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SCENIC RAILWAY

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SCENIC RAILWAY.

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To all whom it may concern:

Be it known that I, JAMES T. DYE, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Scenic Railways, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to amusement devices, and more particularly in some of its details to so-called scenic or pleasure railways.

It is an object of the invention to provide an improved construction of scenic railways possessing entertaining and educational features.

A further object is to provide an improved and practical device of the character indicated wherein a car adapted to run upon tracks is arranged to give to the occupants thereof the sensation or illusion of passing freely through space as in air or water.

Still another object is to provide an improved pleasure vehicle for railways of the class mentioned which is arranged to afford to the occupant a panoramic view of the subjacent scenery while excluding view in other directions.

Other objects will be pointed out in connection with the following detailed description of an illustrative but preferred embodiment of the invention and will in part be obvious in connection therewith.

In the accompanying drawing a side elevation of a typical embodiment of the invention is shown, certain parts being broken away to more clearly disclose details of construction.

Referring now to the drawing for a detailed description, a stationary structure is shown including tracks 1 which are supported by side walls 2 of any suitable construction. This track is preferably so laid out as to slope and curve in various ways, the two track rails being non-synchronous, that is, ordinarily of unequal elevation at opposite points thereof. The track is also provided with numerous steep grades and pitches providing hills and dales over which the pleasure vehicle is adapted to pass. The space between the tracks is generally open, although tie-rods may extend between the tracks for bracing and supporting the same, and lying generally below the level of the tracks and in the space therebetween there is a panorama denoted generally by the numeral 3. This panorama may include actual objects in relief, as shown or the objects may be painted on flat or curved surfaces, arranged generally below the level of the track rails, and may be illuminated in various colors by artificial or other means of lighting for the production of realistic scenic effects. In the present embodiment the various objects 4 are in relief and are arranged between the walls 2 to make up a panorama forming a grotto portraying submarine scenery. It is obvious however, that other scenic effects of a diverting or educational nature may be obtained by varying the character of the grotto and panorama. The floor of the panorama may vary to any depth below the floor of the car.

A car 5 is shown having wheels 6 preferably with cushioned treads adapted to run on the tracks, and the car is preferably ornamental or fanciful in design, as illustrated, to attract attention and stimulate the interest of spectators. A portion of the near side of the wall of the car is shown in the drawing as removed to expose the interior construction and a doorway and door or similar closure will ordinarily be provided in the wall for ingress and egress of passengers. The car may run by gravity on the tracks, or may be positively driven. As shown, a motor 7 is mounted on the car frame and connected to drive the rear axle by means of a sprocket and chain connection. Any desired control system for the motor may be employed preferably a remote manual control.

Within the body of the car is a passenger compartment provided with a transverse seat 8 for the occupants, and in front of this seat is an observation conduit or tube 9 conveniently arranged for the use of the occupants. As shown, this conduit is built into the body of the car having a vision opening 10 positioned so that light rays passing therethrough from below fall on the eyes of the occupants who are sitting in easy position on the car seat. This conduit assumes a general upright position in the car body but inclines downwardly and forwardly from the vision opening 10 having downwardly divergent front and back walls 11, and side walls 12, providing a box-like construction larger at its bottom extremity and opening

adjacent the lower portion of the car body and near the upper surfaces of the track rails in a comparatively large observation opening 13, affording a comparatively extensive field of vision of the subjacent scenery. A panel of plain glass or other transparent material may be mounted in the observation conduit, or glass so mounted may be colored or arranged to magnify or distort the appearance of the panorama and render the same more spectacular. It is obvious that two or more passenger compartments may be provided in the car if desired.

Lamps are provided to illuminate the panorama as the car proceeds on its course, these being preferably mounted within the observation tube. One of these lamps is shown at 14, being provided with a reflector 15 affixed adjacent thereto to the conduit wall to direct the rays of light downwardly upon the panorama and to prevent rays therefrom from passing to the interior of the car through the observation tube. Since the interior of the car is in darkness when the door is closed, and since practically no light passes therein directly from the lamps, very striking and inspiring effects are obtainable as new portions of the panorama come constantly into the field of vision and are brightly illuminated. In this connection, it is to be noted that the passenger compartment may be partially open in which case light rays, except those entering via the observation conduit, are excluded by a tunnel in which the car runs, or the compartment may be enclosed to exclude light rays and give the desired scenic effects.

