

No. 749,676.

PATENTED JAN. 12, 1904.

S. E. JACKMAN.

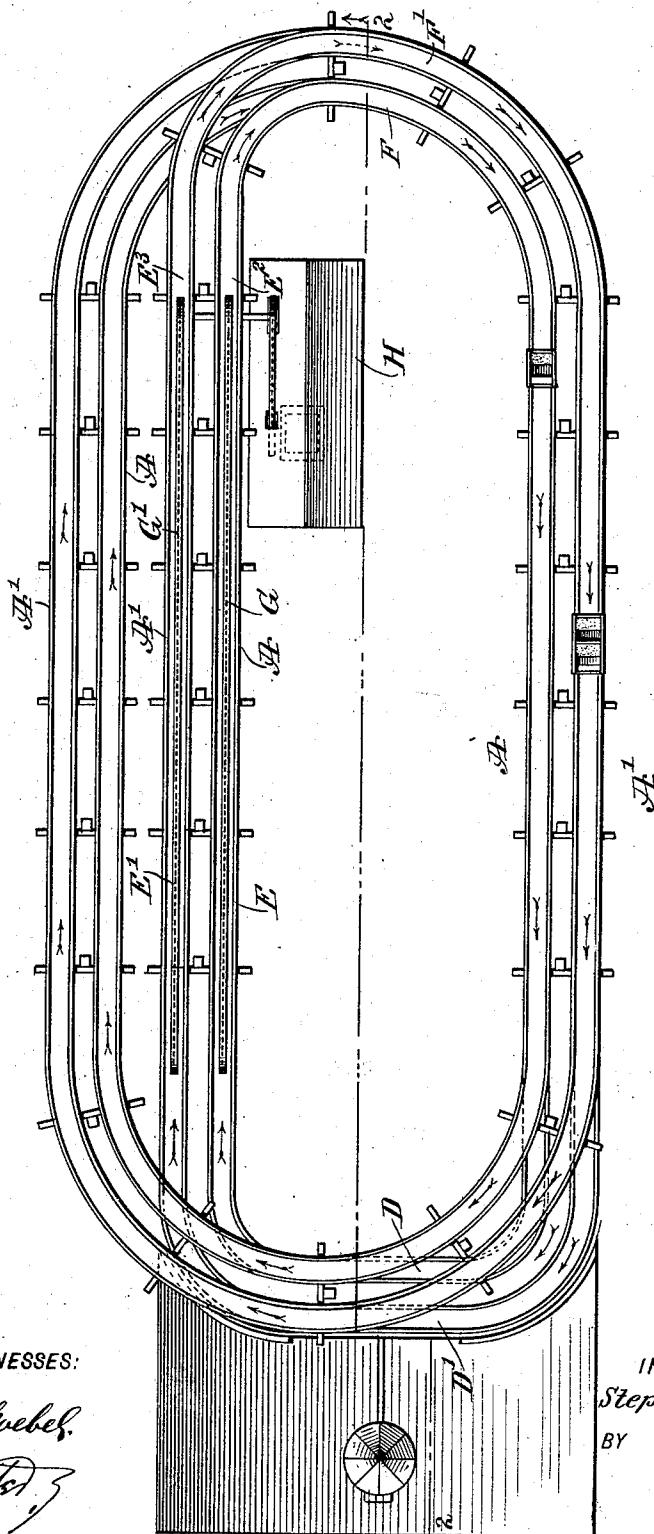
INCLINED RAILWAY.

APPLICATION FILED NOV. 6, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

FIG. 1.



WITNESSES:

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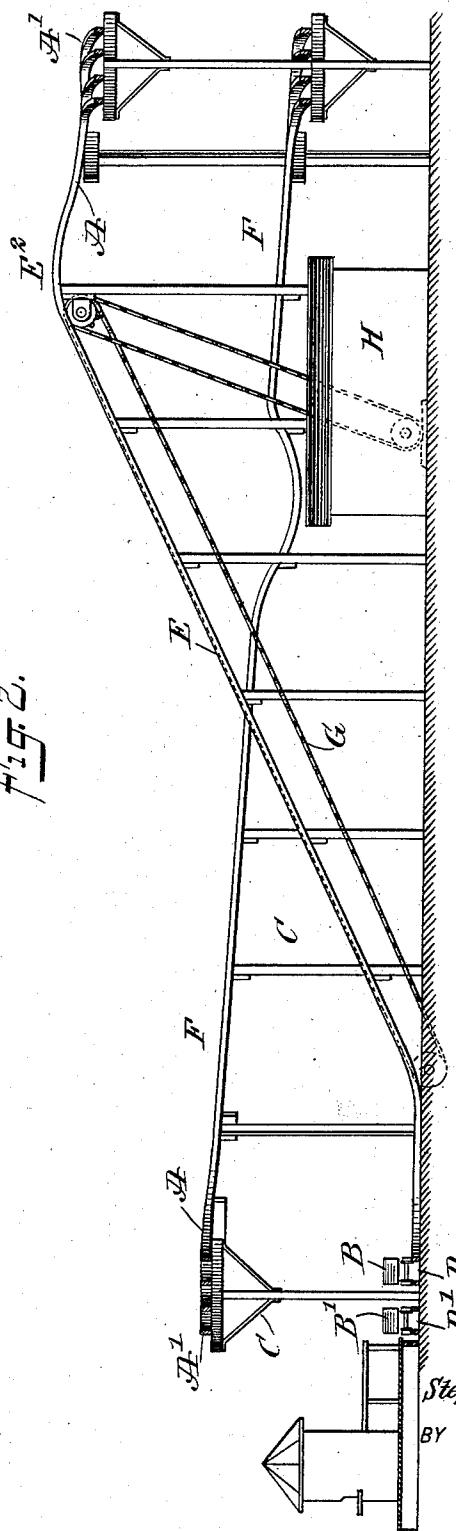
S. E. JACKMAN.

