

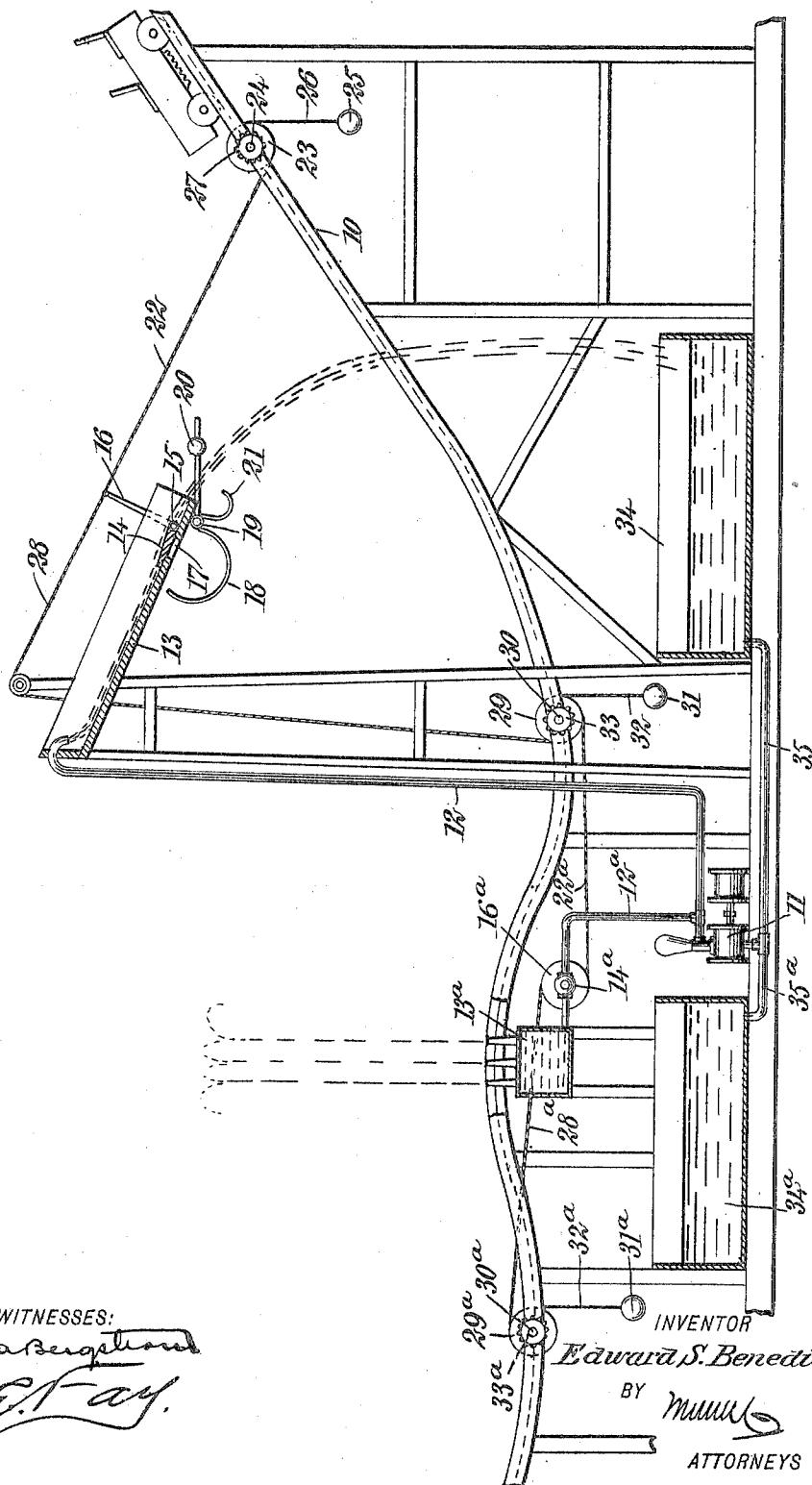
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E. S. BENEDICT.

AMUSEMENT DEVICE.

APPLICATION FILED AUG. 25, 1905.



UNITED STATES PATENT OFFICE.

EDWARD S. BENEDICT, OF NEW YORK, N. Y.

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No. 811,998.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD S. BENEDICT, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Amusement Device, of which the following is a full, clear, and exact description.

