

R. A. DORRILL.  
 TOY RAILWAY.  
 APPLICATION FILED MAR. 18, 1915.

1,142,150.

Patented June 8, 1915.

Fig. 1.

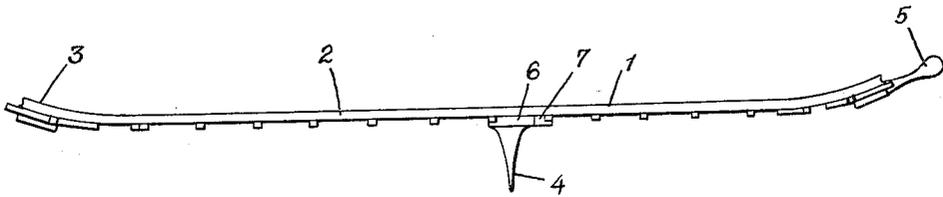


Fig. 2.

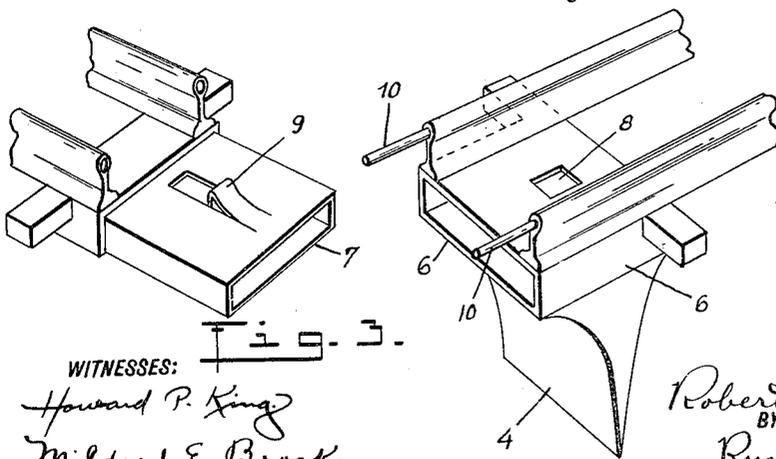
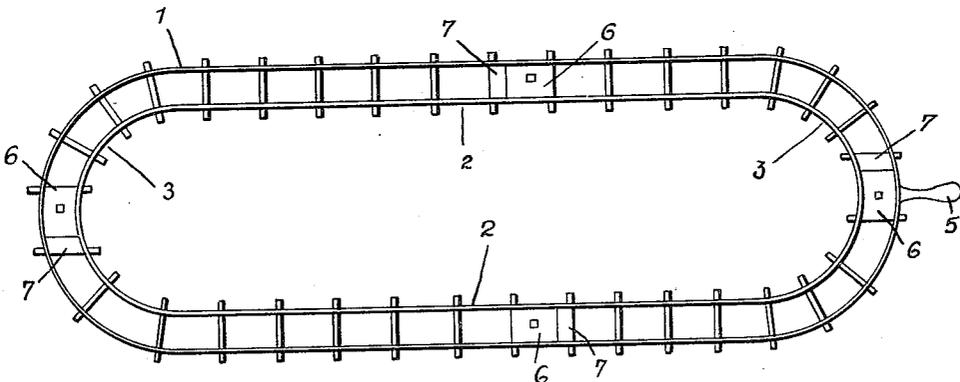


Fig. 4.

WITNESSES:  
*Howard P. King*  
*Mildred E. Brooks*

INVENTOR:  
*Robert A. Dorrill,*  
 BY  
*Russell M. Everett,*  
 ATTORNEY.

# UNITED STATES PATENT OFFICE.

ROBERT A. DORRILL, OF NEWARK, NEW JERSEY.

## TOY RAILWAY.

1,142,150.

Specification of Letters Patent.

Patented June 8, 1915.

Application filed March 18, 1915. Serial No. 15,367.

*To all whom it may concern:*

Be it known that I, ROBERT A. DORRILL, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Toy Railways, of which the following is a specification.

The objects of this invention are to provide an improved toy railway upon which a vehicle may be caused to run continuously by gravity; to provide an elongated track adapted to be tilted longitudinally; to provide a fulcrum nearer one end of the track than the other; to provide such a track which may be separated into a plurality of sections; to rigidly connect the sections when in use; to prevent inadvertent separation of the sections; to secure simplicity of construction and operation, and to obtain other advantages and results as may be brought out in the following description.

Referring to the accompanying drawing, in which like numerals of reference indicate the same parts throughout the several views, Figure 1 is a side elevation of my improved toy railway; Fig. 2 is a plan of the same, and Figs. 3 and 4 are perspective views of the meeting ends of the track sections.

