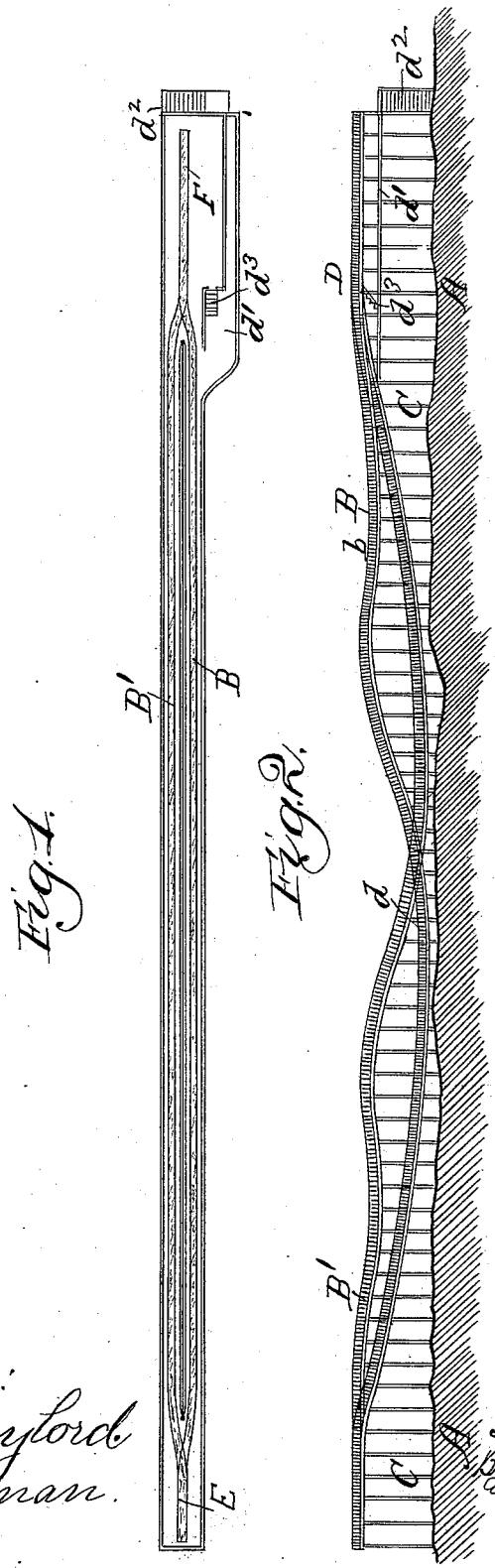
(No Model.) 2 Sheets—Sheet 1.

LA MARCUS A. THOMPSON.

ROLLER COASTING STRUCTURE.

No. 310,966. Patented Jan. 20, 1885.



Witnesses:
Chas. E. Gaylord
L. M. Freeman.

Inventor:
L. A. Thompson.
By G. B. Coupland & Co
attys.

N. PETERS. Photo-Lithographer. Washington, D. C.

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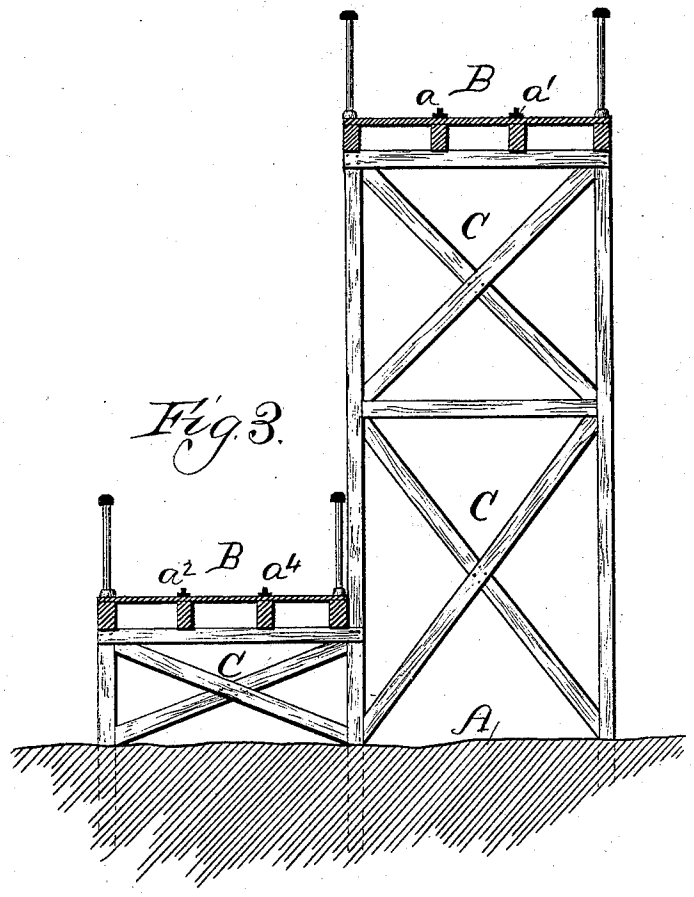