My invention relates to a feature which can be applied to scenic railways, roller-coasters, and other devices embodying a moving vehicle for increasing the attractiveness thereof for the purposes for which said devices are intended and for otherwise increasing their usefulness.

The principal object of the invention is to provide an artificial flow of water directly in line and falling over the track upon which the vehicle moves and for shutting off the flow of water as the vehicle enters it and then starting the flow again when the vehicle has passed. I can accomplish this result in two ways—first, by having the flow of water represent a waterfall, and, second, by having it represent a fountain. Either one can be electrically lighted in any of the ordinary ways or can be provided with any of the features which are employed for beautifying artificial falls and fountains.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure represents a side elevation, partly in section, of an amusement device with one form of my invention applied thereto.

In the drawing I have shown a track 10, which may be level or provided with inclines, as desired. I prefer to locate the flow of water near the bottom of an incline, so that the occupants of the vehicle will apparently be descending into a waterfall or fountain and so that they can see the same for some time before entering it.

The waterfall will first be described. This may be operated in any of the ordinary ways in which artificial waterfalls are exhibited. The construction that I have illustrated comprises a pumping-engine 11, having a pipe 12 for supplying water to a water way or trough 13. This trough is provided with a gate 14, pivoted on a horizontal shaft 15 near the discharge end of the trough. This gate is provided with an arm 16, by which it may be operated.

When it is desired to shut off the water

from the fall so that the vehicle can pass beneath without the occupants being wet by the water, the gate 14 is tilted upon its pivot until it is substantially vertical in the trough to prevent the passage of water over the end 60 of the trough and cause it to be directed through an opening 17 in the bottom of the trough, which is normally closed by the gate 14. Below this opening is a swinging drain 18, which is pivoted at a point 19, designed to 65 carry the water off to one side of the track, so that the occupants of the vehicle will escape it. A counterweight 20 is mounted on a smaller drain 21 for keeping it back out of the path of the waterfall. The drain 21 is shown 70 as being connected with the drain 18 and movable with it. The drain 21 is designed to catch any drippings from the discharge end of the trough when the gate 14 is shut and the opening 17 opened. Although the drain 75 21 intercepts any water discharging from the trough when the gate is closed, it will be readily understood that when the waterfall is flowing in its normal manner it will pass over the drain. The weight of water in the trough 80 18 operates to force the drain 21 farther forward than it would remain when this trough were empty, thus insuring an interception of the water at this time, and the weight 20 pulls it back out of the way when the drain 85 18 is empty, so as to prevent any interference with the waterfall when that is flowing.

In order to provide for operating the gate 14 by the movements of the vehicle, I connect the arm 16 with a wire or other connection 90 22. This wire extends to a drum 23, which is mounted on a shaft 24. A weight 25 is provided with a wire or rope 26, which is also wound on the drum and which normally keeps the drum in a certain position. On the shaft 24 is mounted a gear 27, which is adapted to be engaged by a rack on the vehicle to rotate the shaft 24 and wind up the weight 25. This will also wind up the wire 100 22 and close the gate when the vehicle reaches this point. A pressure of water against the gate will normally keep it closed after this operation, and in order to open it again after the vehicle has passed I provide a second connection 28, which passes to a drum 29, similar to the drum 23 and mounted on a shaft 105 30. This drum also has a weight 31, wound on the drum by means of a wire or rope 32 and a gear 33. The operation of the rack on the vehicle on this gear will cause the gate 14 110

to be tilted back to the open position. (Shown in Fig. 1.) It will thus be seen that the passage of the vehicle will first close the gate to stop the flow of water over the falls and then 5 after it has passed through will again open the gate, so as to restore the flow of water. The water is caught in a tank 34, which is connected with the pump 11 by a pipe 35, so that the same water can be used over again.

10 The construction by which the fountain can be operated in the same way is substantially the same. The pump 11 or any other desired source of power forces water through a pipe 12^a to a fountain 13^a. This fountain 15 is provided with a valve 14^a, which is operated by a wheel 16^a. This wheel is connected, by means of a wire or the like 22^a, with a drum—as, for example, the drum 29—and the passage of the vehicle rotates the wheel 20 16^a in a direction to close the valve 14^a and stop the passage of water through the nozzles of the fountain. The wheel 16^a is connected also by a wire or the like 28^a, wound in the opposite direction to the wire 22^a on the 25 wheel 16^a with another drum 29^a. This drum, like the other, is mounted on a shaft 30^a and has a weight 31^a, wire 32^a, and gear 33^a. The discharge from the fountain is collected in a tank 34^a and is supplied from the 30 pump by means of a pipe 35^a, as before. The fountain operates in substantially the same way as the waterfall.

