No. 780,049. PATENTED JAN. 17, 1905.

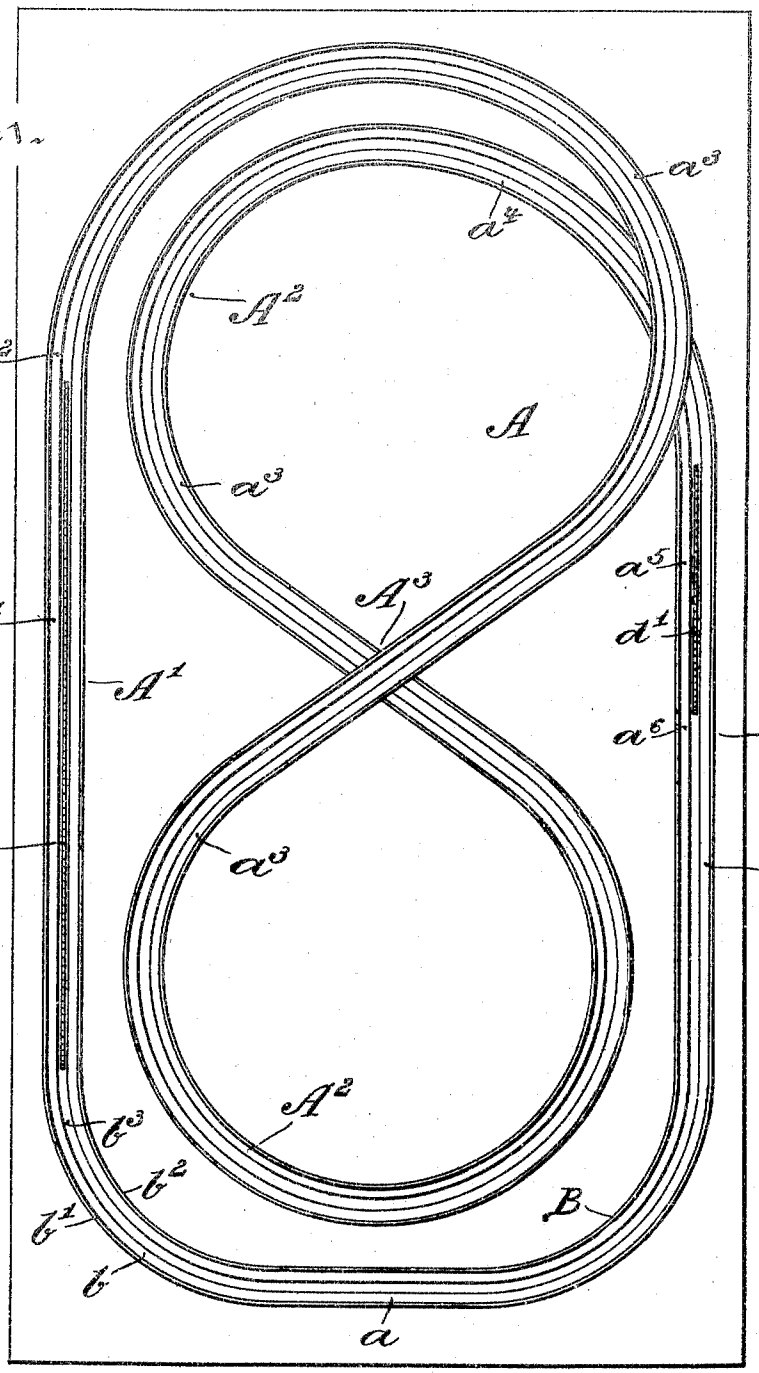
J. H. MAGUIRE.

AMUSEMENT APPARATUS.

APPLICATION FILED SEPT. 29, 1904.

3 SHEETS—SHEET 1.

Fig. 1.



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3 SHEETS—SHEET 2.

