

No. 620,321.

Patented Feb. 28, 1899.

T. D. HOLCOMB.  
PLEASURE RAILWAY.

(Application filed Oct. 6, 1898.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

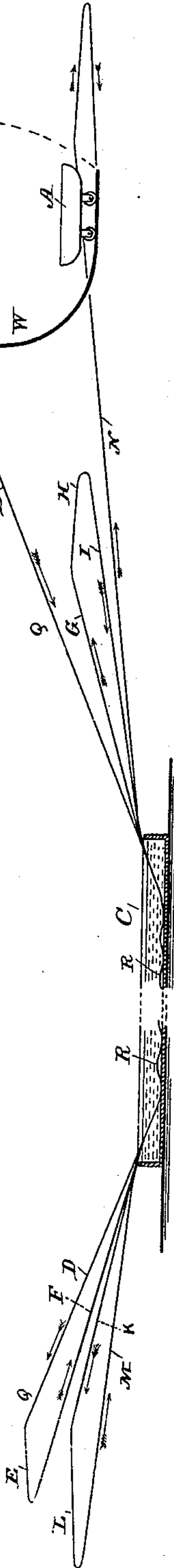
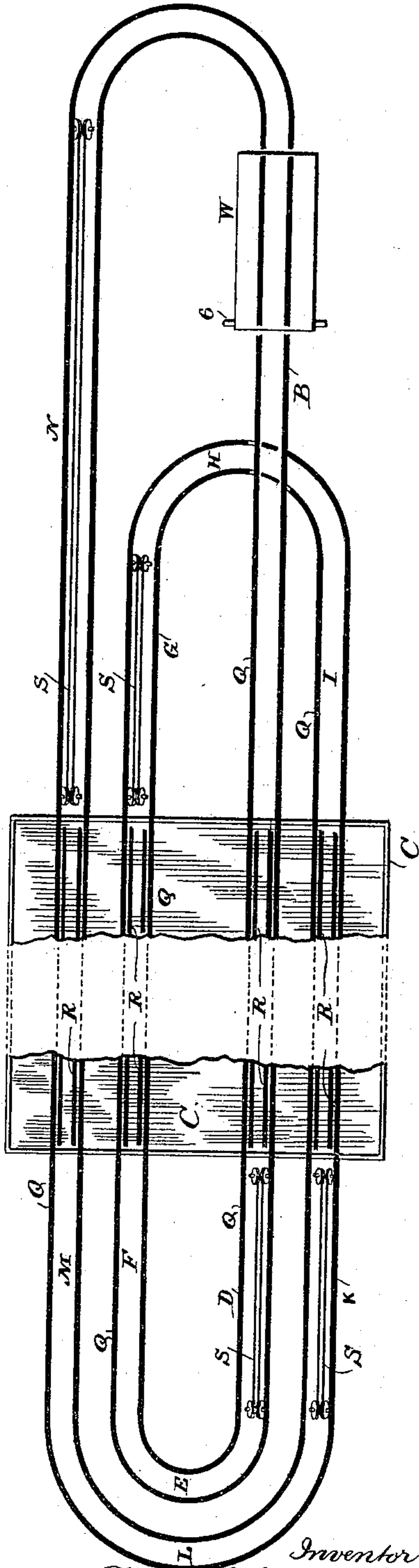


Fig. 2.



