

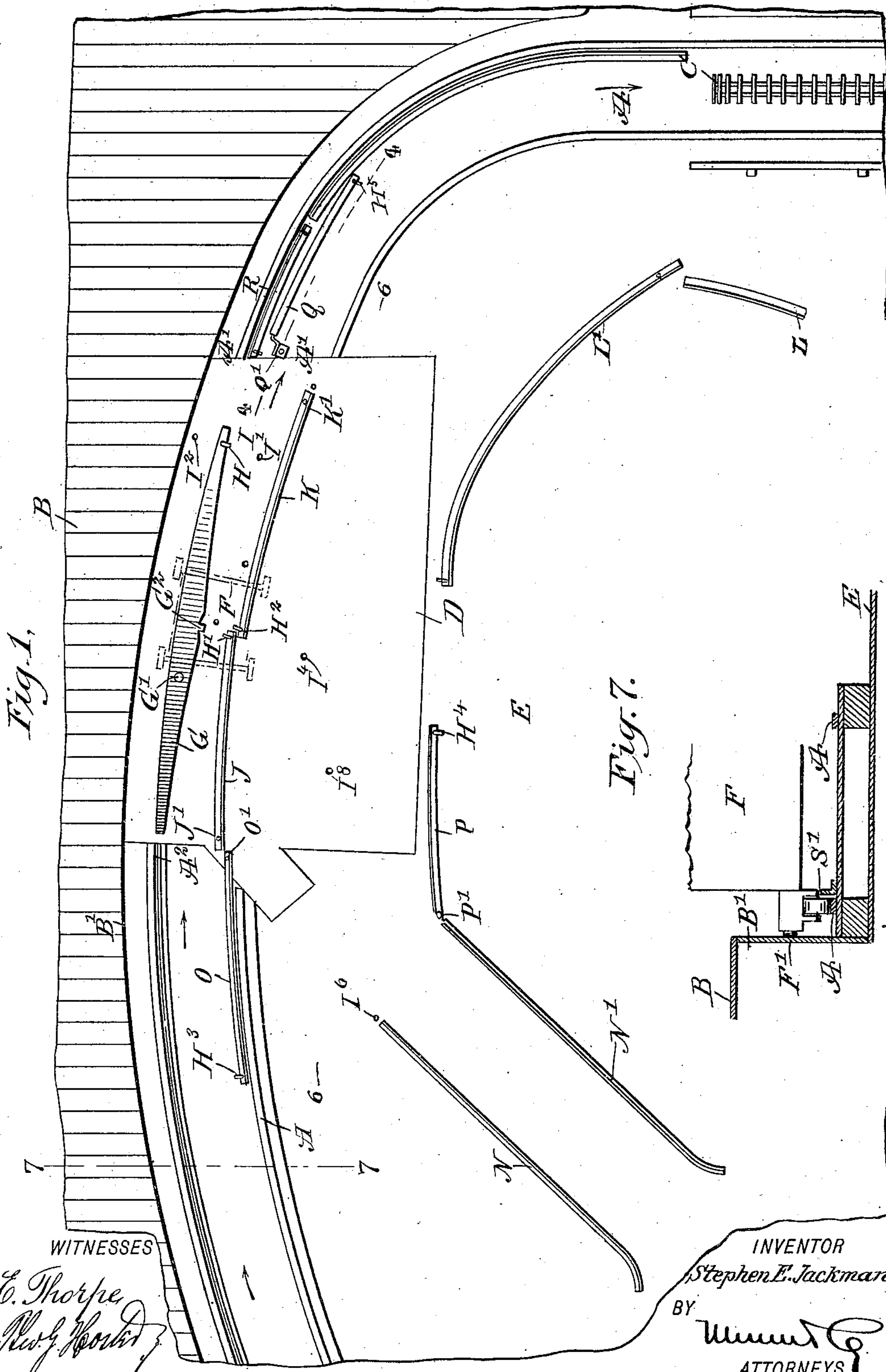
No. 881,000.

PATENTED MAR. 3, 1908.

S. E. JACKMAN.  
SWITCH FOR PLEASURE RAILWAYS.

APPLICATION FILED OCT. 3, 1907.

3 SHEETS—SHEET 1.



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Fig. 2.