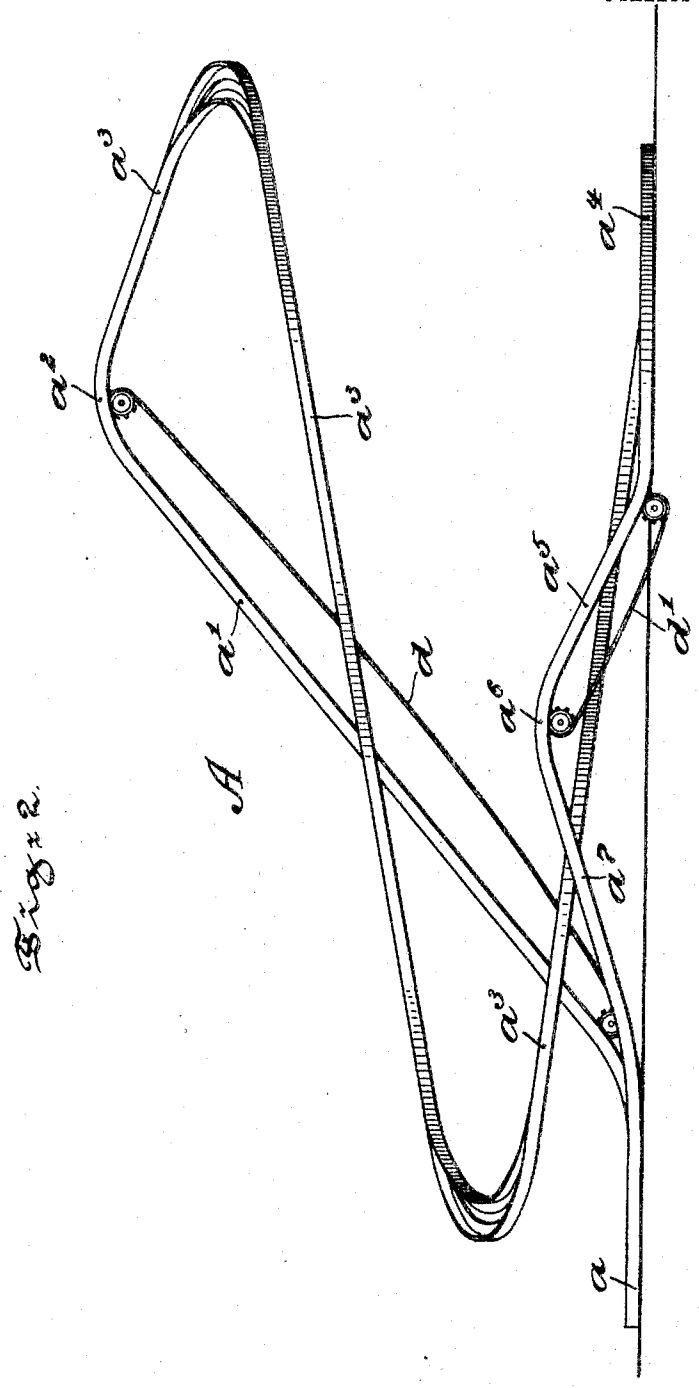

Fig. 2.

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3 SHEETS—SHEET 3.

Fig. 3.