Witnesses

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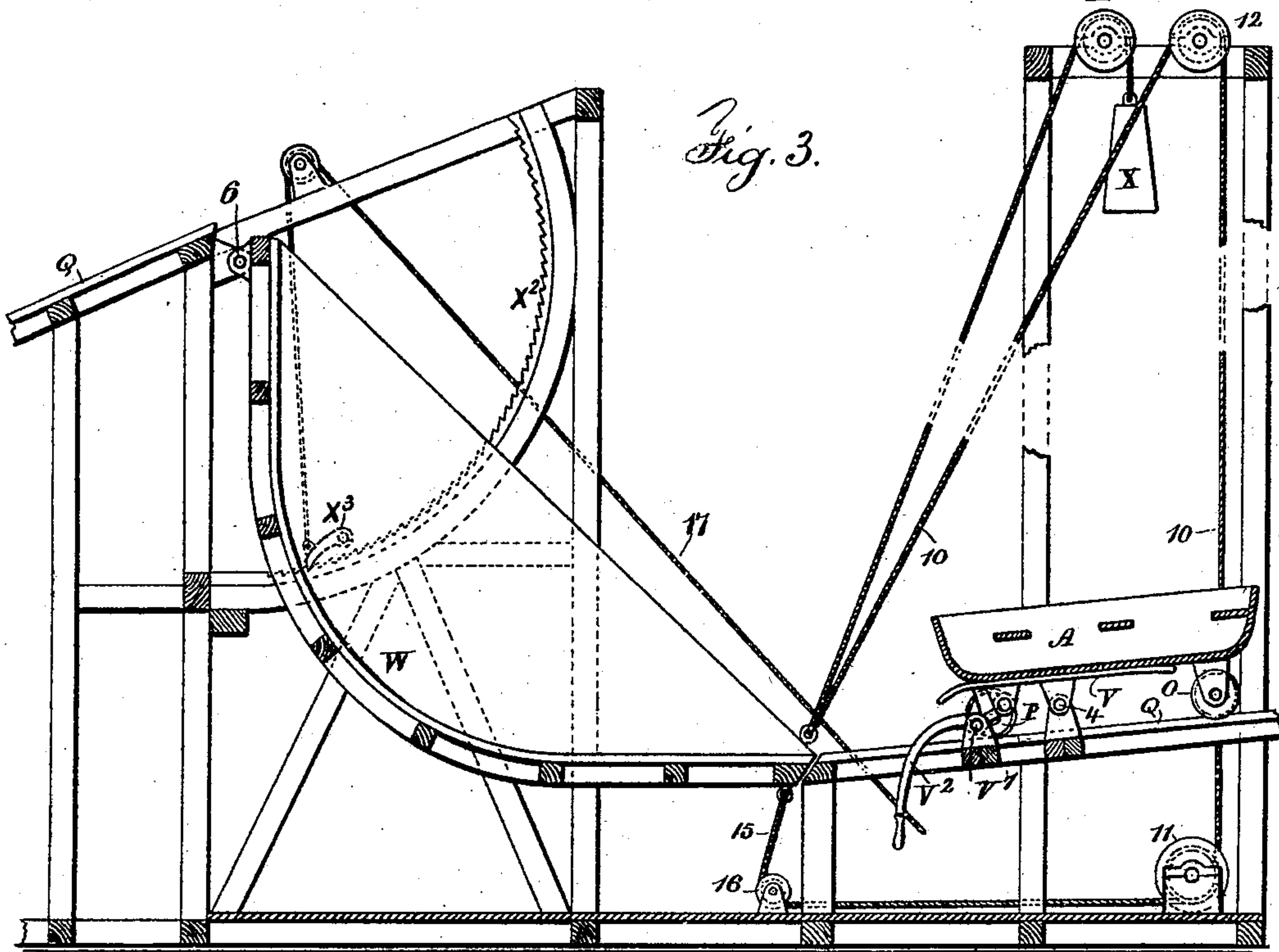
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