B. BERHOLD.

AMUSEMENT DEVICE.

APPLICATION FILED MAR. 24, 1911.

995,945.

Patented June 20, 1911.

4 SHEETS—SHEET 1.

Fig. 2.

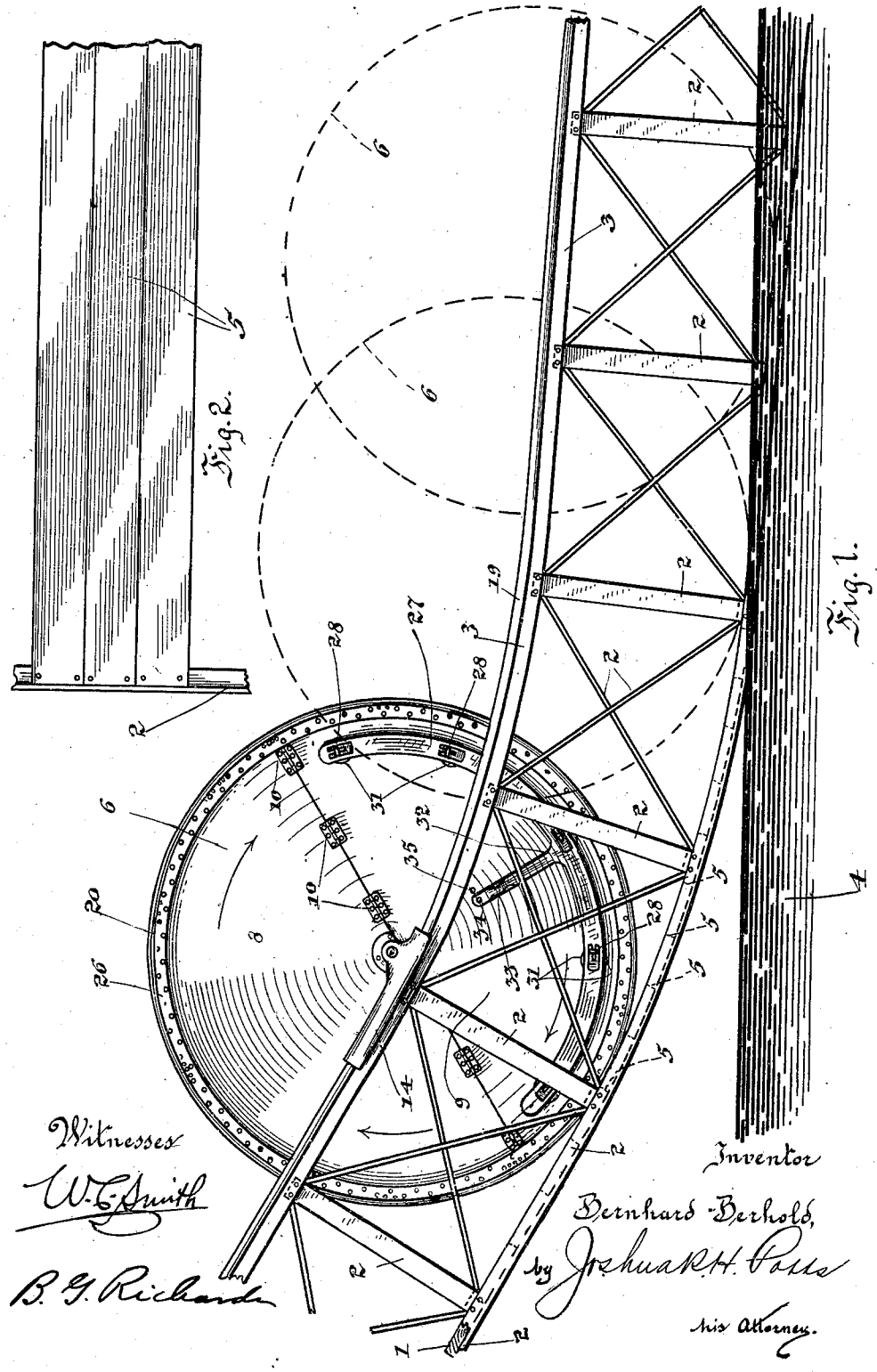

Fig. 1.

