

No. 895,256.

PATENTED AUG. 4, 1908.

P. GOUDRON.  
AMUSEMENT COASTER.  
APPLICATION FILED MAR. 26, 1908.

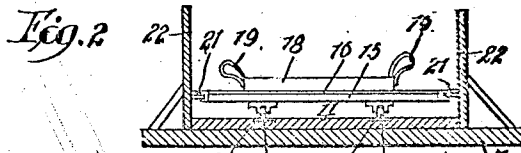
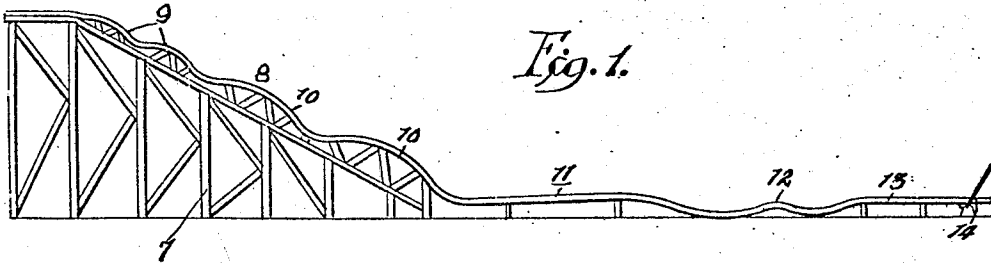


Fig. 3.

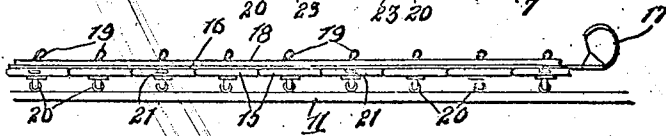


Fig. 4.

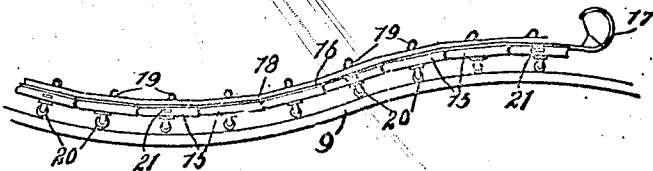


Fig. 5.

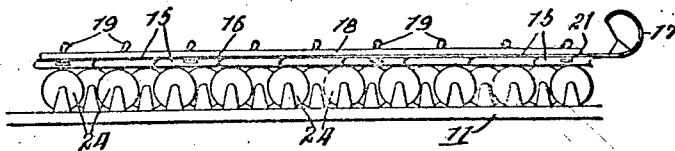
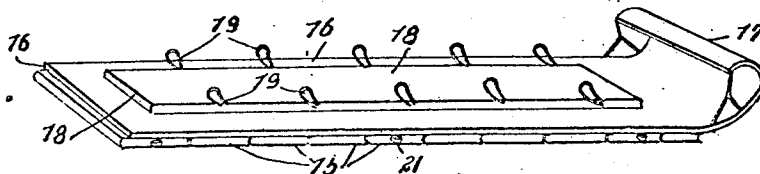


Fig. 6.



Witnesses:

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# UNITED STATES PATENT OFFICE.

PAUL GOUDRON, OF CHICAGO, ILLINOIS.

## AMUSEMENT-COASTER.

No. 895,256.

Specification of Letters Patent.

Patented Aug. 4, 1908.

Application filed March 26, 1908. Serial No. 423,444.

*To all whom it may concern:*

Be it known that I, PAUL GOUDRON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Amusement-Coasters, of which the following is a specification.

The object of this invention is to provide a coaster carriage having its seating portion so constructed that the carriage as a whole will conform to the curves and undulations of the coaster track, whereby occupants of the carriage will be subject not only to the up and down movement due to irregularities in the track but will also be subject to the undulating movement of the carriage itself, thus greatly increasing the variety of sensations produced by the travel of the carriage.

The invention is intended for use on any coaster track having an undulating surface, but is more especially intended for use on "chute the chutes" structures suitably modified by the addition of an undulating track surface built above the chute structure. The carriage, by reason of its flexible structure, is intended to closely follow the curvature of the track so that all portions of the carriage will be parallel with the supporting structure and close thereto, whereby the possible danger of an upset or other accident will be eliminated so that a most exhilarating sensation will be produced without any attendant danger.

The invention consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of an ordinary chute structure, having an undulating track built thereon; Fig. 2 a cross sectional elevation of the track, showing the carriage of the present invention; Fig. 3 a side elevation of the carriage traveling over a level track; Fig. 4 a similar view, showing the carriage traveling over the undulating section of track; Fig. 5 a modification of the roller bearing surface for the carriage; and Fig. 6 a perspective view of the carriage.

As shown in Fig. 1, the track is in the form of an inclined structure 7 provided, on its upper side, with an undulating track 8, which preferably starts with one or more short undulations 9, followed by one or more longer undulations 10, followed by a straight section of track 11, followed by a short bump or undulation 12, terminating in a level track

13. A suitable braking device 14 is preferably provided at the end of the track. It will be understood that the arrangement of undulations shown serves merely for purposes of illustration and that the steepness of the track and the arrangement, size and steepness of the undulations can be modified to suit existing conditions or the sensations intended to be produced.

