No. 825,130. PATENTED JULY 3, 1906.

J. JÜRGENS.

AMUSEMENT APPARATUS.

APPLICATION FILED NOV. 6, 1905.

4 SHEETS—SHEET 1.

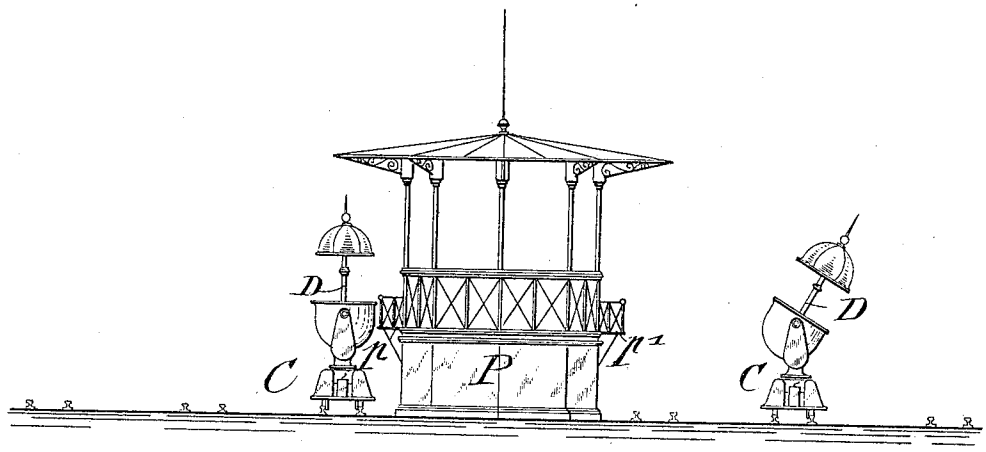


Fig:1.

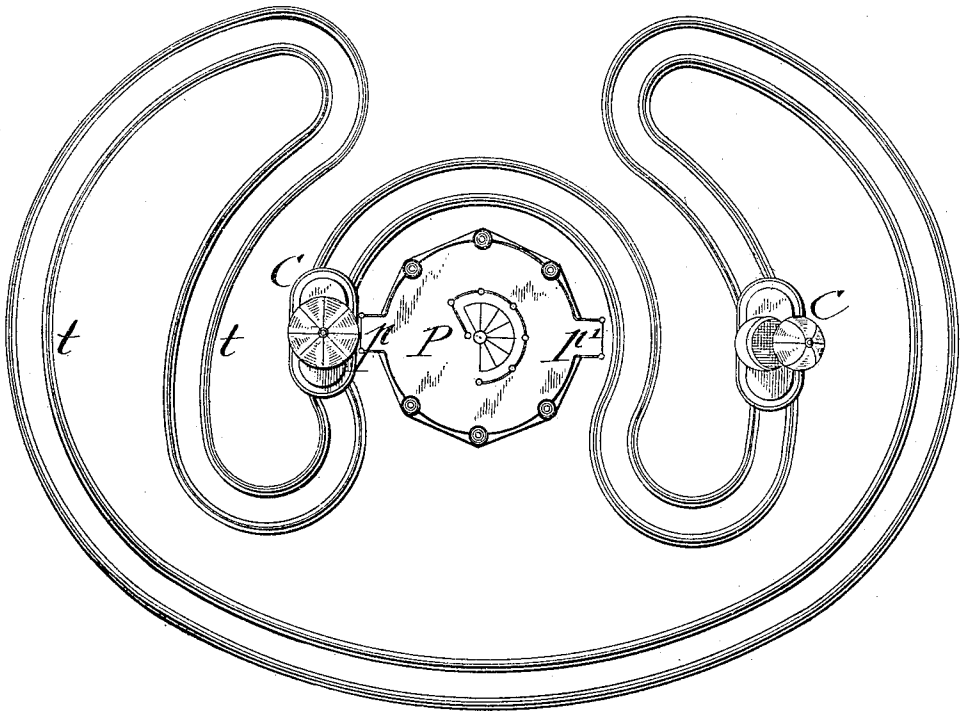


Fig:2.

