

Sept. 9, 1924.

R. M. HARRIS

1,508,319

AMUSEMENT DEVICE

Filed June 6, 1923

2 Sheets-Sheet 1

Fig. 1.

WITNESSES

Frederick Rich.
P. A. Patterson.

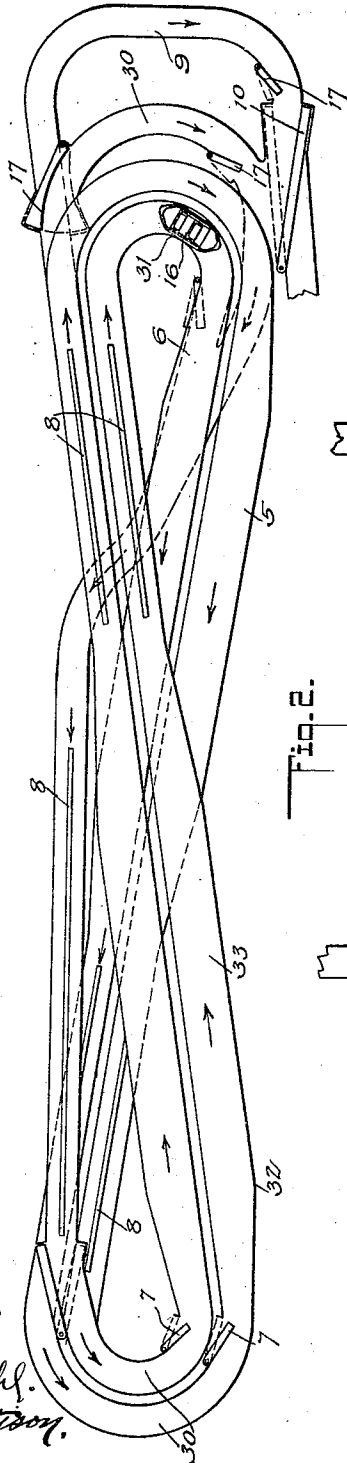
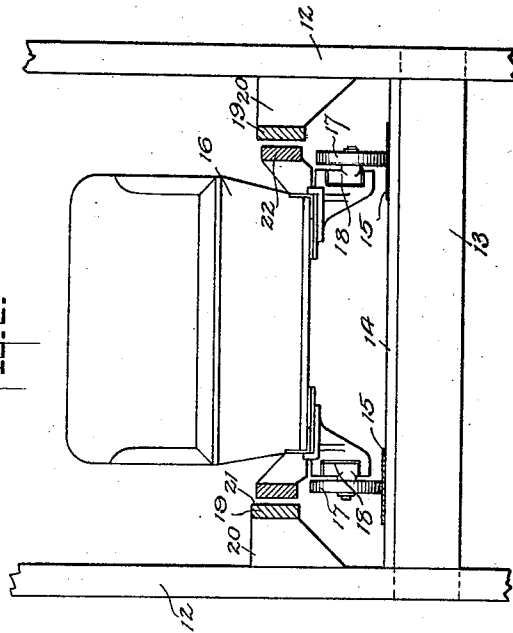


Fig. 2.



