80 of the bridging assembly. The lever 102 carries a weight 107 biasing it downwardly so that the bridging members are normally up.

When the coil 97 is energized, the armature 99 is attracted, raising the lever 102 up against a downwardly bent flange 108 formed in the channel 53'. This forms a stop for the lever 102 and a pivot point about which it vibrates. The attractive force acting on the armature 99 varies during the alternating current cycle and this imposes a varying load on the lever system and the springs 100 and 95. This force is applied through the connecting rod 92 and tube 94 to the vibratory member 90 to vibrate the latter. The vibratory platform 90 acts in a manner similar to that above described and substantially the same operations are carried out. The springs 95 and 100, together with the backing washers 96 and 101, provide a flexible or yieldable support for the lever 102, permitting it to be vibrated vertically and to shift somewhat in transverse directions without imposing frictional drag on the moving parts.

The car C is shown in detail in Figures 1 to 4, 6, 7, and 22 to 26, inclusive. It has conventional trucks and couplers permitting its use on the track and its incorporation into toy trains with other cars. The truck at the left end of the car, as shown in Figure 1, or at the upper end, Figure 22, is indicated at 110 in Figures 3, 6 and 24. The truck at the other end of the car is indicated at 111, Figures 4 and 7. These trucks are alike and each truck

carries an electromagnetic coupler and a current collector 110', or 111', similar to that shown in Giaimo 2,297,142, September 29, 1942, and is cooperative with one or the other of the supplemental rails used with five-rail track as shown in that patent or in Bonanno Patent 2,232,508, February 18, 1941, so as to permit automatic uncoupling and control of car carried accessory.

When the car is on the three-rail track T or T', and stopped in the proper position, these current collectors 110' and 111' are in position to engage with the contact blade 28 or 28', and grounding contact 26 or 26' so that a current consuming device carried by the car and connected between the two current collectors may be energized whenever the circuit is closed to connect the insulated strip 28 or 28' with the third rail, as for example, through the switch 85 and contact strip 34 of Figures 9a and 16.

In the car of Figures 22 to 26, inclusive, the current consuming element connected between the current collectors 110' and 111' is in the form of a coil 112. This coil is mounted centrally of the car platform 113 and below it in a suitable coil housing 114. The bottom of this housing is closed. The coil is outside a non-magnetic tube 115 and this tube receives an armature 116 and cushioning spring 116'.

The armature is utilized to open the normally closed doors of the car and operate a vibratory stock supporting platform in the car.

The side wall of the car body 117 is provided with two door openings 118 and 119 spaced the same as the spacing of the bridge members 78 and 79 on the stockyard or platform. The door openings are closed by overhead doors indicated at 120 and 121, both part of a plastic molding having a central interconnecting portion 122 and rearwardly extending brackets 123 by which the door forming unit is supported on pins 124 carried in the end walls of the car body. The door member is gravity biased to the closed position shown in full lines in Figure 23 so that the doors are normally closed.

The coil housing 114 has two members 125 and 125' which extend upwardly above the base 113 of the car and support a horizontal shaft 126 between the armature 116 and the side of the car having the door openings. A lever member 127, made of spring wire, is rockably carried on the shaft 126. The left arm 128, as indicated in the drawings, is normally under the connecting bar 122 between the doors, and when the doors are lowered, the weight of the doors holds the lever 127 in the position indicated in full lines in Figure 24, and the right-hand end 129 of this lever member which passes through a slot 130 in the armature 116 and underneath a pin 131 carried by the armature, lifts the armature. The armature is thus held up so that when the coil is deenergized, the armature exerts no effort on the lever 127 to effect an opening of the door.

When, however, the coil 112 is energized and the armature pulled down, the pin 131 acts on the right-hand arm 129 of the lever 127 and lifts the left end 128 so as to effect an opening of the doors, shifting the parts from the full line position of Figures 23 and 24 to the dotted line position of these figures, or to the full line position of Figure 25. In this position, the center of gravity of the door carrying member is substantially above the pivots 124 so that very little load is transmitted to the arm 128 of the lever.

When the armature 112 is fully attracted as shown in Figure 25, the arm 129 of the lever is brought down by the pin 131 against the soft rubber grommet 132. This grommet is carried in a central bracket element 133 which forms part of a vibrating stock support or platform 134. This stock support which forms the floor of the car extends lengthwise of the car as indicated more clearly in Figure 22 and has a channel-shaped trough which extends from one door opening to the other. The ends 135, 136 of the vibrating member 134 extend

slightly beyond the door openings of the car. The vibrating platform 134 is secured to the car platform 113 by three resilient adhesive buttons 137, 138 and 139.