Witnesses
A. J. Buhrtin
Jacob Roth

Inventor
Johann Jürgens
By his Attorneys
Gowan & Gowan

THE NORRIS PETERS CO., WASHINGTON, D. C.

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4 SHEETS—SHEET 2.

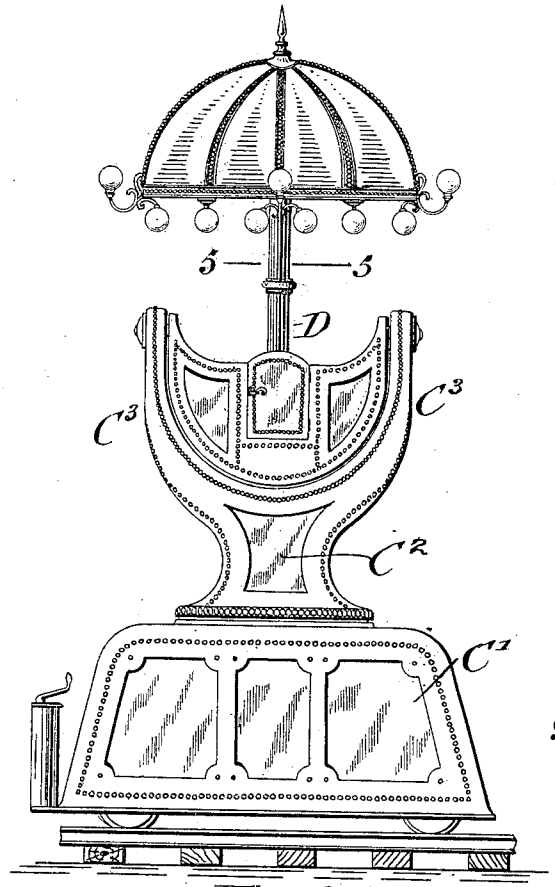
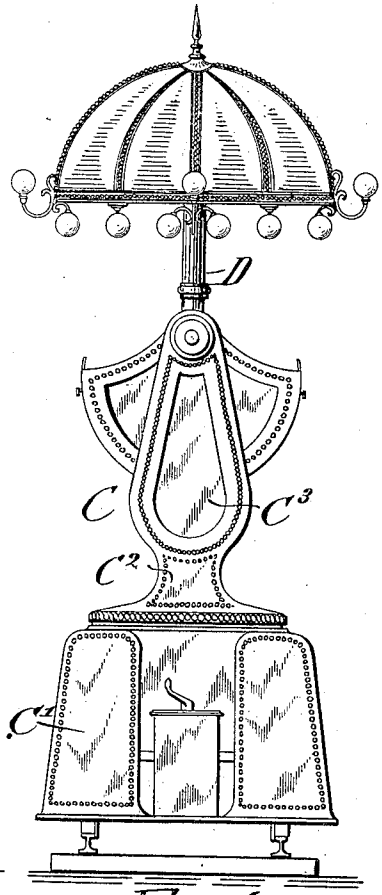



Fig: 3.

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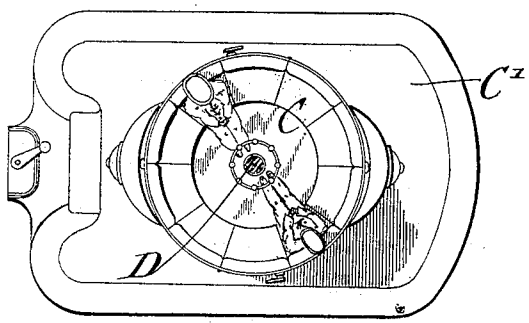


Fig: 5.

Witnesses,
H. Duhrkier.
Jacob Bell.

Inventor
Johann Jürgens
By his Attorneys
Bruce Goepel & Co.

THE NORRIS PETERS CO., WASHINGTON, D. C.

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J. JÜRGENS.

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4 SHEETS—SHEET 3.

