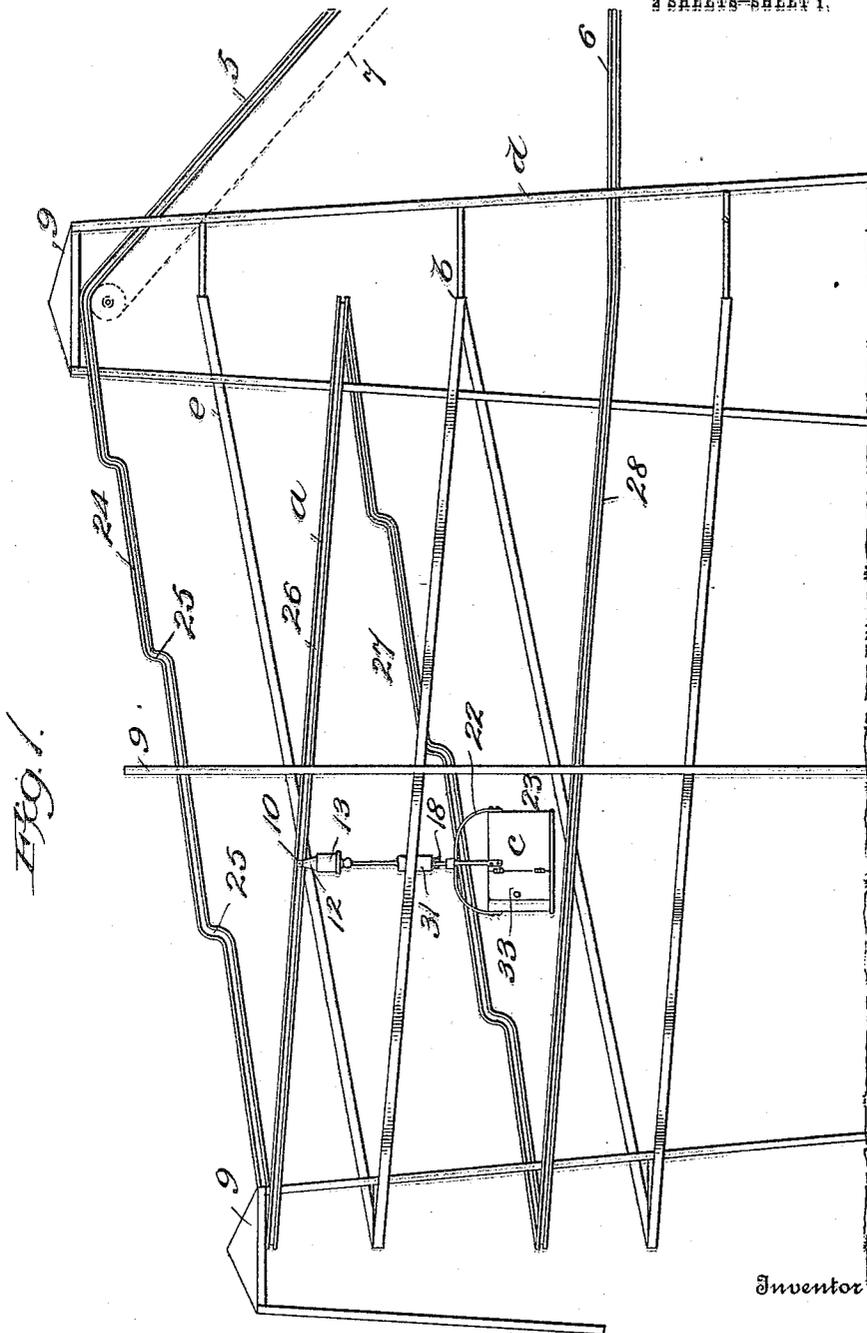


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 AMUSEMENT RAILWAY.
 APPLICATION FILED NOV. 28, 1913.

1,127,753.

Patented Feb. 9, 1915.

2 SHEETS-SHEET 1.



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2 SHEETS—SHEET 2.

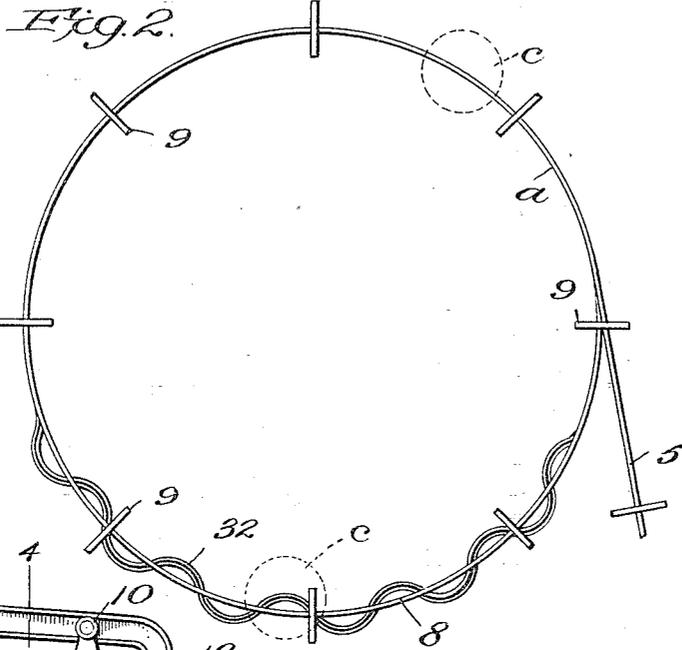


Fig. 3.