When the coil 112 is energized by alternating current, the armature 116 urged upwardly by spring 116', and together with the platform 134, vibrate up and down with the change in the attractive force of the magnet and this vibration will cause animals A which are on the car-carried platform 134 to proceed in the normal direction, i.e., forwardly. When the coil is energized the entire car, including the doors, undergoes vibration, but only the vibration of the stock support or car floor 134 has a functional value in carrying out the transportation of the toy animals. In normal operation, the animals enter car C through door opening 118 at the lower end of Figure 22, or at the right of Figures 1 and 2, and the vibration of the channel 134 will cause these animals to move toward the other end of the car for discharge through the other door. In order that the animals in the car can be kept from accidental escape, should the coil be energized when the car is on a length of five-rail track such as above referred to, the car is provided with a suitable stop 140 above the channel 134 and near its discharge end. This stop 140 may conveniently be connected to a sliding door 141 carried on the car opposite the loading and unloading door openings.

When the car is placed opposite the trackside structure as shown in Figure 1, and the remote control switch closed, current is supplied to both magnetic structures, the car doors 120, 121 opened and the respective platforms vibrated rapidly. This intense vibration will cause the movable toy articles or animals, as shown herein, to travel about a loop or circuit, including both vibratory platforms. Should the car be shifted, it will pass off of the energized contacts and the car doors will close. The paths through which the toy animals travel on the trackside structure may be controlled by shifting the gates so that the animals may be caused to travel round and round in a loop on the platform or may be diverted so as to be passed down the unloading ramp.

While the car and trackside structure are intended for operation together, it is possible to secure play value from either the car alone or from the trackside structure alone. The car can be energized from the length of five-rail track (such as has been referred to), and stock in the car unloaded down a suitable ramp without passing them on to the vibratory platform of a stationary structure. Also, it is possible to use the trackside structure without any tracks as it is a complete operating unit by itself. The stock may be discharged down the ramp shown or another ramp adjacent the unloading bridge.

Since it is obvious that the invention may be embodied in other forms and constructions within the scope of the claims, we wish it to be understood that the particular form shown is but one of these forms, and various modifications and changes being possible, we do not otherwise limit ourselves in any way with respect thereto.

What is claimed is:

1. A trackside accessory for use with toy railroad trackage having the usual flanged rails, comprising a base provided with means along one side thereof whereby the flanged rails of a toy railroad track may be secured thereto in a predetermined elevational position relative to the base, a platform resiliently supported above the base and laterally of the tracks for vibration up and down, an electromagnetic coil actuated vibratory means for vibrating the platform, the platform having guides which determine the paths of movement of vibration propelled devices resting thereon and spaced to provide a discharge passageway at the edge of the platform toward the track for discharge into a rail-carried car having a corresponding floor elevation, having a normally elevated bridge closing off the discharge passageway and biased to lowered position, and means operated by said coil for releas-

ing the bridge on energization of the coil so that articles may be discharged across said bridge.

2. A trackside accessory for use with toy railroad trackage having the usual flanged rails, comprising a base provided with means along one side thereof whereby the flanged rails of a toy railroad track may be secured thereto in a predetermined elevational position relative to the base, a platform resiliently supported above the base and laterally of the tracks for vibration up and down, an electromagnetic coil actuated vibratory means for vibrating the platform, the platform having guides which determine the paths of movement of vibration propelled devices resting thereon and spaced to provide a discharge passageway at the edge of the platform toward the track for discharge into a rail-carried car having a corresponding floor elevation, wherein the guides also are spaced to provide an entrance passageway along said edge, and having normally elevated bridges closing off the discharge and entrance passages, and means operated by said coil for releasing the bridges on energization of the coil so that articles may traverse the bridges.

3. A trackside accessory for use with toy railroad trackage having the usual flanged rails, comprising a base provided with means along one side thereof whereby the flanged rails of a toy railroad track may be secured thereto in a predetermined elevational position relative to the base, a platform resiliently supported above the base and laterally of the tracks for vibration up and down, an electromagnetic coil actuated vibratory means for vibrating the platform, the platform having guides which determine the paths of movement of vibration propelled devices resting thereon and spaced to provide a discharge passageway at the edge of the platform toward the track for discharge into a rail-carried car having a corresponding floor elevation, wherein the vibratory platform has additional guides interior of the other guides to provide alternative paths, and gates adapted to close off the alternative paths.

4. A trackside accessory for use with toy railroad trackage having the usual flanged rails, comprising a base provided with means along one side thereof whereby the flanged rails of a toy railroad track may be secured thereto in a predetermined elevational position relative to the base, a platform resiliently supported above the base and laterally of the tracks for vibration up and down, an electromagnetic coil actuated vibratory means for vibrating the platform, the platform having guides which determine the paths of movement of vibration propelled devices resting thereon and spaced to provide a discharge passageway at the edge of the platform toward the track for discharge into a rail-carried car having a corresponding floor elevation, wherein the guides are also spaced to provide an entrance passageway along said edge and having a fence about the platform except opposite the entrance and discharge passageways.

