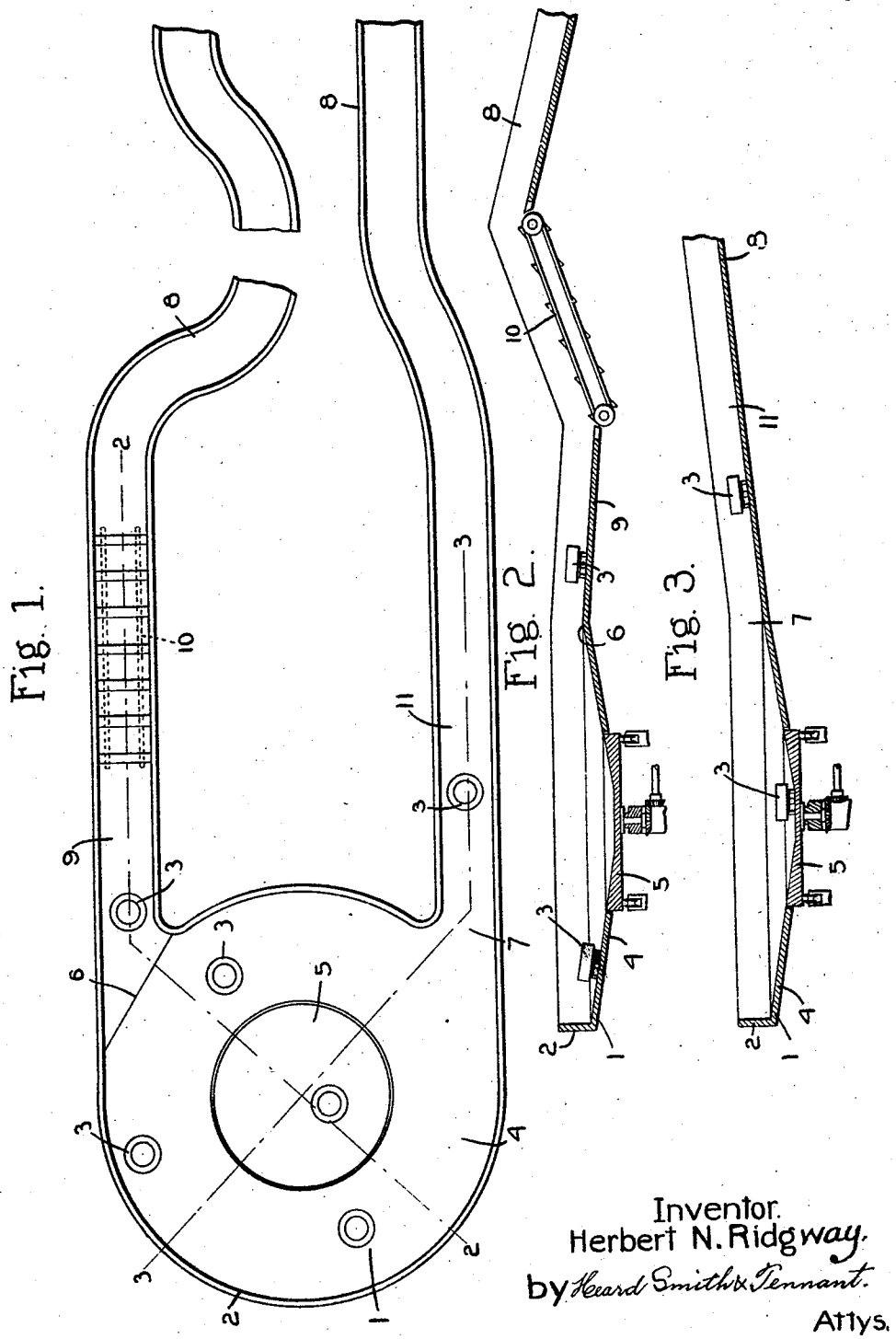
H. N. RIDGWAY.

AMUSEMENT DEVICE.

APPLICATION FILED FEB. 11, 1920.

1,417,570. Patented May 30, 1922.



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AMUSEMENT DEVICE.

1,417,570. Specification of Letters Patent. Patented May 30, 1922.

Application filed February 11, 1920. Serial No. 357,873.

To all whom it may concern:

Be it known that I, HERBERT N. RIDGWAY, a citizen of the United States, residing at Winthrop, county of Suffolk, State of Massachusetts, have invented an Improvement in Amusement Devices, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to amusement devices of that type which comprise an enclosure or space, one or more passenger-carrying cars situated within said enclosure, and adapted to travel in any direction, and means to cause the car or cars to move about within said enclosure in various directions.