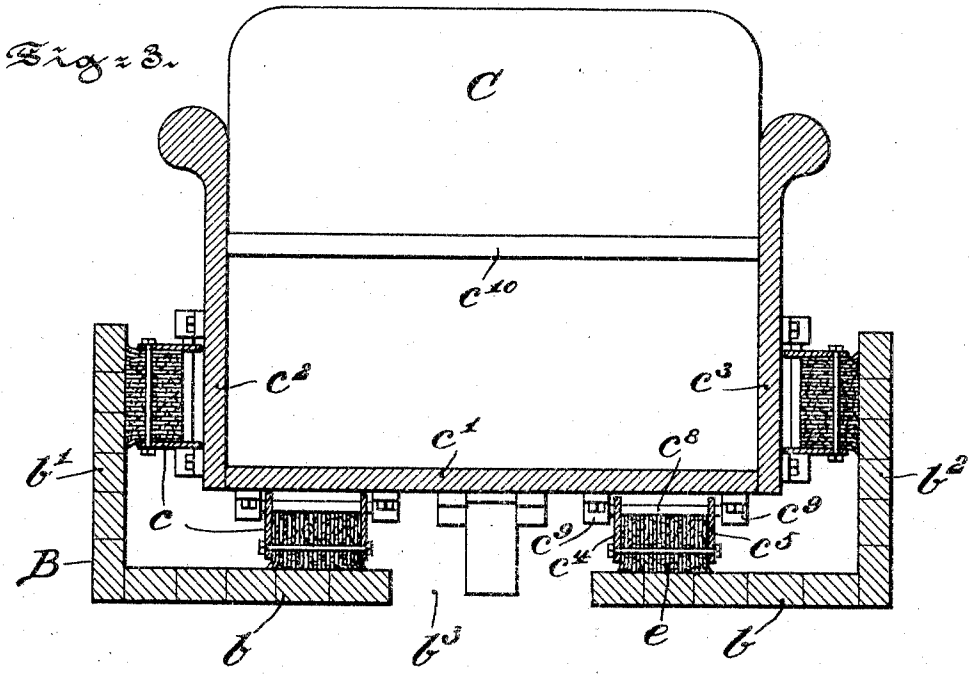


Fig. 4.

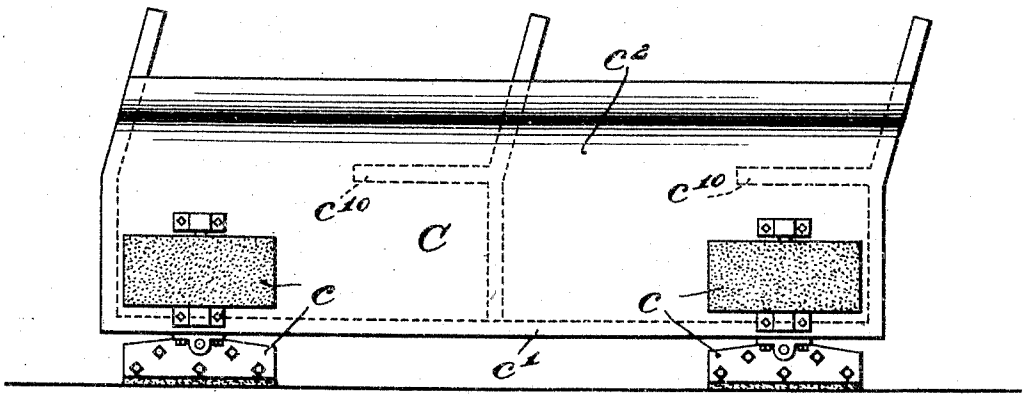
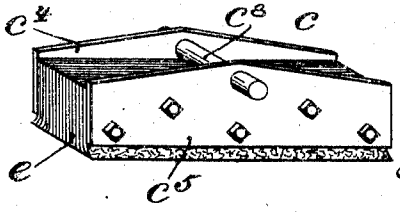


Fig. 5.



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No. 780,049. Patented January 17, 1905.

UNITED STATES PATENT OFFICE.

JOSEPH H. MAGUIRE, OF WAYNE, PENNSYLVANIA.

AMUSEMENT APPARATUS.

SPECIFICATION forming part of Letters Patent No. 780,049, dated January 17, 1905.

Application filed September 29, 1904. Serial No. 226,430.

To all whom it may concern:

Be it known that I, JOSEPH H. MAGUIRE, a citizen of the United States, residing at Wayne, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Amusement Apparatus, of which the following is a specification.

My invention has relation to an amusement apparatus especially adapted for erection in buildings at summer and other resorts and of the class in which means for carrying persons are elevated by power and are then permitted to descend by gravity; and in such connection it relates more particularly to the construction of the means adapted to receive the persons and to the trackway over which said means is adapted to travel by sliding over the course or courses.

The principal objects of my invention are, first, to provide a car or vehicle arranged to slide over a trackway or road-bed; second, to provide a trackway in the shape of a trough in which the cars are adapted to travel by sliding over the same, and, third, to provide in conjunction with the cars slides which are adapted to support and guide the cars in the troughs or trackways therefor.

The nature and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, in which—

Figure 1 is a top or plan view of an amusement apparatus whereof the trackway is of serpentine form, and the same embodying main features of my present invention. Fig. 2 is a side elevational view of the trackway of Fig. 1 removed from its supporting structure. Fig. 3 is a cross-sectional view of a car and the trough-like trackway adapted to support and guide the car. Fig. 4 is a side elevational view of the car of Fig. 3 on a reduced scale, and Fig. 5 is a detail view illustrating perspectively one of the slides or runners adapted to support and guide the car over the trackway or trough.