Witnesses

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4 SHEETS—SHEET 2.

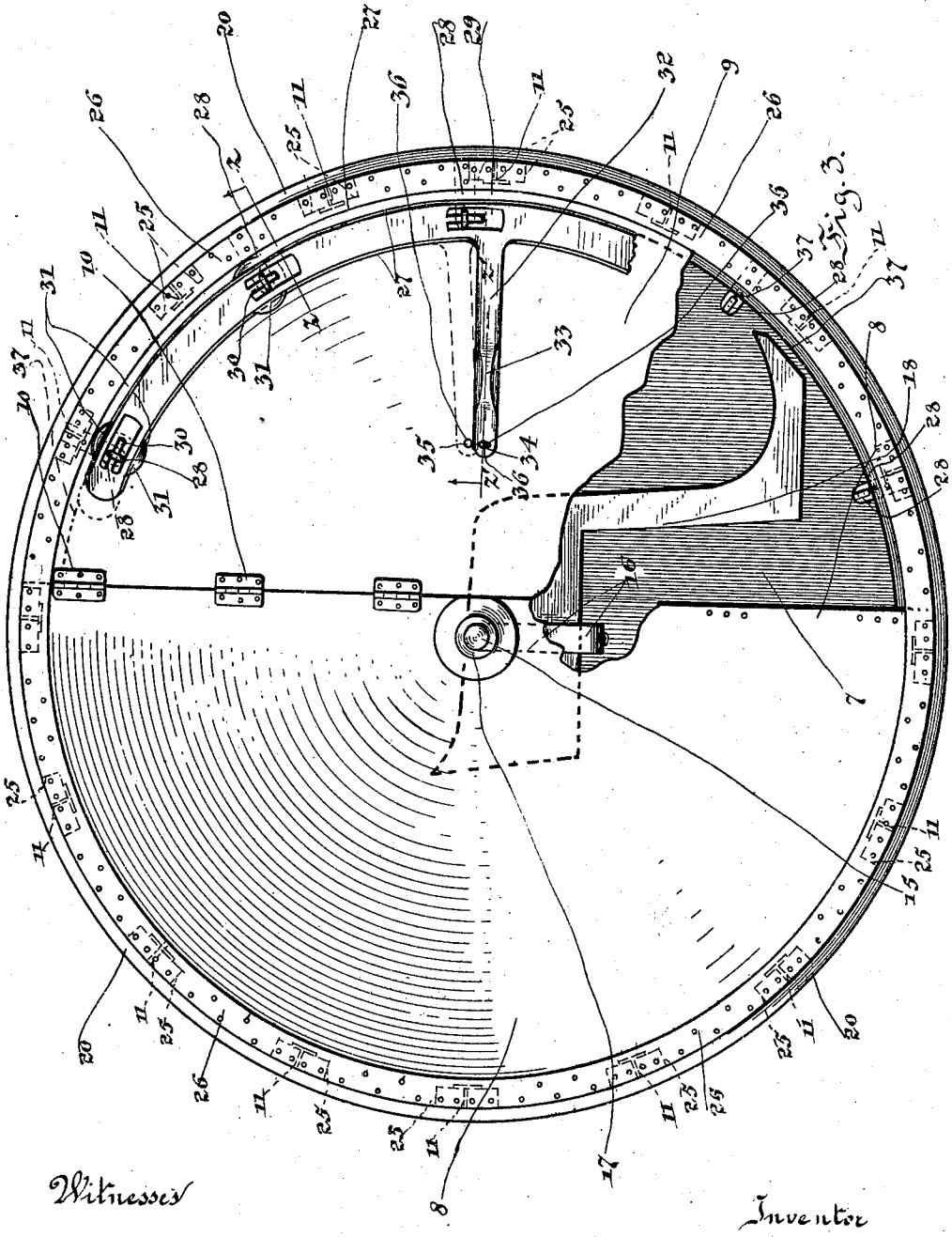

Fig. 3.