One of the objects of my present invention is to provide an amusement device of this type with an enclosure having one or more car exit openings through which a car may pass when it is propelled in the proper direction. The presence of this car-exit opening adds greatly to the pleasure derived from using the amusement apparatus because it introduces the element of uncertainty. Since the car or cars are being moved about within the enclosure in various directions, there is always the possibility that at any instant any particular car may be propelled in the proper direction to cause it to pass out through the exit opening, and where there are a number of cars operating within the enclosure at the same time, the question as to when any particular car will be carried through the exit opening adds the element of chance or uncertainty to the pleasure derived from using the apparatus.

In the preferred embodiment of my invention, I propose to provide the enclosure with a car-entrance opening and to connect the exit opening with the entrance opening by a runway something after the order of a scenic railway or roller coaster through which the cars that are forced through the exit opening will travel before they are again brought back within the enclosure. This travel of the individual car through the runway back to the enclosure introduces the element of variety into the pleasure, so that in using my improved apparatus the passengers not only experience the pleasure and excitement derived from riding in the cars as they travel through their irregular path within the enclosure, but they also experience the pleasure derived from the chance or uncertainty as to when any individual car will in its irregular course be propelled through the exit opening into the runway, and will experience the added pleasure and excitement of the unusual ride through the runway back to the entrance opening.

The enclosure may be made in various ways and various devices may be used for giving the cars their irregular traveling movement within the enclosure without in any way departing from the invention. I will, however, preferably build the enclosure somewhat on the order of the structure disclosed in my Patent No. 1,279,911, dated September 24, 1918. This structure comprises a large stationary platform over which the cars may freely pass in any direction and means at the center of the platform for projecting the cars outwardly toward the periphery of the stationary platform. The stationary platform is inclined from the periphery downwardly toward the center, so that after the cars have been propelled toward the periphery of the platform they will gravitate toward the center of the platform where they will be again propelled outwardly. The propelling force will be sufficient to throw the cars occasionally clear to the periphery of the platform and there is always a chance that any particular car during its travel may be thrown through the exit opening.

In order to give an understanding of my invention, I have illustrated in the drawings a selected embodiment thereof which will now be described, after which the novel features will be pointed out in the appended claims.

In the drawings, Fig. 1 is a plan view of an amusement device embodying my invention;

Fig. 2 is a section on the line 2—2, Fig. 1;

Fig. 3 is a section on the line 3—3, Fig. 1.

The enclosure or space within which the car or cars travel is indicated generally at 1 and this will preferably be provided at its outer or peripheral edge with a boundary wall 2 which maintains the cars within the enclosure. The passenger-carrying cars which travel within the enclosure are indicated generally at 3, and there may be as many of these cars as desirable. There will be more pleasure and excitement produced if several cars are used at the same time. These

cars may have any suitable or usual construction, but will preferably be made so that they will move freely in any direction, all as described in my above-mentioned patent.

Suitable means are provided for causing the cars to travel in different directions within the enclosure whereby each car assumes an irregular course. This propelling of the cars in any direction may be provided for in various ways. One way would be to make the entire floor of the enclosure capable of rotation so that when the floor is rotated the cars would be thrown outwardly toward the periphery. Another way would be to provide means somewhat similar to that illustrated in my above-mentioned patent, that is, to provide the enclosure with a stationary platform 4 over which the cars may travel and which has at its center suitable means for throwing the cars outwardly toward the periphery of the platform. As illustrating one means for this purpose, I have shown a rotating or car-propelling platform 5 situated at the center of the stationary platforms 4, all as shown in my above-mentioned patent. The stationary platform 4 is shown as inclined downwardly from the periphery toward the center so that the cars naturally gravitate toward the center, and as they move onto the rotating platform 5, they are thrown outwardly by the car-propelling platform 5 toward the periphery of the platform 4.

The parts thus far described are or may be all as usual in amusement devices and form no part of my present invention, one feature of which consists in providing the enclosure 1 with one or more car exit openings through which a car may pass when it is propelled in the right direction.

Another feature consists in providing the enclosure with one or more car entrance openings and providing a connecting runway between the exit opening or openings and the entrance opening or openings, so that any car which passes through the exit opening will travel through the runway and be brought back into the enclosure again. The construction shown in the drawings is provided with one exit opening 6 and one entrance opening 7. The exit opening leads to a runway indicated generally at 8 which leads back to the entrance opening 7 and which will preferably have a more or less circuitous course. The particular character of the runway 8 is not essential to the invention, and merely as illustrating more or less conventionally one form, I have shown the runway as provided with a downwardly-inclined portion 9 which extends from the exit opening 6 and which leads to an elevator 10 of some appropriate construction which carries the car from the foot of the incline 9 up to a greater or less height from which the car can gravitate through other portions of the runway 8 in a manner similar to that in which the cars of roller coaster devices are propelled over their course. Inasmuch as the particular character of the runway 8 may be varied and is not essential, I have not shown it in detail.

The delivery end of the runway will preferably be provided with a downwardly-inclined portion 11 leading to the entrance opening 7 so that after any individual car 3 has been carried through the runway 8, it will gravitate down the inclined portion 11, through the entrance opening 7, back into the enclosure 1 again where it will mingle with the other cars within the enclosure, and again wait its turn to be carried through the exit opening 6.

