No. 828,921. PATENTED AUG. 21, 1906.

R. BUCHANAN, Jr.

PLEASURE RAILWAY.

APPLICATION FILED FEB. 9, 1906.

2 SHEETS—SHEET 1.

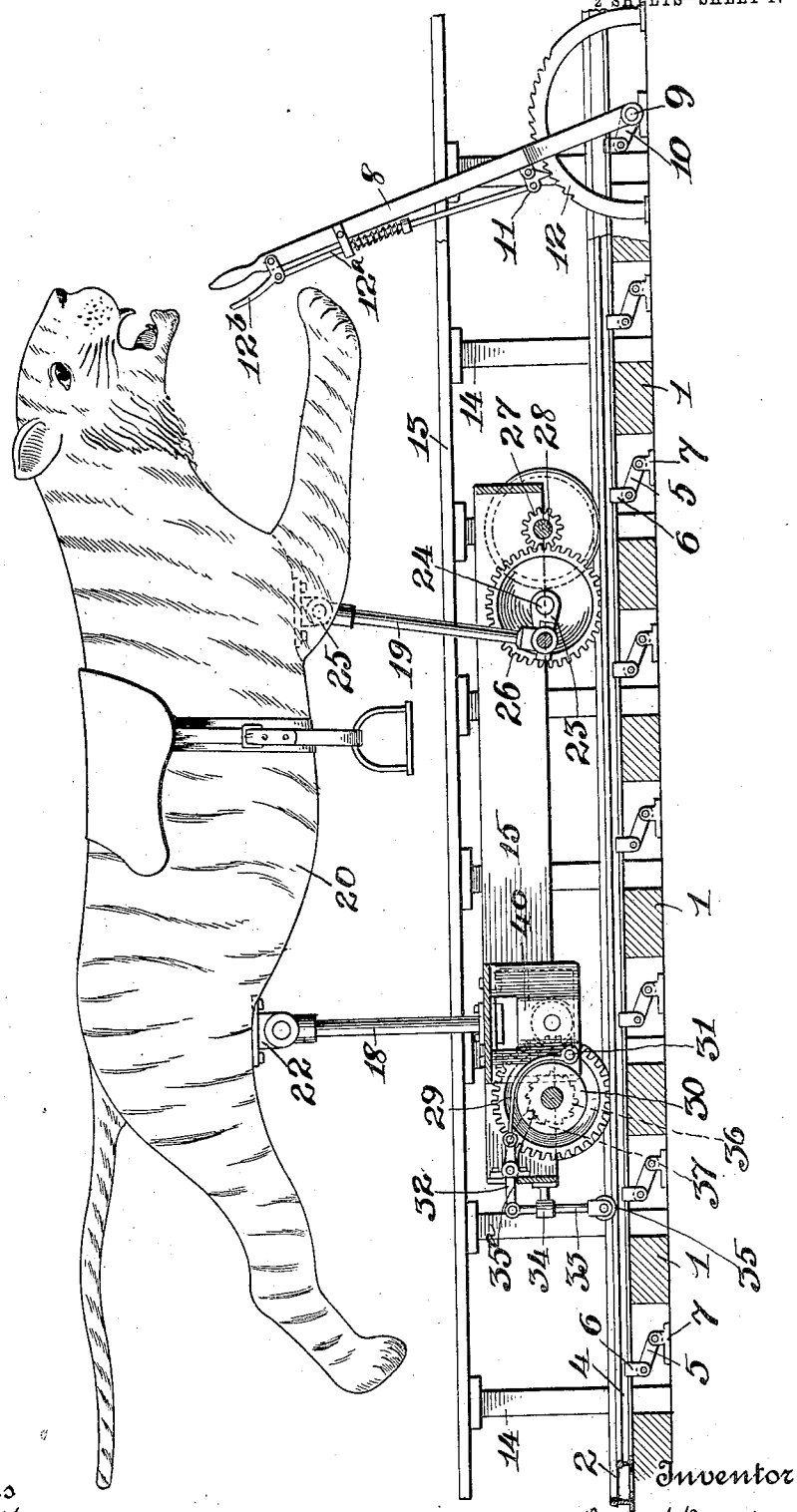

Fig. 1.

Witnesses

Chas. L. Wolf

Albert B. Blackwood.

Inventor

Robert Buchanan Jr.

By his Attorney

Charles A. Stephens

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2 SHEETS—SHEET 2.

