J. W. BOURKE.

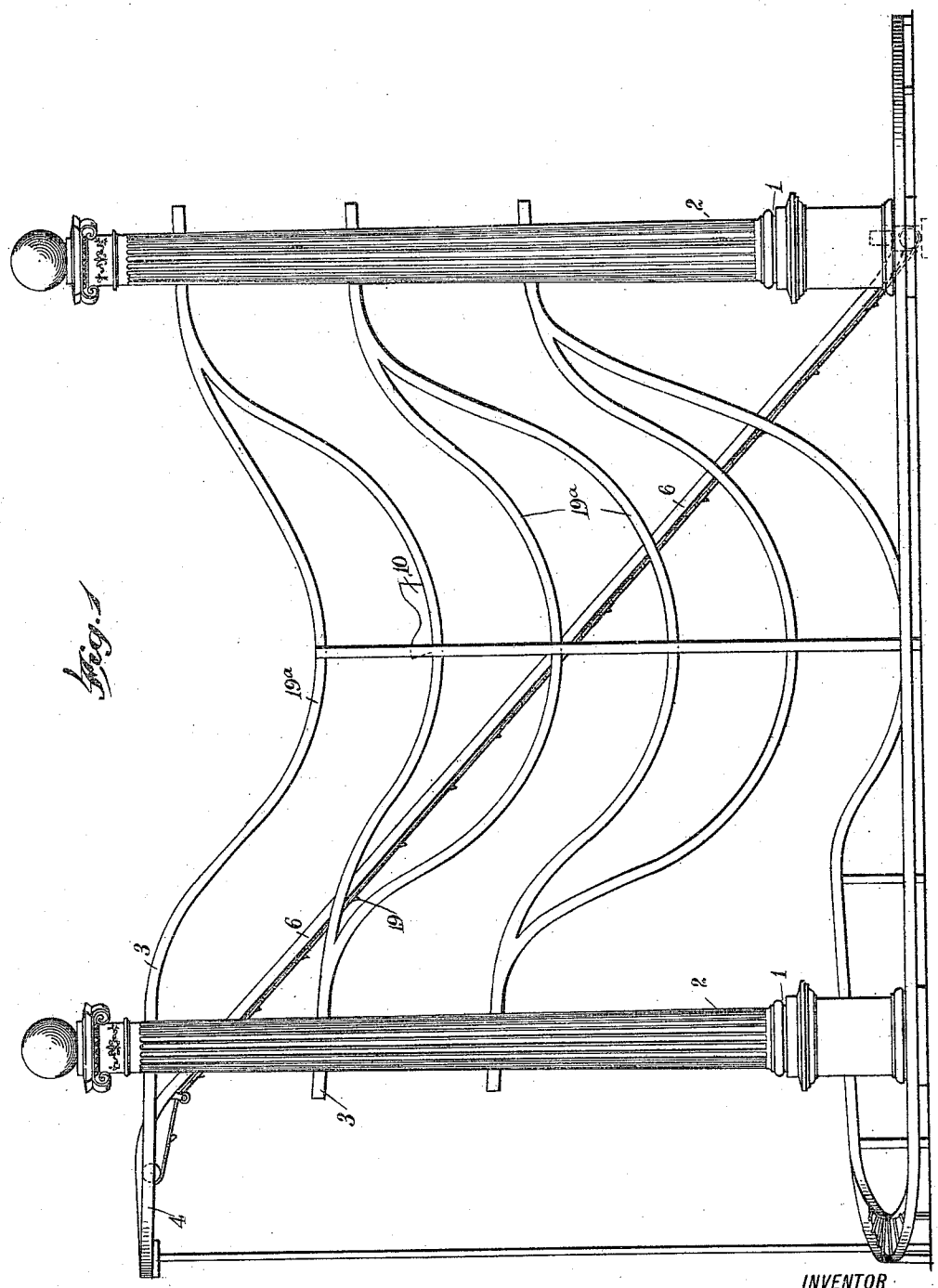
PLEASURE RAILWAY.

APPLICATION FILED OCT. 1, 1910.

