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RAILWAY FOR PLEASURE AND SPORT.

APPLICATION FILED NOV. 17, 1911.

**1,019,834.** Patented Mar. 12, 1912.

Fig 1.

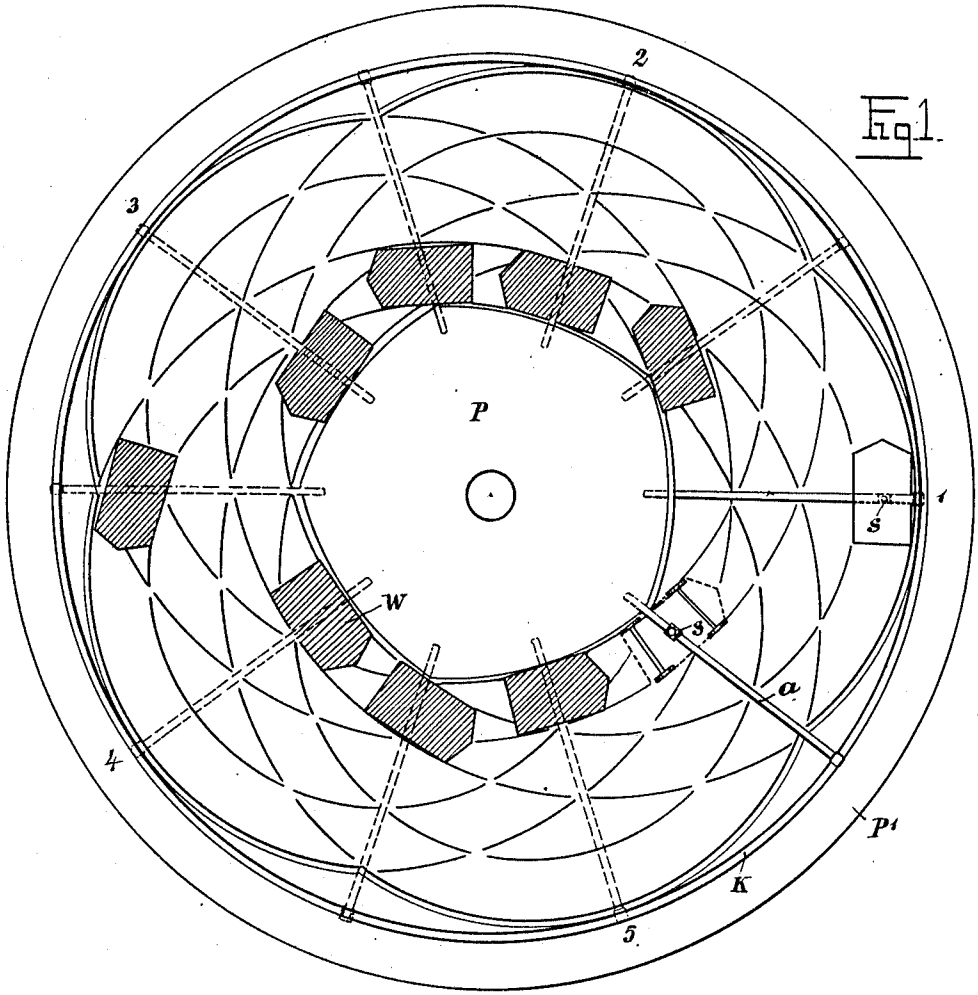
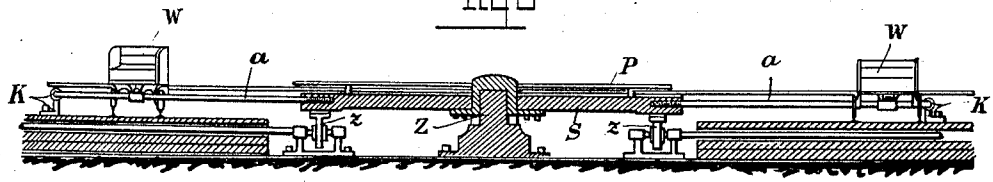



Fig 2.

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# UNITED STATES PATENT OFFICE.

NORBERT POLLAK, OF NORDBAHNHOF, VIENNA, AUSTRIA-HUNGARY.

## RAILWAY FOR PLEASURE AND SPORT.

1,019,834. Specification of Letters Patent. Patented Mar. 12, 1912.

Application filed November 17, 1911. Serial No. 660,919.

*To all whom it may concern:*

Be it known that I, NORBERT POLLAK, official of the Imperial Royal State Railways, a subject of the Emperor of Austria-Hungary, and residing at Nordbahnhof, Vienna, Austria-Hungary, have invented new and useful Improvements in Railways for Pleasure and Sport, of which the following is a specification.

