No. 749,677. PATENTED JAN. 12, 1904.

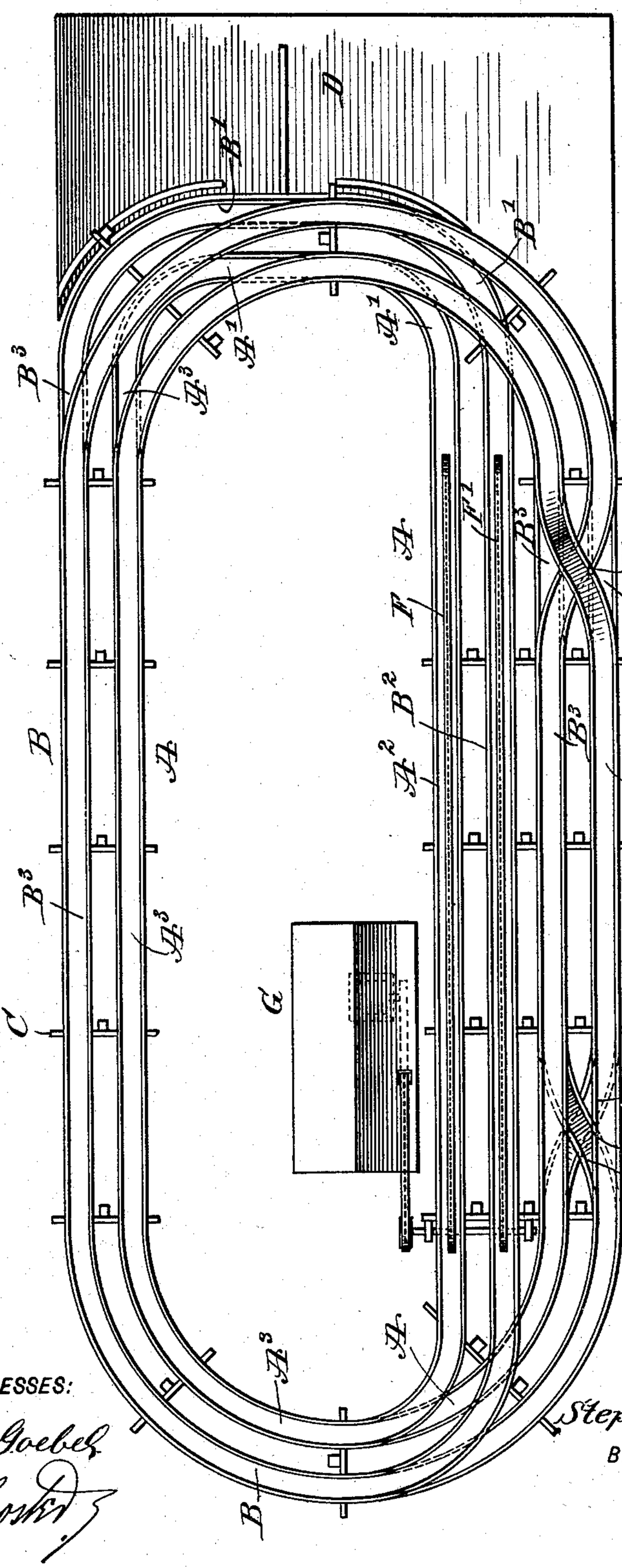
S. E. JACKMAN.

INCLINED RAILWAY.

APPLICATION FILED NOV. 6, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.



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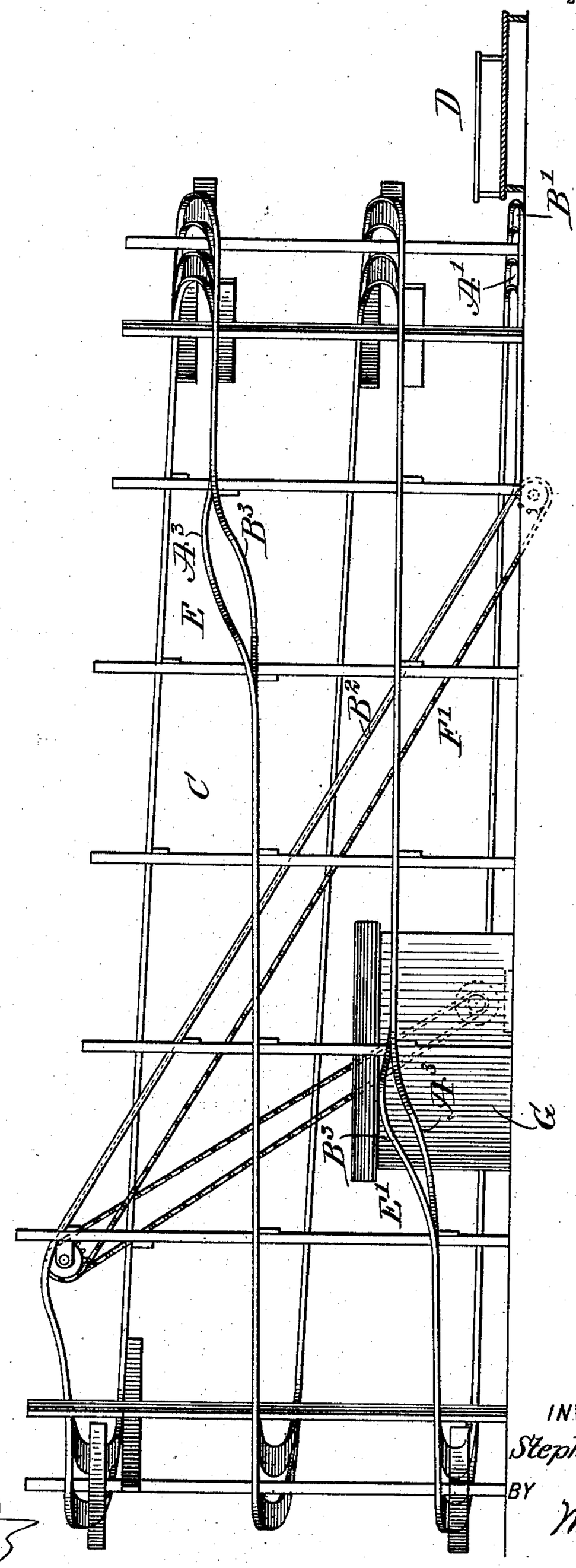
NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.