## INCLINED RAILWAY.

APPLICATION FILED NOV. 6, 1903.

NO MODEL.

2 SHEETS—SHEET 2.



**WITNESSES:**

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INVENTOR  
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## UNITED STATES PATENT OFFICE.

STEPHEN E. JACKMAN, OF NEW YORK, N. Y.

## INCLINED RAILWAY.

SPECIFICATION forming part of Letters Patent No. 749,676, dated January 12, 1904.

Application filed November 6, 1903. Serial No. 180,060. (No model.)

*To all whom it may concern:*

Be it known that I, STEPHEN E. JACKMAN, a citizen of the United States, and a resident of the city of New York, Coney Island, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Inclined Railway, of which the following is a full, clear, and exact description.

The invention relates to railways such as are used for amusement in pleasure-resorts, exhibitions, and the like; and its object is to provide a new and improved inclined or switchback railway arranged to allow two cars to race by their own momentum down adjacent tracks to afford exciting rides for the passengers in the racing cars, especially as it is possible for the car on the outer longer track, loaded heavier than the car on the inner shorter track, to outstrip the car on the shorter or inner track.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a plan view of the improvement, and Fig. 2 is a sectional side elevation of the same on the line 2 2 of Fig. 1.

The inclined railway shown in the drawings consists, essentially, of two tracks A A', extending parallel or one alongside the other and at the same inclination throughout their length, so that the inner track A is considerably shorter than the outer track A', and yet by starting cars B B' filled with passengers simultaneously from the summits of the tracks A A' to run down the same by their own gravity it is possible that the car B' on the outer longer track A' will reach the end of the journey before the other car B, provided, however, that the car B' and its load is heavier than the car B and its load.

As shown, the continuous tracks A A' are mounted on a suitable trestle-work or other support C, and the tracks consist of station-sections D D', leading at one end to the bot-

toms of the up-tracks E E', from the summits E<sup>2</sup> E<sup>3</sup> of which lead downward or homestretch sections F F' back to the other or inside ends of the station-sections D D'. The homestretch-sections F F' may have any desired number 55 of convolutions and dips, as indicated in Fig. 2; but it is expressly understood that the inclination of both tracks is the same throughout their length.

The up-tracks E E' are provided with endless propelling-chains G G', having spaced cross-bars for engaging projections on the under sides of the cars B B', and the said endless chains G G' are driven by a suitable mechanism from a power-house H, preferably arranged within the track, as indicated in the drawings, to save floor-space.

Now when the railway is in use two cars filled with passengers are started simultaneously from the station-sections D D' and are 70 pushed by attendants to the bottoms of the up-tracks E E', up which they are pulled by the chains G G', so that the cars reach the summits E<sup>2</sup> E<sup>3</sup> simultaneously and start from the summits down the down-track or home-stretch sections F F' by their own gravity. Now as the cars travel down the home-stretch sections F F' it is evident that the heavier car acquires a greater momentum than the lighter car, and consequently travels faster 80 than the same, and if such heavier car is on the outer or longer track-section A' it is possible that the heavier car reaches the station-section D' somewhat before the lighter car on the inner or shorter track A reaches the station-section D. 85

If desired, the cars on the two tracks may be made of different weights, or the attendant in charge may load the outer car with more passengers to increase the weight of the outer 90 car in case both cars are of the same weight.

As the passengers in the cars are as a rule not aware of the underlying principle, it is evident that the passengers in the car traveling on the shorter track are certain that their 95 car will outstrip the car on the outer track; but, as before mentioned, such may not be the case, owing to the greater momentum obtained by the heavier car on the outer track.

Having thus described my invention, I 100

claim as new and desire to secure by Letters Patent—

1. An inclined railway having two continuous race-tracks, arranged side by side and of the same inclination throughout their length, so that cars traveling down the tracks by their own gravity acquire different momenta; according to their weights.
2. An inclined railway having two continuous race-tracks, arranged side by side, of different lengths and of the same inclination throughout their lengths, and cars of different

weights traveling down the tracks by their own gravity, for the cars to acquire different momenta during the downward journey, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

STEPHEN E. JACKMAN.

Witnesses:

THEO. G. HOSTER,  
EVERARD BOLTON MARSHALL.