The present invention relates to a railway for pleasure and sport, in which the track or the permanent way of the railway consists essentially of a continuous interlooping, but always outwardly returning curve, upon which the carriages, the number of which corresponds to the number of the loops of the curve, are mechanically guided in such manner, that their distances from each other and their position upon the track at a given moment is fixed from the beginning, so that a contact or collision of two carriages is impossible. The riding upon this railway, therefore, awakes the sensation of a collision, without it ever being possible for such a collision to happen.

The driving of the single carriages can be effected from a central disk or a central wheel, for instance by means of radial arms, which are guided and kept upon an outer rim, the carriages being slidably connected to the said arms.

The continuous curve consists of a number of directly connected loops, each of which uniformly returns outwardly, a cornered platform being formed in the interior of the curve. Along the outer line of the curve or of the outer track another platform is arranged.

According to the size of the curve on the one hand, and according to the size of the carriages on the other hand, a number of carriages can travel upon the track of the curve. The carriages are slidably connected to radial arms, arranged at equal distances by means of slides provided on the carriages, so that they can only pass through the track together with these arms.

The radial arms may be fixed upon a central disk, and guided by a circular rail. The said disk may be rotatively mounted upon a fixed pivot, and receive its drive by means of toothed wheels, engaging in a wheel rim arranged on their lower side.

The upper platform is stationary and is kept away from the disk by means of small rollers.

All the movable parts are well mounted (driving upon ball-bearings).

It is obvious that instead of the radial arms, chains, ropes or the like could be employed, which would be provided at a crossing point with switches or changing devices. The outer and inner platforms or both, could also be arranged for a game of throwing balls. A somewhat less satisfactory arrangement can also be made in such a manner that the carriages are stationary relatively to the curved track, and that the curved track is rotated, so that the carriages move along the arms.

In the drawing Figure 1 shows a plan view of the railway, Fig. 2 a vertical section of the same.

In the drawing: C designates the track consisting of the continuous interlooping curve with five directly connected loops, $P^1$ the cornered platform, W the carriages, the number of which, may correspond to the number of the loops or to the radial arms *a*, on which the carriages are mounted by slides *s*. S is the central disk or wheel effecting the driving of the carriages and pivoted in Z, *k* an outer rim for guiding the radial arms *a*.

P is the outer platform, *r* are rollers supporting the disk S on this platform.

*z* designates toothed wheels engaging the teeth placed on the under side of the disk and causing the driving of the disk.

Having now described the nature of my invention, what I claim is:

1. An amusement device comprising in combination, a central platform, a single trackway extending around the platform outwardly and then inwardly and intersecting its course at a plurality of points, a plurality of cars on said trackway, elements radially disposed with respect to the axis of said platform and slidably connected with said cars, and means for advancing said elements in a circle about the axis of said platform for propelling said cars along said trackway, substantially as described.

2. An amusement device comprising in combination, a central platform, a trackway extending around the platform outwardly and then inwardly in continuously curved lines and intersecting its course at a plurality

of points, a plurality of cars mounted on said trackway, and elements movable in a circle of said platform and slidably connected with said cars for advancing the same on said trackway, substantially as described.

3. An amusement device comprising in combination, a central loading platform, a circumferential unloading platform surrounding said loading platform and spaced apart therefrom, a single trackway between said platforms having a starting point at the loading platform and a delivering point at the unloading platform and extending a plurality of laps about said loading platform and intersecting its course at a plurality of points, cars on said trackway and elements slidably connected with said cars and movable in a fixed circular path about said central platform, substantially as described.

4. An amusement device comprising in combination, a plurality of car propelling bars movable in a fixed circular path, cars slidably connected with said bars, and car guiding means for shifting said cars radially outwardly and inwardly with respect to said bars during propulsion of the cars thereby, substantially as described.

5. An amusement device comprising in combination, a plurality of car propelling bars movable in a fixed path, cars slidably connected with said bars, and car guiding means for shifting said cars with respect to said bars during propulsion of the cars thereby, substantially as described.

6. An amusement device comprising in combination, a plurality of car propelling devices movable in a circular path, cars slidably connected with said devices, and a trackway for the cars extending inwardly and outwardly in a generally circular path on continuously curved lines and intersecting its course at a plurality of points.

7. An amusement device comprising in combination, a circuitous car guideway having a plurality of curved portions lying one within the other and intersecting its own course at a plurality of points, and a plurality of cars therefor, substantially as described.

8. An amusement device comprising in combination, a circuitous car guideway having a plurality of circular portions lying one within the other and intersecting its own course at a plurality of points, and a plurality of cars therefor, substantially as described.

9. An amusement device comprising in combination, a generally and continuously circular circuitous car guideway intersecting its own course at a plurality of points, and a plurality of cars therefor, substantially as described.

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

NORBERT POLLAK.

Witnesses:
IGNAZ KUÖRFCHUACHER,
AUGUST FUGGER.