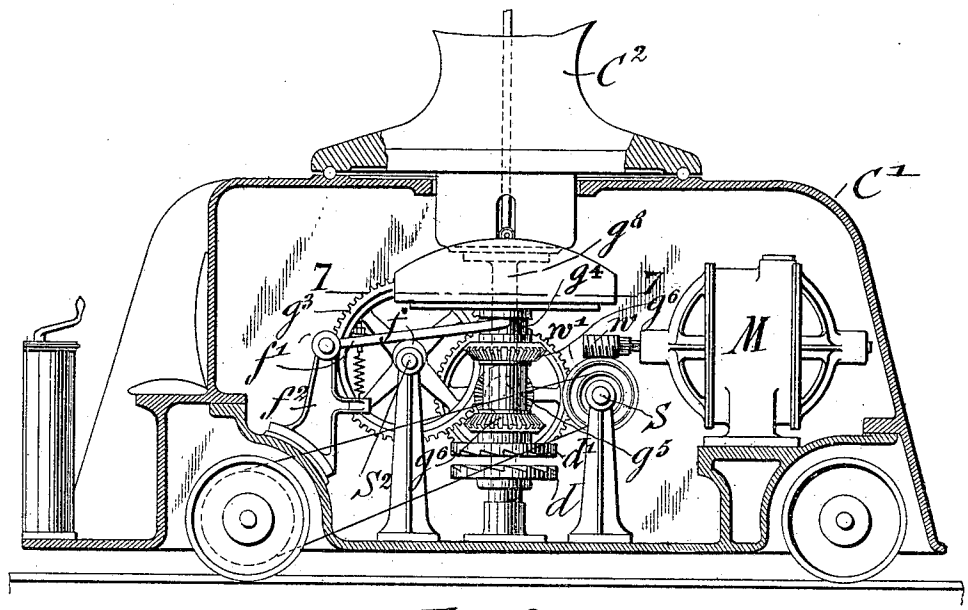


Fig: 6.

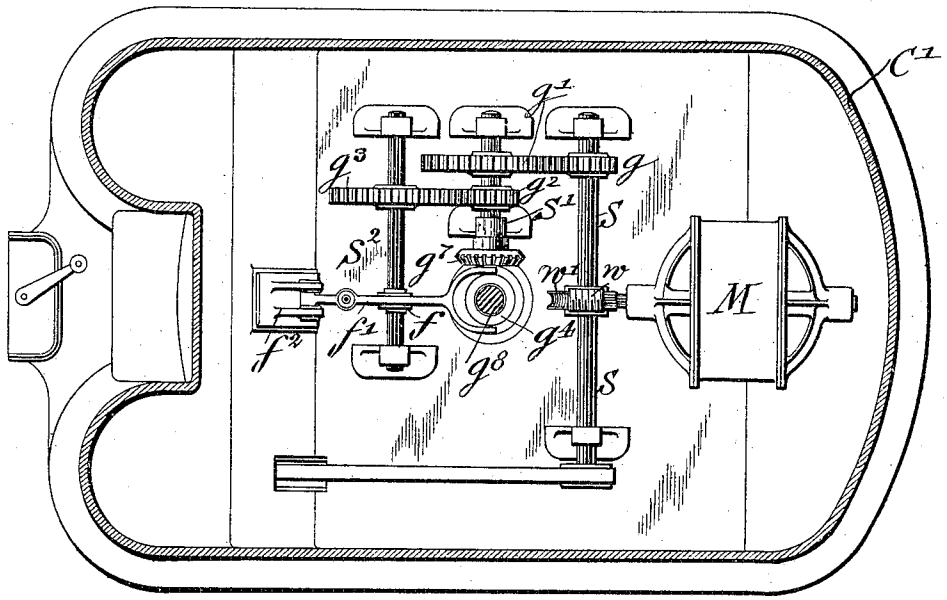


Fig: 7.

Witnesses
A. J. Buhrtier
Jacob Roth

By his Attorneys

Inventor
Johann Jürgens
Howell & Howell

THE NORRIS PETERS CO., WASHINGTON, D. C.