983,119.

Patented Jan. 31, 1911.

3 SHEETS—SHEET 1.



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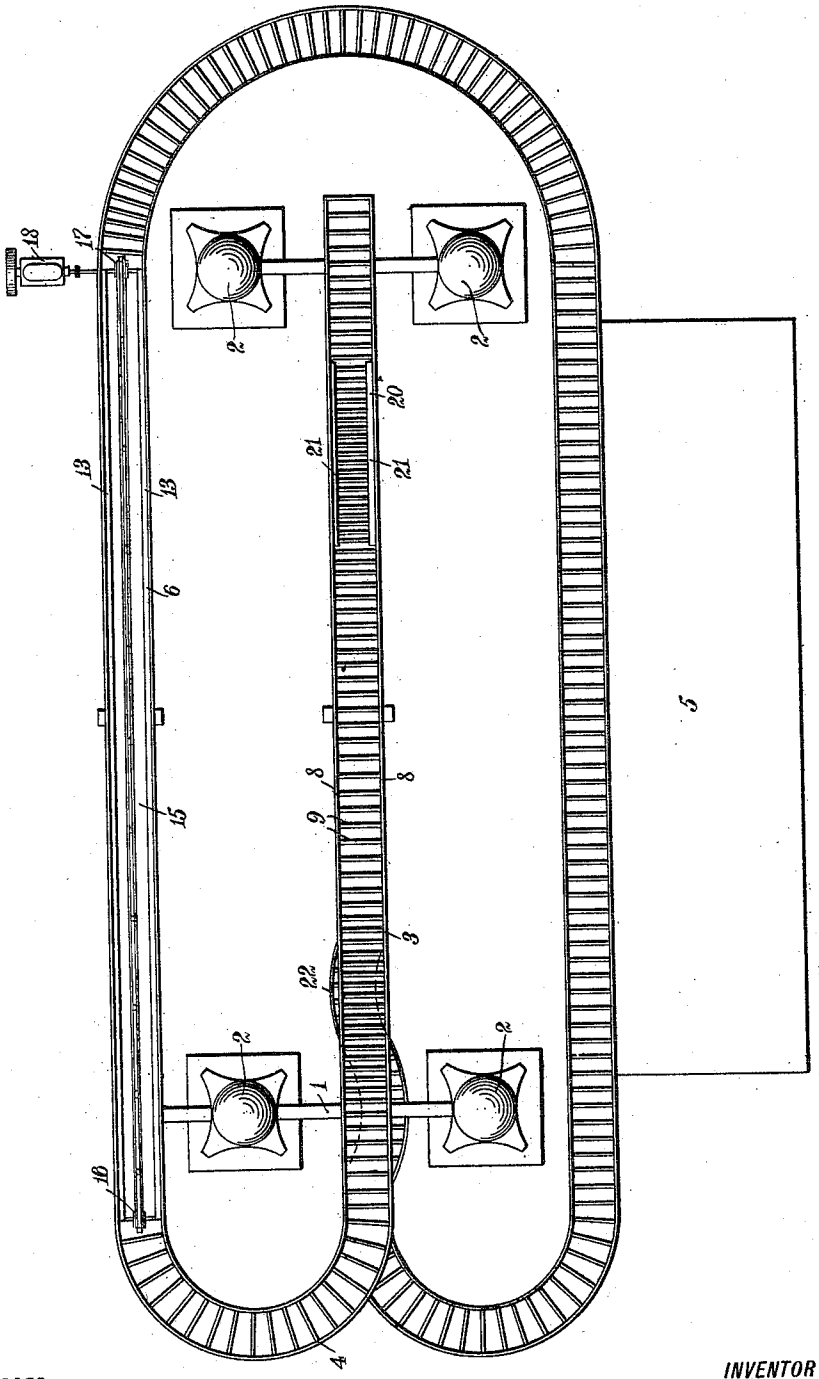

Fig. 2.