This downwardly-inclined portion 11 not only has the function of providing means whereby the returning cars may gravitate into the enclosure or space 1, but it also has the function of preventing the cars from being thrown out through the exit opening. If it should happen that any car should be propelled from the center toward the periphery in a direction to pass out through the exit opening the upward inclination of the portion 11 of the runway will prevent the car from traveling to any extent through said opening and will return the car to the enclosure again. It will, therefore, be impossible for any car to be thrown out through the exit opening.

On the other hand, the downwardly-inclined portion 9 of the runway ensures that if a car is thrown out through the exit opening 6, it will be carried away from the enclosure by gravitating down the incline and there will be no danger of its returning to the enclosure again through the exit opening.

My improved device, therefore, not only affords to the passengers the fun and excitement derived from the movement of the cars 3 within the space or enclosure 1, but also augments such fun and excitement by the element of chance as to when any individual car will be carried through the exit opening 6, and further augments such fun and excitement by the unusual pleasure of the ride through the runway 8 back to the enclosure again.

While I have illustrated herein a single exit opening, a single entrance opening and a single runway connecting said openings, yet the number of entrance openings and exit openings and the number of connecting runways is not essential to the invention and one or more may be used without departing from the invention.

In the above description and the claims I have referred to the space 1 as an enclosure. This term "enclosure" is used herein as indicating the space within which the cars ordinarily travel and is not to be under-

stood as necessarily applied to a space which is enclosed or bounded by a wall, fence or the like.

I claim:

1. In an amusement device, the combination with an enclosure having a car-exit opening and a car-entrance opening, of a plurality of cars within said enclosure, each adapted to travel in any direction, means constructed to act on any car which may be occupying a predetermined portion of the enclosure to positively propel said car in an indeterminate direction whereby there is always a possibility that it may be carried out through the exit opening, and means for automatically returning to the car-entrance opening any car delivered through the car-exit opening.

2. In an amusement device, the combination with an enclosure having a car-exit opening and a car-entrance opening, of a plurality of cars in said enclosure, each adapted to travel in any direction, means within the enclosure constructed to act on any car which may occupy a predetermined portion of said enclosure to positively propel said car in an indeterminate direction whereby there is always the possibility that a car may be carried out through the exit opening, a runway connecting said exit opening to the entrance opening, and means along the length of the runway to ensure that any car entering said runway from the exit opening will be returned to the enclosure through the entrance opening.

3. In an amusement device, the combination with an enclosure having a car-exit opening, of a plurality of cars within said enclosure, each adapted to travel in any direction, means within the enclosure constructed to act on any car which may occupy a predetermined portion of the enclosure to positively propel said car in an indeterminate direction whereby there is always a possibility that any car may be propelled through said exit opening, and means to receive a car thus propelled through the opening and conduct it away from the opening.

4. In an amusement device, the combination with an enclosure having a floor or platform which inclines downwardly from the periphery toward the center thereof, said enclosure having a car-exit opening and a car-entrance opening at its peripheral portion, of a plurality of cars within the enclosure adapted to travel in any direction, means at the center of the enclosure for propelling the cars outwardly toward the periphery thereof in an indeterminate direction, whereby there is always the possibility that a car may be carried out through the exit opening, and means for automaticaly returning to the car-entrance opening any car which is delivered through the car-exit opening.

5. In an amusement device, the combination with an enclosure having a floor or platform which inclines downwardly toward the center thereof, said enclosure having a car-exit opening and a car-entrance opening, of a runway connecting said openings, a plurality of cars situated within said enclosure and each adapted to travel in any direction, and means at the center of the enclosure for propelling the cars outwardly.

6. In an amusement device, the combination with an enclosure having a car-exit opening and a car-entrance opening, of a plurality of cars within said enclosure, each adapted to travel in any direction, means for moving the cars in various directions within the enclosure, and a runway connecting said openings and having at some point in its length an elevator.

7. In an amusement device, the combination with an enclosure having a car-exit opening and a car-entrance opening at the same level, of a plurality of cars within said enclosure, each adapted to travel in any direction, means for moving the cars within said enclosure in various directions, and a runway connecting said openings, the portion of the runway leading from the exit opening having a downward inclination from said opening and the portion of the runway leading to the entrance opening having a downward inclination toward said opening and means to cause the cars to be propelled from one to the other end of the runway.

8. In an amusement device, the combination with an enclosure having a car-exit opening and a car-entrance opening, of a plurality of cars within said enclosure, each adapted to travel in any direction, means for moving the cars within said enclosure in various directions, and a runway connecting said openings, the portion of the runway leading from the exit opening having a downward inclination from said opening and the portion of the runway leading to the entrance opening having a downward inclination toward said opening, said runway also including an elevating device situated between said inclined portions.

In testimony whereof, I have signed my name to this specification.

HERBERT N. RIDGWAY.