Witnesses

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4 SHEETS—SHEET 3.

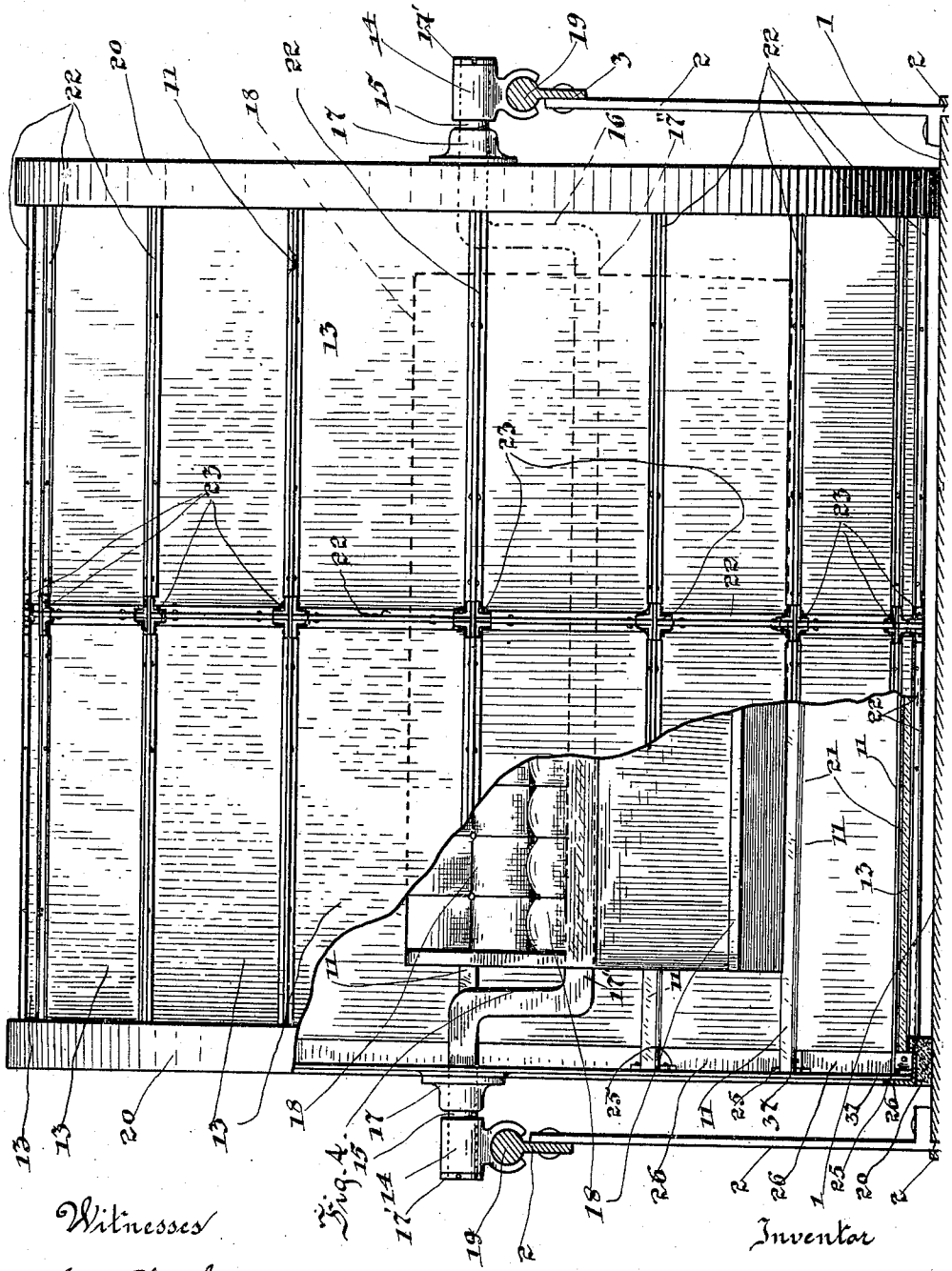

Fig. 4.

