E. F. VON TAUTPHOEUS.

AMUSEMENT RAILWAY.

APPLICATION FILED JUNE 20, 1921.

1,430,203.

Patented Sept. 26, 1922.

2 SHEETS—SHEET 1.

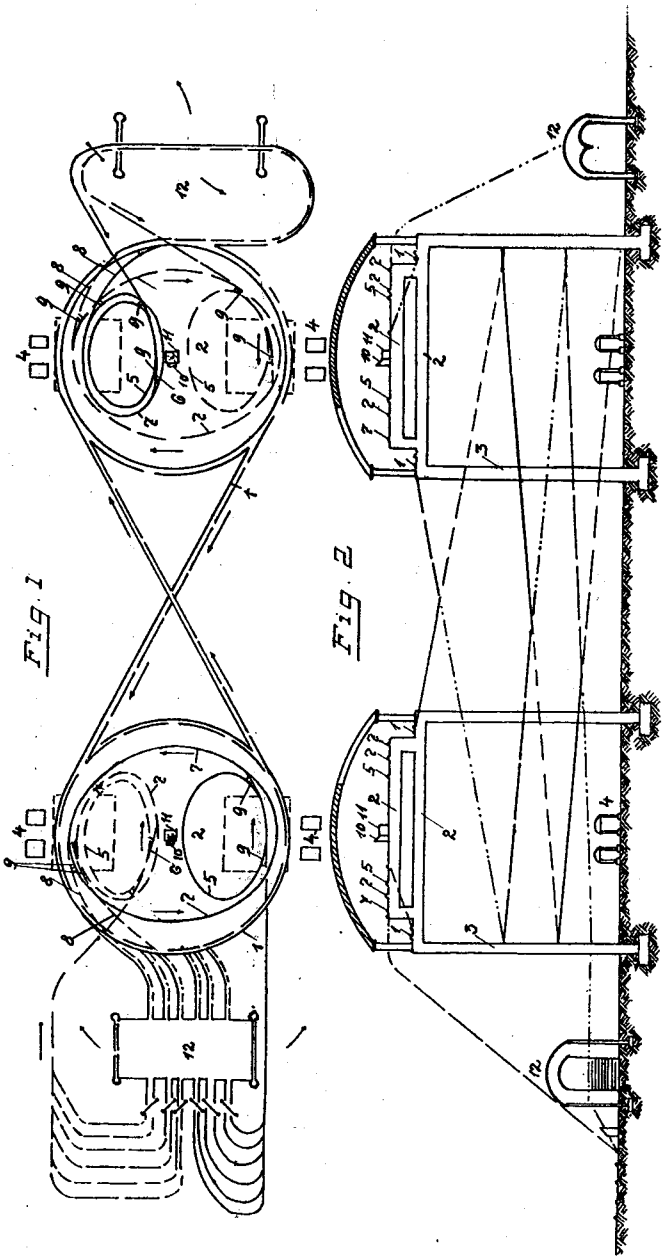

Fig. 1

Fig. 2

INVENTOR:
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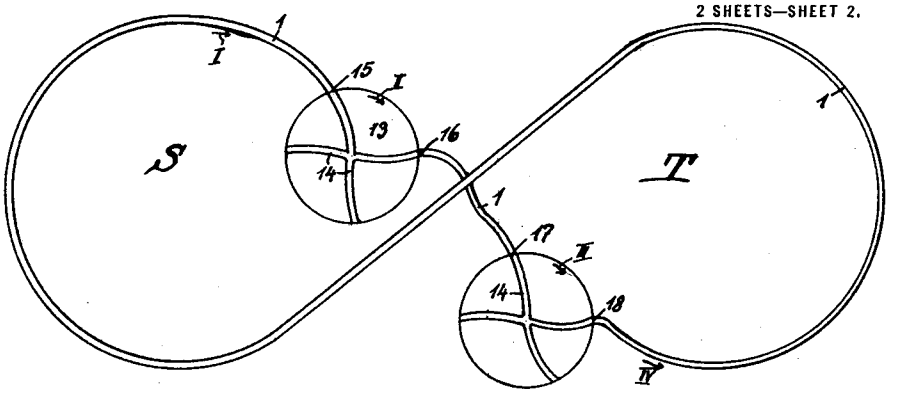
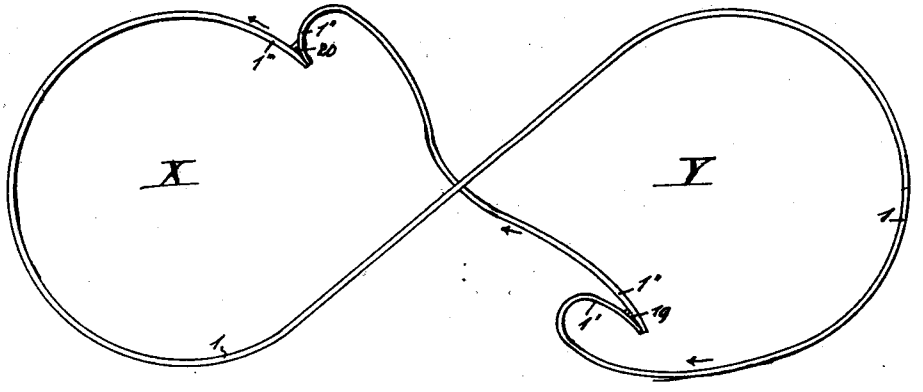


