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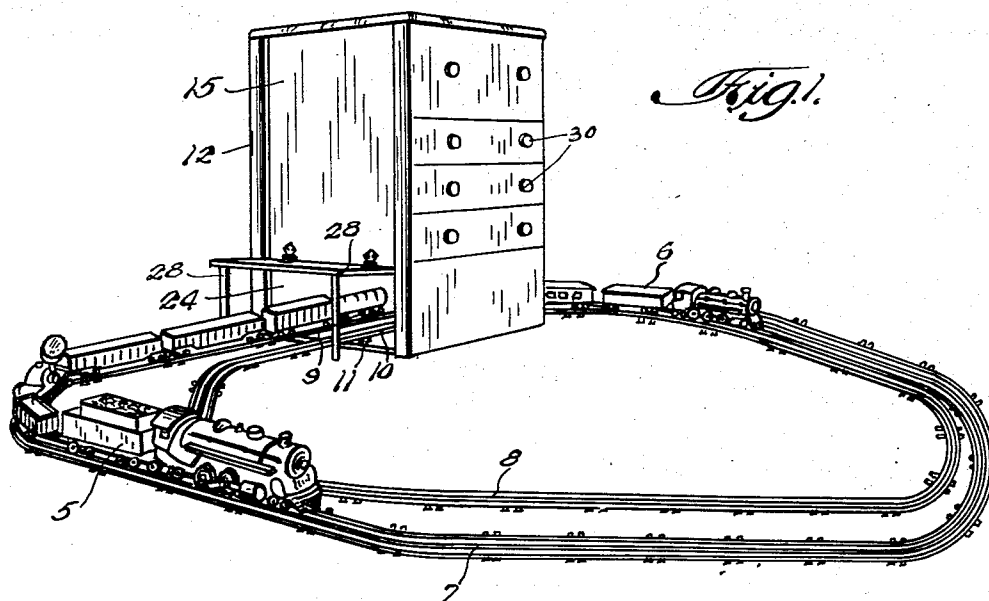
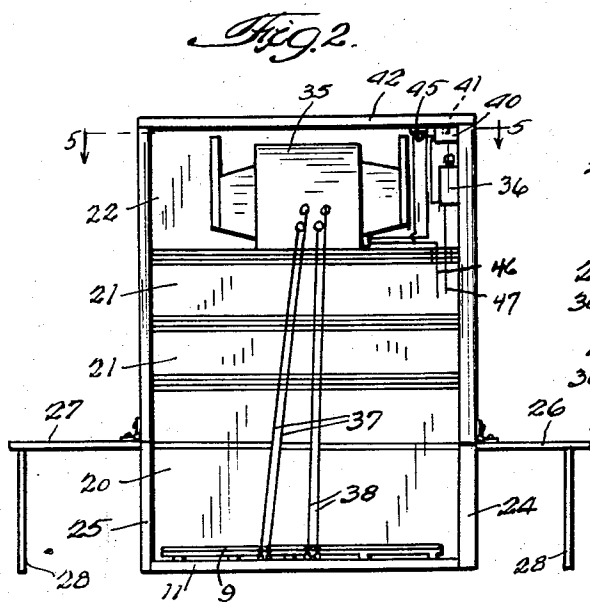
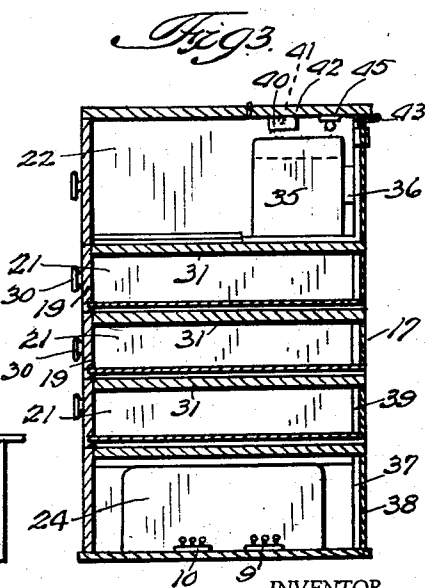
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2,955,763

SUPPORTING AND STORAGE UNIT FOR ELECTRIC TRAIN SETS

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2 Sheets-Sheet 1



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Fig. 4.