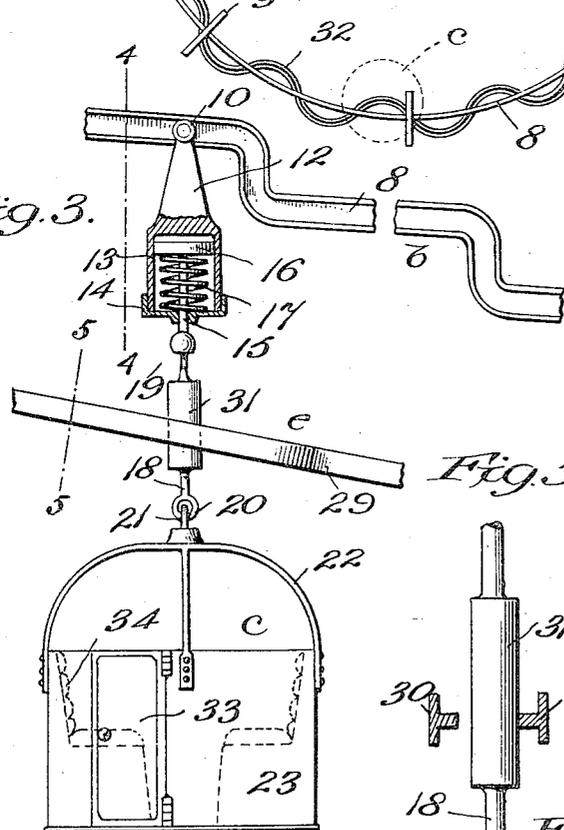


Fig. 4.

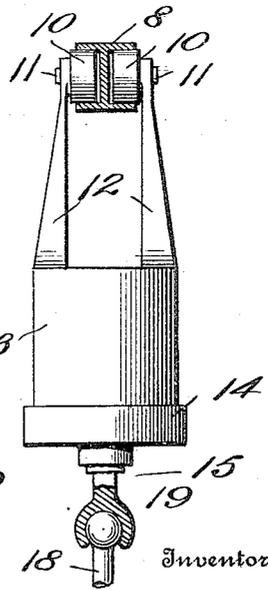
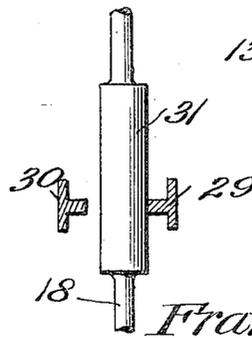


Fig. 5.



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AMUSEMENT-RAILWAY.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK GLYNN, a citizen of the United States of America, residing at Perth Amboy, county of Middlesex, and State of New Jersey, have invented certain new and useful Improvements in Amusement-Railways, of which the following is a specification.

The general object of the invention is to incorporate in an amusement railway such structures as will operate to jolt and to sway a car moving along the track of said railway. And to these ends the invention resides in forming adjacent sections of the railway track one with a series of downwardly extending offset portions and the other with a compound curvature.

Other objects will appear and be better understood from that embodiment of my invention of which the following is a specification, reference being had to the accompanying drawings forming part hereof, in which:—

Figure 1 is a side elevation of the device in a diagrammatic form. Fig. 2 is a plan in diagrammatic form. Fig. 3 is a detail partly in section and side elevation of the track guide and car. Fig. 4 is an enlarged cross section in detail taken on the line 4—4 of Fig. 3. Fig. 5 is a view similar to Fig. 4 taken on the line 5—5 of Fig. 3.

The railway forming the subject matter of the present invention is herein designated generally by *a* and includes a track *b* upon which is adapted to travel the cars one of which is shown in Fig. 1 and indicated generally by *c*. The structure of the railway may be such as will permit of operating the cars either by suitable motive power, such as electricity, or by gravity as shown. The direction of extension of the track *b* may be such as is found desirable, and in the embodiment shown, this track is arranged spirally and supported by the uprights *d*.

Approach to the highest point in the track *b* is had over an inclined rail 5 which extends from the highest point in the track *b* to a point adjacent to the ground, where, by preference, it is suitably connected and arranged so as to form an extension of the extension 6 at the lowest point in the track *b*. A suitable motor operated elevator herein shown in dotted lines in the form of an endless chain 7, is arranged in such relation to the incline 5 as to move a car such as is shown at *e*, upwardly to the highest point

in the track *b*. Any preferred or well-known means may be employed for connecting the upwardly moving side of the elevator 7 to any convenient point on the car, it being understood that such means will automatically disengage from the car when the same arrives at the highest point in the track *b*.