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2 Sheets-Sheet 2

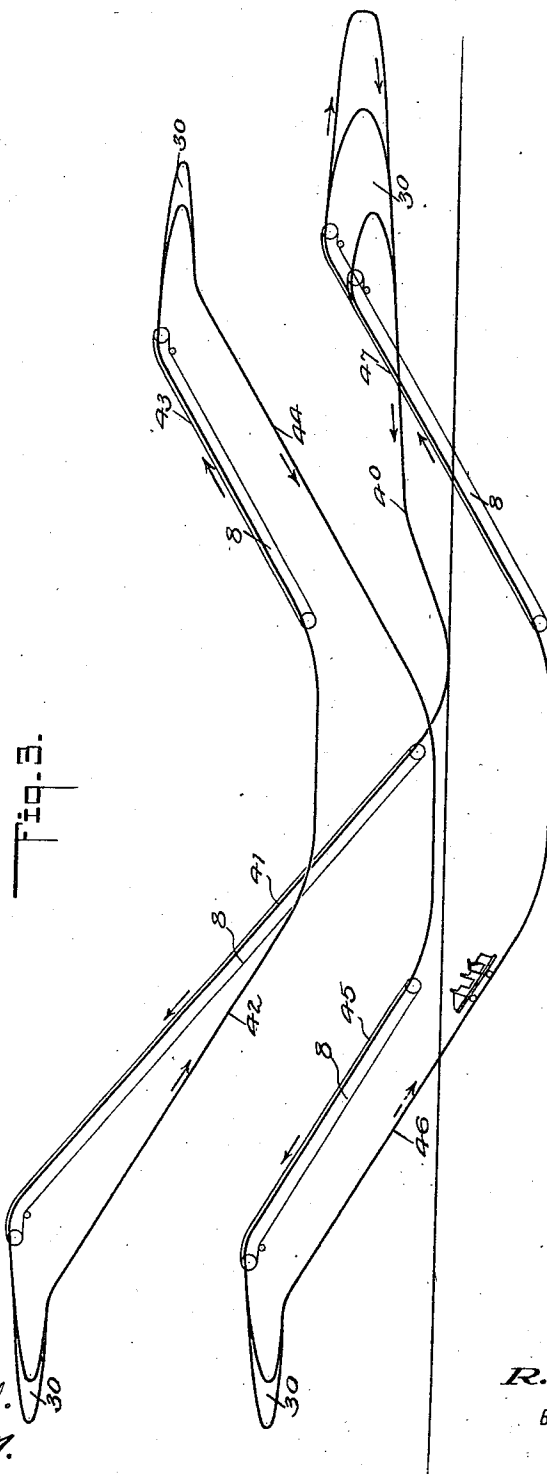


Fig. 3.

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UNITED STATES PATENT OFFICE.

REGINALD M. HARRIS, OF EAST ORANGE, NEW JERSEY.

AMUSEMENT DEVICE.

Application filed June 6, 1923. Serial No. 643,762.

To all whom it may concern:

Be it known that I, REGINALD M. HARRIS, a citizen of the United States, and a resident of East Orange, in the county of Essex and State of New Jersey, have invented a new and Improved Amusement Device, of which the following is a full, clear, and exact description.

The present invention relates to new and useful improvements in amusement devices, and it pertains more particularly to that type of devices known as pleasure railways.

It is an object of the invention to provide a new and improved form of pleasure railway in which the element of competition enters into the operation of the pleasure railway.

It is a further object of the invention to provide a pleasure railway in the nature of a trackway having a vehicle for travel thereover, the vehicle being so constructed that the skill of its occupant enters largely into the operation of the vehicle over the trackway.

It is a further object of the invention to construct the trackway and vehicle so that one operator possessing more skill than another, may cause his vehicle to advance or travel over the trackway at a greater rate of speed than the vehicle controlled by an operator of less skill.

With the above and other objects in view, reference is had to the accompanying drawings which are more or less of a diagrammatic nature, and in which—

Figure 1 is a top plan view showing diagrammatically a conventional form of pleasure railway with a track of the improved construction;

Fig. 2 is a transverse sectional view of a section of track showing the construction thereof and the co-operating structure of the vehicle which travels over the said track.

Fig. 3 is a view illustrating diagrammatically a side elevation of the track.

Referring more particularly to the drawings, the device comprises two tracks 5 and 6, the tracks being so arranged that they are of substantially the same length; that is, it will be noted that the track 6 is located on the inside at the right-hand of Fig. 1 and that said track 6 is the outside

track at the curve on the left-hand side of Fig. 1. The tracks are constructed with suitable safety devices 7 (not forming a part of this particular invention), and with suitable chain hoists 8, by means of which the vehicles may be drawn up an inclined surface, by mechanical means. The tracks are formed with a loop 9 and a gate or switch-over 10 controls the entrance and exit thereof.

Referring to Fig. 2, it will be seen that the trackway comprises vertical stanchions 12 and cross beams 13. These cross beams support the trackway 14, which may be formed of wood or other suitable material, and carried by the trackway 14 are tracks or the like, 15, formed of sheet metal. These tracks 15 are flat and have no raised or depressed portions, the purpose of employing these flat tracks being to permit of lateral movement of the vehicle relative to the trackway 14.

The reference character 16 designates the vehicle, and said vehicle is provided with wheels 17, the treads of which are flat, thus facilitating lateral movement of the vehicle. These wheels 17 in the case of the front wheels of the vehicle, are mounted in steering knuckles 18, and the steering knuckles are adapted to be controlled by one of the occupants of the vehicle, by a steering mechanism, not forming a part of the present invention, and, therefore, not illustrated herein.

The stanchions 12 carry side rails or the like, 19, supported upon brackets 20, and the side rails 19 may or may not be provided on their outer face 21, with a friction-producing element or surface. The vehicle carries side rails 22, and the side rails 22 are so positioned with respect to the vehicle on the trackway that they will be at all times juxtaposed with relation to the side rails 21.