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No. 749,677. Patented January 12, 1904.

UNITED STATES PATENT OFFICE.

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

INCLINED RAILWAY.

SPECIFICATION forming part of Letters Patent No. 749,677, dated January 12, 1904.

Application filed November 6, 1903. Serial No. 180,061. (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 mainly used for amusement in pleasure-resorts, exhibitions, and the like; and its object is to provide a new and improved inclined or switch-back railway arranged for racing two cars by their own momentum down adjacent separate continuous tracks, crossing each other twice above grade and in reverse order, to render the tracks approximately alike in length, in inclination, and at the crossings, to make the chances for either car to reach the station first equal.

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 side elevation of the same, the station being shown in section.

The tracks A and B are arranged one alongside the other and are mounted on a suitable trestle-work or other support C, and each of the tracks is individually continuous—that is, is complete in itself—and a car traveling over a track comes back to the same starting-point. Each track A and B when viewed in plan appears as a plurality of elongated loops, as will be readily understood by reference to Fig. 1, and the tracks are built approximately of the same length and inclination and consist of station-sections A′ and B′, connected forwardly of a station D with the lower ends of up-tracks A^2 and B^2, from the summits of which lead downwardly-racing sections or homestretches A^3 and B^3, terminating in the rear or exit ends of the station-sections A′ and B′, respectively.

The racing-sections A^3 and B^3 may extend through several courses, and the said racing-sections cross one above the other to prevent collision of the cars, and two such crossings E and E′ are preferably employed between the summits and the station-terminals, as plainly illustrated in the drawings. The racing-sections A^3 and B^3 are so arranged at the crossings E and E′ that the racing-section A^3 passes over and above the section B^3 at the crossing E, and at the crossing E′ the conditions are reversed—that is, the racing-section B^3 passes over and above the racing-section A^3.

The up-tracks A^2 and B^2 are provided with endless propelling-chains F F′, having spaced cross-bars for engaging projections on the under sides of the cars adapted to travel over the continuous tracks A and B, and the said endless chains F and F′ are driven by a suitable mechanism from a power-house G, preferably arranged within the track, as indicated in the drawings, to save floor-space.

By the arrangement described the continuous track A from the station-section up the up-track A^2 and down the racing-section A^3 to the crossing E is the inner track and then becomes the outer track to the crossing E′, at which the track A again becomes the inner track and returns to the station-section A′. In a like manner the track B is the outer track from the station up the up-track B^2 and down the racing-section B^3 to the crossing E, at which point the track B becomes the inner track and remains so until reaching the crossing E′, at which point the track B again becomes the outer track and remains so and terminates in its own station-section B′.

In using the railway two cars on the station-sections A′ and B′ are started simultaneously up the up-tracks A^2 and B^2, so as to reach the summits at the same time, and then the cars start simultaneously from the summits downwardly on the racing-sections. It is evident that for the time being the car on the inner track, which is less in length, has the advantage until the crossing E is reached, as the car then runs on its outer track-section, while the car on the track B after passing the crossing E runs on its inner track-section, and the conditions are again reversed when the cars pass the crossing E′, so that both cars have equal chances for reaching the station D

first, as both tracks are approximately of the same length and inclination.

From the foregoing it will be seen that considerable amusement is afforded to the passengers in the cars racing down the racing-sections A^3 and B^3, especially as the cars travel alternately on outer and inner track-sections and cross each other at different planes at the crossings E and E′ and in reverse order.

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

1. A railway comprising a plurality of individually-continuous tracks, arranged side by side and having approximately the same inclination and length, the tracks crossing each other twice, one above the other, as set forth.

2. A railway comprising a plurality of individually-continuous tracks, arranged side by side and having approximately the same inclination and length, the tracks crossing each other twice, one above the other and in reverse order, 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.