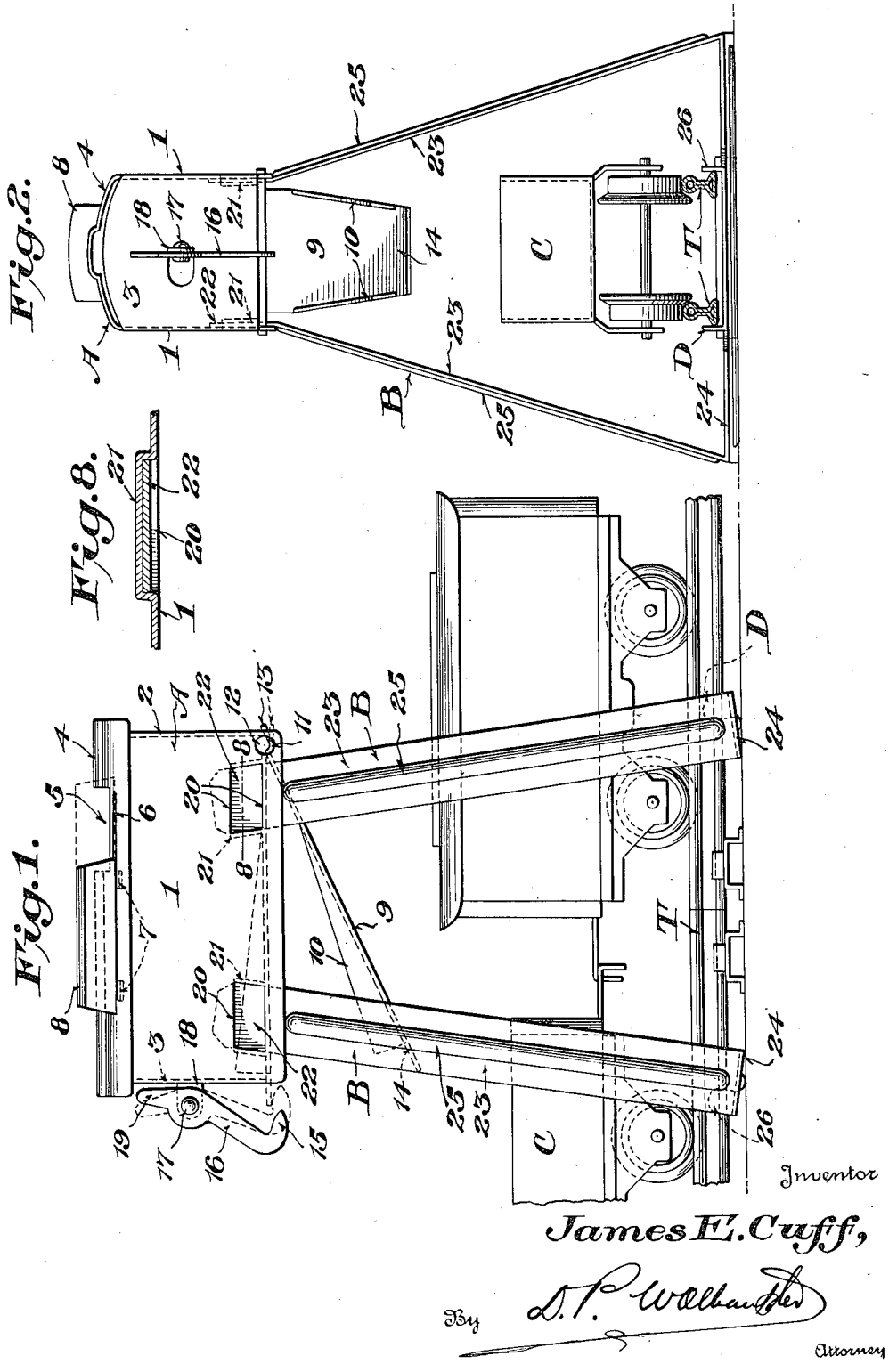
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LOADING STATION FOR TOY TRAINS

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LOADING STATION FOR TOY TRAINS

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Fig. 3.

