(No Model.) 2 Sheets—Sheet 1.

J. A. GRIFFITHS.

PLEASURE COASTING COURSE.

No. 549,635. Patented Nov. 12, 1895.

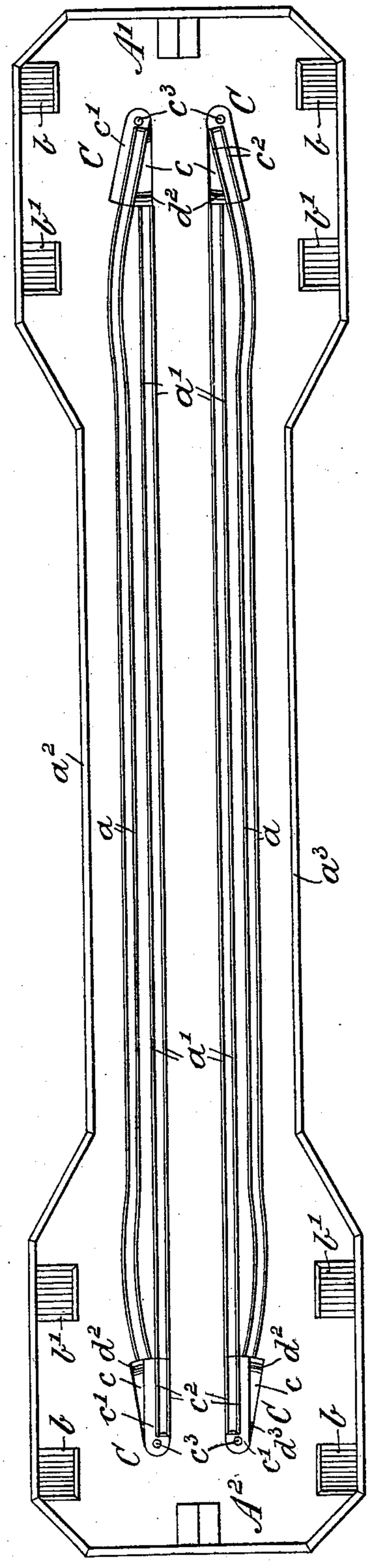

Fig: 1.

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(No Model.)

2 Sheets—Sheet 2.

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PLEASURE COASTING COURSE.

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Fig: 2.

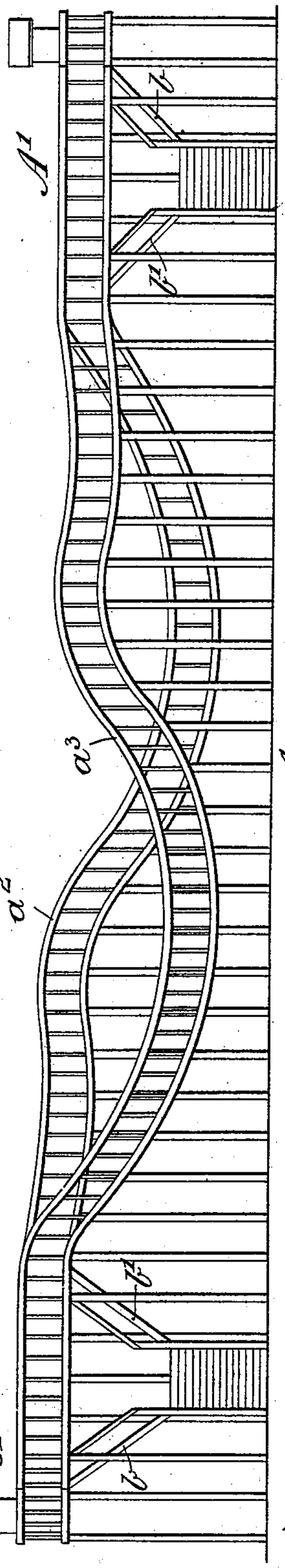


Fig: 4.

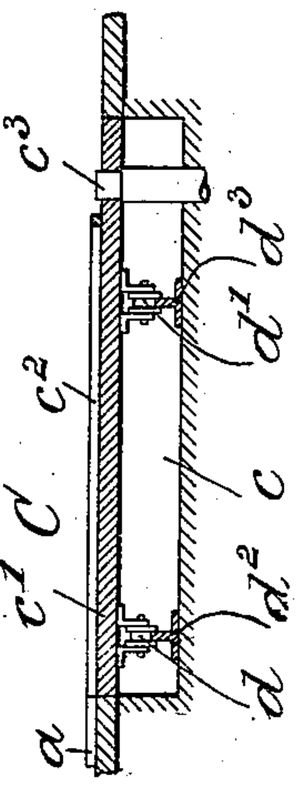
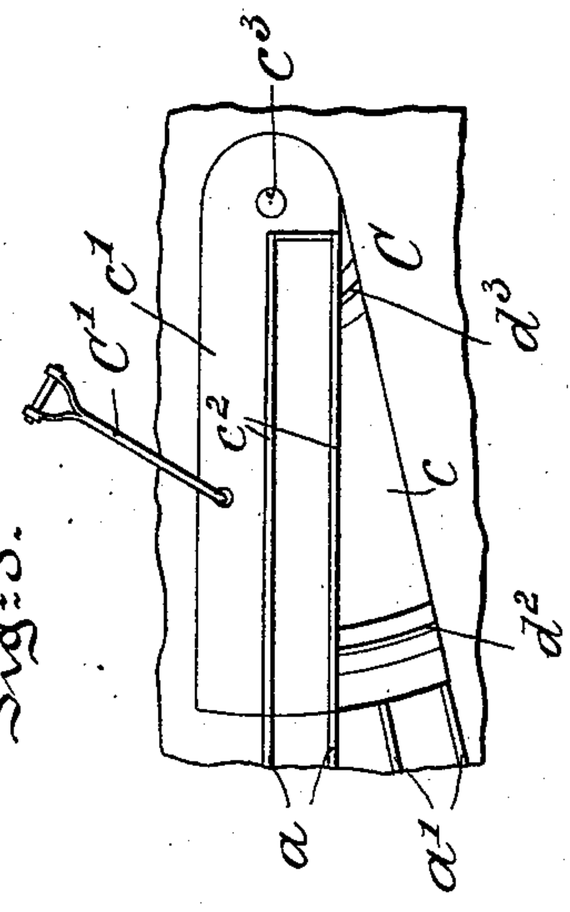