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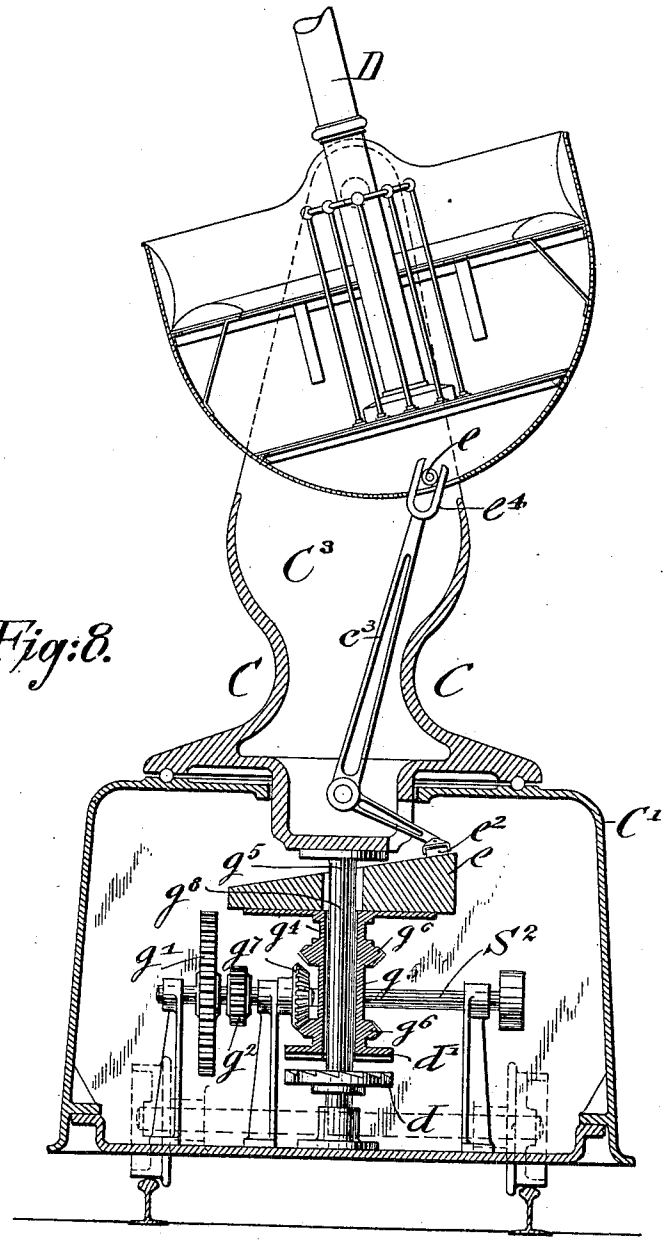
4 SHEETS—SHEET 4.

Fig. 8.




Witnesses
A. F. Dahlberg.
Jacob Rolb

By his Attorneys

Inventor
Johann Jürgens
Francis Greene

THE NORRIS PETERS CO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

JOHANN JÜRGENS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO CHARLES KRETSCHMER, OF BROOKLYN, NEW YORK.

## AMUSEMENT APPARATUS.

No. 825,130. Specification of Letters Patent. Patented July 3, 1906.

Application filed November 6, 1905. Serial No. 286,118.

*To all whom it may concern:*

Be it known that I, JOHANN JÜRGENS, a citizen of the Empire of Germany, residing in New York, in the borough of Brooklyn and State of New York, have invented certain new and useful Improvements in Amusement Apparatus, of which the following is a specification.

This invention relates to an improved amusement apparatus which is intended for public parks, seashore places, &c., and which is based on electrical transmission of passengers in gondola cars of peculiar construction, the amusement consisting in the ride taken by the passengers and the motion imparted to the gondola while the car is moving over a track; and for this purpose the invention consists of an amusement apparatus consisting of a suitable track and cars running over said track and receiving and delivering the passengers at a suitable platform.

