July 18, 1961 A. EINFALT 2,992,598

TOY SWITCHBACK OR SCENIC RAILWAYS

Filed Feb. 9, 1959

Fig. 1

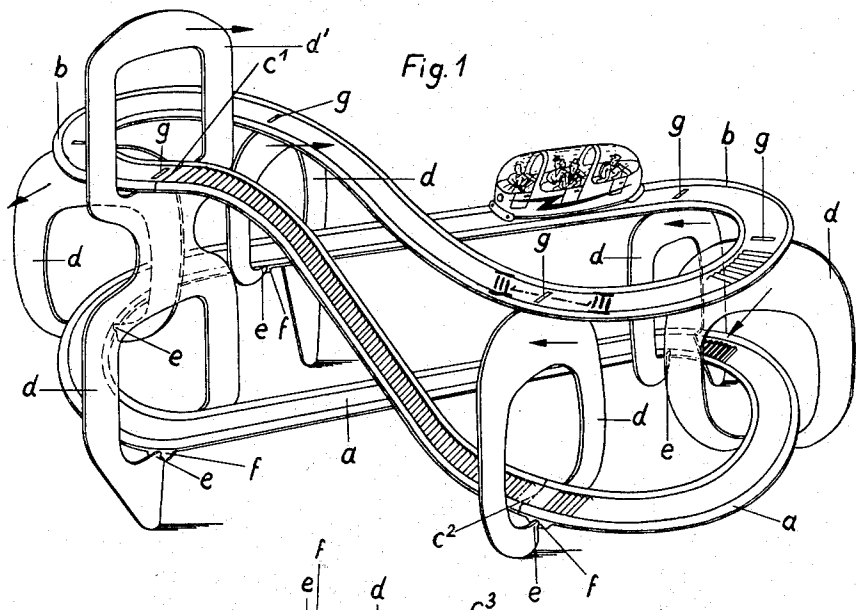


Fig. 2

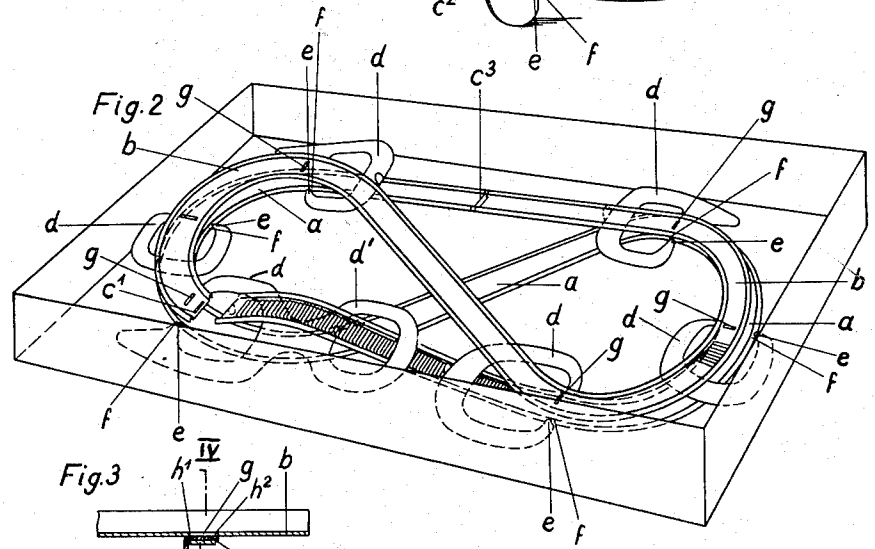


Fig. 3

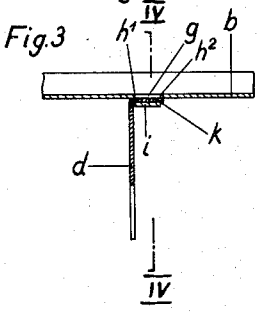
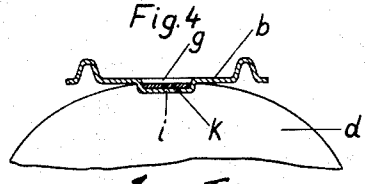


Fig. 4



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TOY SWITCHBACK OR SCENIC RAILWAYS

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5 Claims. (Cl. 46—216)

The invention relates to a toy switchback or scenic railway, the track of which has supported sections running one over the other.

Toys of this type have always a considerable fascination when the vehicles run along the track, race round the curves and easily negotiate the ascents and descents. To enable the vehicles to climb steep ascents in a reliable manner they are in many cases provided underneath with a driven pinion or sprocket wheel which cooperates with teeth or ribs on the track.

When erected these toys are a bulky structure which requires a relatively great amount of space. Consequently they must be foldable for storing, packing and shipment. Therefore the problem arises of devising a construction which can be quickly and easily folded or collapsed and set up or erected and which can be manipulated by children. Another problem is to make this foldable construction so that when erected the track has the necessary support and reliable rigidity.

These problems are solved by the invention in a manner which is both simple and progressive in that the track can be erected and collapsed by means of foldable supports capable of being detachably fixed on the upper section of the track. At the same time it has been found particularly advantageous to hinge the supports on the lower track section and to secure the supports to the upper section of the track by means of plug-in connections.

The invention presents the advantage that by exerting gentle pressure, the supports can be released from their plugged-in position and folded on to the lower track section with the result that the upper track can rest on the lower track section, whereby it may, however, be necessary to disconnect the upper track section at one or several places, chiefly those where there is a steep gradient, by uncoupling the track parts at these places.

