Oct. 10, 1944. E. HICKLING 2,360,030

TOY TRAIN

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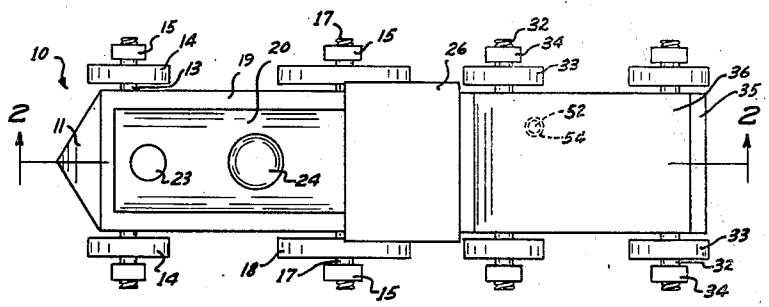


Fig. 1

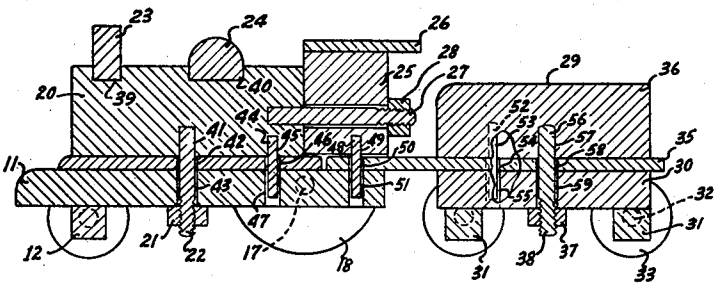


Fig. 2

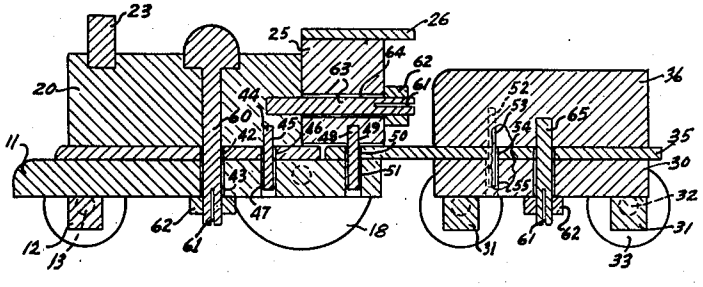


Fig. 3

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TOY TRAIN

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4 Claims. (Cl. 46—216)

This invention relates to improvements in toy trains, and more particularly to structures that are designed to be readily separated and reassembled. Broadly, the invention comprises a plurality of pieces that are designed to be secured together by means of pins, preferably of wood. The general outline of the blocks or pieces is that of a toy railway engine and tender, and railway cars.

One object of the invention is to devise a plurality of pieces which when assembled forms a wheeled toy such as an articulate train consisting of two or more cars.

Another object of the invention is to provide a device that will amuse and instruct children in taking apart and re-assembling the pieces. Such a take-apart structure increases the child's powers of observation in relationship of the parts of and assembling of railway trains as well as other objects.

Other objects and advantages will be apparent during the course of the following description:

In the accompanying drawing forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a top plan view of a locomotive and tender;

Figure 2 is a view taken along line 2—2 of Figure 1; and

Figure 3 is a sectional view of a modified form of the invention.

In the drawing is disclosed a locomotive as one unit and a coal tender as the second unit but it is to be understood that other and/or additional units or cars may be made which fall within the scope of the appended claims but each unit or car regardless of its nature should consist of an upper block and a lower black having a thinner member between the blocks and the three members secured together by a pin or pins or the equivalent. Suitable couplings may be employed between units where a full train is desired.

Referring to Figures 1 and 2 the locomotive 10 consists of boiler member 20, a relatively thin intermediate member 19, and a lower member 11. Near one end of the member 11 is secured axle block 12 and into this block extends axle 13. The axle extends beyond the ends of the block a sufficient length to receive wheels 14. The rotatable wheels are held in place by suitable means such as threaded nuts 15. An axle 17 for supporting the larger wheel 18 is secured in an opening in member 11. These wheels are held in place by nuts 15 or any other suitable means.

In the boiler member 20 is opening 39 in which is suitably secured stack respresenting member 23. Another opening 40 is provided in boiler member 20 in which is suitably secured member 24. In the bottom side of the boiler member 20 are openings 41 and 45 in which are secured pins 22 and 44.

Pin 22 passes through opening 42 in member 19 and opening 43 in member 11 in securing the members together. A removable nut 21 is suitably secured on the lower end of pin 22. The pin 44 extends through openings 46 in member 19 and into opening 47 in member 11.

The cab like portion of the locomotive consists of block 25 and roof member 26 which is suitably secured to the block 25. Through an opening in block 25 extends pin 27 which is secured in one end of boiler member 20. Nut 28 is suitably secured on the free end of pin 27. In the lower part of member 25 is secured pin 48 and this pin passes through opening 50 in member 35 and extends into opening 51 in member 11.