Witnesses

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4 SHEETS—SHEET 4.

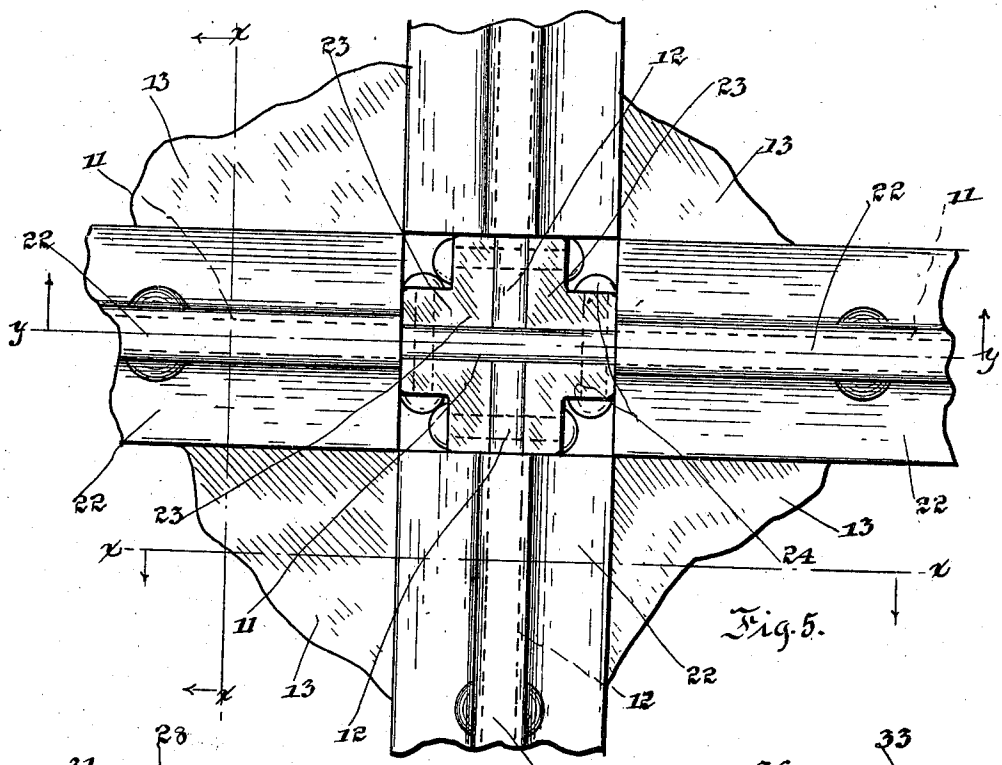

Fig. 5.

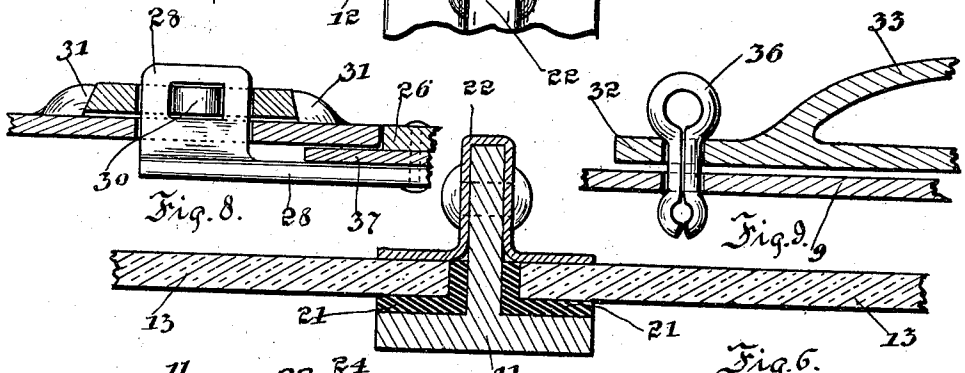

Fig. 8.

