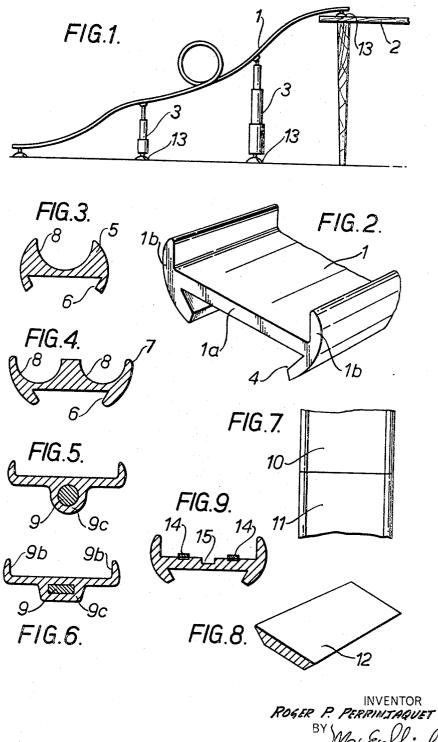
RACE TRACK

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3,480,210 RAĆE TRACK Roger Paul Perrinjaquet, 18 Chemins Ph. de Sauvage 1214, Geneva, Switzerland Filed Dec. 13, 1968, Ser. No. 783,664 Claims priority, application Switzerland, Dec. 21, 1967,

18,145/67 Int. Cl. A63h 18/02, 18/12, 33/00 U.S. Cl. 238—10 7 Claims

A track for rolling toys, particularly toy vehicles, is described which consists of individual track segments joinable on to another by means of connector elements in- 15 serted in recesses in the ends of each segment, said recesses bearing an inverse geometrical correlation with said connector elements. The track segments and connector elements are constructed of flexible material such that convoluted shapes can be imparted to an assembled track. 20

ABSTRACT OF THE DISCLOSURE

The present invention is directed to a child's toy item. This toy item is characterized by the fact that it has at least one element made of a material which is flexible 25 but non-resilient enough to keep a given form. Such an element is utilized to shape a convoluted track for a rolling toy.

By way of example, the accompanying drawings describe the toy item in accordance with the invention, to- 30 gether with several variants.

FIG. 1 is an assembly view of typical configuration of assembled track.

FIG. 2 is a perspective view of an element portion. FIGS. 3, 4, 5 and 6 are cross-sectional views of four 35 element variants.

FIG. 7 is a plan view of two connected elements.

FIG. 8 is a perspective view of an element connector.

FIG. 9 is a cross-sectional view of a variant of an ele-

ment intended for use with toy electric cars.

In FIG. 1 an assembled track is shown which utilizes an element 1 as shown scaled up in FIG. 2. This element has been shaped so as to form a track for a toy such as a small scale model of car, for instance. Said track shows a descending slope, a loop, and a second descending slope. 45 The top end of the track is fixed to a table 2 by a suction mouthpiece 13 and its lower end is stuck to the floor or other suitable base by another suction mouthpiece.

Upright, telescopic, pylon-shaped poles 3 of adjustable elevation support the track elements 1.

This element, as shown in detail in FIG. 2, has a body made from plastics material which, in cross-section, shows a rectilinear median portion 1a at each end of which appears a flange 7b. In the center of the lower face of the median portion 1a is a dovetailed recess 4 intended to re- 55 ceive connectors. Elements shown in FIGS. 5 and 6 have in their center a thickened portion 9c wherein is disposed a longitudinal metallic core 9 made from a non-resilient, deformable metal, or from plastics material having similar characteristics, such that an assembled track will retain 60 the convolutions imparted to it by manual manipulation.

In cases of installations which require several track elements in succession, the joining can be accomplished by means of connector elements, or cores, shown as 12 in FIG. 8. Those cores are also constructed of flexible, non- 65 resilient material, and are shaped so that they may be press-fitted into the dovetail 4 shown in FIG. 2, or the dovetails 6 shown in FIGS. 3 and 4.

Track elements shown in FIGS. 5 and 6 have in their centers a metallic core 9 which can be of circular or 70 rectangular cross-section, as shown in FIGS. 5 and 6, respectively.

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Track elements shown in FIGS. 3 and 4 are intended to be used as tracks for balls instead of cars. This type of ball or marble which children play with could be made of glass, metal, earth or any other hard material. With respect to very small children which are not yet old enough to play with cars or do not yet enjoy the required proficiency for building a track with slanted bends, for instance, it will be possible for them to have balls rolling by gravity inside the semi-rounded cavities 8.

The core could also be constructed of plastics material instead of metal, provided that the requisite qualities of

flexibility and non-resilience are present.

With the present toy, children are given opportunities to construct by themselves tracks intended for use with small scale models or cars or any kind of rolling toys, or even for ordinary balls.

Another variant is shown in FIG. 9 wherein the toy element has in its center a longitudinal guide groove to receive a pin disposed on the underside of a toy car in order to maintain it in the direction given by the element. Such pins are provided in small scale models of electrically-driven cars. It is possible for the electric cars to be fed by means of two conducting elements 14 embedded in or adhered to the track element, by using for instance self-adhesive electrically-conductive tape. Electrical connection can be effectuated at either end of an assembled track, thus making it possible to have ascending or descending slopes. Electrically-conductive tapes can be used with any of the various cross-sections of the track elements shown in the various figures.

Although the invention has been described and illustrated in detail, it is to be clearly understood that the same is by way of illustration and example only and is not to be taken by way of limitation, the spirit and scope of this invention being limited only by the terms of the appended claims.

I claim:

1. A track system for a miniature vehicle having freely rolling wheels:

- at least one elongated track section of substantially uniform cross-section throughout its length for guiding said vehicle including an upper face portion for supporting the wheeled vehicle, guide flanges projecting generally upwardly from each side of said face portion and extending substantially the entire length of said track section for guiding said vehicle and maintaining it on said track section, and spaced sufficiently far apart to permit lateral movement of the vehicle on said upper face portion, and a lower portion generally underlying said upper face portion and defining downwardly open channel means extending substantially the entire length of said track section thereby imparting strength and rigidity to said track section, said channel means comprising flange means defining inwardly facing opposed grooves providing a receptacle for a track connector whereby said track section may be connected to an additional track section of similar cross-section configuration; and
- a connector having a cross-sectional configuration substantially conforming to the interior of said channel means and adapted to be partially inserted therein with its opposed edges engaging in said grooves so that the remainder thereof can be inserted into the corresponding channel means of a second track section having a substantially similar cross-section.
- 2. The apparatus as set forth in claim 1 wherein said track section is composed of a single piece of flexible plastic whereby said track section will smoothly traverse an unsupported span between two supports.
- 3. The apparatus as set forth in claim 1 wherein each said flange means depends downwardly and inwardly, whereby a dovetail recess is formed.

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- 4. The apparatus as set forth in claim 1 wherein said connector is securely maintained in said channel means by means of a frictional fit therebetween.
- 5. The apparatus as set forth in claim 1 further including means for affixing a portion of said track section 5 to an elevated structure.
- 6. The apparatus as set forth in claim 1 wherein said upper face portion includes a continuous longitudinal guide groove.
- 7. The apparatus as set forth in claim 1 wherein said upper face portion is provided with electrical conducting elements for supplying electricity to self-powered vehicles.

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