W. E. MILLER.

AMUSEMENT APPARATUS.

APPLICATION FILED SEPT. 22, 1911.

1,013,202.

Patented Jan. 2, 1912.

3 SHEETS—SHEET 1.

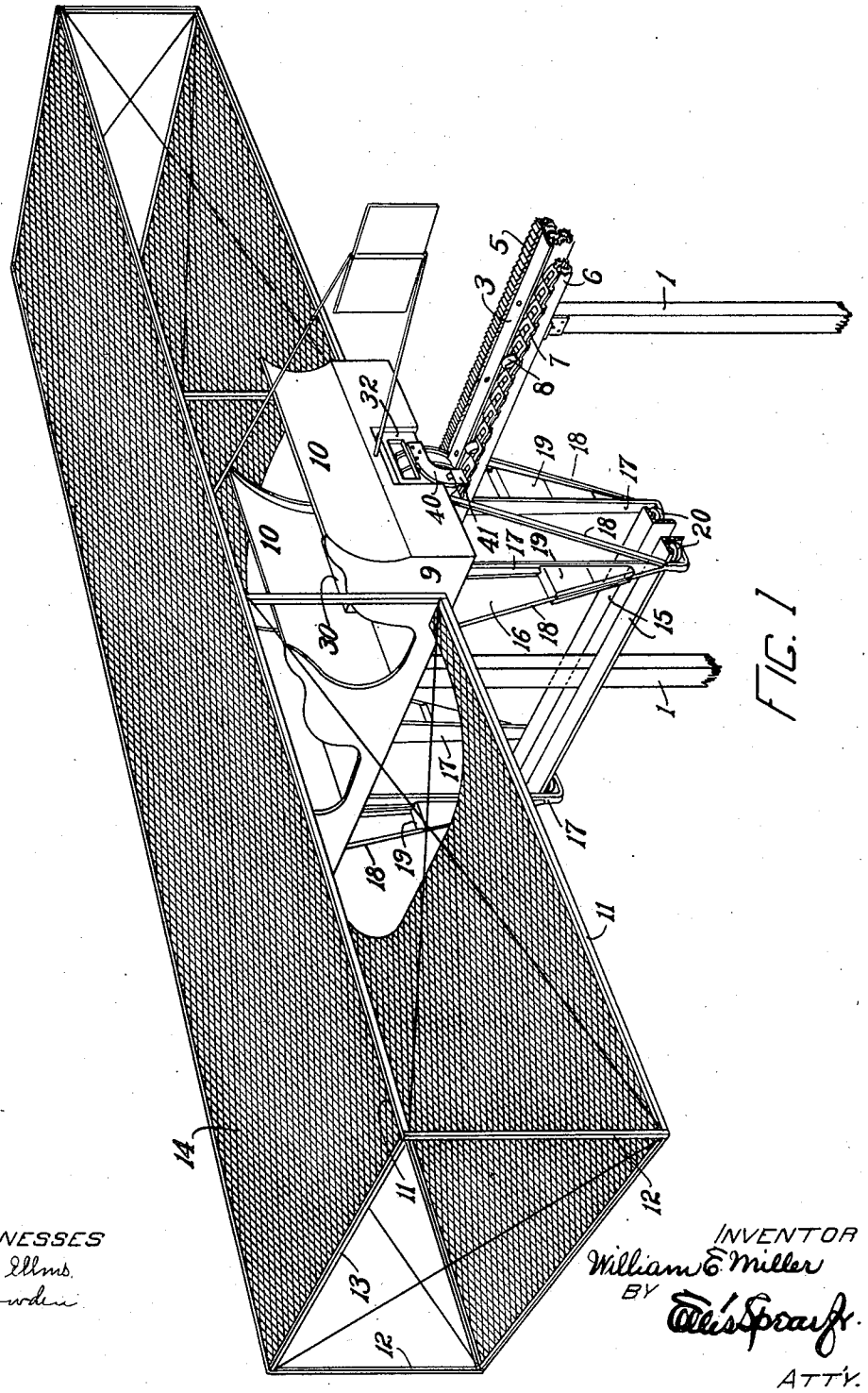

FIG. 1

WITNESSES

R. B. Ellms.

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INVENTOR