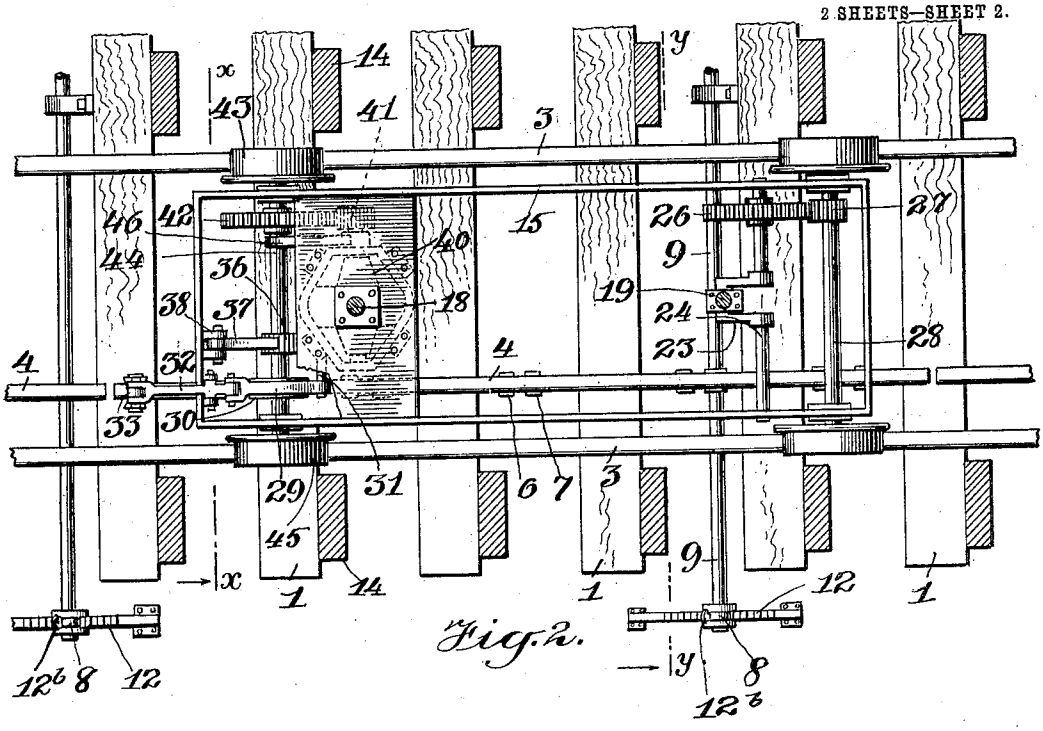

Fig. 2.

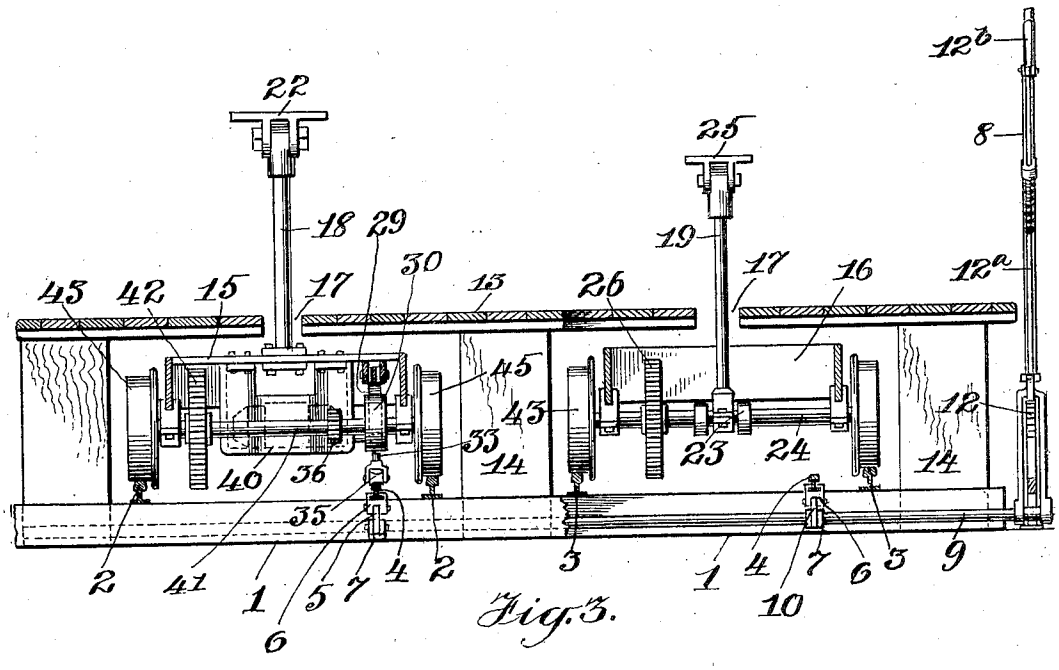

Fig. 3.

Witnesses
Chas. L. Wolf
Albert B. Blackwood

Inventor
Robert Buchanan, Jr.
By his Attorney
Charles A. Stephens

UNITED STATES PATENT OFFICE.