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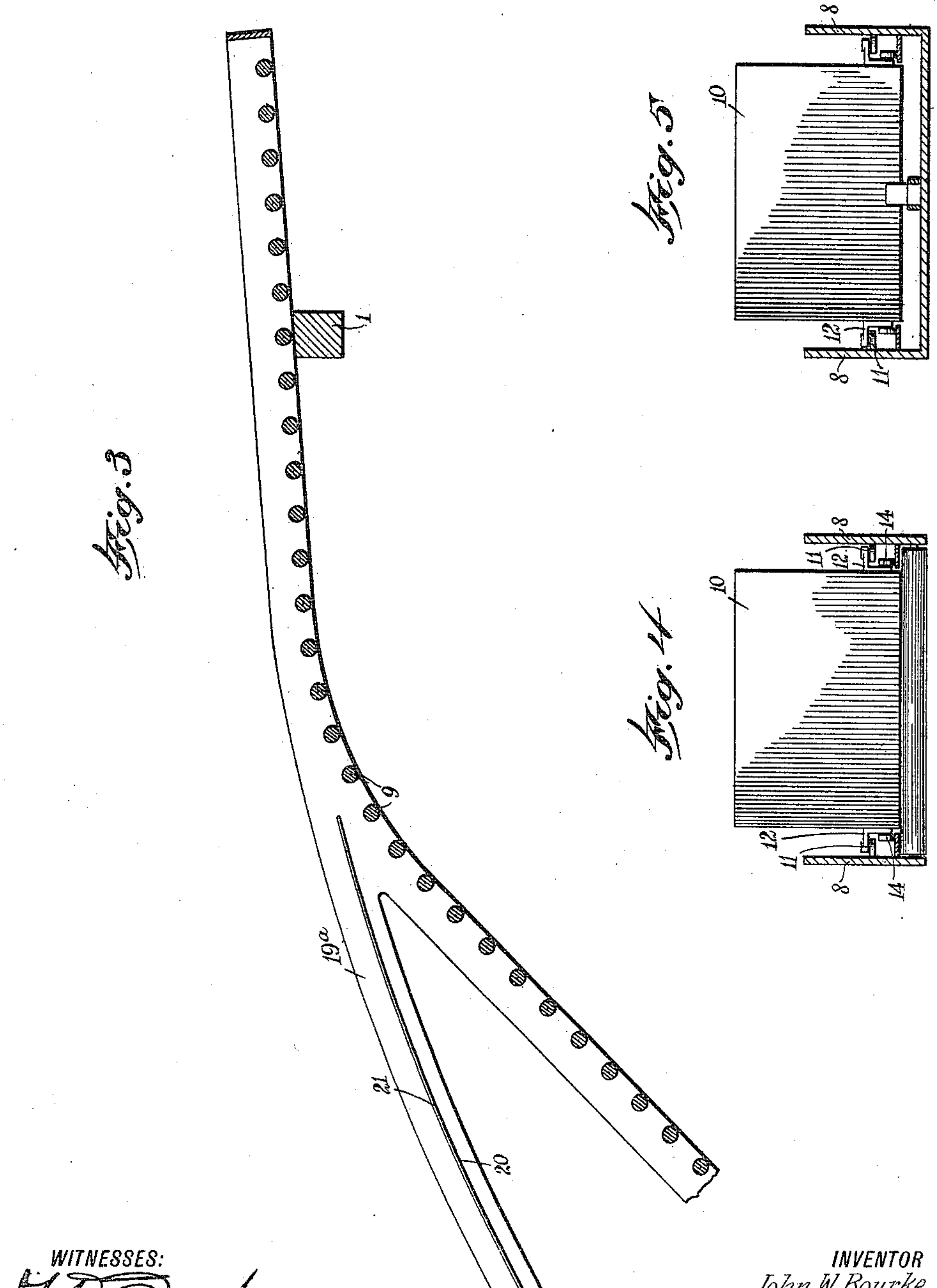

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JOHN W. BOURKE, OF DORCHESTER, MASSACHUSETTS.

PLEASURE-RAILWAY.

983,119. Specification of Letters Patent. **Patented Jan. 31, 1911.**

Application filed October 1, 1910. Serial No. 584,834.