The flexible car or carriage intended for use on the track is, as shown, in the general form of a toboggan having a flexible body composed of transverse slats 15, preferably of wood, of sufficient thickness and rigidity to sustain the weight of the intended load without bending or sagging at the middle. The number of the slats and their width will be dependent upon the length of the carriage and the degree of flexibility desired. It is advisable, however, to have the slats sufficient in number and narrow enough in width to conform substantially to the curvature of the track at all points. The slats are held together and united into an integral structure by a flexible floor or covering 16 which may be formed of heavy rubber, canvas, linoleum, or similar material having sufficient flexibility to conform to the curvature of the track under the weight of the load and at the same time having sufficient strength to firmly bind or unite the slats together.

In order to decrease the action of the wind on the clothing of the passengers, the forward end 17 of the flexible floor or covering is curved or bowed like the front of a toboggan, which adds to the appearance of the carriage, increases the safety and comfort of the occupants, and creates the illusion of traveling on a toboggan. On the top of the flexible floor is located a cushion 18, which is preferably narrower than the width of the floor and which affords seats for the passengers, allowing an uncushioned floor space on each side of the seats for the support of the feet and the garments of the occupants. The cushion, along its edges, is provided with straps or handles 19 which enable the passengers to hold themselves securely in place during the descent of the carriage.

In the preferred form of carriage, best illustrated in Fig. 2, a pair of supporting rollers 20 is provided on the under surface of each of the slats, which rollers are located sufficiently close to the center to sustain the weight of the load without allowing the slats to sag or bend at the center. The support-

ing rollers 20 are supplemented by guide rollers 21 of suitable number, which outwardly project from the ends of a selected number of slats and are adapted to bear against the inner faces of the sides 22 of the trackway. The sides 22 should preferably be of sufficient height to guard against the danger of accidents due to carelessness or foolishness on the part of the occupants of the carriage. The supporting rollers 20 preferably rest upon track rails 23 which, as shown, are in the form of narrow strips of metal sunk into the floor of the trackway and flush with the surface thereof.

15 In the modification shown in Fig. 5, the construction of the carriage is similar in all respects to that hitherto described, with the exception that the supporting rollers are omitted and the track surface itself is provided with rows or lines of rollers 24 over which the carriage is intended to travel.

In use, as the carriage descends the undulating trackway, the occupants not only experience the sensation of an uneven descent but will also directly feel the rocking or undulation of the surface upon which they are seated. At the same time, the cushion relieves the occupants from any unpleasant jarring or jolting which would be occasioned if the passengers were to slide down an undulating or bumpy surface like that provided in the amusement device known as "bump the bumps." Furthermore, the arrangement of the toboggan enables the occupants to be seated in comfort and safety, and the arrangement of supporting and guide rollers prevents any side swaying or tilting which might tend to throw the passengers out of their seats. The floor and sides of the track, being perfectly smooth in the preferred construction, will eliminate all bodily danger and obviate the possibility of the tearing of garments which might otherwise be caught and torn.

Although the invention has been described with considerable particularity as to detail, it will be understood that it is not intended to limit the invention to a flexible carriage of the exact construction herein shown and described, since it is obvious that the same flexibility of movement might be afforded by other forms of construction.

What I claim as new and desire to secure by Letters Patent is:

55 1. An amusement coaster comprising a trackway having vertical undulations, and a carriage having a flexible body adapted to conform to the undulations of the trackway and affording a vertically undulating and unstable seating surface, substantially as described.

2. An amusement coaster comprising a

trackway having an undulating surface, a flexible carriage adapted to conform to the undulations of the track, and roller bearings on which the carriage is supported, substantially as described.

3. An amusement coaster comprising an undulating trackway, a flexible carriage adapted to conform to the undulations of the trackway, said carriage being formed of transversely extending rigid slats, and a flexible floor connecting the slats, substantially as described.

4. An amusement coaster comprising an undulating trackway, a flexible carriage adapted to conform to the undulations of the trackway, said carriage being formed of transversely extending rigid slats and upturned at its forward end, and a flexible floor connecting the slats, substantially as described.

5. An amusement coaster comprising an undulating trackway, a flexible carriage adapted to conform to the undulations of the trackway, said carriage being formed of transversely extending rigid slats, a flexible floor connecting the slats, and roller bearings supporting the slats, substantially as described.

6. An amusement coaster comprising an undulating trackway, a flexible carriage adapted to conform to the undulations of the trackway, said carriage being formed of transversely extending rigid slats and upturned at its forward end, a flexible floor connecting the slats, and roller bearings supporting the slats, substantially as described.

7. An amusement coaster comprising an undulating trackway consisting of a floor and side walls, a flexible carriage comprising transversely extending rigid slats and a flexible covering to which the slats are attached, supporting rollers secured to the bottoms of the slats, and guide rollers secured to the ends of the slats and adapted to bear against the side walls of the trackway, substantially as described.

8. An amusement coaster comprising an undulating trackway consisting of a floor and side walls, a flexible carriage comprising transversely extending rigid slats, a flexible covering to which the slats are attached, and a cushion seat carried by the flexible covering, supporting rollers secured to the bottoms of the slats, and guide rollers secured to the ends of the slats and adapted to bear against the side walls of the trackway, substantially as described.

PAUL GOUDRON.

Witnesses:

WALKER BANNING,  
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