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PATENTED SEPT. 11, 1906.

E. H. LANIER.
AMUSEMENT DEVICE.
APPLICATION FILED JUNE 30, 1905.

2 SHEETS—SHEET 1.

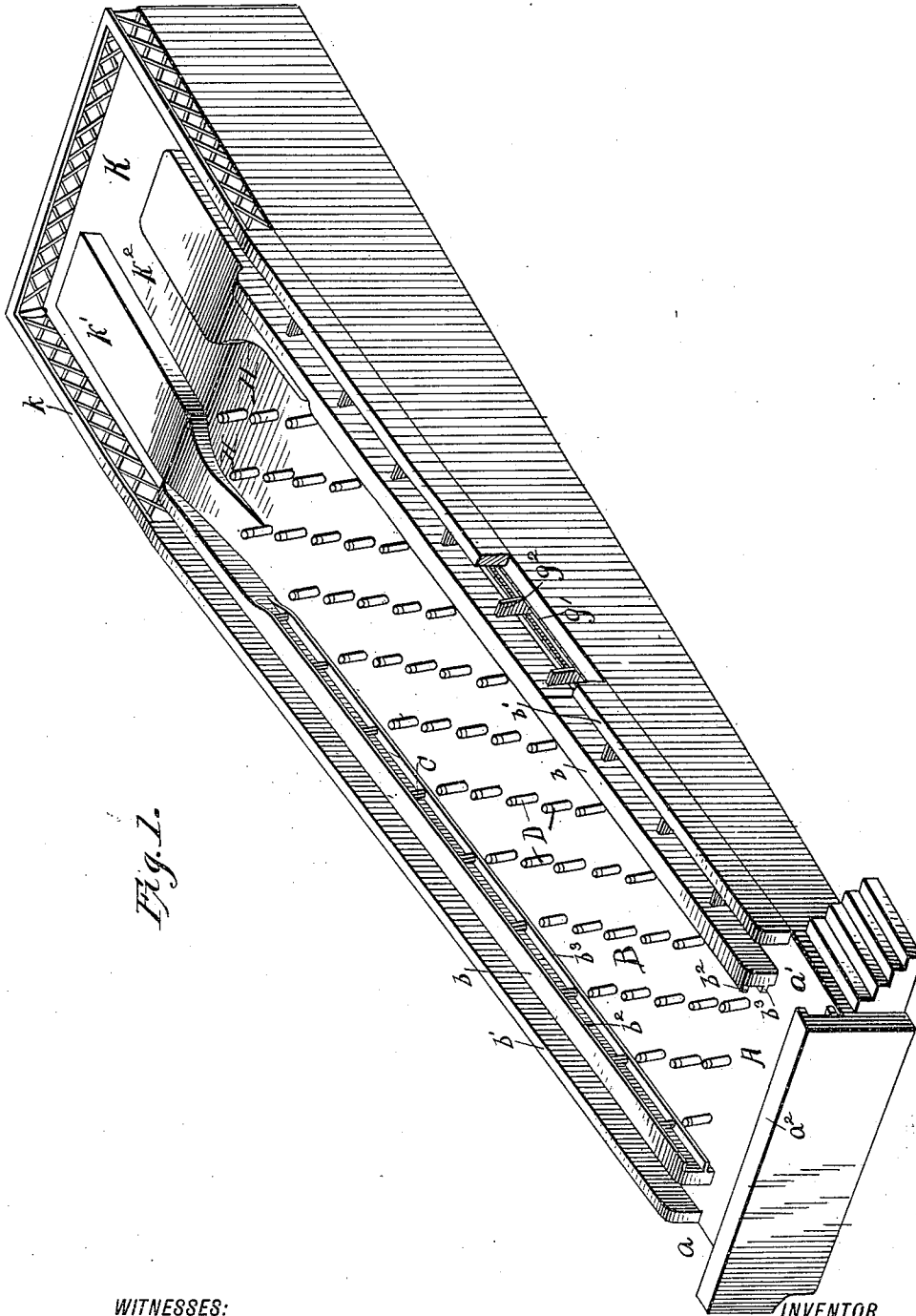


Fig. 1.