5. A trackside structure for use with toy cars having a standard height from wheel tread to car floor and with installed toy railroad trackage having the usual ties and flanged rails without disarranging said trackage, comprising a base having alongside one edge thereof a relatively low level portion adapted to extend under the trackage ties and provided with means for detachably securing the base to the flanges of the installed track rails so that the treads of the track rails have a predetermined elevation and lateral position with respect to the base and a car on the rails has its floor located at a predetermined height, a platform carried from the base at a predetermined lateral position with respect to the tracks and car and opposite the car floor, the platform having guides providing a path terminating along the edge thereof near the track support and carrying bridges which when elevated close off the ends of the path, means for supporting the platform for vertical vibration, whereby articles supported thereon by resilient oblique fingers may be moved by such vibration, electromagnetically operated, platform

vibrating means supported from the base and operably connected to the platform, and means connecting the electromagnetically operated means to the bridges to open them upon energization thereof.

6. A trackside structure as claimed in claim 5 wherein the ends of the path are on the edge of the platform towards the track to provide entrance and exit passageways spaced lengthwise and wherein the platform is higher at the discharge passageway than at the entrance passageway so that it may discharge articles at a greater elevation than that at which articles may be accepted.

7. A trackside structure as claimed in claim 5 wherein the electromagnetic means includes a freely vibrating armature carried by the platform, and a second armature biased to one position and moved to a second position out of contact with the first where it provides a shortened air gap.

8. A trackside structure as claimed in claim 5, wherein the electromagnetic means includes a coil and two freely movable armatures, one connected to the platform to move bodily therewith, the other movable to a position to provide a narrow air gap between it and the first armature and having means to adjust the air gap.

9. A trackside structure as claimed in claim 5 and for use with different tracks each having a rail elevation different from the elevation of the other of said tracks and having a plurality of track securing means for securing the said different tracks at different elevations, and wherein the means for carrying the platform from the base includes means for supporting the platform at corresponding selected heights to thereby compensate for change in height of the rails of the selected track and change in elevation of the car thereon.

10. A trackside structure as claimed in claim 9 wherein the platform supporting means includes a plurality of sets of superposed holes and a plurality of laterally shiftable members fitted into one set only of holes.

11. A toy railroad trackside accessory for use with diverse forms of installed toy railroad trackage having ties and flanged track rails of different heights, said accessory having a base adapted to rest on a flat surface and including means for securing it to the rail flanges with the rail flanges at one of a plurality of selected heights above said surface so that standard height cars on the rails have their floors at correspondingly different heights above the said surface, said accessory also including a merchandise handling device having a platform for transfer of merchandise to and from the cars, and also including means to mount the trackside platform at correspondingly different heights above the base of the accessory.

12. A toy railroad trackside accessory as claimed in claim 11, wherein the merchandise handling device includes electromagnetically operated means for vibrating the platform, the accessory being in the form of a pre-assembled unit, and shifted bodily from one mounting position to the other.

13. A toy railroad trackside accessory as claimed in claim 11, wherein the merchandise handling device includes resilient supports for the platform thereof, and an electromagnetically operated platform vibrator having a solenoid coil and a vibratory armature drivingly connected to the said platform.

14. A toy railroad trackside accessory for use with diverse forms of installed toy railroad trackage having ties and flanged track rails of different heights, said accessory having a base adapted to rest on a flat surface and including means for securing it to the rail flanges with the rail flanges at one of a plurality of selected heights above said surface so that standard height cars thereon have their floors at correspondingly different heights above the said surface, a merchandise handling device having a platform for transfer of merchandise to and from the cars, and means to mount the trackside platform at correspondingly different heights above the base of the accessory, said last mentioned means includ-

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ing horizontally extending prongs and a cover member for the base which directly supports the platform of the merchandise handling device and has holes at different elevations to receive the prongs.

15. A trackside accessory for use with different forms of toy railroad trackage having flanged track rails of different heights so that cars with uniform spacing of their floors above the rails have different floor heights, said accessory having a base provided with two sets of rail flange engageable devices at different heights so as to hold either track at a selected elevation relative thereto, a vibratory platform, and means to mount it at correspondingly selected elevations above the base and at the same elevation above the track irrespective of which track is in place so as to compensate for car floor height variation.

16. A trackside accessory as claimed in claim 15, wherein the rail engageable means includes notched members receiving the edges of the rails.

17. A trackside accessory as claimed in claim 15, wherein the platform mounting means includes a cover member secured to the base and to which the platform is secured, and the base and cover have cooperative

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prongs and prong-receiving apertures, the apertures being vertically spaced.

18. A trackside accessory as claimed in claim 15, having insulated and grounded contact of height to correspond with one rail height and extension contacts to change the elevation to correspond with the other rail height.

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