J. A. MILLER.

AMUSEMENT STRUCTURE.

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1,380,731. Patented June 7, 1921.

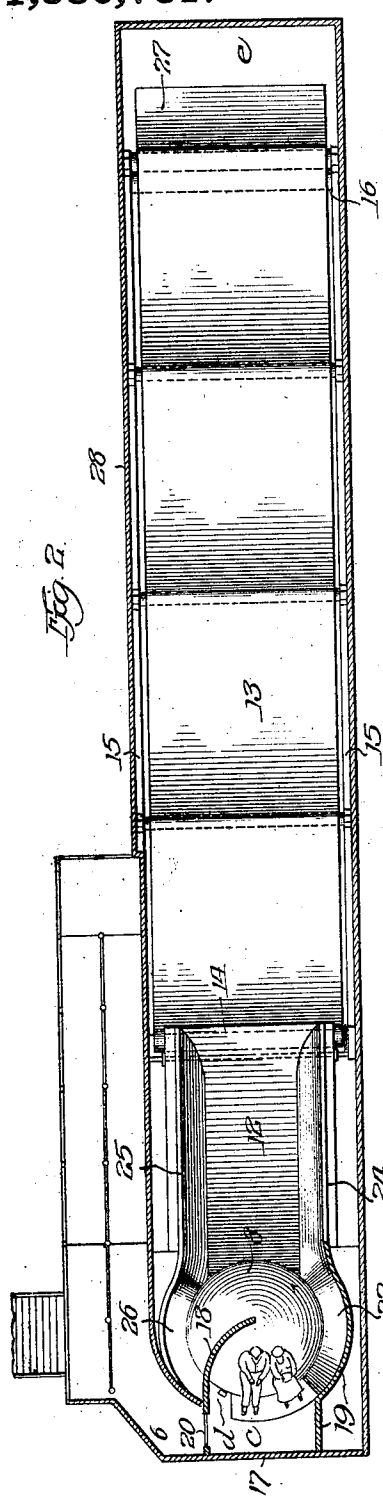

Fig. 2.

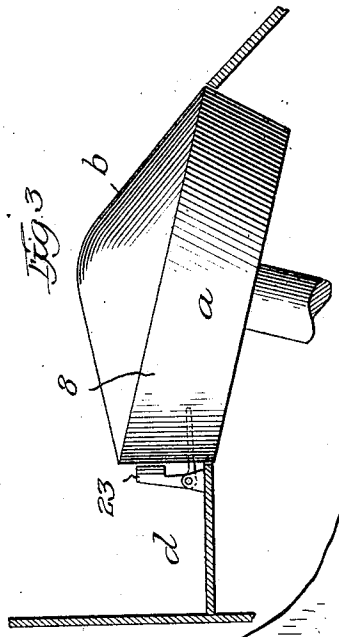

Fig. 3.

Fig. 1.

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1,380,731. Specification of Letters Patent. Patented June 7, 1921.

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To all whom it may concern:

Be it known that I, JOHN A. MILLER, a citizen of the United States, and a resident of Homewood, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Amusement Structures, of which the following is a specification.

My invention relates to amusement structures to be placed in pleasure parks or other amusement places and is of that class in which persons after reaching an elevated chamber are taken unawares and suddenly transferred from the chamber onto an incline or chute. My invention concerns particularly improved and more sensational means for transferring and ejecting the occupants of a room therefrom and onto a chute or slide. In accordance with my invention I provide, at the head of a chute or slide, a seat structure adapted to rotate about an inclined axis, the seat surface being at such angle with the axis that when it is in one position it is horizontal to permit seating thereon by persons, and when the seat structure has rotated 180 degrees the seat surface will be inclined and will form an approach to the main chute or slide, the force of gravity acting on the weight of the persons sitting on the seat structure being sufficient to cause axial rotation thereof. Walls are provided forming a chamber around the seat surface when in horizontal position, the persons entering the chamber being caused to sit on the seat surface whereafter their weight causes rotation of the seat structure and transfer of the persons from the chamber and sliding of them onto the main chute.

On the accompanying sheet of drawings I have shown sufficient structure to disclose and illustrate the invention,

Figure 1 being a side elevational view with parts broken away,

Fig. 2 being a plan view with parts broken away and

Fig. 3 being an enlarged side elevational view of the seat structure.