The invention consists, further, of the construction of the gondola car and the means for imparting alternately a rotary motion and an oscillating motion to the gondola car while the same is moving over the track in the regular manner.

In the accompanying drawings, Figure 1 represents a side elevation of my improved amusement apparatus, showing the platform, the track, and two gondola cars moving on said track. Fig. 2 is a plan view of Fig. 1. Fig. 3 is a side elevation of the gondola car. Fig. 4 is an end elevation of the same. Fig. 5 is a plan view, partly in horizontal section, on line 5 5, Fig. 3. Fig. 6 is a detail vertical longitudinal section through the motor mechanism of the gondola car. Fig. 7 is a plan view of Fig. 6, showing the transmitting mechanism, partly in section, on line 7 7, Fig. 6; and Fig. 8 is a vertical transverse section through the car, showing the mechanism for imparting alternately rotary and oscillating motion to the gondola cars.

Similar letters of reference indicate corresponding parts in the different figures of the drawings.

Referring to the drawings, *t* represents a track which is arranged in any suitable curve in proximity to and around a platform P, on which the persons who desire to use the amusement apparatus are conducted for entering into or getting out of a number of gondola cars which are running by electric power in the nature of trolley-cars with underground circuits over the track. The platform P is provided at any suitable points, preferably at diametrically opposite points, with small projecting platforms $p$ $p'$, from which the passengers enter into the car or leave the car when the same has completed its regular trip over the track. The gondola cars C are provided in their lower part with a closed casing C′ with an electromotor M, to which the current is supplied from a central station and by which the car is driven, the motorman being seated at the front part of the casing, so as to start and stop the car and control the speed of the same. The motor M is rotated by the current in the usual manner and transmits motion by belt-and-pulley transmission to the truck on which the car C is supported, as shown clearly in Figs. 6 and 7, the motor-shaft transmitting, by means of a worm and worm-gear $w$ $w'$, the rotary motion to the driving-shaft S, to which the belt-and-pulley or other suitable transmitting mechanism is applied. On the casing C′ of the car C is arranged a turn-table provided with antifriction-rollers, on which the pillar $C^2$, which is provided with curved upwardly-extending standards $C^3$, is supported.

To the upper parts of the standards $C^3$ is pivoted, by means of suitable gudgeons, the car-body or gondola C, which is preferably cup-shaped and provided with seats for, say, ten passengers and with hinged doors at diametrically opposite points, which are also provided with seats, so that a maximum number of persons can be seated in the car. Below the seats in the gondola C is arranged a bottom and a pillar D, which is surrounded by a railing *d*, the lower part of which serves as a foot-rest for the passengers seated in the gondola. To the upper end of the pillar is applied an ornamental roof or canopy, which is provided with incandescent lights, so as to be lighted up at night.

After the gondola is filled at the platform P with persons who desire to take a ride the motorman starts the car over the track, when