Fig. 3.

Witnesses:
Chas. E. Gaylord.
L. M. Freeman.

Inventor:
L. A. Thompson
By G. B. Coupland & Co
attys.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

LA MARCUS A. THOMPSON, OF SOUTH CHICAGO, ILLINOIS.

ROLLER COASTING STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 310,966, dated January 20, 1885.

Application filed April 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, LA MARCUS A. THOMPSON, of South Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in a Roller Coasting Structure, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to an improved coasting structure to be used as a means of pleasure and amusement; and it consists of certain novel features in the construction and arrangement, as will be hereinafter more fully set forth and claimed.

Figure 1 is a top or plan view; Fig. 2, a side elevation; and Fig. 3 a transverse section.

A double-track structure is provided, as indicated in the drawings, both ends of the tracks starting at the same elevation, the object being to have each car make a round trip—that is, going out on one track and returning on the other.

Referring to the drawings, A represents the ground line; B B′, the companion railway-tracks or road-bed; *a a′ a² a⁴*, the track-rails, and C the supporting trestle-work. The ends of the tracks are placed at quite an elevation, so that the cars will acquire nearly sufficient gravity momentum on the down grades to carry the same almost to the top of the ascending end. Both ends of the tracks are at the same height; but between the ends the grade is lower, undulating, and irregular, as shown in Fig. 2 of the drawings. The height of the ends or starting-stations will be determined by the length of the track, and the grades of such proportion as will carry the cars the farthest up the ascending plane at the opposite end from which the car is started. The starting end D of the outgoing track B is of a gradual decline to *b*, where the track takes a short rise, which, however, is not steep enough to materially check the momentum gained by the car from the start. From this point the track takes quite a sudden or steep descent to the lowest part, *d*, and then a gradual and regular rise to the terminal point. The momentum or acceleration acquired on the downgrade will carry the car nearly to the top of the ascending end, means being provided to continue the car to the top when its collected force has been expended. The car is then transferred to the return or companion track B′ by means of the switch-track E, and when it has returned to the starting-point it is switched onto the outgoing track by means of the switch F. The two tracks run parallel and are duplicates of each other, the structure and grades being the same at opposite ends. The tracks may have a number of short descending grades such as may afford the most pleasant sensations to the patrons, and may also be arranged to have a winding or curved direction in a horizontal plane, in addition to the descending and ascending grades, and may be provided at one or more points with a suitable inclosure roofed over to imitate a passage through a tunnel. The waiting-platform *d′* is reached by the stairs *d²*, the stairs *d³* leading to the point from which the cars start. This platform will be provided with a ticket-office and seats for the convenience of the patrons. Ordinarily, two cars will be employed and pass each other, one on the outgoing and the other on the incoming track, which will greatly increase the pleasure over that which would be afforded if only a single track were used. This construction and arrangement affords a very enjoyable means for amusement and pleasure, the sensation being similar to that of coasting on the snow, with the difference that the conveyance runs on wheels and returns the passenger to the starting-point without the necessity of having to walk up hill for a second ride.

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

1. In a coasting structure, the combination, with the tracks B B′, running parallel with each other and having the starting and terminal stations at the same elevation, of the switch-tracks E F, whereby the car reaching

the terminus on the outgoing track is transferred to the return-track and back again to the first track for another trip, substantially as described.

2. In a coasting structure, the combination, with two parallel tracks or road-beds having undulating grades or planes, of the supporting trestle-work C and the platform d' and d^2 of the same height, substantially as described.

LA MARCUS A. THOMPSON.

Witnesses:
L. M. FREEMAN,
L. B. COUPLAND.