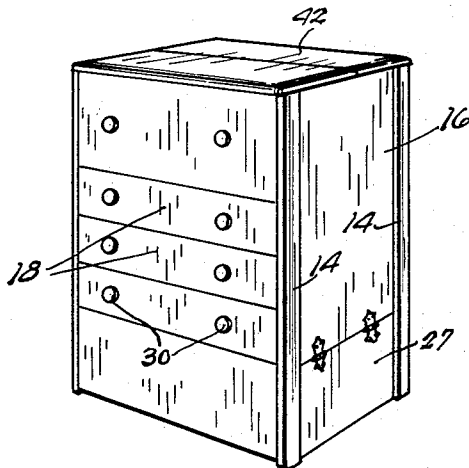


Fig. 5.

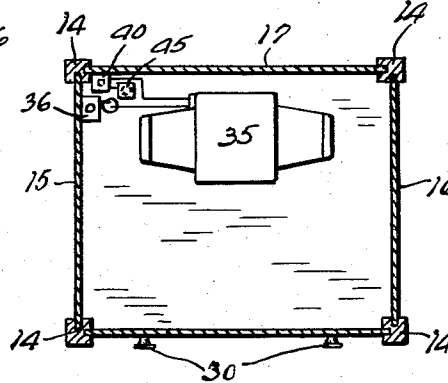
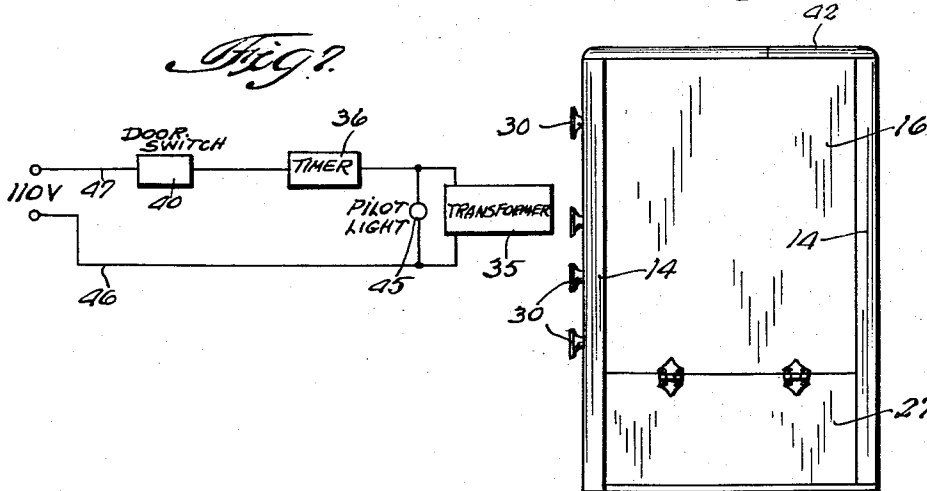


Fig. 6.



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SUPPORTING AND STORAGE UNIT FOR
ELECTRIC TRAIN SETS

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4 Claims. (Cl. 238—10)

This invention relates to collapsible electric train sets and more particularly to a supporting and storage unit therefor.

Due to the size of many homes and the lack of available play space for toys, many children are deprived of the opportunity of owning and operating electric train sets. It has been suggested to provide storage structures that have foldable panels carrying the track sets already set up using a permanently laid-out pattern for the tracks but such structures lessen the educational value of electric train sets and deprive the children of varying the design of the track layout according to their imagination and planning. These undesirable limitations destroy the usefulness of the supporting structures and the child soon tires of the train set and his desire to be entertained by it.