A structure S of steel or wood provides a gradual stairway, walk or other approach 5 from the ground to the elevated floor 6. In this floor is the opening 7 through which extends the seat structure 8, which in this case is shown as of circular circumferential form. The seat structure is secured to the upper end of a shaft 9 which extends through the structure axis, and this shaft is inclined and journaled in the bearing frames 10 and 11 suitably supported by the structure S.

Extending downwardly from the inner side of the opening 7 is the incline, slide or chute 12. At its lower end this chute leads to the traveling belt 13 supported on the various pulleys 14 on the incline structure 15, the belt traveling over the drag pulley 16 driven by some suitable source.

The seat structure shown comprises the cylindrical or frusto-conical body part *a* and the conical or convex top *b*. The angle of inclination of the shaft 9 is such that at one side of the seat structure the top will be approximately horizontal so that persons can readily sit and hold their feet thereon, and at the opposite side the angle will be such as to prevent seating thereon and to permit gravity to readily pull the occupants downwardly.

At the side of the seat structure opposite to that from which the chute 12 leads, the wall structures 17, 18 and 19 form the chamber *c*. The floor of the chamber is on a level with the floor or platform 6 to which the gradual step or pathway structure 5 leads. Between this platform 6 and the chamber *c* a door or drapery 20 is interposed. In the chamber *c* in front of the seat structure is the step 21 which enables persons to seat themselves well up toward the apex of the seat structure conical top. The seat structure will rotate by gravity in the directions indicated by the arrow thereon in Fig. 2 and between the end of the step and the chute 12 is the inclined floor 22 for gradually raising the feet of the occupant to the level of the entrance end of the chute 12. Suitable brake mechanism 23 is provided for holding the seat structure at rest and for stopping it at the proper time.

The people desiring to enjoy the amusement structure walk up the path structure 5 to the platform 6 and are admitted usually two at a time through the door 20 by the attendant who stands in the space *d* in position to adjust the brake mechanism. The parties entering the chamber *c* step up on to the step 21 and keep themselves well up on the seat structure 8. The wall 18 extends well to the apex of the seat structure to prevent the parties from looking

down onto the chute structure when they first enter the chamber *c*. Of course as soon as the parties sit on the seat structure their attention will be attracted and they will not see the chute structure and will be unaware of what will happen to them. After they are well seated on the seat structure the attendant releases the brake and gravity causes the seat structure to rotate to carry the occupants toward the chute 12. If the feet extend beyond the edge of the seat structure they will travel along the step 21 and the incline 22, and when the occupants reach the opposite side of the seat structure, that is when they reach a position in front of the entrance to chute 12 the incline of the conical top *b* has become great enough to cause them to slide downwardly off of the conical top and out to the chute. Before they start to slide down their feet will have been carried onto the chute from the incline 22. If during travel of the occupants with the seat structure they should tend to slide downwardly thereon before they reach the chute 12 they would be partly or wholly carried along the incline passages 22 and would eventually reach the chute. To guard against falling the wall section 19 is provided around the incline section 22 and guard sides 24 and 25 are provided for the chute, the guard side 25 extending a distance around the seat structure in case occupants should be carried with the seat structure beyond the body of the chute 12. In this case they would reach the incline surface 26 similar to, but opposite the surface 22, and they would slide down the surface 26 and eventually reach the chute 12. Thus after the occupants are once seated upon the seat structure they must eventually reach the chute 12 down which they will slide to be deposited along the short incline 27 to the base *e*, which base may form part of a housing or inclosure 28 for the amusement structure.

I thus provide a very unique seating structure for receiving, carrying and then depositing occupants onto a chute. Where the top of the seat structure is conical or convex as shown, there is nothing for the occupant to hold onto when the seat structure rotates and as soon as the angle of inclination becomes sufficient, the occupants will slide downwardly and will eventually be deposited onto the chute. It is evident that seat structures other than the particular form shown can be used for carrying out the important features of my invention namely, a seat structure on an inclined shaft, the seat structure when positioned being substantially horizontal to hold people thereon and when rotated with the shaft assuming an angle which will be sufficient to cause people on the structure to slide downwardly therefrom. Other changes and modifications can also be made without departing from the spirit of my invention.