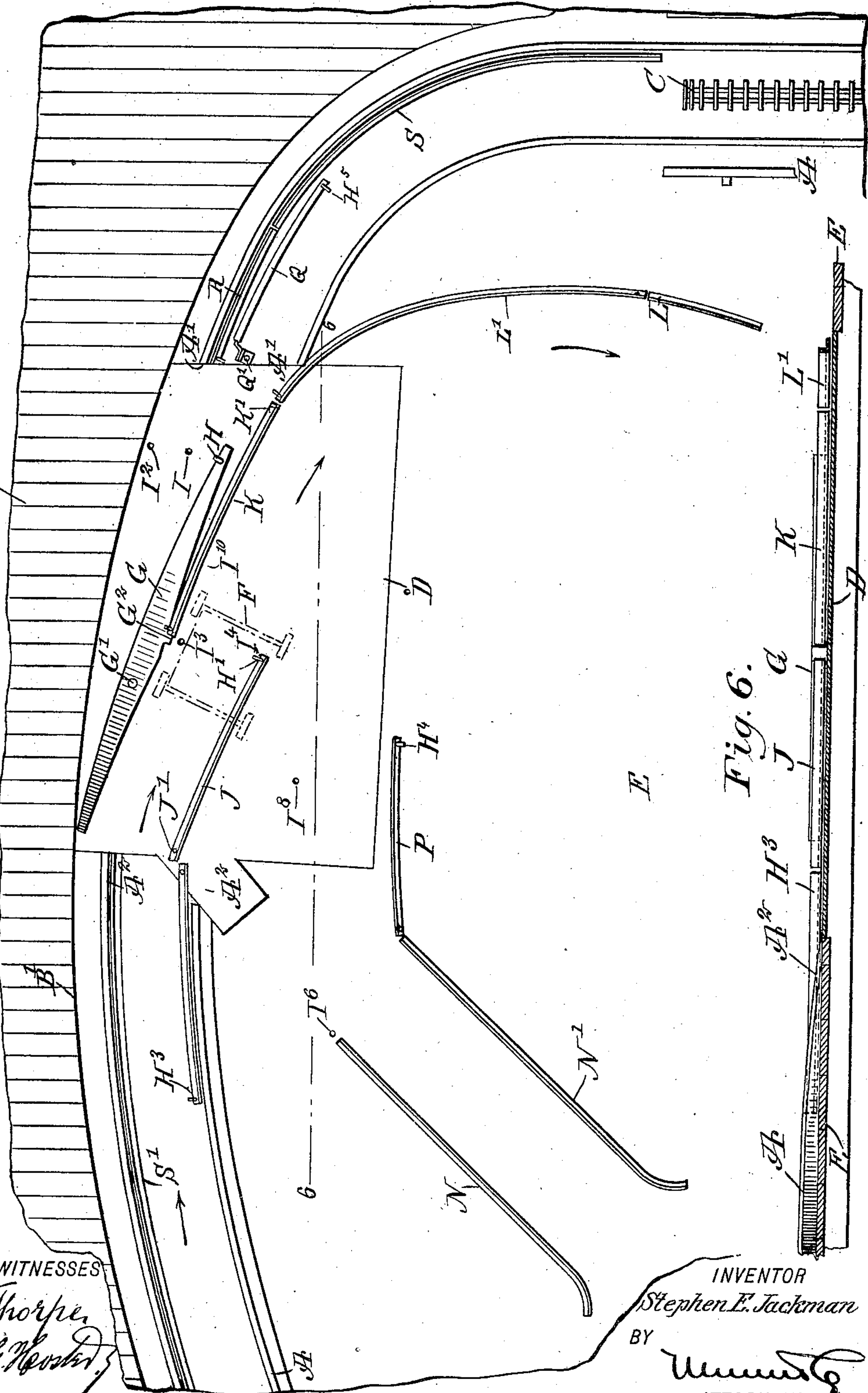


Fig. 6.