The performance of the apparatus in actual operation will be understood from the foregoing description. In the illustrated embodiment the car rocks and rolls laterally, pitching fore and aft and rising and falling in its course over the irregular track, giving its occupants the sensation of passing through or over the surface of water, as in a glass bottom boat, or being tossed hither and thither on the waves. This sensation is accentuated and the illusion may be changed from one passing through water to one of passing through air, by appropriately changing the character of the panorama and grotto to portray terrestrial or aerial landscapes. By other appropriate changes in the character of the panorama and grotto other illusions both instructive and entertaining may be produced. As mentioned the various objects forming the panorama are illuminated as the car proceeds so an area of fresh scenery is continually enfolding to the view of the occupants and passing from the visual field of observation of the conduit.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention, which, as a matter of language, might be said to fall therebetween.

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

1. In a pleasure railway, in combination, a vehicle adapted to run on a track and having a passenger compartment with a seat therein and an observation conduit disposed in front of said seat and opening downwardly through the bottom of the car so as to afford an unobstructed view by the occupant to the subjacent scenery, said car being otherwise closed to external vision of the occupant.

2. In a pleasure railway, in combination, a vehicle adapted to run on a track and having a passenger compartment with a seat therein and an observation conduit disposed in front of said seat and opening downwardly through the bottom of the car so as to afford an unobstructed view by the occupant to the subjacent scenery, said car being otherwise closed to external vision of the occupant and means mounted on said car to illuminate the scenery below said observation conduit and means to prevent direct light rays from said illuminating means from reaching to the eye of the occupant.

3. In a pleasure railway, in combination, a vehicle adapted to run on a track and having a passenger compartment with a seat therein, an observation conduit disposed forwardly of said seat and having an observation extremity positioned in front of the occupant so light rays passing therethrough may fall on the eye of the occupant when sitting in natural position on the seat, said conduit also being provided with an enlarged objective extremity positioned adjacent the lower portion of the car, so as to afford to the occupant an unobstructed view of the subjacent scenery.

4. In a pleasure railway, in combination, a vehicle adapted to run on a track and having a passenger compartment with a seat therein, an observation conduit disposed forwardly of said seat and having an observation extremity positioned in front of the occupant so light rays passing therethrough may fall on the eye of the occupant when sitting in natural position on the seat, said conduit also being provided with an enlarged objective extremity positioned adjacent the lower portion of the car, so as to afford to

the occupant an unobstructed view of the subjacent scenery, and means for illuminating the subjacent scenery and for preventing direct rays therefrom from reaching the eyes of the occupant.

5. In a pleasure railway, in combination, a vehicle adapted to run on a track and having a passenger compartment with a seat therein, an observation conduit disposed in front of said seat in juxtaposition thereto and extending from a point near the eye of the occupant, when seated downwardly through the body of the car whereby light rays from the subjacent scenery fall on the eye of the observer producing the illusion of traveling over water as the car passes over the track.

6. In a pleasure railway, in combination, a vehicle adapted to run on a track and having a passenger compartment, a seat therein, an observation conduit disposed in front of said seat and extending from a point near the eye of the occupant while seated, downwardly through the body of the car, whereby light rays from a subjacent panorama fall on the eyes of the observer while light rays from other sources are substantially excluded therefrom, and illuminating means carried by the car and arranged to illuminate the subjacent panorama when in the field of vision of the observer and arranged to prevent direct rays therefrom entering the compartment.

7. In an amusement or instruction apparatus, in combination, a vehicle having a passenger compartment with a seat therein and an observation conduit disposed forwardly of said seat and having an observation extremity positioned in front of the seat so light rays passing therethrough may fall on the eyes of the occupants when sitting in natural position on the seat, said observation conduit opening to the exterior of the vehicle so as to afford to the occupants of the seat a clear view of the adjacent exterior scenery, said compartment being otherwise closed to external vision of the occupants and to observation from without.

8. In an amusement or instruction apparatus, in combination, a vehicle having a passenger compartment with a seat therein and an observation conduit disposed forwardly of said seat and having an observation extremity positioned in front of the seat so light rays passing therethrough may fall on the eyes of the occupants when seated in natural position in the seat, said observation conduit having an enlarged objective extremity opening to the exterior of the vehicle so as to afford to the occupants of the seat a clear view of the adjacent scenery, said compartment being otherwise closed to external vision of the occupants and to observation from without, and means for illuminating adjacent the scenery and for preventing direct rays therefrom from reaching the eyes of the occupants.

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

JAMES TAYLOR DYE.

Witnesses:
C. W. WEEKS,
M. A. CASHIN.