I claim as follows:

1. In an amusement device, the combination of a chute, and a seat structure at the head of said chute, said seat structure being rotatable on an inclined axis and adapted in one position to afford a surface sufficiently horizontal for the seating thereon of persons and when in another position to incline said seat surface sufficiently to discharge the persons therefrom onto said chute.

2. In an amusement structure of the class described, the combination of an elevated chamber, a chute, and a receiving and discharging structure between said chamber and chute, said structure being rotatable on an inclined axis and presenting a seating surface to the chamber and a discharge surface to the chute.

3. In an amusement structure of the class described, the combination of an elevated chamber, a chute, a seat structure between said chamber and chute, an inclined axis to which the seat structure is secured and about which it is rotatable, said seat structure presenting to the chamber a seating surface sufficiently horizontal for the seating thereon of persons and said seating surface after rotation of said seat structure being inclined to form an approach to said chute and for discharging the persons onto said chute.

4. In an amusement device of the class described, the combination of an elevated floor, a chute, a seat structure rotatable between said floor and chute and having an axis of rotation inclined toward said chute, the side of said seat structure adjacent said floor being sufficiently horizontal to permit persons to retain their seats thereon and the opposite side of said seat structure being inclined sufficiently to cause the persons to slide therefrom onto said chute.

5. In a pleasure device of the class described, the combination of an elevated chamber, a chute extending downwardly from the level of said chamber floor, a circular seat structure having its axis of rotation inclined toward said chute, said seat structure having a conical top with its axis in the axis of rotation, the slope of said top being such that the side thereof adjacent said chamber being sufficiently horizontal to permit persons to remain seated thereon and the opposite side being adjacent to the entrance under the chute and at a sufficient angle to cause persons to slide onto the chute.

6. In a pleasure device of the class described, the combination of a chute, having an opening at its elevated end, a convex floor section rotatable in said opening on an inclined axis and the slope of said rotatable floor section being such that it will form a continuation on one side of the chute in-

clination and at the opposite side will be sufficiently flat to permit persons to retain their seats thereon.

7. In a pleasure device of the class described, the combination of a chute having an opening in its upper end, a domed floor section which is rotatable and which has its axis of rotation inclined to cause the domed surface to be sufficiently horizontal at one side to permit persons to retain their seats thereon, the section on which persons are seated increasing in inclination as the domed structure turns, whereby the persons are eventually discharged therefrom onto the chute proper.

8. In a pleasure device of the class described, the combination of an elevated chamber, a chute, a seat structure between said chamber and chute, said seat structure being rotatable on an axis inclined toward said chute, said seat structure providing a seating surface normally exposed to said chamber for receiving persons thereon, said seat structure being rotatable under the influence of gravity to carry said persons around toward said chute and the angle of inclination of said seat increasing as the persons reach the chute to eventually cause said persons to slide from said seating surface onto said chute.

9. In a pleasure structure of the class described, the combination of a chute, a turn-table in advance of said chute and rotatable on an inclined axis whereby persons seated on one side thereof will be carried therewith to a gradually lowering level to be eventually caused to slide therefrom onto said chute.

10. In a pleasure structure of the class described, the combination of an inclined chute, a section of the floor of said chute being rotatable whereby persons seated on one side of said ratatable section will be carried therewith to a gradually lowering level to be eventually caused to slide therefrom onto the stationary part of the chute.

11. In a pleasure device of the class described, the combination of an elevated floor, a chute leading from one end of said floor, said floor having an opening, a turn-table disposed in said opening and rotatable on an inclined axis, said turn-table being dome shaped with its side adjacent the chute steep and the opposite side sufficiently horizontal to permit seating thereon of persons, said turn-table being rotatable by gravity to carry the seated persons around until the inclination becomes steep enough to cause discharge of the persons onto the chute, a step for permitting persons to step up to said turn-table, and inclined surfaces from said step to said chute adjacent said turn-table leading to said chute.

12. In a pleasure structure of the class described, the combination of an elevated chamber, a pathway structure leading to said chamber, a dome shaped turn-table rotatable on an inclined axis to present a substantial horizontal seating surface to said chamber and a steeper surface at the opposite side, and a chute forming a continuation of said steeper surface, said turn-table rotating by gravity to carry persons from the horizontal seating surface side to the steeper side to be discharged therefrom onto said chute.

In witness whereof, I hereunto subscribe my name this 1st day of March, A. D., 1920.

JOHN A. MILLER.