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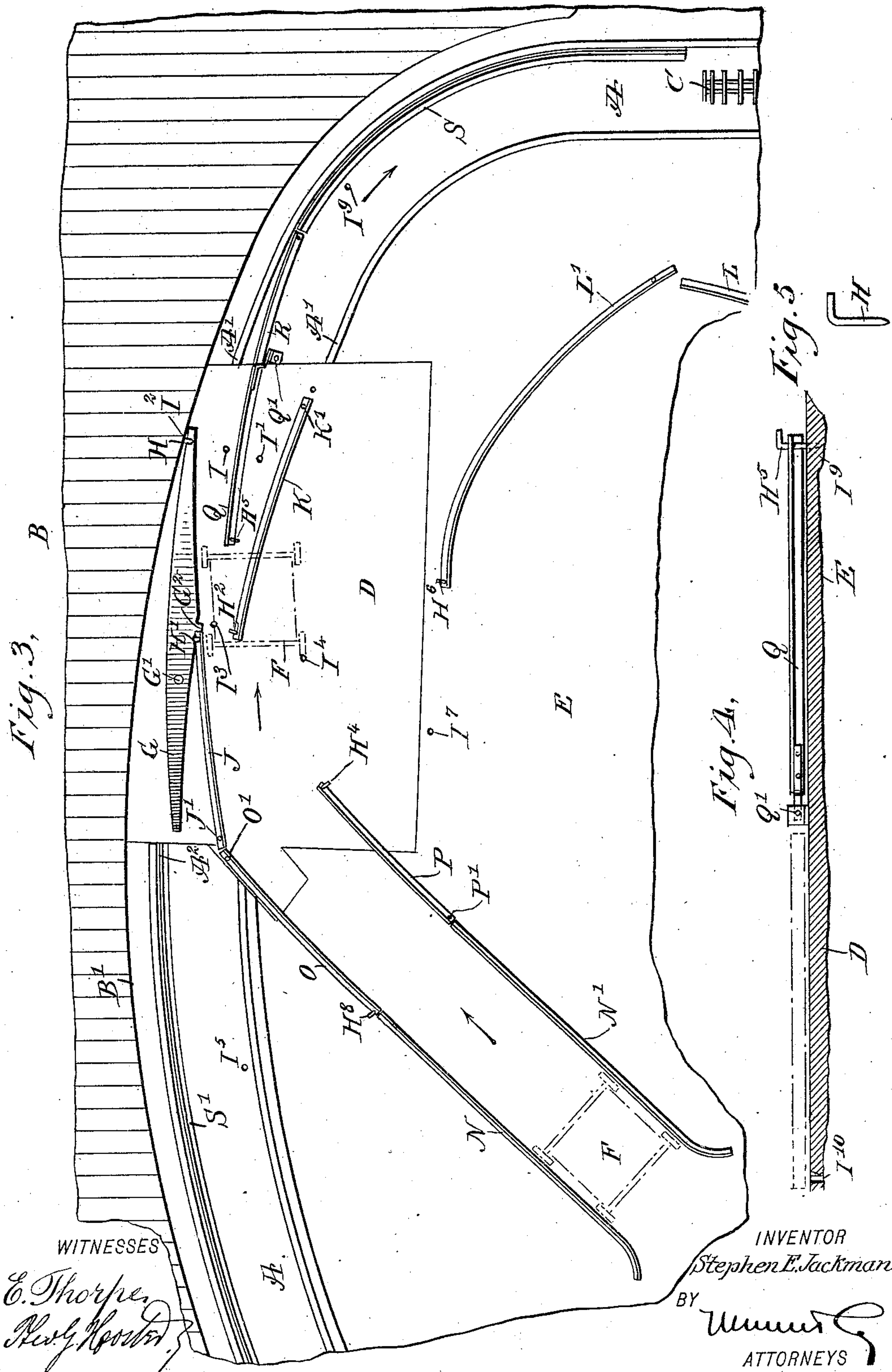
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# UNITED STATES PATENT OFFICE.

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

## SWITCH FOR PLEASURE-RAILWAYS.

No. 881,000.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed October 3, 1907. Serial No. 395,666.

*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 Switch for Pleasure-Railways, of which the following is a full, clear, and exact description.

The invention relates to inclined or switch-back pleasure railways, such as are used in exhibition grounds, parks, pleasure resorts and the like, and the object of the invention is to provide a new and improved switch, arranged to permit of conveniently and quickly running the cars from a storage floor to the track of the railway, and from the track back to the storage floor, as required by the demands of the traffic, and without seriously interrupting the running of the railway.