the signal to move is given. While the car is moved over the track, a rotary motion is imparted to the gondola alternately with an oscillating motion, the rotary and oscillating motion forming the attraction and giving the amusement to the passengers. For this purpose the opposite end of the driving-shaft S is provided with a pinion $g$, which meshes with a gear-wheel $g'$ on an intermediate stud-shaft S′, the stud-shaft being supported, like the main shaft S, in upright standards that are supported on the bottom of the casing C′. A pinion $g^2$ on the intermediate shaft S′ meshes with the gear-wheel $g^3$ on a third shaft $S^2$, which carries a cam $f$, which raises or lowers a forked and spring-actuated lever $f'$, pivoted to a bracket $f^2$, that is attached to the end of the casing near the motorman, the forked end engaging a grooved collar $g^4$, which is placed on a sleeve $g^5$, provided with bevel gear-wheels $g^6$ at its upper and lower ends, that are alternately placed in mesh with a gear-wheel $g^7$ on the intermediate shaft S′, according as the forked lever $f'$ is raised or lowered by the rotary motion of the cam $f$. The upright shaft $g^8$ is supported in step-bearings on the bottom of the casing C′ and is provided with a disk-shaped enlargement at its upper end, which is attached to the under side of a central cylindrical depression arranged in the base of the pillar $C^2$, on which the gondola is supported. The connection of the upright shaft $g^8$ with the cylindrical portion of the pillar $C^2$ is clearly shown in Fig. 8. When the sleeve $g^5$ is lowered by the action of the forked lever on the grooved collar at the upper end of the same, so that the movable clutch member $d'$ engages with the fixed clutch member $d$, which is attached to the upright shaft $g^8$, then the transmitting gear-wheel $g^7$ on the shaft S′ is placed in mesh with the lower bevel gear-wheel on the sleeve $g^5$, and thereby rotary motion imparted to the upright shaft $g^8$ by the transmission of the clutch members, and thereby to the supporting-pillar $C^2$ and the gondola C. As soon as the cam or eccentric $f$ on the shaft $S^2$ raises the lever $f'$ the forked end of the same raises the sleeve $g^5$ by its action on the grooved collar $g^4$, so as to move the clutch members $d$ $d'$ out of mesh and bring the lower bevel gear-wheel on the sleeve $g^5$ into mesh with the gear-wheel on the intermediate shaft S′, so as to transmit thereby motion to an inclined block $e$, which is attached to a disk $e'$ at the upper end of the sleeve $g^5$. The block $e$ is provided with a central opening of sufficient size to permit the upright shaft $g^8$ to pass through the same and to permit the free motion of the block around the same. On the inclined face of the block $e$ is moved an antifriction-roller $e^2$, which is located at the end of an elbow-lever $e^3$, that is fulcrumed to the central depression of the pillar $C^2$, the upper end of the elbow-lever $e^3$ being forked at $e^4$, so as to engage an antifriction-roller $e^5$ in the lower end of the gondola below the bottom of the same. The rotary motion of the block $e$ imparts, by the intermediate fulcrumed elbow-lever $e^3$, an oscillating motion to the gondola. This oscillating motion alternates with the rotary motion which is imparted to the pillar $C^2$ and gondola C by the automatic shifting of the motion-transmitting mechanism, due to the action of the cam $f$ and forked lever $f'$ and the bevel gear-wheels and clutch members described. The cam and forked lever produce the ordinary upward and downward shifting of the sleeve, producing thereby the meshing of the clutch members, by which rotary motion is transmitted to the column, or the oscillating motion, by the raising of the sleeve and the bringing in contact of the inclined block or disk $e$ with the elbow-lever $e^3$, by which oscillating motion is imparted to the car. As the rotary motion imparted to the pillar and car alternates with the oscillating motion imparted to the same while the car is moving over the track, a great deal of amusement is given to the passengers in the same until they return to the platform and leave the same at the point opposite to where they have entered the car.

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

1. In an amusement apparatus, the combination, with a platform having auxiliary outgoing and incoming platforms, of an endless track arranged surrounding said platform, and cars moving from said platform over said track and surmounted by movable gondolas.

2. In an amusement apparatus, the combination, with a railway-track, of a platform located approximately in the center of said track and provided with auxiliary outgoing and incoming platforms, cars moving from the platform to and fro over the track, gondolas on said cars, and means for imparting alternately axial rotating motion and an oscillating motion to said gondolas.

3. In an amusement apparatus, a gondola car consisting of a truck, a motor mechanism supported on said truck, a pillar also supported on said truck provided with upwardly-curved supports, a gondola pivoted to said supports, means for imparting rotary motion to the gondola-supporting pillar, and means for imparting oscillating motion to the gondola on its pivots.

4. In an amusement apparatus, a gondola car consisting of a truck, an electric motor for driving the same, a casing surrounding the motor provided with a turn-table, a pillar

having side supports and a base on said platform, means for imparting rotary motion to the upright pillar, a gondola pivoted to said side supports provided with doors, and means for imparting oscillating motion to the gondola alternating with the rotary motion imparted to the supporting-pillars.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOHANN JÜRGENS.

Witnesses:
PAUL GOEPEL,
H. J. SUHRBIER.