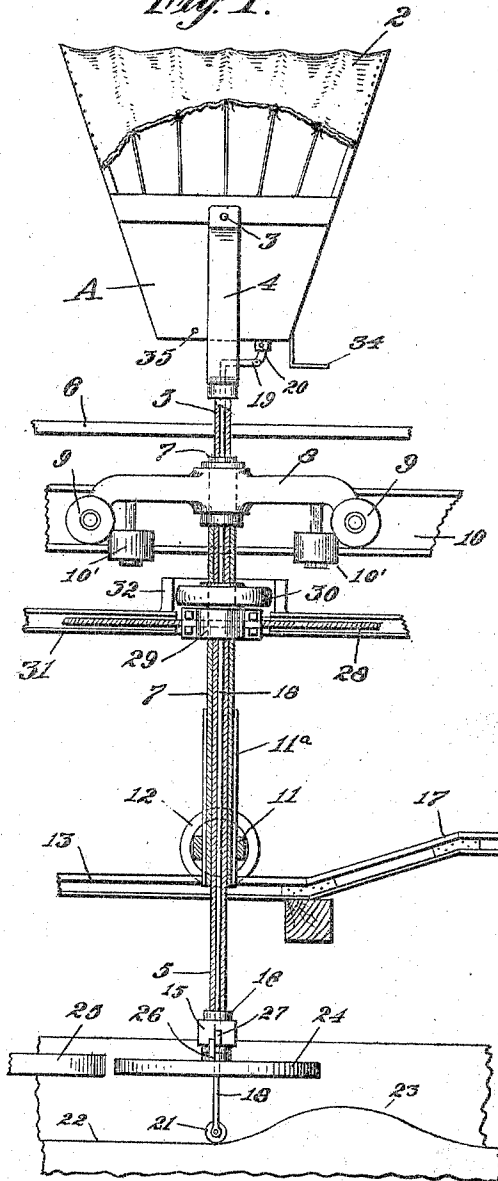


965,768.

Patented July 26, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

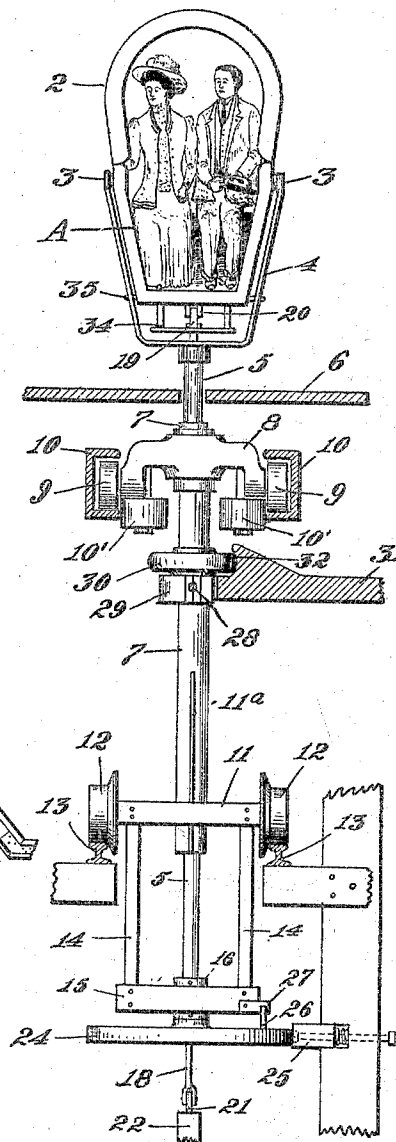


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Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