The invention consists of novel features and parts and combinations of the same, which will be more fully described herein-after 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 all the views.

Figure 1 is a plan view of the improvement arranged for running cars over the track; Fig. 2 is a like view of the improvement, showing the switch in position for running cars from the terminal of the railway track to the storage floor; Fig. 3 is a similar view of the improvement showing the switch arranged for running a car from the storage floor on to the beginning end of the railway track; Fig. 4 is an enlarged sectional side elevation of the improvement on the line 4—4 of Fig. 1; Fig. 5 is a face view of one of the switch rail locking pins; Fig. 6 is a sectional side elevation of the improvement on the line 6—6 of Fig. 2, and Fig. 7 is a transverse section of the improvement on the line 7—7 of Fig. 1.

The main track A of the pleasure railway has the beginning point A' and the terminal point A<sup>2</sup> spaced apart at the station B, as plainly indicated in Figs. 1, 2 and 3, the said main track being provided with an up-track C, up which the cars are hauled shortly after leaving the station B, by a suitable propelling mechanism which releases the cars after

the summit of the up-track is reached, so that the cars travel down the track by their own weight until they finally reach the terminal A<sup>2</sup> of the track, at which point the passengers of the car disembark. The empty car is now run over the platform D back to the beginning point A' of the main track A, at which point passengers embark for taking a ride over the pleasure railway.

The platform D forms part of a floor E, on which the cars not used at the time are stored, and from which cars can be run onto the main track A, or run from the same back to the floor, according to the demand of the traffic.

Now in order to guide a car F from the terminal A<sup>2</sup> of the track over the platform D to the beginning point A' of the track, or to run a car from the floor E onto the platform D and onto the track A at the beginning point A' thereof, or to run a car from the terminal A<sup>2</sup> over the platform D onto the storing floor E, a suitable device is provided, constructed as follows:

A main guide rail G is pivoted at G' on top of the platform D, and its outer edge is curved and its ends terminate near the ends of the outer rail of the main track A, so that a car F coming down the track A and passing from the terminal A<sup>2</sup> thereof onto the platform D, is guided over the latter by the said guide rail G to the beginning point A' of the main track A, it being understood that the outer wheels of the car F run alongside the outer curved edge of the guide rail G. The guide rail G is normally locked in the normal position described and shown in Fig. 1 by a locking pin H engaging one end of the rail G and an aperture I formed in the platform D. On withdrawing the pin H the rail G can be swung into either of the positions shown in Figs. 2 and 3, and then locked in either of these positions by reengaging the pin H with the switch rail G and with the corresponding aperture I' or I<sup>2</sup> formed in the platform D. When the guide rail G is locked in its normal position, as illustrated in Fig. 1, and the cars are finally run over the track, which is now rendered practically continuous by the use of the platform D and the guide rail G, then use is also made of guide rails J and K fulcrumed at J' and K' on the platform, adjacent to the ends of the inner rail of the track A, as plainly indicated in Fig. 1. The rails J and K are adapted to be



locked in place on the platform D by locking pins  $H'$ ,  $H^2$ ; similar to the locking pin  $H$ . By the arrangement described the rails J and K prevent the inner wheels of a car F from traveling laterally during the time a car runs over the platform D from the terminal  $A^2$  to the beginning point  $A'$  of the main track A. The pin  $H'$  normally engages an aperture  $I^3$ , but is adapted to engage an aperture  $I^4$  whenever the rail J is swung from the position shown in Fig. 1 to the position indicated in Fig. 2. The free end of the rail K is adapted to engage a shoulder  $G^2$  on the main guide rail G, whenever the said rail K is swung from the position shown in Fig. 1 to that shown in Fig. 2 at the time the main rail G is in the position indicated in the said Fig. 2. On the floor E is arranged a curved rail L terminating in a pivoted guide rail  $L'$ , the free end of which is adapted to form a continuation of the pivoted end of the guide rail K. Normally the guide rail  $L'$  is swung inward as shown in Fig. 1. The free end of the curved guide rail  $L'$  is adapted to be locked in either of its two positions by a pin  $H^6$  engaging corresponding apertures in the platform D and floor E respectively. Now when the rails G, J, K and  $L'$  are moved into the position illustrated in Fig. 2, then a car F coming down the main track A is guided, after leaving the terminal  $A^2$ , by the rails G, J, K and  $L'$  to one side of the platform D and against the rail L curved inwardly over the floor E, to allow of running the car back on the floor to store the car. It is understood that when the car F passes from the terminal  $A^2$  of the main track A onto the platform D, its inner wheels are guided along the rail J while the outer wheels are guided along the left hand portion of the main rail G and the rails K and  $L'$  to finally reach the rail L.