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3 SHEETS—SHEET 2

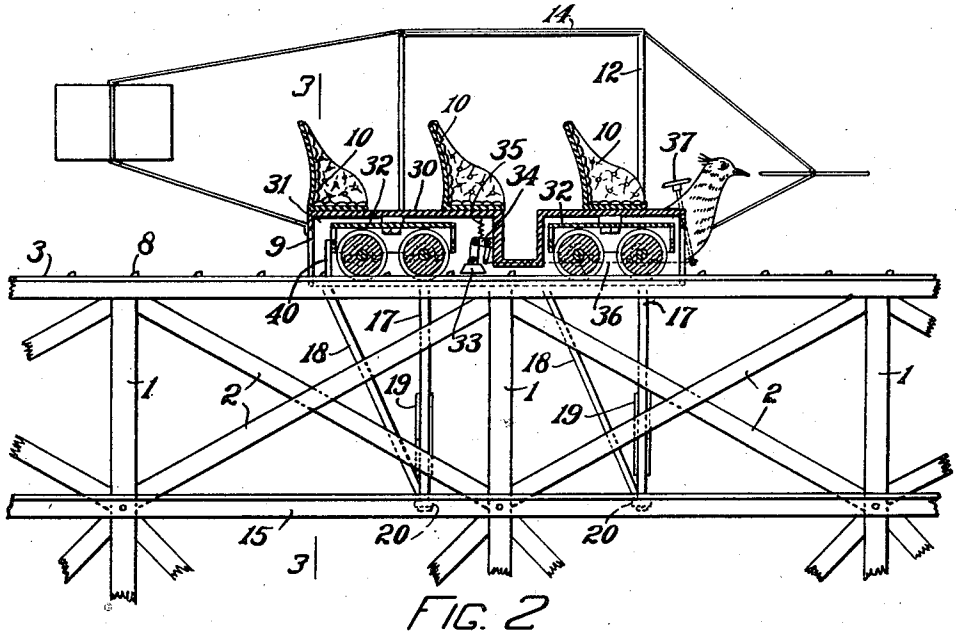

FIG. 2

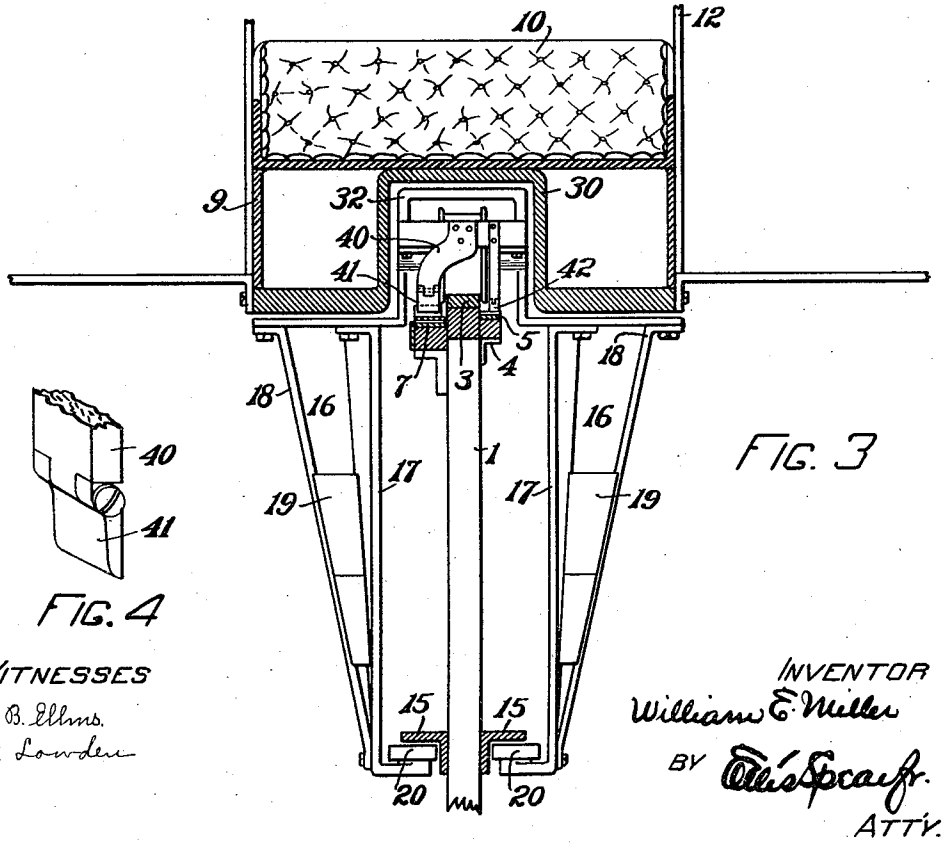

FIG. 3

FIG. 4

WITNESSES

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3 SHEETS—SHEET 3.