In the specific embodiment of the invention shown in said drawings, the reference numeral 1 indicates a continuous track elongated to provide substantially parallel portions 2, 2 connected at their ends by semi-circular portions 3, 3. Suitable fulcrums 4, 4 are provided, in a line transverse to the longitudinal portions 2, 2, upon which the track is adapted to tilt so as to elevate one end and lower the other and vice versa, alternately. It will be obvious that a vehicle or other toy upon the track will have a tendency to gravitate thereon while the track is tilted in one direction, and the longitudinal portion affords a sufficiently long run for the vehicle to obtain momentum enough to carry it more than half way around the semi-circular portion 3. Then the track is tilted in the other direction and the vehicle continues to run down the incline and around the curve at the end, when the track is again tilted and so on.

Preferably the semi-circular or curved portions of the track are transversely tilted, that is, the outside rail is elevated above the horizontal plane of the inner rail. This

prevents the vehicle or other toy from derailment by centrifugal force, as is common in railway engineering, and also makes the ends of the track upturned as shown in Fig. 1 so that the track can tilt farther. Furthermore, it is preferable to maintain one end of the track normally depressed, so that when not otherwise positively held it will remain in or automatically return to its depressed position, and thus in operation it is necessary to depress only one end of the track and when the vehicle or other toy arrives at that end let go of the track and the other end will immediately depress without further attention. I obtain this result in the present disclosure by placing the fulcrums closer to one end than to the other, the difference in weight of the track of the longer end over the weight of the track of the shorter end and the vehicle being sufficient to secure the desired result.

For more convenient manipulation of the device I have shown at the shorter end a handle or knob 5.

For convenience in constructing and packing the device, the track is divided into sections preferably separable at the fulcrumal joints, and also separable at the middle of the curved portions, although it is within the scope of the present invention to separate the track in other places and make as many sections as desired. The specific means herein shown for connecting the sections comprises opposite telescopic members 6, 7, rigid with respect to the abutting ends of the tracks, said members being substantially as wide as the track and rectangular in cross-section. Preferably one of these members, as the outer one 6, provides in its top a recess 8, and the other member 7 has a spring detent 9 bent up from its top adapted to cooperate with said recess to prevent inadvertent separation of the members. In order that the detent may not interfere with telescoping the members into assembled position, the detent slopes longitudinally from the outer or free end of the member from which it is bent toward the farther end and will be depressed as the member is slid into the other member until it registers with the recess 8 therein and springs into the same. Obviously to separate the members the detent may be readily depressed with the finger and the members drawn apart. In the construction of my device, I prefer to

make the members 6, 7 wide enough to underlie both rails, and furthermore attach the rails rigidly thereto. Added rigidity is obtained by providing pins or dowels 10, 10, projecting from the rails in one section and adapted to be inserted in corresponding holes in the rails of the other section.

The fulcrums 4 are preferably secured to the outer of the telescopic members in the longitudinal portions of the track, projecting downwardly therefrom and being shown herein substantially as wide as the member. The fulcrums are furthermore each shown as wedge-shaped, with the sharpened edge at the bottom and extending transversely of the track, said edges of the two fulcrums being substantially in alinement, so that the track will tilt evenly. It will be understood that the fulcrums extend below the track so that thin sharpened edges may rest upon a plane surface and rock thereon.

Obviously detail modifications may be made in manufacturing my improved tilting track without departing from the spirit and scope of the invention, and I do not wish to be understood as limiting myself except as required by the following claims when construed in the light of the prior art.

Having thus described the invention, what I claim is—

1. The hereindescribed toy railway, comprising a continuous track and a transverse

fulcrum through said track nearer one end thereof than the other.

2. The hereindescribed toy railway, comprising an elongated continuous track having straight longitudinal portions and curved end portions, said curved end portions being upturned or bent.

3. The hereindescribed toy railway, comprising a continuous track, a transverse fulcrum beneath said track nearer one end thereof than the other, and a handle at the shorter end of the track for tilting it.

4. The hereindescribed toy railway, comprising sections, cooperating members upon the adjacent ends of two sections for securing them detachably together, and fulcrums upon two of said cooperating members near the middle of the track for said track to tilt upon.

5. The hereindescribed toy railway, comprising sections, cooperating telescopic members upon the adjacent ends of the sections the inner one having at its top a spring catch and the outer one having a recess to receive said catch, and fulcrums secured to the bottoms of the outer members near the middle of the track.

ROBERT A. DORRILL.

Witnesses:

HOWARD P. KING,  
MILDRED L. BROOKS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."