ROBERT BUCHANAN, JR., OF NEW YORK, N. Y.

PLEASURE-RAILWAY.

No. 828,921. Specification of Letters Patent. Patented Aug. 21, 1906.

Application filed February 9, 1906. Serial No. 300,206.

To all whom it may concern:

Be it known that I, ROBERT BUCHANAN, Jr., a citizen of the United States, and a resident of Greater New York, borough of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Pleasure-Railways, of which the following is a specification.

My invention relates to improvements in pleasure-railways.

It has for its objects to provide a device of this character for racing purposes at pleasure resorts, exhibitions, or other places of amusement which embodies a number of trucks adapted to run on parallel lines of tracks and provided with mounts representing animals upon which the patrons may ride, to provide means operated by the movement of the trucks for imparting a galloping motion to the mounts, to provide means for driving the trucks independently of each other, to provide means for stopping the trucks at any point independently of the riders, and to effect the above-mentioned objects in the most simple and inexpensive manner consistent with results to be attained.

In the drawings, Figure 1 is a longitudinal vertical sectional view of my device; Fig. 2, a plan view with the mounts removed, and Fig. 3 a transverse vertical sectional view with the mounts removed.

In all the figures of the drawings illustrating my invention like reference characters designate corresponding parts.

Referring to the drawings, 1 designates the ties of the railway, which are made of a suitable length to accommodate the desired lines of tracks and shown in the drawings as having two lines of tracks 2 and 3, secured thereon.

A single line of rails 4, having their ends spaced, rests upon the ties 1 between the tracks of each line and are reciprocally supported upon links 5, having their upper ends pivotally connected to blocks 6, secured to the flanges of the rails and their lower ends pivotally connected to supports 7, located between the ties. These rails are reciprocated and thereby raised and lowered by means of levers 8, secured to the shafts 9, forming the pivots of the links 10, and the levers are fixed to hold the rails in raised position by means of pawls pivoted thereon, said pawls engaging racks 12 and being operated by spring-pressed rods 12^a, the lower ends of which are pivoted to said pawls and the upper ends pivoted to hand-levers 12^b, pivoted on the upper end of the levers 8. A platform 13 is supported upon posts 14 above the tracks forming the lines, so as to allow of the passage of the trucks 15 and 16 beneath it and is provided with slots 17, through which the rods 18 and 19 for supporting the mounts 20 project.

For the purpose of giving the mounts a galloping motion the lower ends of the rods 18 are secured to the trucks and the upper ends pivotally connected to brackets 22, secured to the rear of the mounts. The lower ends of the rods 19 loosely embrace the cranks 23 of the crank-shafts 24, journaled in the trucks, and the upper ends are pivotally connected to brackets 25, secured to the front of the mounts, and the crank-shafts are given a rotary motion by means of gears 26, secured thereon and engaging pinions 27, secured on the front axles 28 of the trucks, whereby it will be understood that when the front axles are turned the crank-shafts will also be turned to raise and lower the mounts on the rods 19 and turn them on the rods 18.

For the purpose of stopping the trucks at the desired points independently of the riders of the mounts thereon mechanism is provided embodying a spring brake-band 29, located over the periphery of a disk 30, secured on the rear axle and having one end connected to a pin 31 and the other end connected to the inner end of a lever 32, pivoted on the truck and having its outer end pivotally connected to the upper end of a rod 33, reciprocally held in a guide 34 on the truck and having a roller 35, journaled on its lower end and adapted to ride on the rails 4, from which construction it will be understood that when the rails 4 are raised the rods 33 will be raised to turn the levers 32 and bring the brake-bands into engagement with the disks 30, and that when the rails 4 are lowered the brake-bands by their spring action will move out of engagement with the disks 30 and restore the lever 32 and rod 33 to their normal condition.

The downward movement of the rod 33 is limited by the engagement of the levers 32 with the bottoms of slots 35^a in the truck-frames.

To prevent the cars from running backward, the rear axles are provided with ratchet-wheels 36, engaged by pawls 37, pivoted on the truck-frames between the ears 38.

Each truck is driven by means of a motor

40, mounted thereon and having a pinion 41 on its commutator-shaft meshing with a gear-wheel 42 on the rear axle of the truck, and current may be supplied in any suitable manner, for instance, through one rail while the other serves to complete the circuit, the positive current entering the wheel 43 and axle 44, which is insulated from the wheel 45 in any suitable manner, and through contacts 46 on the axle enters the commutator brushes and armature of the motor when the circuit is made by the operator of the trucks.

I do not wish to be understood as limiting myself to the precise details and arrangements of parts shown and described, but reserve the right to all modifications within the scope of my invention.