An object of the invention is to provide an improved supporting and storage unit for an electric train set overcoming the aforesaid difficulties by embodying a portion of the track sections permanently upon the base in a lower compartment and accessible for attachment to other track sections that may be laid out in different patterns, if so desired, which track sections may be kept stored when not in use in a series of upper compartments or drawers.

A further object of the invention is to provide an improved supporting and storage unit of this type wherein permanent circuit connections may be incorporated between the lower compartment and an upper compartment having control equipment disposed therein whereby the train set may be rendered inoperative and the circuit de-energized when the cover of the upper compartment is closed. The position of the cover will visually indicate the condition of the circuit while disposing the control equipment in an upper compartment will provide greater safety in use to the extent that it will be normally inaccessible to smaller children.

In the drawings:

Figure 1 is a perspective view of an electric train set and a supporting and storage unit therefor embodying the present invention;

Fig. 2 is a rear elevation of the same with the rear panel removed;

Fig. 3 is a transverse sectional view showing the lower intermediate and upper compartments;

Fig. 4 is a perspective view of the supporting and storage unit shown in Fig. 1 but with the train set including the tracks detachably uncoupled and stored in the unit;

Fig. 5 is a sectional view taken along line 5—5 of Fig. 2;

Fig. 6 is a side elevational view of the unit; and

Fig. 7 is a wiring diagram of the same.

As illustrated in the drawings, the train sets designated broadly as 5 and 6 may be travelling on several tracks 7 and 8 formed of detachable sets capable of being arranged in a number of patterns. Each of the tracks 7 and 8 may be detachably connected to track sections 9 and 10, respectively, fixedly attached to the base 11 of supporting and storage unit 12.

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Unit 12 preferably comprises a simple and inexpensive construction of vertical standards 14 disposed at the four corners to receive two side panels 15 and 16, a rear panel 17, and a sectional front panel, each section of which forms the front wall 18 of a series of compartments 20, 21 and 22. Side panels 15 and 16 extend downwardly partway to leave openings 24 and 25 into and out of which trains 5 and 6 travel over track sections 9 and 10, coupled in the sectional trackage 7 and 8.

Hinged covers 26 and 27, when in open position as shown in Figs. 1 and 2, will permit movement of the trains 5 and 6 through lower compartment 20. The manner in which hinged closures 26 and 27 are carried is immaterial but in order to add to the novelty, posts or pins 28 are furnished to hold these closure members 26 and 27 in open position. Lower compartment 20 with its two track sections 9 and 10 secured to base 11 permits lower compartment 20 to simulate a train shed with different trains entering and leaving at the same time.

Intermediate compartments 21 may be in the form of independent drawers to receive the detachable sections of trackage 7 and 8 when the train set is not in use and all the parts have been detached and neatly placed within the unit, as shown in Fig. 4. The drawers or intermediate compartments 21 may be provided with knobs 30 for use to slide the drawers back and forth. Side panels 15 and 16 may have supporting tracks for drawers 21. Upper compartment 22 serves to retain such control equipment as a transformer 35 and a timer 36. The exact construction of the control equipment is immaterial to the present disclosure. The purpose is to locate the control equipment in compartment 22. The wiring connections 37 and 38 extend upwardly from proper connections to the two track sections 9 and 10 in lower compartment 20. The manner in which these wiring connections extend upwardly to compartment 22 is immaterial, they being shown broadly as extending forwardly through a conduit 39 attached to rear panel 17.

Included in the circuit is a door switch 40 adapted to be operated by a button 41 on the underside of door 42 hingedly attached at 43 so that this cover may be swung to open and closed positions. When swung to open position, switch 40 is closed so that the control equipment 35 and 36 may be energized to permit operation of train sets 5 and 6. When door 42 is closed, switch 40 will be open to de-energize the circuits and render the train sets inoperative. A pilot light 45 may be bridged across the supply lines 46 and 47 connected to the usual 110 volt lighting circuit normally used to operate electric train sets. Pilot light 45 will light when cover 42 is in open position. This indicates to the parents that the control circuit including equipment 35 and 36 is still energized and consuming current. Timer 36 may be of conventional construction that will hold the supply circuit closed for a predetermined period of time but will open such circuit after expiration of the time as a safety in the use of the equipment.