As will be noted by referring to Figs. 1, 3 and 4, the rail 8 which goes to make up the track *b* is I-shaped in vertical cross section and is suitably fastened to cross pieces 9 associated with the uprights *d*. In Fig. 1 the upper spiral only is shown as connected to the cross pieces of the uprights, but it will be understood that cross pieces will be provided and arranged so as to admit of connecting the succeeding spirals.

By virtue of the cross sectional contour of the track rail 8, two treads or bearing surfaces, as is found present in the ordinary railway track, are provided for the truck wheels 10—10 of the car *c*; so also, are stops which function to prevent bodily upward movement of the said truck wheels. It will, of course, be understood that this structure of track rail while embracing features of economy and simplicity, is not essential for the purpose of my invention and therefore the ordinary double track rail system may be substituted for what is shown, if found desirable.

As shown in Figs. 1, 3 and 4 the truck wheels 10 are in diameter so proportioned to the intervening space between the flanges of the track rail 8, as to admit of the said wheels rotating freely on their axles 11 while bearing on the lower flange, as viewed in Fig. 4. The arms 12—12 to which the axles 11—11 are attached, are formed integral with or otherwise suitably secured to the upper end of a casing 13 whose lower end is provided with a detachable head 14. The head 14 is pierced to loosely receive the piston rod 15 whose inner end is attached to a piston 16 slidingly fitted in the casing 13.

17 is a compression spring arranged in the casing 13 and surrounding the rod 15 and operating to provide a yielding support for the piston and its rod. The casing with its piston arms 12—12 and wheels 10—10 combine to form a truck for the car *c*, the connection between the piston and the car being effected by a hanger in the form of a rod 18 which has a ball at its upper end that inter-

locks with a socket 19 in the piston rod 15 and an eye 20 at its lower end which interlocks with an eye 21 positioned at the central part of a spider-like frame 22 to which the body 23 of the car *c* is attached. It will be noted that by virtue of the connection between the hanger and the truck and car, a flexible connection is established between the truck and the car, whereby to permit of an amount of lateral movement of the car independently of the truck, and also the rotating of the car.

Referring now to Fig. 1 the upper spiral 24 of the track *b* is formed with a series of sections arranged in echelon and connected together by downwardly offset portions 25. The succeeding spiral 26 extends as an inclined plane and the spiral 27 which forms a continuation of the spiral 26 is formed with sections corresponding to the sections in the upper spiral 24. The lowest spiral 28 which forms a continuation of the spiral 27 and which connects to the extension 6, corresponds in structure to the spiral 26. It will be noted now by referring to Fig. 1 that a guide *e* underlies the spirals 24—26—27 and 28. As shown in Fig. 5 this guide is made up of guide rails 29 and 30 arranged in spaced relation and spaced apart for a sufficient distance to permit the passing therebetween of a roller 31 journaled on the hanger 18. It will be noted that the guide *e* extends as a spiral, the parts thereof underlying the spirals 24 and 27 of the track having a regular curvature but the parts underlying the spirals 26 and 28 having a compound lateral curvature as indicated by 32 in Fig. 2.

With the foregoing structure it is obvious that a car constructed as previously described, will be bounced vertically upon passing over the parts 24 and 27 of the track and forced to follow a zigzag course by passing over the parts 26 and 28 of the said track. It will be further noted that when the part 31 swings into contact with either guide rail, the said part will roll on such rail and effect the rotating of the car. Thus when the track proper and guide are considered as a whole, it is obvious that the several parts of the track will combine to bounce,

rotate and undulate a car laterally as the car progresses over the railway.

The body 25 of the car *c* is by preference cylindrical in contour and provided with a door 33 which controls the passageway into the car. Interiorly the body is provided with a seat 34 substantially circular in contour. This seat is suitably padded or otherwise cushioned to prevent injury to the passengers, as the positions of these are disturbed by the action of the car as the same proceeds along the track.

What is claimed as new is:

1. An amusement railway, comprising an elevated track adapted for supporting therefrom a car and having associated therewith structures arranged for effecting the bouncing and the turning of the car and the causing of the car to follow a zigzag course as the car progresses on the track.

2. An amusement railway comprising a track having sections thereof connected together and arranged in echelon, a car adapted to travel on the track, and means for causing the car to follow a zigzag course while in progress on the track.

3. In an amusement railway, a track having a regular portion and an irregular portion made up of connected sections arranged in echelon, an irregular-shaped guide arranged adjacent to the regular portion of the track, and a car adapted to be operated upon by the irregular portions of the track and guide substantially as described.

4. In an amusement railway, the combination of a track and a car, the said car being adapted to travel on the said track, and structures associated with the car and with the railway and combining to bounce the car vertically and undulate the car laterally as the same progresses along the track of the railway.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this 21 day of November 1913.

FRANK GLYNN.

Witnesses:

JOHN J. DESMOND,
JOHN PUGH.