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

1. In a pleasure-railway, a truck having a disk on one of its axles, a lever pivoted on said truck, a spring brake-band adjacent the periphery of said disk, one end secured to said truck and the other end to the inner end of said lever, a vertically-reciprocable rod mounted on said truck and having its upper end connected to the upper end of said lever and means adapted to engage said rod and raise it to effect the engagement of said brake-band with said disk and allow it to fall to effect the disengagement of said brake-band from said disk, substantially as described.

2. In a pleasure-railway, a truck having a disk on one of its axles, a lever pivoted on said truck, a spring brake-band adjacent the periphery of said disk, one end secured to said truck and the other end to the inner end of said lever, a vertically-reciprocable rod mounted on said truck and having its upper end connected to the outer end of said lever, means for limiting the downward movement of said rod and means adapted to engage said rod and raise it to effect the engagement of said brake-band with said disk and allow it to fall to effect the disengagement of said brake-band from said disks, substantially as described.

3. In a pleasure-railway, a truck having a disk on one of its axles, a lever pivoted on said truck, a spring brake-band adjacent the periphery of said disk one end secured to said truck and the other end to the inner end of said lever, a vertically-reciprocable rod mounted on said truck and having its upper end connected to the outer end of said lever and a reciprocable rail adapted to engage the lower end of said rod and raise it to effect the engagement of said brake-band with said disk and allow it to fall to effect the disengagement of said brake-band from said disk, substantially as described.

4. In a pleasure-railway, a truck having a disk on one of its axles, a lever pivoted on said truck, a spring brake-band adjacent the periphery of said disk, one end secured to said truck and the other end to the inner end of said lever, a vertically-reciprocal rod mounted on said truck and having its upper end connected to the outer end of said lever, a reciprocable rail, and links their upper ends pivotally connected to said rail and their lower ends pivotally connected to supports, substantially as described.

5. In a pleasure-railway, a truck having a disk on one of its axles, a lever pivoted on said truck, a spring brake-band adjacent the periphery of said disk one end secured to said truck and the other end to the inner end of said lever, a vertically-reciprocal rod mounted on said truck and having its upper end connected to the outer end of said lever, a reciprocable rail, links their upper ends pivotally connected to said rail and their lower ends pivotally connected to supports and means for raising and lowering said rail on said links and fixing it in adjusted position, substantially as described.

6. In a pleasure-railway, a truck having a disk on one of its axles, a lever pivoted on said truck, a spring brake-band adjacent the periphery of said disk, one end secured to said truck and the other end to the inner end of said lever, a vertically-reciprocable rod mounted on said truck and having its upper end connected to the upper end of said lever, means adapted to engage said rod and raise it to effect the engagement of said brake-band with said disk and allow it to fall to effect the disengagement of said brake-band from said disk and means mounted on said truck for driving it, substantially as described.

7. In a pleasure-railway, a truck, a mount pivoted thereon and adapted to be swung up and down by the movement of said truck, and means for controlling the movement of the truck and thereby controlling the movement of the mount, embodying a disk on one of its axles, a lever pivoted on said truck, a spring brake-band adjacent the periphery of said disk, one end secured to said truck and the other end to the inner end of said lever, a vertically-reciprocable rod mounted on said truck and having its upper end connected to the upper end of said lever and means adapted to engage said rod and raise it to effect the engagement of said brake-band with said disk and allow it to fall to effect the disengagement of said brake-band from said disk, substantially as described.

8. In a pleasure-railway, a truck, a mount pivoted thereon and adapted to be swung up and down by the movement of said truck, and means for controlling the movement of the truck and thereby controlling the movement of the mount, embodying a disk on one of its axles, a lever pivoted on said truck, a spring brake-band adjacent the periphery of said disk, one end secured to said truck and

the other end to the inner end of said lever, a vertically-reciprocal rod mounted on said truck and having its upper end connected to the outer end of said lever, a reciprocable rail, and links their upper ends pivotally connected to said rail and their lower ends pivotally connected to supports, substantially as described.

9. In a pleasure-railway, a truck, a mount pivoted thereon and adapted to be swung up and down by the movement of said truck, and means for controlling the movement of the truck and thereby controlling the movement of the mount, embodying a disk on one of its axles, a lever pivoted on said truck, a spring brake-band adjacent the periphery of said disk, one end secured to said truck, and the other end to the inner end of said lever, a vertically-reciprocable rod mounted on said truck and having its upper end connected to the upper end of said lever, means adapted to engage said rod and raise it to effect the engagement of said brake-band with said disk and allow it to fall to effect the disengagement of said brake-band from said disk and means mounted on said truck for driving it, substantially as described.

Signed at New York, in the county of New York and State of New York, this 6th day of February, A. D. 1906.

ROBT. BUCHANAN, JR.

Witnesses:

CHAS. L. WOLF,

ALBERT B. BLACKWOOD.