

No. 774,348.

PATENTED NOV. 8, 1904.

N. CAMPBELL.  
COASTER.

APPLICATION FILED MAY 21, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

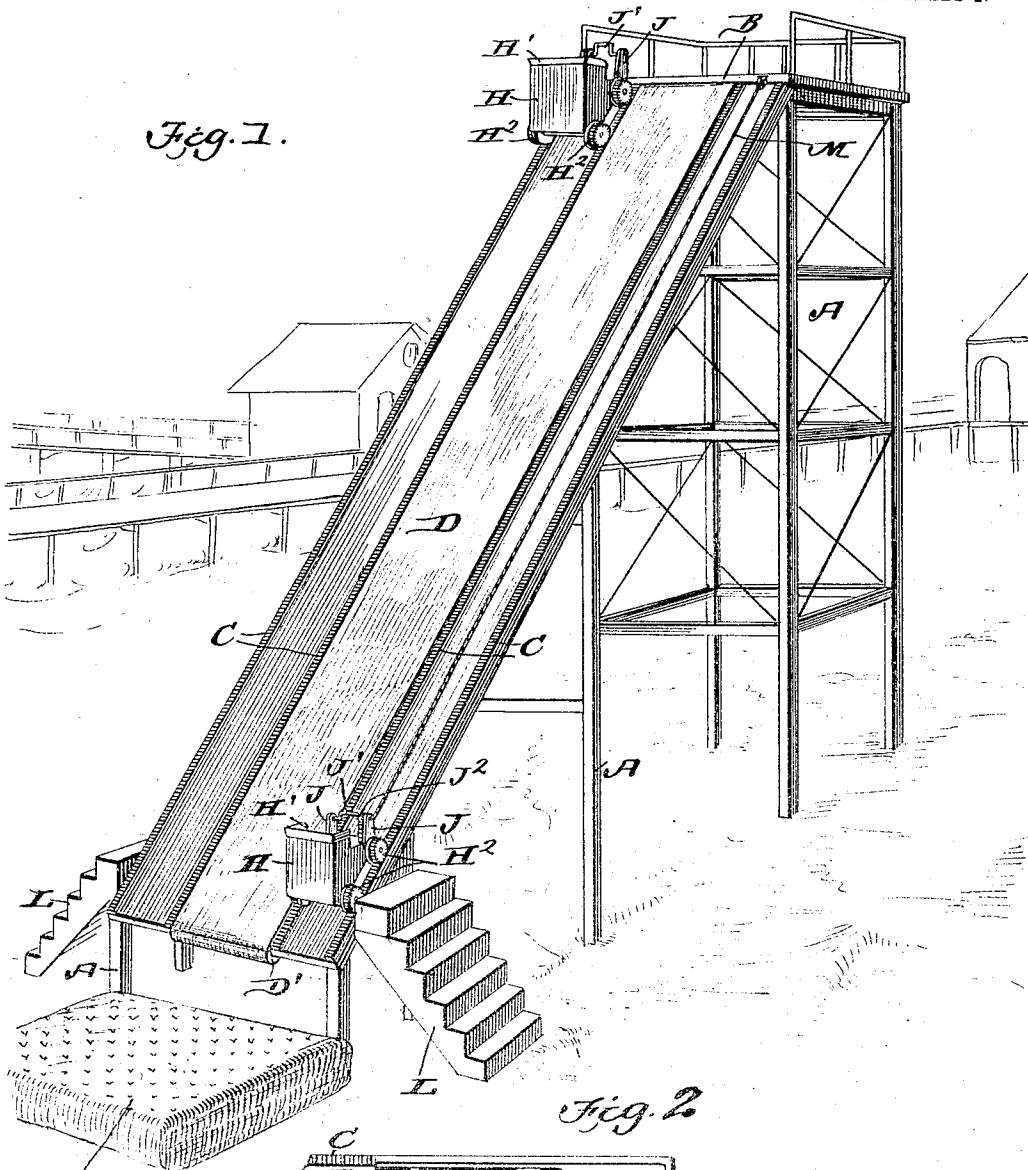
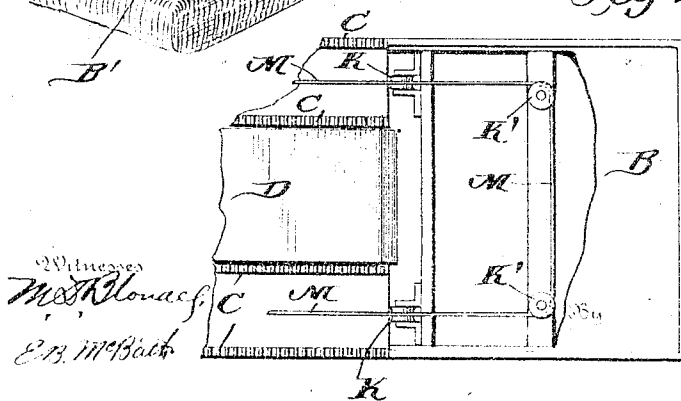