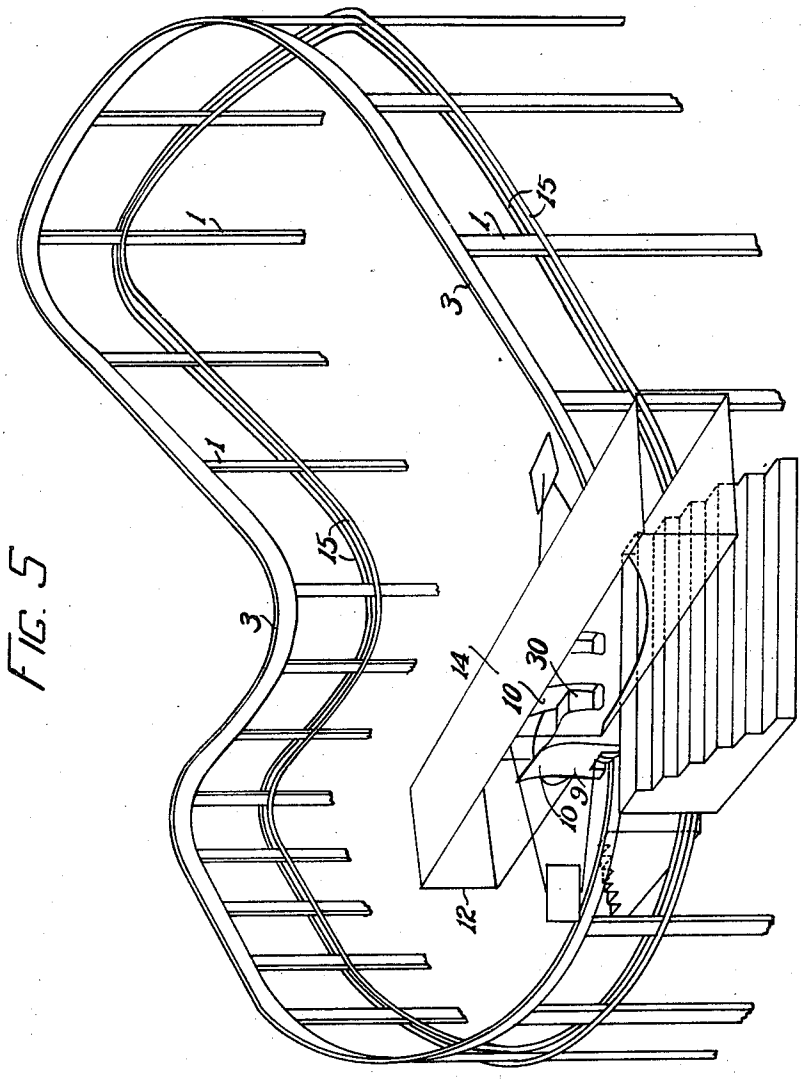

FIG. 5

WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM ED. MILLER, OF REVERE, MASSACHUSETTS.

AMUSEMENT APPARATUS.

1,013,202. Specification of Letters Patent. Patented Jan. 2, 1912.

Application filed September 22, 1911. Serial No. 650,859.

To all whom it may concern:

Be it known that I, WILLIAM E. MILLER, a citizen of the United States, residing at Revere, county of Suffolk, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Amusement Apparatus, of which the following is a specification.

This invention relates to an amusement apparatus and particularly to a gravity ride of the monorail type in which a flight by aeroplane is approximated.

In devices of this sort great difficulty is experienced in securing the desired sensations for the passengers by constructions in which the limits of safety are not suppressed.

It is the object of my invention therefore to provide an aeroplane ride which shall be safe and secure and yet which will afford a very close approach to the sensations of aerial navigation by aeroplane.

The construction and operation of my device will be more fully set forth in the specification which follows.

In the drawings which form a part of that specification, I have shown an illustrated embodiment of my invention which I find well calculated to secure the results desired.