Fig: 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

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PLEASURE COASTING-COURSE.

SPECIFICATION forming part of Letters Patent No. 549,635, dated November 12, 1895.

Application filed August 14, 1895. Serial No. 559,247. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. GRIFFITHS, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Pleasure Coasting-Courses, of which the following is a specification.

My invention has relation to pleasure courses for summer and other resorts for cars or similar appliances, adapted to travel on wheels over the same to convey persons from a starting-point again to the same point without change of cars, and my invention relates in such connection to means for permitting of the shifting of the car at the end of each of a series of parallel undulating outgoing courses to a series of undulating incoming courses to complete by gravity a round-trip and without passengers having to alight from the cars, so that time and expense are saved, and the avoidance of accident thereby in handling passengers participating in the exhilarating sport or amusement is insured.

The principal object of my invention is to provide in a coasting structure a car-shifting appliance for readily and quickly transferring a loaded car or other passenger-conveyer from an incoming course to an outgoing course of the structure without passengers having to alight from a car in the making of a round-trip.

My invention consists of a pleasure coasting-course, consisting of two substantially parallel undulating tracks terminating at one end of the structure in a horizontal plane lower than the horizontal plane on which said tracks terminate at the opposite end of the structure and provided with means at each end for shifting a car from one track to the other, so that the same may travel continuously from end to end of the structure in a substantially elliptical course, and my invention further consists of the improvements in pleasure coasting structures, hereinafter described and claimed.

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 a structure comprising a series of straight parallel incoming and outgoing undulating courses of different altitudes at the respective ends thereof, and provided with car-shifting means located at said ends for transferring readily and quickly a loaded car or other conveyance from one course to the other to complete a trip or trips. Fig. 2 is a side elevational view of the structure with the end of a lower altitude at the right-hand end than at the left-hand end thereof. Fig. 3 is a top or plan view, enlarged, of the car-shifting means which is located at the horizontal plane at each end of the structure; and Fig. 4 is a vertical central section through said car-shifting means, showing the detailed construction and arrangement thereof and in elevation the end pivotal connection of said means with the structure.

Referring to the drawings, A represents the stilted structure, consisting of a series of straight parallel undulating courses provided with tracks a and a', and guards a^2 and a^3 located adjacent thereto for safety in the rapid travel of the cars of the respective courses of the structure by gravity over the said tracks.

The horizontal plane or end A′ at the right of the structure is lower by a foot, more or less, than the horizontal plane or end A^2 at the left-hand end of the structure, as illustrated in the drawings. By such provision the cars on an outgoing course from the starting-point A^2 will travel by gravity to the end A′ of that course and thereat the passengers without alighting from the car can be readily transferred, by means to be hereinafter fully explained, onto the return course to travel by gravity to the starting-point A^2 again for another trip. By giving each car an energetic push, as practice has demonstrated, from the starting and return points at the respective ends it will accumulate in its travel by gravity over the straight parallel undulating

course sufficient momentum to reach and climb the last inclination of the structure and pass onto the car-shifting device C at that end to permit of its transfer to complete a trip, without occasion for the occupants of the car to alight therefrom at either end, should they desire to take other trips.

At both ends of the structure are provided entrances b and exits b' for passengers.

The car-shifting device C is set into an opening c, formed at each end of the platform of the structure, and this device consists of a platform c', provided with rails c^2. This platform is supported by an end-recessed pivot c^3, set into the structure A. This platform c is also provided with front and back traveler-rolls d and d', engaging rails d^2 and d^3 in the opening c. There is also provided an operating-lever C', connected with the platform c' of the device for shifting the same, so that a car by the momentum acquired in its travel by gravity is caused to pass onto the said device C and by means of the said lever C' is readily shifted while loaded with passengers onto the return tracks to complete the excursion or trip afforded passengers by the particular arrangement of the structure, as hereinafter fully described.

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

A pleasure coasting course, consisting of two substantially parallel undulating track courses, the respective ends of which are formed into horizontal planes of different altitudes, and onto each of which a car is run by gravity and propulsive force applied at the opposite end of the course for shifting the same so as to permit of its return to the opposite horizontal plane of the structure and so on continuously back and forth, and a shifting device provided on each of said horizontal planes for shifting the car from the tracks of one course to those of another, substantially as and for the purposes described.

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

JAMES A. GRIFFITHS.

Witnesses:
J. WALTER DOUGLASS,
THOMAS M. SMITH.