WITNESSES:

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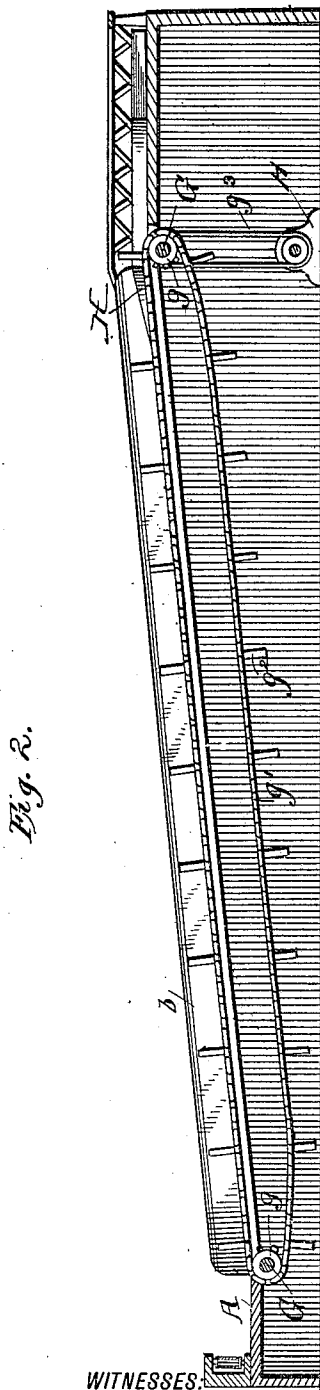
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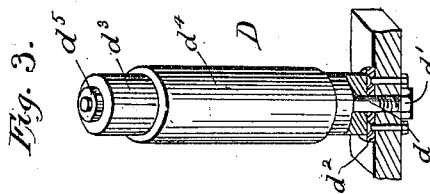
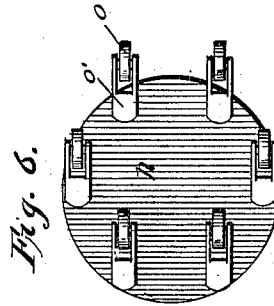
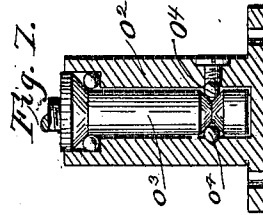
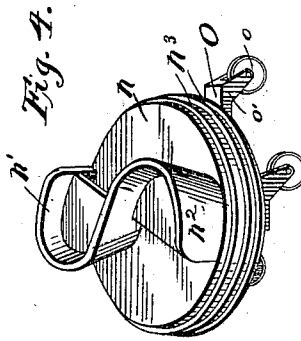
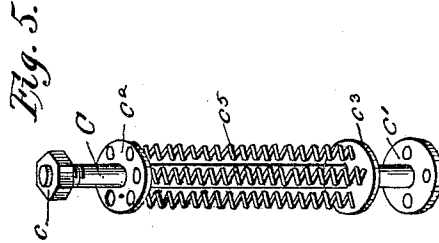
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2 SHEETS—SHEET 2.



WITNESSES: 
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UNITED STATES PATENT OFFICE.

EDWARD H. LANIER, OF MEMPHIS, TENNESSEE.

AMUSEMENT DEVICE.

No. 831,012.

Specification of Letters Patent.

Patented Sept. 11, 1906.

Application filed June 30, 1905. Serial No. 267,751.

To all whom it may concern:

Be it known that I, EDWARD H. LANIER, a citizen of the United States, and a resident of Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Amusement Devices, of which the following is a specification.

My invention is an improvement in amusement devices; and it consists in certain novel constructions and combinations of parts hereinafter described and claimed.

Referring to the drawings forming a part hereof, Figure 1 is a perspective view of my device. Fig. 2 is a longitudinal vertical section. Fig. 3 is a perspective detail of one of the obstructions. Fig. 4 is a perspective view of the car. Fig. 5 is a similar view of another form of obstruction. Fig. 6 is a bottom view of the car, and Fig. 7 is a vertical longitudinal section through the connection of the wheel and car.