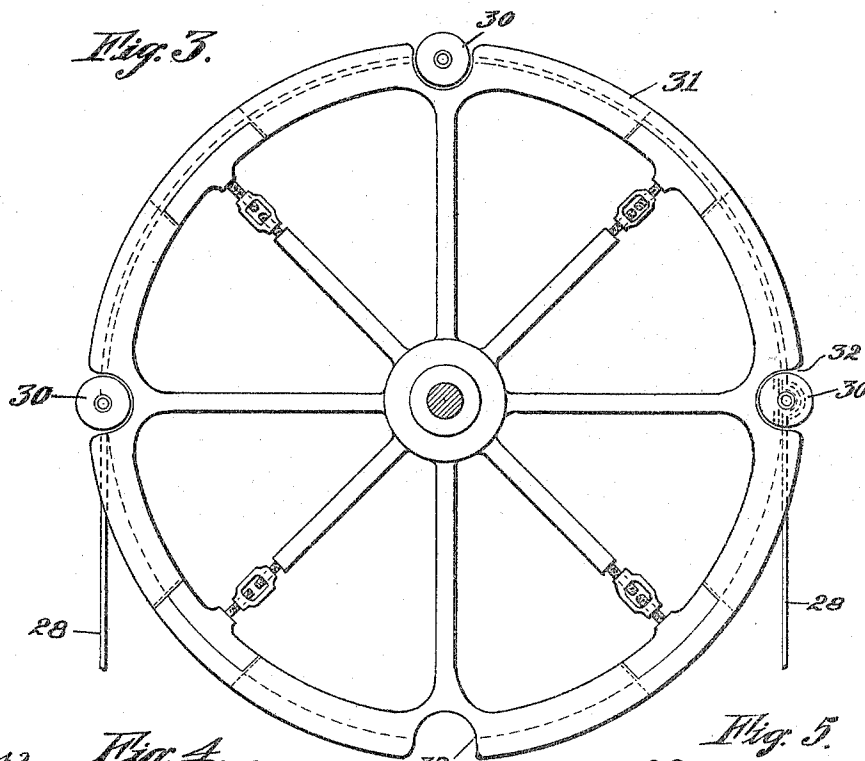
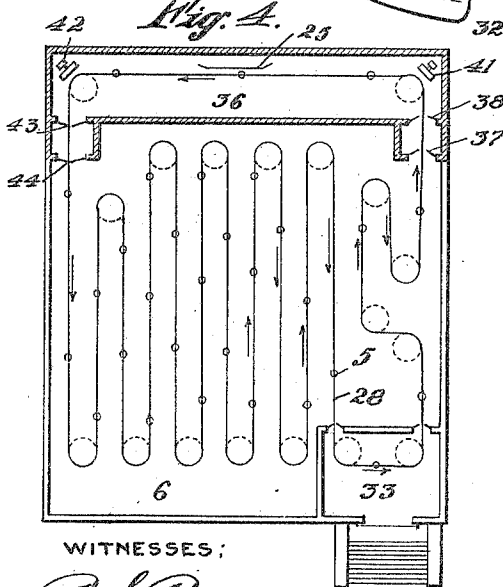


Fig. 4.



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Fig. 5.

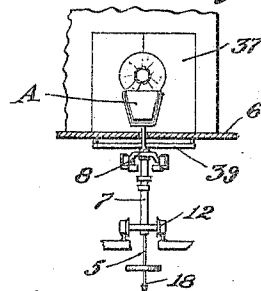
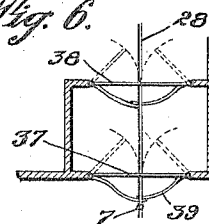


Fig. 6.



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AMUSEMENT APPARATUS.

965,768.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed June 14, 1909, Serial No. 502,163. Renewed June 24, 1910. Serial No. 568,717.

To all whom it may concern:

Be it known that I, WILLIAM S. VAN SANT, a citizen of United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Amusement Apparatus, of which the following is a specification.

My invention relates to amusement devices, and pertains particularly to that class employing traveling passenger conveyances, adapted to travel through a variety of scenes, and to subject the passenger to a variety of novel and entertaining situations.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a side elevation partly in section of the invention. Fig. 2 is a front elevation. Fig. 3 is a plan view of a cable drum. Fig. 4 is a diagram showing the route of travel. Fig. 5 is a detail showing the conveyance enter a door. Fig. 6 is a detail showing the door-operating mechanism.

The invention is designed to represent a trip across the plains in early days, in a prairie schooner, and to afford in a limited space, in a short period of time, a variety of thrilling experiences and sensations realistic to the participants of a trip of that sort. To this end I provide one or more cars as A adapted to contain one or more passengers, each car having a covered canvas bowed top 2, in simulation of an ancient prairie schooner. Each car A is pivoted above the center of gravity 3 to a yoke 4, which latter is carried on a hollow standard 5. This standard 5 extends down through a continuous slot in the flooring 6 of the pavilion or building, or area, in which the apparatus is installed. This hollow standard 5 has a free sliding movement in a sleeve 7, which is fixed to and carried by a carriage 8, Figs. 1 and 2. This carriage or truck 8 has suitable wheels 9 at front and back running in fixed channel tracks 10; these channel tracks 10 trucks 8, and guide sleeves 7 serving to maintain the tubular standard 5 always upright. The lower end of the sleeve 7 has a vertical sliding movement, and within the lower truck 11, having wheels 12 running on suitable track rails 13. Depending from the truck 11 is a pair of rods 14,

carrying a crosshead 15 to which the lower end of the hollow standard 5 is rigidly connected by means of the collar 16. These track rails 13 do not always run on the same level, but at suitable intervals they are made to take a sudden rise, as shown at 17 (Fig. 1) so that while the sleeve 7 and truck 8 remain stationary, the whole carriage is given a sudden vertical movement.