When it is desired to run a car from the floor E onto the beginning end  $A'$  of the main track A, then the switch rails G, J, K and  $L'$  are moved into the position illustrated in Fig. 3, so that the switch rail J abuts against the shoulder  $G^2$  and thus forms a continuation of the right-hand side of the same at the inner edge thereof. The car F is run from the floor E between a pair of guide rails N,  $N'$  terminating in guide rails O and P fulcrumed at  $O'$  and  $P'$  on the platform D and floor E, the said guide rail O being normally locked in a non-active position adjacent to the inner face of the innermost main track rail at the terminal  $A^2$  (see Figs. 1 and 2). A locking pin  $H^3$  engaging the free end of the rail O also engages an aperture  $I^5$  in the floor E, to lock the rail O in the inactive position mentioned. The pin  $H^3$  is also adapted to engage an aperture  $I^6$  in the floor E adjacent to the end of the rail N, to lock the rail O in active position at the time this rail forms a continuation of the rail E (see Fig. 3). The other rail P is

adapted to be locked in either of its two positions, as shown in Figs. 1, 2 and 3, by a locking pin  $H^4$  engaging either of the two apertures  $I^6$  and  $I^7$ . Now when the rails O and P form continuations of the rails N and  $N'$  and are locked in place, and a car F is pushed between the rails N,  $N'$  and O, P, then this car finally travels from the floor E onto the platform D, and is guided by its outer wheels along the rail J and the right hand side of the rail G, to direct the car towards the beginning point  $A'$  of the track A. The inner wheels of the car F are guided along the rail E, so as to finally guide the car directly onto the beginning end  $A'$  of the main track A. Use is also made of a rail Q fulcrumed at  $Q'$  on the platform D adjacent to a pivoted guard rail R for the outer rail of the main track A at the beginning point  $A'$ . The rail Q is adapted to be locked in either of its two positions shown in Figs. 1, 2 and 3 by a locking pin  $H^5$  engaging the free end of the rail Q and either of two apertures  $I^9$ ,  $I^{10}$ . Thus when the rail Q is in active position, as shown in Fig. 3, it is folded over onto the platform D and the rail R is swung over to form a continuation of the rail Q, so that the rails Q and R prevent the outer wheels of the car F from traveling inward too far, thus guiding the outer wheels towards the beginning end of the outer main track rail, that is, the outer car wheels travel between the rails Q and R and the right-hand end of the main rail G. When the rail Q is not in use (see Figs. 1 and 2) it is swung over alongside the guard rail R and locked in place in this position by the pin  $H^5$  engaging the aperture  $I^9$ .

Guard rails S and  $S'$  are arranged along the inner sides of the outer rails of the main track A, so as to hold the car wheels in position while traveling up the beginning portion of the main track A or returning from the main track at the terminal  $A^2$  thereof. The car F is provided with side wheels  $F'$  (see Fig. 7) adapted to travel on the inner wall  $B'$  of the platform B during the time the car F moves from the terminal  $A^2$  over the platform D to the beginning point  $A'$  of the main track A (see Figs. 1 and 7), the said wall  $B'$  being parallel to the main track A and the outer edge of the switch rail G when the latter is in the normal position shown in Fig. 1.

From the foregoing it will be seen that a car can practically travel over a continuous track as long as the switch rails are in the position shown in Fig. 1, and whenever it is desired to run more cars on the track the switch rails are shifted into the position shown in Fig. 3, and when it is desired to remove a car from the track and store the same on the floor E then the switch rails are shifted to the position shown in Fig. 2.

It will also be noticed that the desired changes in the switch rails can be readily made for running the cars on or off the main



track A without seriously interfering with the running of the cars remaining on the track at the time.