Fig. 9.

Fig. 6.

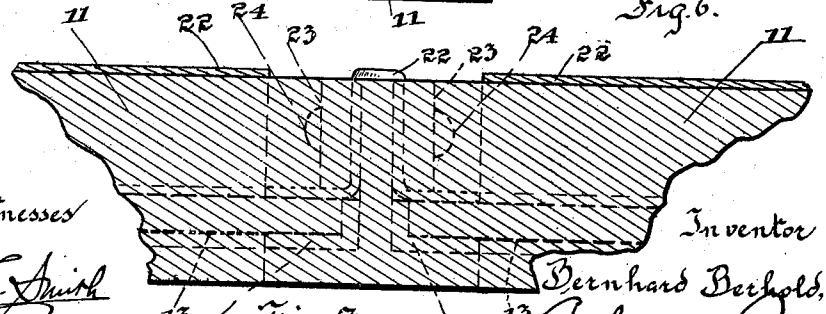

Fig. 7.

Witnesses

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UNITED STATES PATENT OFFICE.

BERNHARD BERHOLD, OF FOREST PARK, ILLINOIS.

AMUSEMENT DEVICE.

995,945. Specification of Letters Patent. Patented June 20, 1911.

Application filed March 24, 1911. Serial No. 616,702.

To all whom it may concern:

Be it known that I, BERNHARD BERHOLD, a citizen of the United States, and a resident of the city of Forest Park, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Amusement Devices, of which the following is a specification.

My invention relates to improvements in amusement devices especially adapted for parks, the object being to provide a device of this character which shall be simple of construction, strong and durable, and safe and efficient in its operation.

My invention consists in a novel construction and arrangement of parts all as will be hereinafter fully described and more particularly pointed out in the appended claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which—

Figure 1, is a side elevation of an amusement device embodying my invention, Fig. 2, is a fragmentary top plan view showing a portion of an inclined track employed in the device, Fig. 3, is an enlarged side elevation showing the general construction of a cylindrical car employed in the device, Fig. 4, is a front elevation of said car showing said track in transverse section, Fig. 5, is an enlarged fragmentary detail elevation showing the manner of constructing the central portions of the periphery of said car, Fig. 6, is a longitudinal section taken on line *x*—*x* of Fig. 5, Fig. 7, is a section taken on line *y*—*y* of Fig. 5, Fig. 8, is a section taken on line *z*—*z* of Fig. 3, and Fig. 9, is a section taken on line *z'*—*z'* of Fig. 3.

The preferred form of construction of my invention as illustrated in the accompanying drawings comprises an inclined track 1 which is supported at each edge thereof by means of trestles or truss-works 2. Each trestle 2 comprises a top member 3 which serves as a guide rail, as will be hereinafter described. The lower end of the track 1 is curved and bent nearly to the horizontal as shown in Fig. 1, said lower end being also submerged in water 4. The track 1 is preferably composed of a plurality of transversely extending boards 5, but any other suitable means may be employed. A suitable landing place, not shown, may be provided at the upper end of the inclined track where entry into the cylindrical car 6 is made, said car having a water-tight construction and adapted to float on the water 4 after it leaves the track 1, which terminates at its lower end in said water.