In order to give the car or carriage a sudden backward tilt at intervals, a rod 18 extends lengthwise through the hollow standard 5, and is slidable therein, and has its upper end crooked, as shown at 19 (Fig. 1), and pivotally connected to the car forward of the center thereof, as shown at 20. The lower end of the rod 18 carries a suitable antifriction device, as roller 21, adapted to run on a trackway 22, which trackway is provided with bumps or cam surfaces 23 at suitable intervals so that whenever the roller 21 runs up over these bumps, or down into a depression, the car is given a sudden tilt backward, or allowed to drop forward so as to more or less excite the occupants of the car.

In addition to the vertical movements of the car, given by the elevation 17 in the track, and to the tilting movements of the car due to the cam surfaces 23, provision is made for turning the car from side to side while the same is traveling. This turning movement being afforded by means of a drum 24 rigidly fixed to the lower end of the tubular standard 5, which drum is adapted at suitable intervals in the path of travel of the car to encounter fixed lateral guides 25 with which the drum 24 frictionally contacts to turn the standard and car to one side or the other, according to which side the cam guide 25 is disposed. The turning movement of the drum about its axis is limited by means of a pin 26 on the drum encountering a projection 27 carried by the cross-head 15.

Side play of the truck 8 in the channeled guides 10 is limited by means of the rollers 10' carried on vertical pivots on the under side of the truck 8, and which rollers run on the inner edges of the guides 10.

The sleeve 7 is provided with a key 11^a operating in a feather-way on the truck 11, so that when the auxiliary truck 11 encounters an upraise, as 17, this truck will slide up on the sleeve, carrying the carriage upward by means of the connection with

the standard 5, provided by the hanger 14—15.

The car is propelled by any suitable means. As here shown preferably a single cable 28 driven from any appropriate source of power, is connected to the sleeve 7 by suitable means, as the clamp collar 29 (Fig. 1). This clamp collar 29 carries a free running antifriction roller 30 which is adapted when the apparatus is traveling around any of the drums (Fig. 4) at the various angles or turns in the course of travel, to engage in pockets 32 in the periphery of these drums; these rollers being adapted to roll gradually into these pockets, and insure the proper alinement always with the cable. The cable 28 is made to take various turns, and is operated at suitable speed, and the system may be installed in any suitable pavilion or inclosure.

In operation, the prospective occupant or occupants of the cars take passage from a platform as 33 (Fig. 4), entering the cars by the steps 34 (Fig. 1). On starting out each car faces ahead in the line of travel, and at different points along the route various scenes and vistas are presented. At intervals the car is made to travel up an incline 17, similar to an ascending grade over the mountains; then again it may be made to drop down into a canyon like effect; or the roller 21 may encounter a series of irregularities 23 in the track 22, causing a sensation of rough bumping movements, similar to travel over a rough road; suitable stops 35 on a car preventing it from tipping back too far accidentally. The weight of the load however is at all times forward of the pivot 3 so that the natural tendency of the car is to tip forward, its front end being supported on the roller 21 and rod 18. From time to time the drum 24 strikes a side cam 25, and turns the car partly or all the way around, sometimes reversing the car so that the passengers are traveling backward; sometimes turning the car half-way so that the occupants of one car are facing the occupants of another car on another stretch of track, which latter car having been simultaneously turned, produces this desired effect of perfect strangers confronting each other. The car is straightened by the drum 24 later encountering the friction ledge 25 on the opposite side. At another point in the ride, the cars may enter a darkened chamber 36, like unto a tunnel or dark chasm; the entrance and exit from this chamber 36 being through a double set of double hinged doors 37—38, these doors being adapted to swing inwardly to allow the car to enter, but being so positioned that they do not open until the occupant of a car is about to strike it with his face; the illusion and temporary terror of the occupant of the car being heightened, if desired, by

painting the outside of these doors to represent a brick wall so that it seems certain that as the car comes along, the occupant will be thrown against this brick wall. Preferably behind the outside doors 37 are other doors 38 operated in the same manner as the outside doors, the purpose of the inner doors being to exclude the light from the chamber 36. The doors 37—38 may be manipulated in any suitable fashion, as for instance by arms 39 fixed to the hinge rods 40 to which the doors are secured; these arms 39 being suitably curved and positioned so as to be intercepted at the proper moment by a sleeve 7 to open the doors without the occupant of the car ever actually coming in contact with the doors. Inside the chamber 36 is partial or complete darkness. If it is entirely dark as in a tunnel, the sensation is that of a complete stop, and a loss of direction; the illusion being increased by passing around the sprockets 31 in the chamber.

If desired warm and cold blasts of air may be directed successively against the car by means of the fans 41—42, and some of the cam friction surfaces 25 may be so arranged as to act on a cam drum 24 as to turn the car around, causing the occupant to ride backward out through the opposite swinging doors 43—44.