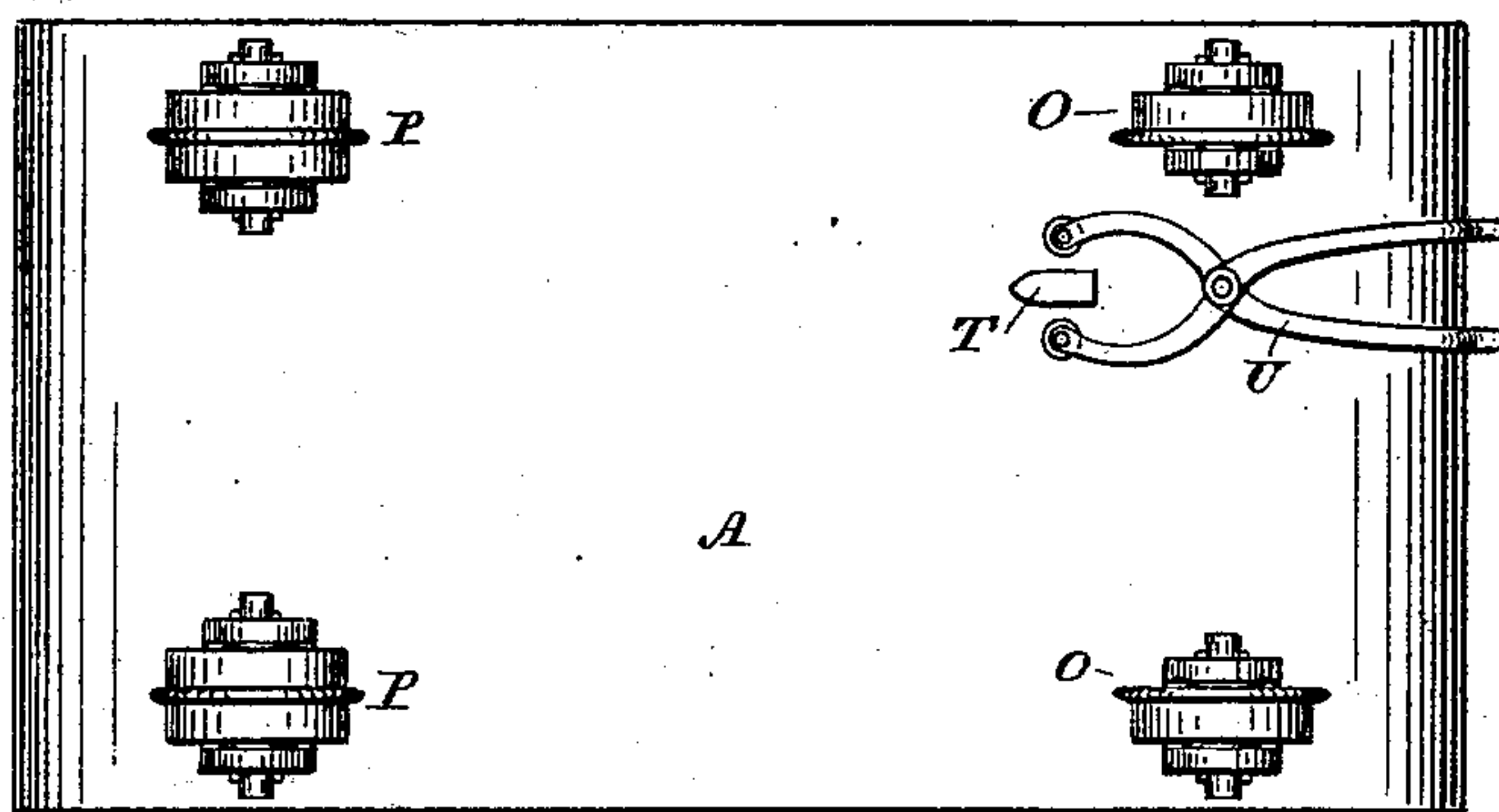
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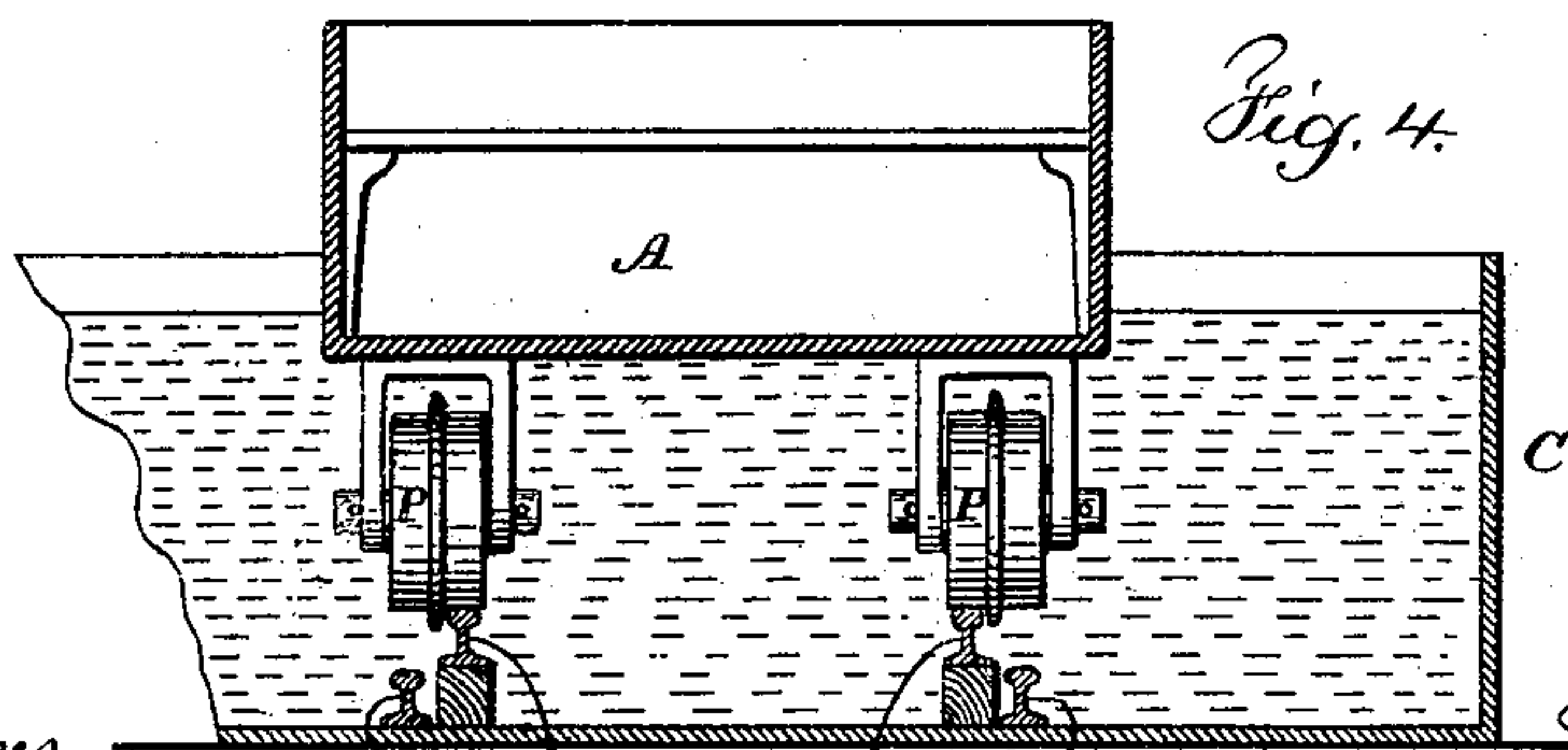
2 Sheets—Sheet 2.