In the practical application of my invention I provide a substantially horizontal lower platform A, provided with an entrance-space *a* and an exit-space *a'*, a railing *a''* being arranged on the front edge of the platform. An inclined platform B is secured to the rear edge of the lower platform and inclines upwardly therefrom at a slight inclination, the sides of the inclined platform being provided with double walls *b b'*, spaced apart from each other to form passages at each side thereof. The inner wall *b* is provided longitudinally thereof with upper and lower parallel girders *b² b³*, a series of oppositely-disposed perforations being provided in the girders for the reception of a bolt C, the bolt being secured at the outside of the girders by nuts *c*. A flange *c'* upon the bolt rests upon the lower girder, and flanges *c² c³* on the bolt adjacent the respective girders are provided with a series of similarly-placed perforations for the reception of strong spiral springs *c⁵*, which extend between the flanges of the girders longitudinally of the bolts and entirely around the circumference thereof. The whole length of both side walls is provided with the above-described resilient devices.

A plurality of series of resilient obstructions D are arranged upon the upper surface of the inclined platform, each comprising an iron core *d*, passing through the platform and secured by a nut *d'*, a flange *d²* being secured to the bolt and resting upon the platform. The iron core is surrounded by a wooden roller *d³*, secured thereon by a nut *d⁵* engag-

ing the free end of the core, and a casing of rubber *d⁴* or other suitable resilient material is placed around the core. As will be seen from an inspection of Fig. 1, the obstructions are placed in parallel series, the obstructions of the series being staggered with respect to the obstructions of the adjacent series, the obstructions being placed in parallel lines, the lines inclined with respect to the longitudinal center of the platform. An upper substantially horizontal platform K is arranged at the upper end of the inclined platform, a railing *k* being provided at the outer edge of the platform and connecting with the outer side walls of the inclined platform. A plurality of circular cars *n*, each provided with oppositely-disposed seats *n' n²* and with a series of rubber bands *n³*, encircling the body of the car, are provided for passengers, the cars being adapted to roll by gravity down the incline and to be engaged and deflected by the resilient obstructions on the floor of the platform. The cars are provided with casters-wheels O, comprising the wheels *o*, journaled in brackets *o'*, having secured to the upper end thereof the sockets *o²*, adapted to be engaged by pins *o³*, secured to the body of the car and retained in the socket by a ball-bearing *o⁴*. As will be evident from an inspection of the drawings, the double side walls of the inclined platform form chutes on either side thereof, the chute on the left being a passage-way whereby passengers may reach the upper platform, while in the chute to the right are provided means for elevating the cars from the lower to the upper platforms. Shafts G, journaled in the framework of the platform at either end of the chutes, are provided with sprocket-wheels *g*, carrying a parallel link chain *g'*, having secured thereto the wooden vanes *g²* for engaging the cars and driven from a suitable motor H by a chain *g³*, connected with the motor and with the sprocket-wheel *g⁴* upon the upper shaft G.

A platform K', raised to about the level of the car, is provided on the upper platform for the convenience of passengers, the cars being shoved around the chute *k²* and alongside the platform *k'*.

While I have shown the obstructions as being composed of iron cores having a rubber casing therearound, it is evident that a device similar to that used upon the sides of the inclined platform could be made use of for obstructions and that similarly the rubber-padded posts might be used in place of the resili-

ent springs on the sides of the chute. The guards H H' are provided at the upper end of the inclined platform for guiding the cars into engagement with the pins.

- 5 In operation the passengers being seated in the cars they are pushed out of the chute k^2 and upon the incline. The cars immediately start toward the bottom of the platform and are engaged by the obstructions
10 and deflected here and there, meeting other obstructions, until they finally reach the bottom of the platform.

The circular form of the cars and the peculiar arrangement of the wheels permit the
15 cars to revolve or to run in any direction without overturning. The seats and the inside of the cars are well padded to prevent injury to the occupants, and the incline is placed at such an angle as will permit the
20 cars to descend gently, so that the contact with the posts will be of a gentle nature, but still sufficient to cause the car to rebound with its occupants.