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

1. An amusement apparatus comprising the combination of a traveling cable, a vertical sleeve carried thereby and a vertical standard extending through the sleeve and turnable therein, a carriage supported on the upper end of the standard, a truck fixed to the sleeve and parallel guides for the truck, means supporting the lower end of the standard, and means for turning the carriage sidewise during its travel.

2. In an amusement apparatus, the combination of a carriage shaped and inclosed to present a covered vehicle open at the front, a standard upon which the carriage is supported, means for supporting the lower end on the standard, a truck and trackways therefor, a sleeve surrounding the standard, a second truck fixed to the upper end of the sleeve having rollers at opposite sides, and oppositely disposed parallel guides, said standard being slidably mounted in said sleeve.

3. In an amusement apparatus, the combination of a carriage shaped and inclosed to present a covered vehicle open at the front, means for causing the carriage to travel continuously, a standard having a yoke at its upper end extending upwardly along the outside of the carriage, means for supporting the lower end of the standard, means for giving the carriage at different points in its travel a vertical reciprocating

motion, inwardly facing parallel channel guides, and a truck fixed to the upper end of the sleeve having rollers at opposite sides engaging said channels.

5 4. In an amusement apparatus, the combination of a carriage shaped and inclosed to present a covered vehicle open at the front, means for causing the carriage to travel continuously, a standard having a
10 yoke at its upper end extending upwardly along the outside of the carriage, means for supporting the lower end of the standard, means for giving the carriage at different points in its travel a vertical reciprocating
15 motion, inwardly facing parallel channel guides, a truck fixed to the upper end of the sleeve having rollers at opposite sides engaging said channels, means for giving the carriage a tilting movement in a forward
20 direction, and means for imparting a side-wise turning movement to the standard and carriage.

5. An amusement apparatus comprising in combination with a traveling cable, a
25 vertical sleeve carried thereby, a standard slidable in the sleeve, said sleeve supported on a truck which runs between channeled guides, an auxiliary truck member in which the sleeve is vertically slidable, a carriage
30 supported on the upper end of said standard, the lower end of the standard and carriage supported from a hanger on said auxiliary truck, means for turning the carriage sidewise during its travel, and means
35 for giving the carriage a backward tilt, said last named means including a rod slidable through said standard and connected with the carriage, and fixed cam projections in the path of the lower end of said rod.

40 6. An amusement apparatus consisting of a carriage covered and shaped to represent a prairie schooner, and open at the front, said carriage pivoted in a yoke, said yoke supported on a vertical standard, a sleeve
45 surrounding said standard and in which the latter is turnable, a truck rigidly connected to the sleeve and running in channeled guides, an auxiliary truck slidable on the sleeve and supporting the lower end of the
50 standard, and means connected with the sleeve to cause the carriage to travel.

7. An amusement apparatus consisting of a carriage covered and shaped to represent

a prairie schooner, and open at the front, said carriage pivoted in a yoke, said yoke 55 supported on a vertical standard, a sleeve surrounding said standard and in which the latter is turnable, a truck rigidly connected to the sleeve and running in channeled guides, an auxiliary truck slidable on the
60 sleeve and supporting the lower end of the standard, means connected with the sleeve to cause the carriage to travel, and means for causing the carriage to turn from side to side during its travel. 65

8. An amusement apparatus consisting of a carriage covered and shaped to represent a prairie schooner, and open at the front, said carriage pivoted in a yoke, said yoke supported on a vertical standard, a sleeve 70 surrounding said standard and in which the latter is turnable, a truck rigidly connected to the sleeve and running in channeled guides, an auxiliary truck slidable on the sleeve and supporting the lower end of the
75 standard, means connected with the sleeve to cause the carriage to travel, and means for causing the carriage to turn from side to side during its travel, said last named means including a drum on the standard en- 80 gageable with fixed guides in the path of the drum.

9. An amusement apparatus consisting of a carriage covered and shaped to represent a prairie schooner, and open at the front, 85 said carriage pivoted in a yoke, said yoke supported on a vertical standard, a sleeve surrounding said standard and in which the latter is turnable, a truck rigidly connected to the sleeve and running in channeled
90 guides, an auxiliary truck slidable on the sleeve and supporting the lower end of the standard, and a cable connected with the sleeve to cause the carriage to travel, said cable connections having a roller turnable 95 about the sleeve, sprockets around which the cable travels, and pockets in the periphery of the sprockets to accommodate said rollers.

In testimony whereof I have hereunto set 100 my hand in the presence of two subscribing witnesses.

WILLIAM S. VAN SANT.

Witnesses:

E. G. BLASDEL,
J. C. BRODIE.