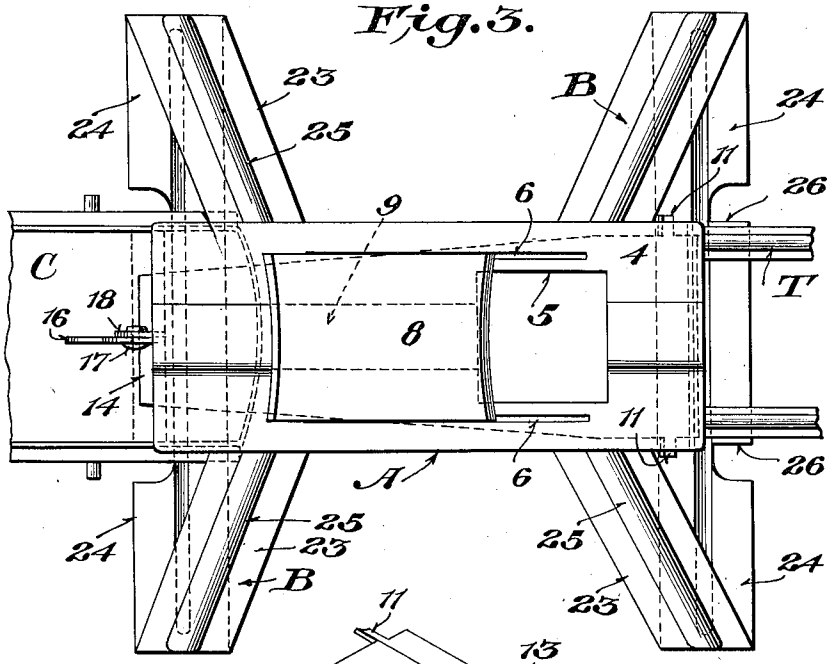


Fig. 4.

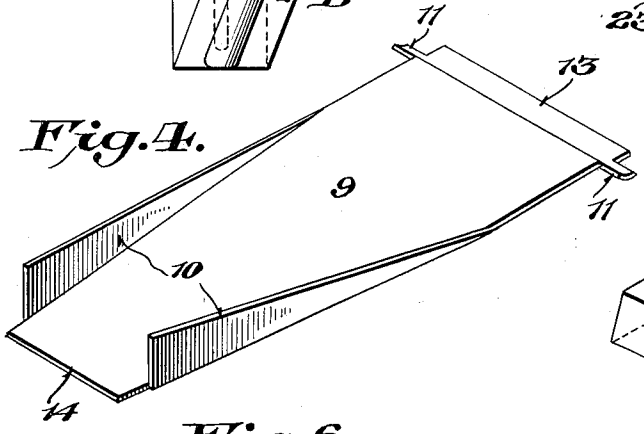


Fig. 5.

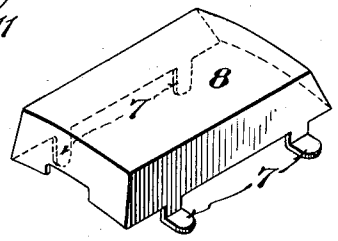


Fig. 6.

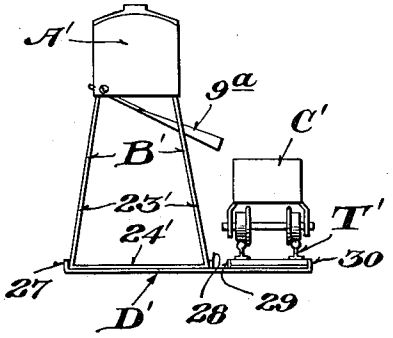
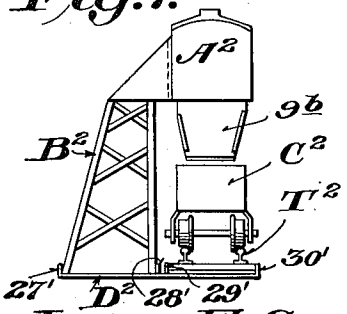


Fig. 7.



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Patented Oct. 15, 1935 2,017,616

UNITED STATES PATENT OFFICE

2,017,616

LOADING STATION FOR TOY TRAINS

James Edward Cuff, Hinsdale, Ill.

Application October 26, 1934, Serial No. 750,225

14 Claims. (Cl. 46—48)

This invention relates to toy railways, and more particularly to a novel article of railway equipment in the form of a loading or coaling station to be used in connection with toy trains.

A special object of the invention is to depart from the conventional method of toy train operation and offer the train operator a new field of entertainment in the form of toy operating equipment designed to closely follow the appearance of actual auxiliary or maintenance equipment now in use on standard railroads, and more particularly operating equipment that is used in conjunction with the rolling stock.