The particular construction of the supporting and storage unit is simple and very adaptable to the particular use. It affords a number of compartments arranged one above the other and the use of the lower compartment as a train shed. The intermediate compartments 21 may advantageously be used to store any number of track sections so that different layouts of the trackage may be constructed by the child if he so desires. The upper compartment 22 locates the control equipment away from the floor and out of reach of the children so that it will be energized only when cover 42 of the upper compartment is open. This open position of the cover indicates that the circuit is connected to the source of current supply regardless of whether the train sets are being used.

The cabinet construction may also be varied because it is not essential to the construction that standards 14 are employed inasmuch as the side panels may be directly attached to each other and the drawers of each compartment supported by the panel construction. In other words, the invention is capable of adaptation without necessarily limiting it to any particular cabinet construction.

Without further elaboration, the foregoing will so fully explain the character of my invention that others may, by applying current knowledge, readily adapt the same for use under varying conditions of service, without eliminating certain features, which may properly be said to constitute the essential items of novelty involved, which items are intended to be defined and secured to me by the following claims.

I claim:

1. A device of the class described comprising a base, vertical member means carried by said base and extending upwardly therefrom to form a front wall, a back wall and two side walls, said side walls having openings therein adjacent to said base, a lower compartment, intermediate compartments, and an upper compartment, all said compartments being disposed above said base, toy railroad track sections secured to and upon said base and accessible through said openings, a plurality of other toy railroad track sections arranged for attachment to said first track sections secured to and upon said base, circuit wires connected electrically to said track sections upon said base and extending from said base to said upper compartment, and a cover for said upper compartment having open and closed positions and having means for opening said circuit wires when said cover is in closed position.

2. A device of the class described comprising a base, vertical member means carried by said base and extending upwardly therefrom to form a front wall, a back wall and two side walls, said side walls having openings therein adjacent to said base, a lower compartment, intermediate compartments, and an upper compartment, all said compartments being disposed above said base, toy railroad track sections secured to and upon said base and accessible through said openings, a plurality of other toy railroad track sections arranged for attachment to said first track sections secured to and upon said base, circuit wires connected electrically to said track sections upon said base and extending from said base to said upper compartment, circuit control mechanism in said upper compartment con-

nected to said circuit wires, and a cover for said upper compartment having open and closed positions for operating said circuit control mechanism whereby to open the circuit of said circuit wires when said cover is in closed position.

3. A device of the class described comprising a base, vertical member means carried by said base and extending upwardly therefrom to form a front wall, a back wall and two side walls, said side walls having openings therein adjacent to said base, a plurality of compartments including a lower compartment and an upper compartment disposed above said base, toy railroad track sections secured to and upon said base and accessible through said openings, a plurality of other toy railroad track sections arranged for attachment to said first track sections secured to and upon said base, circuit wires connected electrically to said track sections upon said base and extending from said base to said upper compartment, and a cover for said upper compartment having open and closed positions and having means for opening said circuit wires when said cover is in closed position.

4. A device of the class described comprising a base, vertical member means carried by said base and extending upwardly therefrom to form a front wall, a back wall and two side walls, said side walls having openings therein adjacent to said base, a plurality of compartments including a lower compartment and an upper compartment disposed above said base, toy railroad track sections secured to and upon said base and accessible through said openings, a plurality of other toy railroad track sections arranged for attachment to said first track sections secured to and upon said base, circuit wires connected electrically to said track sections upon said base and extending from said base to said upper compartment, circuit control mechanism in said upper compartment connected to said circuit wires, and a cover for said upper compartment having open and closed positions for operating said circuit control mechanism whereby to open the circuit of said circuit wires when said cover is in closed position.

References Cited in the file of this patent

UNITED STATES PATENTS

806,071	Dorsey	Nov. 28, 1905
2,143,239	Foltz	Jan. 10, 1939
2,590,676	Bradley	Mar. 25, 1952