*Fig. 5.*



*Fig. 4.*



Witnesses

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# UNITED STATES PATENT OFFICE.

THOMAS D. HOLCOMB, OF NEW YORK, N. Y.

## PLEASURE-RAILWAY.

SPECIFICATION forming part of Letters Patent No. 620,321, dated February 28, 1899.

Application filed October 6, 1898. Serial No. 692,775. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS D. HOLCOMB, a citizen of the United States, residing at New York, in the borough of Brooklyn, county of Kings, and State of New York, have invented an Improvement in Pleasure-Railways, of which the following is a specification.

Merry-go-rounds have been made with imitation boats and also coasting apparatus with inclines down which a car or boat passes, and in some instances water has been used in connection with the merry-go-round or the coasting apparatus, and gravity has been availed of in the propulsion of the boat or car, and the boat or car has been brought around beneath the place of beginning and elevated to the upper end of the incline.

In my present improvement I employ a peculiar elevating device by which a motion is given to the car as it is raised, and finally the car is caused to start down the incline by the action of the lifting apparatus, and I cause the car to pass over or through water, the wheels of the car or imitation boat running upon tracks in the water, and the tracks are so arranged that the car passes forward and back through the water several times before the car reaches the end of the track where it is elevated. I also make one of the tracks in the water undulating, so that the forward part of the car or imitation boat is moved up and down in imitation of the car or boat riding over waves, and it is necessary as the car comes out of the water for the track to be upwardly inclined, and it often is necessary to furnish power at this place for drawing the car up the incline.

I find it advantageous to use comparatively small ropes that are being constantly driven and a wedge upon the car coming in between these ropes and rollers or similar devices outside to press the ropes against the wedge give the necessary friction, as a grip, for causing the ropes to draw the car properly up the incline. It often happens that the car is under considerable momentum when nearing the end of the railway. I make use of a brake-bar and lever for actuating the same to move the bar up against the under side of the car, so as to use this bar as a brake for stopping the car reliably and without any tendency to strain the wheels or the bearings for the same,

and so that the attendant at the end of the track and outside the car can control the stopping of the car regardless of the parties who are in the car.