Having thus described my invention, I claim as new, and desire to secure by Letters 35 Patent—

1. The combination with a movable vehicle, of means for directing a stream of water into the path of travel of the vehicle, and means controlled by the movement of the vehicle for starting and stopping the flow of water.

2. The combination with a track for vehicles, of means for directing a stream of water into the path of travel of the vehicle on the 45 track, and means for automatically stopping the stream when the vehicle approaches it.

3. The combination of means for directing a stream of water into the path of travel of a vehicle, means for automatically stopping the stream when the vehicle approaches it, and means for starting the flow of water after the vehicle has passed through the path thereof.

4. The combination of means for directing a stream of water into the path of a vehicle, a shaft located adjacent to the path and having means adapted to be engaged by a vehicle for rotating the shaft, means for stopping said stream of water, and means for connecting 60 said shaft and said last-named means.

5. A track for vehicles having a shaft located adjacent thereto, means on the shaft adapted to be engaged and turned by a vehicle on the track, a drum on said shaft, a flexible member adapted to be wound on the

drum, a water-controlled device connected with said flexible member, and means for directing a flow of water against said track.

6. The combination with means for directing a stream of water in a certain path, means for controlling the flow of water in said stream, a flexible member connected with said last-named means, a drum upon which said member is adapted to be wound, a shaft connected with the drum, and a gear mounted on 75 said shaft.

7. The combination with means for directing a stream of water in a certain path, means for controlling said stream of water, a pair of flexible members connected with said last-named means, a pair of drums upon which said members are adapted to be wound, and a gear connected with each of said drums whereby the rotation of the gears will cause the drums to be rotated to wind up the flexible members thereon.

8. The combination of a pump, a device for directing a stream of water, means connected with the pump for supplying said device with water, means for controlling the flow of 90 water through said device, a pair of flexible connections extending from said last-named means in two directions whereby a pull on one of said members will stop the flow of water and a pull on the other will start it, a 95 pair of drums upon which said members are adapted to be wound, means rigidly connected with said drums for causing them to be rotated to wind up the flexible members thereon in succession, and counterweights for normally unwinding the flexible members from 100 said drums.

9. The combination of a pump, a fountain, an inclined trough, means connected with the pump for supplying the fountain and trough 105 with water, means for controlling the flow of water through said fountain, means for controlling the flow of water through said trough, each of said two last-named means comprising a drum, a flexible connection adapted to 110 be wound on the drum and connected with the means for supplying water, and a pinion on each drum, and a vehicle adapted to move adjacent to said fountain and trough and having a rack for engaging said pinion and operating the same.

10. The combination of a railway, a fountain located adjacent thereto and adapted to force a stream of water across the path of a vehicle on the railway, an inclined trough located above the railway, means for supplying water to the fountain and trough, means for controlling said supplying means, and means operable by the passage of a vehicle for operating said controlling means.

11. A water-trough having an open end, an opening in its bottom, and means for alternately closing the end and the opening.

12. An inclined water-trough having means at its lower end for directing water in a stream 130

to represent a natural waterfall, an outlet above said means, and means for alternately rendering said first-named means inoperative and closing the outlet.

5 13. The combination of a trough having two discharge-outlets, means for alternately opening said outlets, and a movable trough located below the first-named trough and adapted to intercept water discharged from 10 the two outlets.

14. The combination of a trough having two discharge-outlets, means for alternately opening said outlets, and a movable trough located below the first-named trough and 15 adapted to intercept water discharged from the two outlets; said trough having a portion located below each outlet, and a counter-

weight for moving one of said portions out of operative position.

15. An artificial waterfall, comprising an inclined trough having an open lower end and an opening in its bottom above said end, and a pivoted trough located below said opening in the bottom of the main trough, said trough being provided with a lip adapted to project into a position below the open end of the main trough.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD S. BENEDICT.

Witnesses:

ROBERT L. LIGHTFOOT,
H. N. KNOWLES.