Having thus described my invention, what
25 I claim as new, and desire to secure by Letters Patent, is—

1. In an amusement device, the combination of the lower platform, an inclined platform connected therewith, an outer side wall
30 secured to the inclined platform, a padded inner wall secured to the platform and spaced apart from the outer wall, parallel longitudinal girders on the inner side of the side walls, spaced apart from each other, a series
35 of bolts connecting the girders; oppositely-disposed flanges on the bolts adjacent to the girders, a series of spiral springs arranged longitudinally of the bolts and secured to the flanges, a series of padded posts arranged in
40 parallel lines on the floor of the inclined platform and projecting upwardly therefrom, the lines of posts being inclined with respect to the longitudinal center of the platform, cars adapted to roll by gravity down the inclined
45 platform and comprising each a padded circular body, provided with oppositely-disposed seats, caster-wheels secured to the body portion, an upper platform, and means for lifting the cars from the lower to the upper
50 platform, comprising shafts journaled between the inner and outer walls at one side of the platform, sprocket-wheels on the shaft, endless chains on the wheels, vanes on the chains adapted to engage the car, and means
55 for driving the chains.

2. An amusement device comprising upper and lower platforms, an inclined platform therebetween, padded side walls on the inclined platform, a plurality of padded posts
60 secured to the platform, the posts being arranged in lines parallel with each other, and inclined with respect to the longitudinal center of the inclined platform, a circular car provided with caster-wheels and adapted to
65 roll by gravity down the inclined platform, a

chute at one side of the inclined platform, means in the chute for lifting the cars from the lower to the upper platform, and means for guiding the cars from the chute to the inclined platform.

3. An amusement device comprising an inclined platform, padded side walls on the inclined platform, a series of padded obstructions arranged in parallel lines upon the inclined platform, the lines being inclined with respect to the longitudinal center thereof,
75 circular padded cars provided with caster-wheels and adapted to roll by gravity down the inclined platform, and means for lifting the cars to the top thereof.

4. An amusement device comprising an inclined platform provided with resilient side walls, a plurality of resilient obstructions secured to the platform and projecting upwardly therefrom, the said obstructions being
85 arranged in lines parallel with the longitudinal center of the inclined platform, and the obstructions in the individual lines being staggered with respect to the obstructions in the adjacent lines, circular padded cars adapted to roll by gravity down the inclined platform, and means for lifting the cars to the top thereof.

5. An amusement device comprising an inclined platform provided with resilient side
95 walls, a plurality of resilient obstructions projecting upwardly from the surface of the platform and arranged in lines parallel with the longitudinal center thereof, the obstructions of the individual lines being staggered
100 with respect to the obstructions of the adjacent lines, a car adapted to roll by gravity down the inclined platform, and means for lifting the car to the top thereof.

6. An amusement device comprising an inclined platform provided with resilient side
105 walls, a plurality of parallel series of resilient obstructions on the platform, the obstructions of the individual series being staggered with respect to the obstructions of adjacent
110 series, a car having a resilient outer surface adapted to roll by gravity down the incline, and means for lifting the car to the top of the platform.

7. An amusement device comprising an inclined platform provided with resilient side
115 walls, a plurality of parallel series of resilient obstructions on the side walls, the obstructions in the individual series being staggered with respect to the obstructions of the adjacent series, and a car adapted to roll by gravity
120 down the incline.

8. An amusement device comprising an inclined platform provided with resilient side
125 walls, a car having a resilient outer surface adapted to roll by gravity down the platform, a plurality of resilient obstructions in the path of the car, and means for lifting the car to the top of the platform.

9. An amusement device comprising an in- 130

clined platform having resilient side walls, a resilient car adapted to roll by gravity down the platform, and a plurality of resilient obstructions in the surface of the platform and
5 adapted to engage and deflect the car.

10 10. An amusement device comprising an inclined platform having resilient side walls, a car adapted to roll by gravity down the inclined platform, and a plurality of resilient obstructions for engaging and deflecting the car.

11. An amusement device comprising an inclined platform, a car adapted to roll by

gravity down the inclined platform, and a plurality of resilient obstructions for engaging and deflecting the car. 15

12. An amusement device comprising an inclined surface, a car adapted to roll by gravity down the surface, and a plurality of resilient obstructions for engaging and deflect- 20 ing the car.

EDWARD H. LANIER.

Witnesses:

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G. T. PARKISON.