Another object of the invention is to provide a novel loading or coaling station which is intended to receive small objects such as marbles, stones or the like, and to retain the same until the operator of the toy train stops his cars properly under the station, when, by moving a lever, the operator can cause the contents of the station to drop down a chute or slide into any selected car or into the tender of the train.

A further object of the invention is to provide a loading station which is of rigid construction when assembled, and which is so designed as to be centrally located with respect to the track bed and to be locked to a track section or sections, so that if the track is shifted during play therewith, the loading station is automatically moved with the track and, moreover, will not become disaligned with the track so that when the train makes another trip it will not be derailed.

A still further object of the invention is to provide a toy loading station of the knock-down type which comprises relatively few pieces that may be readily packed or nested together in such a way as to utilize the smallest possible amount of storage or shipment space and yet be easily and quickly assembled or set up by the user.

With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the invention consists in the novel features of construction, combination and arrangement of parts, hereinafter more fully described, illustrated in the accompanying drawings, and defined in the appended claims.

A preferred and practical embodiment of the invention is shown in the accompanying drawings, in which:—

Figure 1 is a side elevation of the novel loading station connected with the track and illustrating several cars in load receiving position.

Figure 2 is an end elevation of the construction shown in Figure 1.

Figure 3 is a top plan view of the construction shown in Figures 1 and 2.

Figure 4 is a detail perspective view of the bottom or delivery chute of the device.

Figure 5 is a detail perspective view of the cover for the housing or body of the loading station.

Figures 6 and 7 are diagrammatic views illustrating the application of the invention to other forms of embodiment wherein the support for the loading station is arranged at one side of the track.

Figure 8 is a detail section taken on the line 8—8 of Figure 1.

Similar reference characters designate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, it will be observed that the body or container of the loading station which provides in effect a storage bin or feed hopper is designated generally as A, the same being carried or mounted on support B over and above the cars C to be loaded and which travel on the track T comprising a plurality of conventional track sections of either the electrical or mechanical type. The lower ends of the supports B are intended to be interlocked or engaged with a track section, or adjacent track sections, through the medium of suitable interlocking or holding means D.

As will be observed from the drawings, the body of the loading station is formed by a housing having the side walls 1, end walls 2 and 3, and a top or roof portion 4 provided at each side of the opening with suitable slots 6 intended to receive the lugs 7 carried by a cover 8. It will, therefore, be apparent that the cover 8 may be slidably shifted on the roof 4 to cover and uncover the opening 5. The bottom of the body or container 1 is formed by a pivoted bottom wall, floor, or gate 9 having a portion of the sides thereof bent upwardly as indicated at 10 to provide a delivery chute. The rear end of the bottom wall or gate 9 is formed with the laterally projecting pintle forming lugs 11 intended to be mounted in the hinge openings 12 at the lower corners of the side walls 1—1 so as to pivotally mount the bottom wall or gate, while the edge portion 13 is extended beyond the members 11 to provide an abutment for engaging with the lower edge of the end wall 2 to regulate the extent of downward movement of the gate or bottom member 9. The forward or front end 14 of the pivoted gate or bottom is intended to project beyond the end wall 3 so that it may be engaged

by the hook portion 15 of a latch 16 pivotally connected as at 17 to an ear 18 struck out from the wall 3 and having a handle or operating extension 19 above the pivot. The latch 16 is therefore intended to normally hold the floor or gate 9 in a position to sustain or support the contents of the body A until it is desired to discharge or deliver the same to a car. When the car is properly positioned beneath the body A, the latch 16 may be moved from the dotted line to the full line position shown in Figure 1, thereby to permit the floor or gate 9 to drop downwardly and in discharging relation to a waiting car.

The side walls 1—1 of the body A are each provided with pairs of spaced parallel slots or slits 20—20 so as to enable the sheet metal of the body A to be bent inwardly to provide the holding straps 21 (Fig. 8). These slots and straps cooperate with the side walls to provide in effect sockets intended to receive and hold the upper portions 22 of the arms or uprights 23 which constitute a part of the supporting members B. The said supporting members which include the uprights or arms 23 are preferably of substantially U-shaped formation and, therefore, the said uprights are connected by transverse bottom member or web 24. If desired, the uprights 23 may be provided with the rib 25 for purposes of reinforcement. The transverse member 24 of the support is provided with the track interlocking means D heretofore referred to. In the example shown, the said interlocking means is preferably in the form of centering and holding lugs 26 struck up from the body of the member 24 and which are so spaced as to engage with the rails of a track section and thereby effectively center and interlock said section with the loading station.