To all whom it may concern:

Be it known that I, JOHN W. BOURKE, a citizen of the United States, and a resident of Dorchester, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Pleasure-Railway, of which the following is a full, clear, and exact description.

This invention relates to a new and improved amusement device of the pleasure-railway type, in which the pleasure-seekers are given a rolling, jolting ride in a zig-zag dipping manner calculated to give all the excitement required.

An object of this invention is to provide a device which will be simple in construction, strong, durable, and both exciting and fascinating in its operation.

A further object of this invention is to provide a pleasure railway with a plurality of superposed tracks, and with means for switching from one track to the other, so as to gradually lower the car in a zig-zag manner over an undulating dipping path.

These and further objects, together with the construction and combination of parts, will be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a side view in elevation; Fig. 2 is a top plan view; Fig. 3 is an enlarged fragmentary vertical section showing the junction of two adjacent tracks, one superposed above the other, and the means for switching a car from one track to the other; Fig. 4 is a vertical transverse section showing the structure of the car and its relation with the track at a switch, and taken on the line 4—4 of Fig. 3; and Fig. 5 is a vertical section showing the car on the riser portion of the track when it is engaged by the conveyer or elevator.

Referring more particularly to the separate parts of the device, 1 indicates a support of any suitable character, which, however, is preferably in the form of a plurality of ornamental columns 2, arranged in pairs and having the falling portion 3 of a track 4 arranged intermediate the pairs of columns and supported thereby.

The track 4 preferably consists of a complete circuit starting at a platform 5 and going around to an ascending portion 6, from whence it continues to the dropping or falling portion 3, from whence it continues back to the starting platform 5, so that a car started from the platform 5 will travel around a continuous circuit and return to the starting point. While this track may be of any suitable form, it preferably consists of side guards 8 spaced apart a suitable distance, and connected by a bed of rollers 9 rotatably supported on the side guards 8 in any well known manner. The track is adapted to be engaged by one or more cars 10 of any suitable form, preferably provided with a smooth bottom, which may be curved in form so as to readily engage the rollers 9 and travel thereon.

For the purpose of preventing the cars from scraping on the side guards 8 and sticking, the cars 10, as will be seen by reference to Figs. 4 and 5, are provided with fending rollers 11, rotatably supported on suitable brackets 12 on each side of the cars 10, in such a position as to readily engage the side guards 8.

At the ascending portion 6 of the track circuit, the rollers 9 may be omitted, and in place thereof rails 13 provided, for the support of the cars 10 when they are being elevated from the low level to the high level. In order that the cars may anti-frictionally engage these rails 13, they are further provided with supporting rollers 14, rotatably supported on the car body 10 in any well known manner and preferably located above the lower surface of the car body, so that they will not engage with the rollers 9 when the car is superposed above said rollers. The means for elevating the cars from a low to a high level may be of any suitable character, such as an endless chain elevator or conveyer 15, rotatably supported at its upper and lower ends, and intermediate its ends if necessary, by suitable sprockets or pulleys 16 and 17, one of which is driven by a suitable motor, indicated at 18. This elevator 15 is provided at suitable intervals with catches 19, which are adapted to engage notches located on the bottom of the cars at any suitable portion thereof, preferably the middle. The descending or dropping portion 3 of this trackway or track circuit is of a peculiar character, in that it consists of a plurality of tracks or runs 19ª

superposed one above the other in spaced relation. Each of these runs or tracks is connected to the juxtaposed run or track, so that the junctions or points of connection are alternately arranged at opposite ends of the runs; that is to say, in staggered relation. These runs are preferably in the form of dips having a descending portion and an ascending portion, the ascending portion being preferably located adjacent the point of junction with the next run, so as to slow up the cars before switching from one run to the other run. As will be noted by reference to Figs. 2 and 3, the particular means for shifting from one run to the adjacent run consists of a switch 20 formed of a plurality of track rails 21, which take the place of the rollers 9 omitted at this place. These rails 21 terminate in comparatively close juxtaposition to the bed of rollers 9 on the subjacent run or track, but are spaced apart sufficiently therefrom to permit the supporting rollers 14 of the cars 10, which carry the cars on the rails 21, to pass thereunder, so as to form no obstruction to the shifting of the cars from one track to the subjacent track. The lowermost of these back-and-forth dipping runs is connected to the starting part of the circuit, which extends at a level alongside of the platform 5. The track may be provided at one or more points with in-and-out curves 22, which form a sinuous path for the purpose of sharply shunting the cars 10 from side to side, to give the passengers additional excitement.