Referring to the drawings, A represents a trackway preferably arranged in serpentine form, as illustrated in Fig. 1. The trackway consists of a trough B, the bottom b whereof forms the runway, and the sides b' and b^2 guides for a car C, which is adapted to slide along the trough. The trough B is preferably constructed of wood or the like, adapted to present a smooth surface and to offer the least possible resistance to a car in its sliding movement through the trough.

As illustrated in Fig. 2, the starting and landing points a of the serpentine course A of the trough B are at a level. From the starting-point a the car C ascends an incline a' in the course A by means of a chain d or by any other preferable means for transporting the car or cars employed. After the car C has reached the highest point a^2 of the incline a' it is released from the chain d in the usual well-known manner, and by reaching the decline a^3 in the course A the car is now permitted to slide by gravity down the trough B until it arrives at the portion a^4 at the same level as the starting and landing points a. From the level portion a^4, which checks the momentum of the car C and permits the same to slowly approach a second incline a^5, upon which the car C ascends by the intervention of a chain d', the car after reaching the highest point a^6 thereof and the decline a^7 completes its travel to the landing-point a by gravity.

As illustrated in Fig. 1, the course A consists, preferably, of an outer partially-straight course A′ and an inner serpentine course A^2, arranged substantially in the form of the figure 8, with the courses crossing each other at the point A^3.

In order to decrease as much as possible the contacting surface between the car C and the trough B, the car is provided with slides c, arranged at the bottom c' and sides c^2 and c^3 of the same, as shown in Figs. 3 and 4. One mode of forming the slides c consists of removably clamping cloth e between two metal plates c^4 and c^5 by means of bolts c^6, introduced through the cloth and secured to the plates c^4 and c^5, as shown in Fig. 3. The cloth e projects a certain distance beyond the plates c^4 and c^5, and this projecting portion forms the wearing portion of the slides. The

slides e, so constructed, permit a car to slide with the least possible resistance over the bottom b and the sides b' of the trough B. In order to permit the slides e to assume varying angular positions with respect to the bottom c' of the car C, the plates c^4 and c^5 are secured to a shaft c^8, which is connected with the car C by means of bearings c^9. The cars C are provided with seats c^{10} and may slide through the trough B either singly or in train of coupled cars. The bottom b of the trough B is provided with an opening b^3 at the portions of the course A in which a chain or other suitable means are employed to move a car or train of cars over an ascending portion of the course A. Although the cloth e of the slides e has been found to offer the least resistance by sliding over the smooth surfaces of the trough B, yet other material or substances may be used with equally good results for the formation of the slides e.

The sensation of traveling in such an amusement apparatus is greatly heightened by the absence of jolting vibrations and noises incident to amusement apparatus in which cars are supported by and run upon rails provided thereon. The sliding of the cars through a trough or trackway of the structure, combined with the sensation of traveling as well by gravity, in effect is similar somewhat to floating through water in a boat.

Having thus described the nature and object of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An amusement apparatus, comprising a trough and a car provided with slides of yielding material at the bottom and sides thereof.

2. An amusement apparatus, comprising a trough and a car provided with slides of yielding material adapted to hold the same in required position in said trough and to guide the car along said trough with least resistance to the free travel thereof by gravity and power.

3. An amusement apparatus, comprising a car, a trough adapted to permit of the car traveling along the same, and yielding material interposed between the car and trough and adapted to reduce resistance to the travel of said car along said trough.

4. An amusement apparatus, comprising a trough, a car, slides of yielding material connected with said car and adapted to contact with the trough, said slides adapted to hold the car in defined position within the trough and to permit of the free sliding thereof through said trough.

5. An amusement apparatus, comprising a U-shaped trough, a car, slides of yielding material connected with the bottom and sides of said car and adapted to contact with the walls of said trough.

6. An amusement apparatus, comprising a trough of substantially serpentine form, a car provided with slides of yielding material adapted to engage the bottom and sides of said trough, and power impelling means and its actuating devices for controlling the ascent of the car over certain portions of said trough.

7. An amusement apparatus, comprising a trough, a car provided with sliding means of yielding material adapted to lessen resistance to the free travel of the car by a sliding action along said trough, and power impelling means for said car adapted to raise the same to elevated points of said trough.

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

JOSEPH H. MAGUIRE.

Witnesses:

J. WALTER DOUGLASS,

THOMAS M. SMITH.