From the foregoing it will be apparent that the body A and supporting means B are detachably connected, and because of the fact that the supporting means B, including the uprights 23 and connecting web 24, are of substantially U-shaped formation, and detachable from the body, they may be nested one within the other when packed for shipment or storage, thereby to effect a considerable economy of space. When it is desired to set up the loading station for use, it is only necessary to insert the upper ends 22 of the uprights 23 through the slots 20 and between the strap 21 and the inside face of the side wall. As will be observed from Figure 1, the upper ends 22 of the uprights are cut away at the corners to facilitate the interfitting thereof with the body and in practice, there is a wedge fit between the upper ends of the uprights and the receiving slots and strap. Moreover, the slots 20 and the strap are preferably formed so as to receive the upper ends of the members 23 at an angle to the vertical thereby causing the supporting members to assume a downwardly divergent relation which materially braces and steadies the structure when set up for use. After the body A is assembled on the supporting means B, the latter may be interlocked with the track by means of the lugs 26 which constitute the track interlocking or engaging means D previously referred to. When the operator of a toy train brings the desired car beneath the loading station and desires to discharge the contents thereof into the car, it is only necessary for the latch 16 to be shifted to release the floor or gate 9 as shown in Figures 1 and 2, whereupon the contents of the body will be discharged into the car. When the floor or gate 9 is reset by the latch 16 as shown by the dotted lines in Figure 1, the body is again in condition to receive an additional load. The new load may be inserted through the opening 5 in the roof which is made accessible by sliding the cover 8 to one side.

Figures 6 and 7 of the drawings illustrate the application of the invention in forms of embodiment wherein the loading station is mounted at one side of the track instead of over and above it.

In Figure 6 the load receiving body A' is mounted on the support B' including substantially U-shaped members having the upwardly extending arms 23' and the transverse bottom or connecting members 24' which are mounted on and engaged by retaining means D' which is connected with the track T'. The track interlocking or retaining means D' preferably consists of a plate having the upwardly extending spaced lugs 27 and 28 for receiving the bottom of the supports B' and also having the struck-up lugs 29 and 30 for receiving the track T'. Thus, the entire assembly A'—B' is held interlocked with the track T' and properly centered with reference thereto so that the chute 9^a may be properly brought into discharging relation to the car C'. Any suitable latch means may be employed for holding and releasing the chute, for example a pivoted latch as shown in Figure 1 or a sliding latch carried by a side wall and engaging beneath the bottom.

Figure 7 of the drawings illustrates a loading container A^2 positioned above the trackway T^2 while the supporting means B^2 is at one side of both the track and the loading member A^2. In this embodiment the loading station is connected by the means D^2 with the trackway so as to properly hold the loading station and track in the desired assembled relation. The means D^2 for holding the track and the loading station assembled is of the same construction as that described in connection with the member D' of Figure 6. That is to say, the member D^2 consists of a plate with lugs 27' and 28' for receiving the base of the support B^2 while spaced lugs 29' and 30' are intended to engage with the track. It will thus be apparent that in this form of the invention the loading member A^2 is positioned directly above the location of the car C^2 so that the chute 9^b may be in discharging relation to the car. In this form of the invention any suitable form of latch means may be employed for releasably holding the bottom 9^b, preferably the same type of latch as shown in Figure 1.

In all forms of the invention, the delivery or discharge chute 9, 9^a, or 9^b is maintained in position to directly discharge into a car positioned properly with reference to the discharge end thereof, and this is true, regardless of whether the container or body of the station is supported directly above and over the tracks or at one side thereof.

Without further description it is thought that the feature and advantages of the invention will be readily apparent to those skilled in the art, and it will of course be understood that changes in the form, proportion and minor details of construction may be resorted to, without departing from the spirit of the invention and scope of the appended claims.

I claim:—

1. The combination with a toy train and the train tracks, of a loading station supported above the track, means included in said station to receive and hold material and to unload said material when the train operator manually releases said means, and supports for mounting said sta-

tion above the tracks and including a portion passing beneath the tracks and engaged therewith.