The tender comprises upper block 36, a block 35 of substantially same thickness as member 19, and lower member 30 suitably secured together. In opening 57 in block 36 is suitably secured pin 56 which passes through opening 58 in member 35 and opening 59 in lower member 30. The lower end 38 of pin 56 is threaded for the reception of nut 37.

In the block 36 is opening 53 in which is secured pin 52. This pin extends through opening 54 of member 35 and into aperture 55 in member 30.

Secured to member 30 are blocks 31 through which extends axles 32 and upon these axles are rotatably mounted wheels 33. The wheels are held in place by means of nuts 34 or by other suitable means.

Some of the purposes of using two members 19 and 35 with a little space between them where they meet near one end of a train unit are; to permit more economical packaging, to insure that all the wheels will contact the floor or surface upon which they are placed, and to give an articulated train, i. e., a coupling between train units that permit some side movement of one unit without corresponding side movement of the adjacent unit. Sufficient clearance is provided for the end of member 35 under cab 25 so that relative free limited side movement of the various units may occur.

It is to be understood that the same kind of coupling as is shown in Figures 2 and 3 may be used between other units of a train, where a full train is desired.

Referring to Figure 3 of the drawing members 19 and 35 extend the length of two units or cars, in the drawing, an engine and a tender. A slightly thicker member or piece 11 which extends beyond the end of member 19 and the extending end represents the pilot, commonly known as cowcatcher. The members 11 and 19 are of substantially the same width but it is to be understood that they may be of different widths. Secured near one end of the member 11 is block 12 in which is secured axle 13. On axle 13 are placed wheels 14 and these wheels are held thereon by any suitable means.

The larger wheels 18 of the engine are mounted upon axles 17 which axles are secured in the member 11. In assembling the engine, boiler representing member 20 is placed upon member 19 and the members 11, 19 and 20 are secured together by pin 60. The pin 60 has a large head and a divided lower end. The lower end is divided by slot 61 and a member 62 cooperates with the split end of the pin in holding members 11, 19, and 20 in the assembled position.

The cab 25 is formed of a separate block 25 and an opening 64 extends longitudinally therethrough. A pin 63 is secured in boiler block 20 and extends through opening 64 in the cab block. The cab block 25 is held in assembled position on the split end of pin 63 by member 62.

The tender block as shown is secured on the member 25 of a pin 65 which is secured in block 36 and passes through members 30 and 35.

It is preferred that the train be made entirely of wood as under the present conditions metal or plastic are not available for toys, but it is to be understood that other materials than wood can be utilized.

Certain changes and modifications may be made by those skilled in the art which changes and modifications fall within the scope of the appended claims. This application is a continuation in part of my copending application, Serial No. 485,954, filed May 5, 1943.

I claim:

1. A toy, comprising a plurality of blocks suitably shaped to form the upper part of train units, a horizontally extending member upon which the blocks representing upper parts of train units are placed, a block representing each unit spaced on the horizontal member from adjacent train unit blocks, wheel supporting blocks spaced beneath the upper train blocks, and means passing through the horizontal member for securing the upper train representing blocks and the wheel supporting blocks in place, said horizontal extending member being divided into two parts for each two units and said division occurring adjacent one end of two units between the upper and lower blocks.

2. A toy, comprising a plurality of blocks suitably shaped to form the upper part of train units, horizontally extending member upon which the blocks representing upper parts of train units are placed in spaced relationship to each other, lower blocks spaced beneath the upper blocks, wheel supporting members secured to the lower blocks and means for securing the upper blocks, horizontally extending member and lower blocks in assembled position, the said horizontally extending member being divided into two parts for each two units and the division occurring between the upper and lower blocks.

3. A take-down toy vehicle comprising a plurality of units, each unit including a top member suitably shaped to represent the upper part of a vehicle, a horizontally extending middle member, a bottom wheel carrying member, and at least one pin member passing through the said horizontally extending middle member for securing the members in the assembled positions, said middle member being divided into two parts for each two units and the said division occuring between the upper and bottom members.

4. A take apart toy train including a series of train representing units; a longitudinally extending member common to a series of train units; spaced wheel carrying blocks upon the lower side of the longitudinally extending member; an engine boiler block; an engine cab block lying end to end with the boiler block; a pin like member extending into the opening in the boiler block and secured therein, the said pin extending through the cab block; a removable means on the pin extending through the cab block for holding the cab block and the boiler block in assembled position; blocks spaced from the cab and boiler blocks and suitably shaped to form a train unit; the boiler block, cab block and train unit block on the upper side on the longitudinally extending member; at least one pin for each train unit passing through the longitudinally extending member; a removable means cooperating with one end of each of said pins for holding the blocks in assembled position, said horizontally extending member being divided between the cab block and a lower wheel carrying block.

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