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

1. A pleasure railway having a track for the cars to run on, a platform between the ends of the said track for the cars to pass over from one end of the track to the other, and guiding means on the said platform for guiding the cars while traveling over the platform from one end of the track to the other end thereof, the said guiding means comprising a main guide rail pivoted on top of the platform and having its outer edge curved, the ends of said main guide rail terminating near the ends of the outer rail of the track, means for locking the main guide rail in position to guide the outer wheels of a car, auxiliary guide rails fulcrumed on the platform adjacent to the ends of the inner rail of the track, and means for locking the auxiliary guide rails in position to guide the inner wheels of a car.

2. A pleasure railway having a track for the cars to run on, a platform between the ends of the said track for the cars to pass over from one end of the track to the other and adjustable guiding means on the said platform for guiding a car while traveling over the said platform from one end of the track to the other end thereof, and for guiding a car from the terminal of the track to one side of the platform and for guiding a car from one side of the platform to the beginning end of the track.

3. A pleasure railway having a track for the cars to run on, a platform between the ends of the said track for the cars to pass over from one end of the track to the other, adjustable guiding means on the said platform for guiding a car while traveling over the said platform from one end of the track to the other end thereof, and for guiding a car from the terminal of the track to one side of the platform, and for guiding a car from one side of the platform to the beginning end of the track, and adjustable auxiliary means for assisting the said guiding means in running a car over the side of the platform.

4. A pleasure railway having a track for the cars to run on, a platform between the ends of the said track for the cars to pass over from one end of the track to the other, adjustable guiding means on the said platform for guiding the cars while traveling over the platform from one end of the track to the other end thereof, and for guiding a car from one end of the track out of the course and to one side of the platform, and auxiliary means for guiding a car on running the same on one side of the platform.

5. A pleasure railway having a track for the cars to run on, a platform between the ends

of the said track for the cars to pass over from one end of the track to the other, adjustable guiding means on the said platform for guiding the cars while traveling over the platform from one end of the track to the other end thereof and for guiding the car from one side of the platform onto one end of the track, and auxiliary means for guiding a car while running the same on one side of the platform.

6. A pleasure railway having a track for the cars to run on, a platform between the ends of the said track for the cars to pass over from one end of the track to the other, and a main guide rail on the platform and serving to guide the outer wheels of a car over the platform from the terminal of the outer track to the beginning end thereof, the said main guide rail being pivoted on the platform to disconnect the ends of the said guide rail from the ends of the outer track rail, to allow of switching a car from the terminal of the track onto the platform and to switch a car from the platform onto the beginning end of the track.

7. A pleasure railway having a track for the cars to run on, a platform between the ends of the said track for the cars to pass over from one end of the track to the other, a main guide rail on the platform and serving to guide the outer wheels of a car over the platform from the terminal of the outer track rail to the beginning end thereof, the said main guide rail being pivoted on the platform to disconnect the ends of the said guide rail from the ends of the outer track rail to allow of switching a car from the terminal of the track onto the platform, and to switch a car from the platform onto the beginning end of the track, and auxiliary hinged rails on the said platform for guiding the car in its travel from the terminal of the track to one side of the platform to the beginning end of the track.

8. A pleasure railway having a track for the cars to run on, a platform between the ends of the said track for the cars to pass over from one end of the track to the other, an adjustable main guide rail pivoted on the platform, adjustable auxiliary guide rails fulcrumed on the platform and adapted to cooperate with the main guide rail for guiding the cars while traveling over the platform from one end of the track to the other end thereof, and an adjustable guide rail adapted to cooperate with the said main and auxiliary adjustable guide rails for guiding a car from one end of the track out of the course and to one side of the platform.

9. A pleasure railway having a track for the cars to run on, a platform between the ends of the said track for the cars to pass over from the terminal end of the track to the beginning end, an adjustable main guide rail pivoted on the platform, adjustable

auxiliary guide rails fulcrumed on the platform and adapted to cooperate with the main guide rail for guiding the cars while traveling over the platform from one end of the track to the other end thereof, guide rails fulcrumed on the platform and floor adjacent to the terminal end of the track, and a guide rail fulcrumed adjacent to the beginning end of the track, the said guide rails being adapted to cooperate with the

main guide rail and the auxiliary guide rails to guide a car from one side of the platform onto the beginning end of the track.

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 B. MARSHALL.