Throughout specification and drawing like reference numerals are employed to indicate corresponding parts and in the drawings:

Figure 1 is a view of my aeroplane car with a portion of rail and grade lift showing. Fig. 2 is a side view in partial section of my car and track. Fig. 3 is a central transverse section. Fig. 4 is a detail of safety brake, and Fig. 5 is a general sketch view indicating an undulating trackway for the apparatus.

My apparatus consists of a trackway built on upright posts or pillars 1 suitably braced at 2 and supporting a rail 3 centrally thereof. Upon one side of the rail 3 is supported upon a bracket 4 a toothed safety rail 5. On the incline leading to the starting point a second bracket 6 supports a cable 7 provided with shouldered links 8.

The car consists of a body 9 having seats 10. Horizontal stringers 11 are spaced and supported by vertical pieces 12 and the frames formed by the horizontal and end pieces 11 and 13 are covered with a wire netting 14. The netting 14 is sufficiently coarse to avoid too much resistance in the downward swoop of the car and yet refined enough to give the general effect of actual effective planes. These netting wings 14 are painted to still further give the effect of a solid surface and by arresting the attention of the eye the netting actually gives the appearance of complete planes.

Upon the uprights 1 I run lateral flange rails 15 of a substantially L-shape. The irons are placed with one flange downward for bolting to the uprights 1 and the other flange extending outward from the upper edge of the first flange.

On each side of the car 9 are a pair of hangers 16 formed of an angle bracket 17 and two strap braces 18. Wedge shaped weights 19 grooved on their edges are fitted between the edges of these members for steadying the car and at the lower end of each hanger is journaled a horizontal wheel 20 set beneath the horizontal flange of the rail 15 and bearing on its vertical member. These wheels afford an absolute safeguard against derailment and loss of balance.

Longitudinally of the car body 9 is a channel 30 connecting with which are track boxes 31 containing a pair of trucks 32. I also provide a suitable brake 33 operated by a bell crank 34, normally held raised by a spring 35. The bell crank is operated by a cord 36 wound on the post of a wheel 37 under the control of the driver.

On the rear end of the car I provide on one side a track 40 having a pawl 41 (see Figs. 1 and 4). The pawl 40 is adapted to be engaged by the shoulders 8 on the left of the chain 7.

On the opposite side of the rear truck frame, I provide a similar pawl 42 adapted to engage the notches in the rail 5 in case the car should attempt to run back.

The track 3 shown in Fig. 5 may be made any desired length and include any number of suitable rises, descents, curves or other features desirable to give the effect of an aeroplane. The particular construction of the car and means of driving the car may be varied, as by using a cable drive instead of a chain drive. These and various other modifications may obviously be made in the construction of my device and in the form and arrangement of the tracks, all without departing from the spirit of my invention if within the limits of the appended claims.

What I therefore claim and desire to secure by Letters Patent is:

1. An amusement apparatus comprising a

gravity monorail trackway, means for supporting said trackway, said trackway including a descending track section and an ascending inclined section connecting the end of said descending section to the starting point thereof, a pair of lateral rails having overhanging flanges mounted on said supports below said trackway, a car approximating the appearance of an aeroplane, vertical grooved wheels under the car for engagement with the trackway, depending brackets on each side of said car having a tapering opening therein, a horizontally disposed guide wheel on each of said brackets and engaging said guide rail below the lateral flange thereof, weights located in the openings of said brackets, means for drawing said car up the said inclined section and means for automatically engaging said drawing means with said car.

2. An amusement apparatus comprising a gravity monorail trackway, means for supporting said trackway, said trackway including a descending track section and an ascending inclined section connecting the end of said descending section to the starting point thereof, a car, a pair of planes carried by said car, the lower of said planes being cut away adjacent to said car to permit access thereto, vertical grooved wheels under the car for engagement with the trackway, means for drawing said car up the said inclined section and means for automatically engaging said drawing means with said car.

3. A car for a gravity amusement ride having an inclined trackway, comprising a car body, supporting wheels under said body to run on said trackway, a plane frame carried by said car, and a netting stretched to said frame to afford the appearance of a true plane but being substantially non-resistant to the air in the descent of the car.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM ED. MILLER.

Witnesses:
WILLIAM H. SCHOPF,
MERRITT I. TUBBS.