2. The combination with a knockdown toy track, of a loading station container supported above the track, said container having a material receiving opening, means for closing said opening, uprights of one-piece construction for supporting said loading container, said uprights consisting of a strip of sheet metal whose upper ends are adapted to engage and support the loading container, a horizontal member connecting said uprights and adapted to pass beneath the track, and means formed from said horizontal member to engage the rails of the tracks and hold said uprights equidistant therefrom.

3. A loading station for toy trains including a storage housing having sockets for receiving supporting means, a releasably held delivery chute, supporting means for detachably engaging said sockets and comprising U-shaped members, and means carried by said supporting means for engaging the track.

4. A loading station for toy trains including a housing having side walls and a roof, the latter provided with an opening, a cover slidably mounted on the roof for opening and closing said opening, a movable bottom for said housing, means for pivotally mounting said movable bottom on said side walls of the housing, means for limiting the downward movement of said bottom, material guiding means on said bottom, a latch for releasably locking said bottom in load sustaining position, and means for supporting said housing.

5. A loading station for toy trains including a housing having side and end walls, said side and end walls having hinge openings and a roof provided with a material receiving opening, a cover slidably mounted on the roof adjacent said last mentioned opening, a bottom member having portions struck out therefrom for engaging in said hinge openings of the side walls and having a portion extending beyond said struck-out portions for engaging with the lower edge of said end walls to limit the downward movement of the bottom, latch means carried by the end wall opposite that engaged by the abutment portion of the bottom for releasably holding the bottom in load sustaining position, and means for supporting said housing.

6. A loading station for toy trains including a housing having side walls provided with hinge openings, opposite end walls, a top wall forming a roof and having a material receiving opening, a cover slidably engaged with said top wall adjacent the material receiving opening, support receiving means formed in the side walls of the housing, a bottom wall having pivot means adjacent one end for fitting in said hinge openings of the side walls and having an abutment extension for engaging with the end wall adjacent the side walls having the opening, chute means carried by said bottom wall, latch means carried by the end wall opposite to the end wall against which the bottom engages to releasably retain the bottom in load sustaining position, and supporting means for said housing, said supporting means including a pair of substantially U-shaped members whose upright portions are adapted to engage with the support receiving means of the housing, and whose horizontal portions are adapted to be disposed beneath the track, and means on said horizontal portions for interlocking with a portion of the track to position the supporting means with reference thereto.

7. In a toy railway, the combination with the knock down toy track, of a house-like elevated container having a delivery chute whose discharge end is adapted to be moved into discharging relation over the track and supporting means for the container having holding and centering members engaging with the toy track rails in any selected location.

8. In a toy railway, the combination with the knocked down toy track, of a house-like elevated container having a pivotal delivery chute adapted to be positioned over the track, manual means for locking and releasing said chute, means for limiting the downward movement of the chute to maintain clearance from the toy cars, and supporting members for the container having a releasable engagement with the track rails.

9. In a toy railway, the combination with the knockdown track, of a loading station comprising an elevated house-like container and supports for said container provided with track engaging elements having a holding and centering engagement with the track rails.

10. In a toy railway, the combination with the toy track, of a loading station adapted to be mounted on and over the track in any selected location, said loading station including a house-like storage housing having a material receiving opening, a movable cover for said opening, a delivery chute for the housing, and supporting means for the housing having a releasable, separable, detachable connection with the toy rails.

11. In a toy railway, the combination with the toy track, of a loading station adapted to be mounted on and over the track in any selected location, said loading station including a house-like storage housing having a material receiving opening, a delivery chute for the housing, and supporting means for the housing having a releasable, separable, detachable connection with the toy rails.

12. In a toy railway, in combination with the knockdown toy track, of a loading station including a house-like storage housing having a releasable delivery chute, and supporting uprights for the housing having a releasable connection with the housing and a releasable connection with the toy rails.

13. In a toy railway, the combination with the knockdown toy track, of a loading station including a house-like storage housing provided with sockets, supporting uprights for the housing releasably engaging said sockets, and also having a releasable holding engagement with the toy rails, and a releasable delivery chute connected with the housing.

14. In a toy railway, the combination with the knockdown toy track, of a loading device comprising an elevated container, a dumping chute carried by the bottom of the container and arranged to have definite clearance from the cars traveling over the track and an elevating support for the container having a detachable holding engagement with the toy track rails at any selected location.

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