The cylindrical car 6 is so constructed as to be substantially water-tight as before stated, and comprises a closed end 7 and end 8 in which a door 9 is hinged, the shape of the latter being substantially semi-cylindrical, as shown in Fig. 3. A plurality of hinges 10 are provided by means of which the door 9 is securely pivoted to the rigid end 8 of the car, said hinges being riveted or otherwise securely held into position. The periphery of the cylindrical car 6 is composed of a plurality of longitudinally extending metallic frame members 11 and circumferentially extending members 12 by means of which a plurality of transparent panels 13 such as glass are held into position, thus illuminating the interior of the car and rendering exterior objects visible to the occupants of the car. The car 6 is adapted to roll down the inclined track by gravity and is guided in its travel by means of the guide rails 3 and guide shoes 14 engaging said rails, said guide shoes being loosely mounted on the ends 15 of a crank shaft 16, as shown in Fig. 4. The ends 15 of the crank shaft 16 are journaled in central bearing blocks 17 provided on the ends 7 and 8 of the car as shown in Figs. 3 and 4, collars 17′ being provided on the extremities 15 to retain the guide shoes 14 in position. On the crank portion 17″ of the crank shaft 16 a seat 18 for the conveyance of persons is mounted, said seat being of any suitable form and preferably upholstered as shown in Fig. 4. Each guide rail 3 is provided with a contact portion 19 which is semi-circular in cross section, the sides of which are embraced by the downwardly extending portions of the brake shoes 14. Each end of the car 6 is provided with circular bands 20 which serve as tires which roll directly on the track 1, said bands or tires being preferably of fiber to render the device noiseless and free from vibration.

Each glass panel 13 is rectangular in form and is seated upon strips of rubber 21 which in turn are seated on the members 11 and 12 which are T-shaped in cross section. The panels 13 are held to the rubber strips 21 by means of clips 22, which are U-shaped in form and riveted to the members 11 and 12, as shown in Fig. 6. At the junctures of

the members 11 and 12 angle irons 23 are provided, rivets 24 securing these irons to the members 11 and 12, as shown in Fig. 5.

From the foregoing description, it is clear that the periphery of the car 6 is transparent, and especially so during the rotation thereof, since the speed of rotation renders the longitudinal frame members 11 invisible. The ends of the longitudinal frame members 11 are secured to the ends 7 and 8 by means of angle-irons 25 which are riveted to circular angle-irons 26 provided at the juncture of the periphery with the ends of the car. In order to securely lock the door 9 for rendering the car water-tight a semi-circular bar 27 is provided on the face of said door and adapted to have a limited longitudinal movement thereon. A plurality of perforated lugs 28 are secured to the angle-irons 26 and project through the slots 29 of the circular bar 27. A plurality of locking tongues 30 project into the slots 29 and are adapted to engage the perforated lugs 28 when the bar 27 is moved in one direction. The locking tongues 30 are so arranged as to disengage and engage their respective lugs simultaneously. A plurality of guide blocks 31, which project from the door 9 are arranged at each edge of the bar 27, as shown in Fig. 2. The bar 27 is provided with a radially extending arm 32 having a handle 33 formed thereon and terminating in an eye 34. Two perforations 35 are provided in the door 9 which are adapted to register with the eye 34 of the arm 32 when at the limit of its movement in other direction. A spring pin 36 is adapted to engage the eye 34 and a perforation 35 for securing the arm 32 as shown in detail in Fig. 9. It is understood that when the bar 27 as shown in Fig. 3 is moved upwardly by means of the handle 33 that the locking tongues 30 will disengage their respective lugs 28 and permit the door to be opened by means of the handle 33. After the door is closed movement of the bar 27 in the opposite direction will cause engagement of the locking tongues 30 with the lugs 28 and thereupon the pin 36 is inserted as shown in Fig. 3.

The operation of the device is as follows: Supposing the car to be at the landing place, not shown, at the upper end of the inclined track 1, and the guide shoes 14 temporarily disengaging the guide rails 3. Then the door 9 may be opened and persons enter the car, after which said door is closed and securely locked. After the guide shoes 14 are engaged with the rails 3 at the upper ends thereof, the car is then started on its downward course over the track. During the travel of the car, the seat 18 will remain in upright position it being clear that the center of gravity of the seat and the persons supported thereby is below the axial line of the crank shaft 16 thereby facilitating stability. When the car 6 has reached the curved portion of the track 1 and comes into contact with the water 4 it will leave said track and float on the water to a suitable landing place, not here illustrated. Splashing will be prevented when the car 6 comes in contact with the water 4 since the car is moving in an approximately horizontal direction at the time of contact with said water, as clearly indicated in Fig. 1 by dotted lines. A door stop 37 is provided.