Referring again to the trackway, it will be noted that at the curved portions thereof, such as indicated by the reference character 30, the trackway is comparatively narrow and of such size that the vehicle will engage the sides thereof as indicated by the reference character 31 in Fig. 1. As the trackway leaves the curved portions 30, however,

it will be noted that the same widens as indicated by the reference character 32 and forms broadened portions 33 throughout the major portion of the straight sections of the trackway. It is at one of these stations that the sectional view (Fig. 2) has been taken, and it will be apparent that with the vehicle in this position on the trackway, there is a space between each of the rails 22 carried by the vehicle and its respective rail 19 carried by the trackway. This space will permit of lateral movement of the vehicle between the rails 19.

Referring to Fig. 3, it will be noted that each trackway comprises a slightly declined section 40 leading to a sharply inclined section 41 having a chain hoist heretofore mentioned. The inclined section 41 leads into a curved section 30 heretofore mentioned, and from the curved section 30 the trackway declines abruptly, as indicated by the reference character 42. From this declined section 42, the trackway runs into an inclined section 43 having a chain hoist 8 heretofore mentioned, and the inclined section 43 leads to another curved portion 30, and leading from this curved portion 30 is a declined section 44, which in turn leads to an inclined section 45, having a chain hoist 8 heretofore mentioned, and said inclined section 45 leads to another curved portion 30 heretofore mentioned. Leading from the curve 30 last mentioned is a declined section 46, and from this declined section 46 the trackway leads to an inclined section 47, having a chain hoist 8 heretofore mentioned, and said trackway leads from there into a curved portion 30, which in turn leads into the first-mentioned curved section 40.

The foregoing is a description of each of the tracks, and it is understood that in building the pleasure railway there will be two or more such tracks of substantially equal length, and they will be so laid as to occupy positions one alongside the other in such a manner that two vehicles each traveling over its own track, will constitute a ride in the nature of a competition race between the vehicles.

The operation of the device is as follows:

The vehicle is started down the inclined section 40 and is engaged by the chain hoist 8 on the inclined section 41 and is carried to the top of the inclined section 41. As the hoist releases the vehicle, the same travels around the curved portion 30 and down the inclined section 42. The transverse dimension of this section 42 is greater than the transverse dimension of the curved portion 30, and thus as the vehicle moves down the section 42, the same is capable of lateral movement with respect to the track. If, now, the occupant in the vehicle having control thereof steers the vehicle in such a

manner that its side rails 22 will be free at all times from the rails 19 of the trackway, it will be seen that the vehicle will travel down the section 42 at a greater rate of speed than if, through the inability of the occupant in charge of the vehicle to steer the vehicle straight, the side rails 22 engage the side rails 19 and produce friction.

By this construction and operation it is apparent that skill or ability on the part of the occupant in control of the vehicle to steer the vehicle straight, will reduce friction due to contact of the rails 22 with the rails 19, and thus the vehicle which is more accurately steered, will gather more momentum and will travel farther up the next succeeding inclined track section before it is engaged by the chain hoist thereof.

As the vehicles travel throughout the course, it is apparent that the vehicle which is more accurately steered will be in advance of that vehicle which is not so accurately steered, and, consequently, the winning of the race between the two vehicles will be the reward for accuracy and ability in steering, thus making a competitive ride on a pleasure railway constructed in accordance with this invention.

What is claimed is:

1. In a pleasure railway, a trackway, a vehicle having steering means, and friction-producing elements permitting of a travel of the vehicle without producing friction when the vehicle is steered in a direction parallel therewith.

2. In a pleasure railway, a trackway, a vehicle for travel thereon, friction-producing elements carried by the trackway, and friction-producing elements carried by the vehicles and so arranged with respect to the friction-producing elements of the trackway that the vehicle may be steered through the friction-producing elements of the trackway without engagement therewith of the friction-producing elements of the vehicle.

3. An amusement apparatus including a track, a vehicle adapted to travel on said track, co-engaging vehicle-retarding means associated with the track and vehicle respectively, and manually controlled means associated with the vehicle and operable to steer the vehicle over said track without engagement of said co-engaging vehicle-retarding means.

4. A pleasure railway including a track, a dirigible vehicle for travel thereon, vehicle-retarding means disposed along the track and engageable by movement of the car laterally of the track, and manually controlled steering means for the vehicle operable for steering the vehicle clear of said retarding means.

5. In a pleasure railway, a starting station, a finish station, a plurality of com-

plementary tracks connecting said starting and finish stations, a vehicle for travel over each of said tracks, vehicle-impeding elements associated with said tracks, and a steering mechanism associated with said vehicles whereby they may be guided over their respective tracks to avoid said impeding elements.

6. In a pleasure railway, a trackway, a vehicle for travel longitudinally of said

trackway, vehicle-impeding elements associated with the trackway and adapted to be engaged by the vehicle in its lateral movement, and steering means for the vehicle whereby it may be guided over the trackway with a minimum of lateral movement to avoid engagement of the vehicle with the vehicle-impeding elements.

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