Fig. 3.

Fig. 4



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UNITED STATES PATENT OFFICE.

EGON FREIHERR von TAUTPHOEUS, OF MUNICH, GERMANY.

AMUSEMENT RAILWAY.

Application filed June 20, 1921. Serial No. 478,915.

To all whom it may concern:

Be it known that I, EGON FREIHERR v. TAUTPHOEUS, a citizen of Germany, residing at Munich, Bavaria, Germany, have invented certain new and useful Improvements in Amusement Railways; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in amusement railways of the class in which the tracks or lines run in a loop or loops, preferably in the shape of an eight (8) and is intended for use as a toy or as a contrivance for the amusement of people and the object of my invention is to provide for certain novelties in the construction and employment of this pleasure apparatus, as described and set forth in the following statement.

In describing my said invention I refer to the drawing herewith in which Figure 1 is a plan view and Figure 2 a diagram in side-elevation of my new railway while Figures 3 and 4 are plan views of modified forms of the invention.

The essential feature of my invention is that the main line of the whole system is connected by the interposition of switches with two tracks or a plurality of tracks of separate secondary lines, hereinafter called "choice-lines" that any car running on one of the said secondary lines may at pleasure during the ride be brought together with and joined to any car running on another corresponding secondary or choice-line, such joining being effected by electric, electro-mechanical or mechanical switching or in any other suitable way, the object being that the two cars make the journey throughout the loop in company and the joining being effected either on or in advance of the switch between the secondary lines and the main line or on the latter itself.

Between the secondary lines and the main line there may be inserted a third line, hereinafter called "line of introduction," the tracks of the same to be connected by means of switches with the corresponding "choice-line" and the main line. The latter comprises a double set of tracks, so that the coupled cars may travel side by side. The cars may further be provided with roofs which, when two cars are being coupled together, may be closed either by hand or automatically by some electric, electro-mechanical, mechanical or other suitable means.

In Figures 1 and 2 there is the double set of tracks one of an 8-railroad system, here shown as an intermontane, that is dipping and ascending railroad with two platforms 2 supported by scaffolds 3. Each of these two platforms has two entrances 4 one of which may be for men and the other for ladies. By the interposition of escalators or lifts persons passing through these entrances may ascend from the ground to the platforms. On each of the latter there may be provided the single tracks of a pair of secondary or choice-lines each of which forms what may be termed a closed circuit. The tracks of these secondary lines 5 may each be connected by tracks 6 with the tracks 7 of a third single-track line or "line of introduction." From these lines 7 connecting-tracks 8 may lead to the double set of tracks of the main line 1. Suitable switches 9 may be provided which, in the example shown in the drawing, may be electrically controlled from the stations 10. In each of these stations 10 there should be stationed an operator for the switch-board 11. Into the exits 12 open the switch-operated branches or arms of the double-track 1, the number of these arms corresponding with the number of cars running on the two choice-lines 5.

The railway system may be operated as follows: On each platform men take the cars of one and ladies those of the other choice-line 5 and travel over the same in the direction of the arrow a given number of times.

If it be men's choice and a man desired to have his car coupled with the car of a certain lady on the corresponding line 5, he may by the exhibition of a certain sign on his car or by any other suitable means, notify the operator at station 10 of his intention. As the man's car approaches the switch 9 of the choice-line 5, the operator shunts the said car, so that it passes over the track 6 to the line 7, the so-called line of introduction. Thereupon the man's car travels around the choice-line 5 of the ladies and the passenger introduces himself to the selected lady. If the latter is ready to have her car coupled to his, she will likewise