In the drawings, Figure 1 is a diagrammatic side elevation illustrating the relative positions of the parts. Fig. 2 is a diagrammatic plan view. Fig. 3 is an elevation showing the devices employed in raising the car from the end of the railway up to the commencement of the railway at the higher elevation. Fig. 4 is a cross-section of the track in the water representing the wheels of the car, and Fig. 5 is an inverted plan of the bottom of the car.

The car A or imitation boat runs down the first incline B and through the tank or pond C, up the incline D and around the curved track E, down the incline F, and again through the tank or pond C, up the incline G, around the curved track H, down the incline I, again through the tank or pond C, up the incline K, around the curved track L, down the incline M, through the tank or pond C, and up the incline N to the place of beginning. It will be seen that the car or boat by this arrangement passes through the tank or pond four times before reaching the end of the track, the track being arranged so that the curved portion H passes beneath the incline B, and the tracks in the tank or pond are advantageously parallel, and the rails upon the respective inclines and through the tank or pond are to be of any desired character, and the wheels O under the rear part of the car or boat A are ordinary wheels similar to car-wheels with flanges and adapted to run on the track-rails; but the wheels P, which are under the front portion of the car or boat, are made with the cylindrical portions wider and the flanges of the wheels in the middle, so that the outer portions of the wheels will run on the rail Q, and the inner portions of such wheels will run on the rails R, and by reference to Fig. 2 it will be seen that the rails R are only provided in the tank or pond, and they are parallel to the rails Q, and preferably between them, so that the track composed of the two rails R is narrower than the track composed of the rails Q, and the rails R are undulating or provided with projections at suitable distances apart rising above the rails



Q, so that as the boat or car runs through the pond it will receive from the rails R at the forward end of the boat or car a rising-and-falling motion; but it is not advantageous to extend these rails R beyond the edges of the tank or pond, because it is desired to give to the car or boat a different motion while in the pond from that received while traveling over the other tracks, and by placing the rails of the respective tracks that are out of the water in line with the rails Q that are in the water the car or boat will travel over the track without receiving an undulating motion except when crossing the tank or pond, and by having the rear wheels O upon the track Q only the rear part of the car or boat will not receive the rising-and-falling motion that is given to the front part. I, however, remark that, if desired, the rails Q that are at the bottom of the water in the tank or pond might be made undulating, so as to give to both ends of the car a rising-and-falling motion, in which case all the car-wheels should be like the wheels P.

As the boat or car is leaving the water it runs up an incline in order that the necessary downward incline may be obtained for the car or boat to acquire the necessary momentum in passing a second time through the tank or pond, and it is often important to give to the car an increased momentum or to apply to the car the force necessary to draw it up the incline. With this object in view I apply to each incline D G K N pairs of traction ropes or cables, as shown at S, there being suitable pulleys around which these cables pass, to which pulleys the power is applied for keeping these cables in motion, and upon the bottom of the car a wedge or block T is fixed, the forward end of which is inclined, so that it passes easily between the cables of the pair of cables, and upon the car are levers U, carrying at their ends rollers that come outside the cables of the pairs of cables, and when the levers are actuated by the attendant these levers, with their rollers, press the cables against the outer surfaces of the block T, so as to act as a grip sufficient for the motion of the cables to be availed of in drawing the car or boat up the incline, and when such car or boat reaches the top of the incline it is only necessary to liberate the cables by moving the levers U and the block T passes out from between said cables.

As the car approaches the end of the track it is frequently under considerable headway and requires to be stopped to prevent injury. With this object in view the brake-bar V is connected with an arm upon a cross-shaft V<sup>7</sup> having a lever V<sup>2</sup>, and it is preferable to pivot the brake-bar, as at 4, and to locate the parts so that the brake-bar V can be brought up against a smooth under part of the car. Hence by depressing the lever V<sup>2</sup> as the car is approaching the end of the track the brake-bar V is raised sufficiently for the car or boat to overrun the brake-bar, and according to

the extent of pressure applied to the lever V<sup>2</sup> so more or less of the weight of the car can be taken upon the brake-bar and the car will rub along upon this brake-bar and be stopped by the frictional contact therewith. Hence the attendant at the end of the railway-track can so regulate the friction as to allow the car to run by momentum into the elevator without any injury.