An amusement device of the construction set forth is compact and symmetrical in form and due to the peculiar sensations experienced within the car is attractive to the general public.

While I have illustrated and described the preferred construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the exact details of construction as set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. In an amusement device of the class described, the combination with an inclined track, of a cylindrical conveyance having transparent walls and adapted to roll on said track, and guiding means for said conveyance, substantially as described.

2. An amusement device comprising an inclined track which is bent approximately to the horizontal at the lower end thereof, a guide rail supported on each side of said track, a cylindrical car having transparent walls and a seat for the conveyance of persons adapted to roll by gravity down said track and to be properly directed thereon by means of said guide rails, substantially as described.

3. An amusement device comprising an inclined track, which is bent approximately to the horizontal at the lower end thereof, said lower end being submerged in water, a guide rail supported on each side of said track, and a cylindrical water tight car having transparent walls, and a seat for the conveyance of persons adapted to roll down said track and to be directed thereon by said guide rails, substantially as described.

4. A device of the class described comprising an inclined track, the lower end of which is curved to approximately the horizontal, a trestle disposed on each side of said track for supporting the same, each trestle being surmounted by a guide rail, a cylindrical car for the conveyance of persons adapted to roll on said track between said guide rails, transparent panels in the periphery of said

car, and means for entering said car and for rendering same water-tight, substantially as described.

5. A device of the class described, comprising an inclined track, a truss-work disposed on each side of said track for supporting the same, each truss-work comprising a guide rail, a car for the conveyance of persons adapted to roll on said inclined track between said guide rails, a plurality of transparent panels in the periphery of said car, and a hinged door on one end of said car adapted to be securely locked into position thereon, substantially as described.

6. A device of the class described, comprising an inclined track, the lower end of which is submerged in water, a truss-work disposed on each side of said track for supporting the same, each truss-work comprising a guide rail, a cylindrical car for the conveyance of persons adapted to roll on said inclined track between said guide rails, a plurality of transparent panels in the periphery of said car, a door hinged to one end of said car for the entrance and exit of persons, and means for securely locking said door, substantially as described.

7. An amusement device comprising an inclined track, the lower end of which is curved and submerged in water, a trestle on each side of said track supporting the same, a guide rail supported at the top of each trestle, a cylindrical car for the conveyance of persons adapted to roll down said inclined track between said rails, an axial crank shaft journaled in said car and projecting through each end thereof, a guide shoe mounted on each end of said crank shaft and engaging said guide rails, a seat in said car mounted on the crank portion of said crank shaft, a hinged door at one end of said car, and means for locking said door, substantially as described.

8. An amusement device comprising an inclined track, the lower end of which is curved and submerged in water, a trestle on each side of said track supporting the same and comprising a guide rail, a cylindrical car for the conveyance of persons adapted to roll down said inclined track between said rails, an axial crank shaft journaled in said car and projecting from each end thereof, a guide shoe mounted on each end of said crank shaft and engaging said guide rails, a seat in said car mounted on the crank portion of said crank shaft, a hinged substantially semi-circular door at one end of said car, and means for locking said door comprising a segmental longitudinal slotted bar mounted on said door and capable of limited longitudinal movement thereon, a plurality of perforated lugs on the car projecting through the slots of said slotted bar, means for moving said bar longitudinally, and locking tongues projecting into said slots, and adapted to engage said perforated lugs, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BERNHARD BERHOLD.

Witnesses:
EMIL BERHOLD,
ANNIE LEHMANN.