A particularly advantageous construction is attained by making the supports in the form of stirrups extending over the lower track section like archways. These stirrups, being two-armed, not only impart increased rigidity but they add to the interest of the toy in that they have the appearance of bridges or the like under which the vehicles run. They also present the advantage that their two arms can be mounted in a simple manner by means of inwardly directed points or pins engaging holes or depressions formed in lugs bent out from the track.

The above-mentioned plug-in connection by means of which each of the supports can be detachably fixed on the upper track section, preferably consists of a small one-hole socket formed in the upper track section and a plug-in projection formed on the stirrup support which projection can be pushed into the socket.

Other features and advantages of the invention will become apparent from the following description of the drawing which illustrates diagrammatically and by way of example one possible embodiment of the invention.

In the drawing:

FIG. 1 is a perspective view showing the toy set-up ready for use;

FIG. 2 is a perspective view of the toy in folded state and packed in the lower half of a box;

FIG. 3 is a section through aplug-in connection taken on line III—III of FIG. 1; and

FIG. 4 is a cross-section taken on line IV—IV of FIG. 3.

As shown in the drawing, the toy comprises a lower track section *a* and an upper track section *b*. It is also possible to provide more track sections arranged one above the other.

The track is composed of a plurality of parts which are interconnected by suitable coupling devices. Usually they are plugged together. In the drawing three such plug and socket connections are shown at c_1, c_2 and c_3. These connections are preferably arranged at the resting points and /or the curves of the track.

The track can be set-up and collapsed, for which purpose the supports *d* are provided which, in the example illustrated are each in the form of an inverted U-shaped stirrup the arms of which embrace the lower track section. These supports have on each of their two arms an inwardly directed point or pin *e* by means of which the stirrups can be mounted pivotally on lugs *f* formed on the track and provided with holes or depressions for receiving the points or pins.

As already mentioned, the supports *d* are detachably connected to the upper track section *b* by means of a plug and socket connection; such a plug and socket connection is illustrated in FIGS. 3 and 4. A socket *g* is arranged parallel with the track section and is formed in the track section *b* by pressing slightly downwards the strip of material *i* between the two incisions h_1 and h_2. A plug nose *k*, formed by a tab extension at the upper edge of the yoke portion of the stirrup is bent out from the plane of supporting stirrup by the proper angle to enter the socket *g* to form the detachable connection.

To collapse or fold the track it is only necessary to exert slight pressure on the supporting stirrups *d* in the direction indicated by the arrows to release the plug and socket connections. The supporting stirrups then fold over and come to rest on the lower track section *a*. The upper track section *b* then rests on these stirrups *d* in the manner illustrated in FIG. 2. If necessary, parts of the track can be disconnected, as stated above. In the example illustrated this is only advisable at c_1 and c_2.

It is likewise possible to cover-in the upper track section *b*. This can be attained in a very simple manner by providing one of the supporting stirrups *d* with a supplementary stirrup *d'* encircling the upper track section, as shown by way of example in FIGS. 1 and 2.

I claim:

1. A toy switchback or scenic railway comprising a track having an upper section running over a lower section thereof, supporting means for the track comprising a plurality of spaced members hingedly connected intermediate their ends to the lower track section, the upper portion of each member and the upper track section having cooperating elements therein for detachably maintaining the member in substantially vertical supporting position, the lowermost portion of the member forming a base for supporting the track, said cooperating elements comprising a plug on the upper portion of each member and a socket formed on the upper track section for detachably receiving the plug.

2. A toy switchback or scenic railway comprising a track having an upper section running over a lower section thereof, supporting means for the track comprising a plurality of spaced members hingedly connected intermediate their ends to the lower track section, the upper portion of each member and the upper track section having cooperating elements therein for detachably maintaining the member in substantially vertical supporting position, the lowermost portion of the member forming a base for supporting the track, said spaced members

being in the form of stirrups having two arms straddling the lower track section in the form of an arch and hinge means pivotally connecting the two arms of each stirrup to said lower track section on a horizontal pivotal axis.

3. A toy switchback or scenic railway in accordance with claim 2 in which the hinge means comprise inwardly projecting pins on the arms of said stirrups and lugs bent from the lower track section having openings therein for receiving the pins.

4. A toy switchback or scenic railway comprising a track having an upper section running over a lower section thereof, supporting means for the track comprising a plurality of vertical supports spaced along said track, each support comprising a flat piece of sheet material in the form of an inverted U having its arms straddling the lower track section, each arm being provided with an inwardly extending point engaging the track section and forming a pivotal connection between the arm and the track section, and the yoke portion of the support member having a tab extension formed at the top thereof and bent out of the plane of the support member and forming a plug element, and the upper track section having a

socket formed therein parallel with the plane of the track and forming a socket for said plug element.

5. A toy switchback or scenic railway comprising a track having an upper section running over a lower section thereof, supporting means for the track comprising a plurality of vertical supports spaced along said track, each support comprising a flat piece of sheet material in the form of an inverted U having its arms straddling the lower track section, means pivotally connecting the lower ends of the arms of each support to the lower track section, and the yoke portion of the support member having a tab extension formed at the top thereof and bent out of the plane of the support member and forming a plug element, and the upper track section having a socket formed therein parallel with the plane of the track and forming a socket for said plug element.

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