The elevator W is in the form of a curve or two flat portions connected by a curve, as represented, there being rails upon this elevator upon which the car runs, and the elevator is hinged at 6, and the moving end is advantageously counterpoised by a weight X, with a rope or chain over a pulley X' and connected to a suitable eye upon the moving edge of the elevator, and at this moving edge is also connected the hoisting rope or chain 10 to the winch or drum 11, the said rope or chain passing over the pulley 12, so that when the drum is rotated by suitable power the moving edge of the elevator is raised and the whole elevator gradually raised by swinging it upon the hinges 6, and it will be observed that the car cannot run backward because the lifting action immediately gives to the rails a forward inclination and the car continues to move upon these rails until the elevator is entirely raised, at which time the car will run out from the elevator and commence to descend the incline B.

I find it advantageous to place at each side of the platform the fixed quadrant-rings X<sup>2</sup> with ratchet-teeth and pawls X<sup>3</sup> upon the platform engaging the ratchet-teeth, so that as the platform of the car is raised the pawls will drop into the teeth of the inclines and effectually prevent the elevator-platform dropping or swinging downward if the hoisting-ropes break or the lifting power becomes insufficient.

If the counterpoise X exceeds the weight of the empty platform W, it is convenient to employ a rope 15 below a pulley 16, leading to a winch-barrel 11, so as to wind such rope thereon and draw down the platform as the rope 10 is given off the winch-barrel. A rope 17 may be provided for raising the pawl X<sup>3</sup>.

I claim as my invention—

1. The combination in a pleasure-railway with the pond or tank and the series of four approximately parallel pairs of rails forming tracks through the same, of a pair of rails forming an inclined track extending upward from one of the middle tracks through the pond to the place of beginning, rails extending upward, curved and extending downward to the other of the middle tracks through the pond, rails extending upward, curved and passing under the first upward incline and downward to an outer pair of rails through the pond, rails extending upward, curved and returned downward to the outer pair of rails on the opposite side of the pond, and rails extending upward and curved to the place of beginning whereby a continuous railway is



formed that passes several times through the pond, a curved platform with a pair of rails thereon connecting the end and beginning of the continuous track and means for elevating the platform with a car thereon, substantially as specified.

2. The combination in a pleasure-railway of a downward incline, a tank or pond containing water and a track through the same, a car upon the track having pairs of wheels at the respective ends and an undulating track through the tank adjacent and parallel to the aforesaid track, one pair of wheels at one end of the car running on the straight track and a pair at the other end running on the undulating track and thereby imparting a rise-and-fall movement to one end of the car as the same passes across the pond or tank, substantially as set forth.

3. The combination in a pleasure-railway having inclined rails in pairs and connections forming a continuous track from an elevated point of beginning to an adjacent and lower termination, of an elevator comprising a platform having straight receiving and delivering portions at approximately right angles, and a curved connecting portion and parallel rails thereon forming a track and connecting the rails at the point of beginning with the rails at the termination and coinciding with the rails at the termination when the platform is depressed and with the rails at the point of beginning when elevated, hinges at one end for connecting the platform to the beginning of the railway and means for raising the swing-

ing end of the platform with the car thereon, whereby the car moves gradually as the platform is raised and is discharged on the elevated railway at the place of beginning.

4. The combination in a pleasure-railway with the car and downward incline, of a tank or pond containing water, two pairs of track-rails in the water, one pair of which is undulating and wheels upon the car having cylindrical portions that run upon the track-rails, and a central flange on each wheel coming between the respective pairs of track-rails, substantially as set forth.

5. The combination with the inclined railway and the car and wheels upon the same, of a brake-bar, a shaft and lever for raising the brake-bar so that the same may come in contact with the bottom of the car as the car runs over and upon the brake-bar, substantially as specified.

6. The combination in a pleasure-railway with the track and inclines for the car, of an elevator pivoted at one edge at the upper end of the inclined track, said elevator being curved and having tracks correspondingly curved, means for raising the platform of the elevator, a segmental rack, and pawl upon the elevator-platform engaging the rack, substantially as set forth.

Signed by me this 3d day of October, 1898.

THOS. D. HOLCOMB.

Witnesses:

GEO. T. PINCKNEY,  
E. E. POHLÉ.