The operation of the device will be readily understood when taken in connection with the above description. The passengers are loaded into the cars from the platform 5, and the cars started successively around toward the left, until they are caught by the elevator or conveyer 15, when they will be run up the inclined portion 6 to the heighest point of the trackway. From here on, the cars travel down by gravity, striking the uppermost run 19^a of the descending portion. Each car here runs down the incline, attaining a considerable momentum, and runs up the opposite incline, which is of slightly less elevation. The car runs off the end of this run or trackway and is deposited with a slight jolt onto the subjacent run or trackway, where the car automatically dips in the opposite direction, so that those who were facing forward are now facing backward. This operation continues, giving the riders a back-and-forth dipping ride from one side to the other, until the lowermost run is reached, when the car runs easily back to the starting platform 5, where the passengers disembark, and a new load is taken on. The sinuous character of the trackway at various points in the circuit, and the up-and-down undulating dips, give the car sufficient jars, jolts and changes of direction to afford a great deal of excitement and amusement.

While I have shown one embodiment of my invention, I do not wish to be limited to the specific details thereof, but desire to be protected in various changes, modifications and alterations which I may make within the scope of the appended claims.

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

1. The combination with a plurality of tracks extending in opposite directions at different levels, of a car adapted to run on said tracks, and a stationary switch at the junction of each of said tracks to the juxtaposed tracks.

2. The combination with a support, of a plurality of superposed tracks connected to said support, and a car adapted to run on said tracks, said tracks having a stationary junction whereby said car may be dropped from one of said tracks to another of said tracks.

3. The combination with a track having a bed of rollers in portions thereof and having rails in other portions thereof, of a smooth-bottom car adapted to travel on said rollers, said car having supporting rollers located above the bottom thereof and adapted to engage said rails.

4. The combination with a plurality of superposed tracks, each having upper and lower ends, the lower end of each track being fixedly connected to the upper end of the next subjacent track, of a car adapted to run on said tracks.

5. The combination with a plurality of tracks, each having upper and lower ends, the lower end of each track being connected to the upper end of the next subjacent track, of a car adapted to run on said tracks, each of said tracks having a bed of rollers for a portion thereof and having rails for a portion thereof adapted to support said car.

6. The combination with a plurality of tracks, each having upper and lower ends, the lower end of each track being connected to the upper end of the next subjacent track, of a car adapted to run on said tracks, each of said tracks being formed with a bed of rollers at their upper ends, and each of said tracks having rails at the junction with the next subjacent track.

7. The combination with a roller track, of rails forming a continuation of said roller track, a roller track subjacent said rails, and a car adapted to run on said first-mentioned roller track and said rails and also adapted to shift from said rails to said second-mentioned roller track.

8. The combination with a track forming a complete circuit, of one or more cars adapted to run on said track, said track compris-

ing an ascending portion, a descending portion and a return circuit, said descending portion comprising a plurality of superposed runs, and means for shifting said car from one of said runs to another of said runs in a vertical direction.

9. The combination with an inclined track having an opening in one end thereof, of a second fixed inclined track disposed directly below said opening and having an opening in its opposite end, and a third fixed track extending directly below said opening in said second track and having an opening in its opposite end.

10. The combination with a plurality of superposed dipped tracks having their ends higher than their intermediate portions and having one end lower than the other, the low end being located alternately on opposite sides in the successive tracks, of a car adapted to travel back and forth on said tracks.

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

JOHN W. BOURKE.

Witnesses:
W. H. JOHNSON,
WILLIAM DIEBOLD.