notify the operator at 10. The latter will now shunt the ladies' car shortly before its arrival in front of the switch 9 of the respective choice-line and so transfer it to the line 7. When the cars which have been selected to accompany each other are side by side, whether such cars are on the tracks 7 or near the switches which by the intermediation of tracks 8 connect the former with the main line 1, or on the said main line itself, they may be automatically coupled and may now travel together over the said main line 1 a certain number of courses. The operator at 10 must determine the proper time for the transfer of the men's cars and the ladies' cars from the choice-line to the line of introduction and the main line. He must have in mind that if the cars do not meet before reaching the main line 1, and thus travel uncoupled on the latter, the cars, on the track which is for the time the inner of the circular portion of the main line 1, must run in advance of the car on the outer of the circular tracks. The same is true with respect to the other pairs of cars. Men's cars, the passengers of which are not yet ready for their respective choices, may proceed on the choice-line 5 or get themselves shunted alone over the main line 1. Ladies who have found no partner may do the same. After a certain number of courses on the choice-lines 5 the cars may be mechanically, electro-mechanically or pneumatically expelled into the main line 1. When the respective number of courses on the main line has been finished, the switches may be fixed near the exits 12 by hand or automatically, so that the passengers may get out of the cars. The empty cars may then be returned to their respective choice-lines.

In the illustrated form of my invention the procedure may be such that while the choice is going on on one platform the return of the cars into their lines of choice and the occupation of the cars take place on the other platform.

My invention permits of improvements and modifications without deviating from the spirit and scope of my invention; thus the loop may be provided with a continuous double set of tracks having means permitting of turning cars coupled side by side 180 degrees during a ride. For this purpose these constructions may consist of turn-tables with double sets of tracks or they may consist of switches connecting two arms of double sets of tracks converging in acute angles.

In the form of invention shown in Figure 3 there are inserted in the loop of the continuous double track 1 turn-tables 13 with double-tracks 14 crossing each other in the middle of said turn-tables. Now, when a pair of cars, or a single car, comes during the ride on the loop S of the track 1 in the direction of the arrow I it will at 15 reach the first turn-table 13 which may then be turned in the direction of the arrow II. On this turn-table the car or cars will remain until they are in position for transference, at 16, to the part of track 1 containing the loop T; whereupon the turn-table 13 may be fixed and the pair of cars caused to pass to the part of the track 1 containing the loop T. The pair passes then the track opposite to the position which it had previously occupied at an angle of 180 degrees. At 17 the cars reach the other turn-table 13 which will turn in the direction of the arrow III. They will leave it again at 18 to pass to loop T. By this second turn-table 13 the pair of cars or the single car is again turned 180 degrees, so that when the cars leave this second turntable at 18, they arrive on the loop T in the position in which they had been previous to getting on the second turn-table 13. On the loop T they proceed now in the direction of the arrow IV, corresponding with that of the arrow I.

In the form illustrated in Figure 4 the pair of cars or the single car, going over the double-track 1 passes at 19 to a switch which connects with each other the double-track arms 1′ and 1″ of the loops X and Y converging in an acute angle. After adjustment of the switch 19 from the arm 1′ to the arm 1″ the cars will proceed on the latter in a direction 180 degrees in relation to the position in which it had been on the arm 1′. At 20 the arm 1‴ of the double-line track converges in an acute angle with the arm 1‴ of the loop X and also in this place a switch may be provided. After reversing the same the single car or the coupled pair of cars is transferred from the track-arm 1″ to the arm 1‴, being turned 180 degrees in the direction of their travel, so that they now occupy on the track of the loop X that position in which they had been previous to entering the switch 19.

I claim:—

1. An amusement railway, comprising a main line having a loop therein, a plurality of circulatory auxiliary lines within said loop, and means for transferring cars from the auxiliary lines to the main line.

2. An amusement railway, comprising a double track main line having a loop therein, a plurality of single track circulatory auxiliary lines within said loop, and means for transferring cars from the auxiliary lines to the main line.

3. An amusement railway, comprising a main line, a plurality of circulatory auxiliary lines juxtaposed to parts of said main line, a connecting line for said auxiliary lines and said main line, said connecting line partly encircling one of said auxiliary lines and completely encircling another thereof,

and means whereby cars may be transferred from the auxiliary lines over the connecting line to the main line.

4. An amusement railway, comprising a double track main line having a loop therein, a plurality of single track circulatory auxiliary lines within said loop, a line connecting said auxiliary lines to each other and to the main line, and means whereby cars may be transferred from the auxiliary lines over the connecting line to the main line.

5. An amusement railway, comprising a double track main line having a loop therein, a plurality of single track circulatory auxiliary lines within said loop, means for transferring cars from the auxiliary line to the main line, and means in said main line for changing the direction of travel of cars thereover.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

EGON FREIHERR VON TAUTPHOEUS.

Witnesses:

OLGA FREIGRAU V. TAUTPHOEUS,

GEORGE MÜLLER.