Fig. 2.



Inventor

N. Campbell,

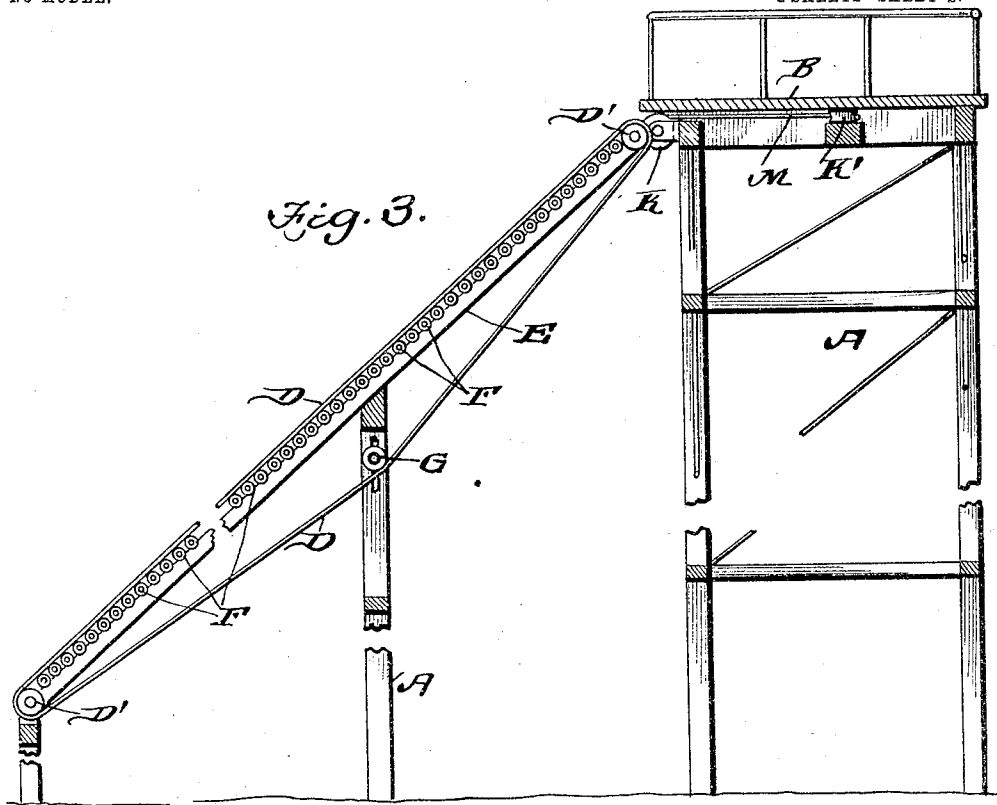
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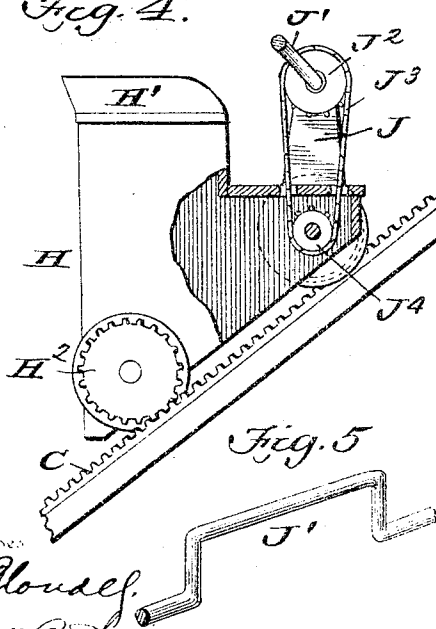
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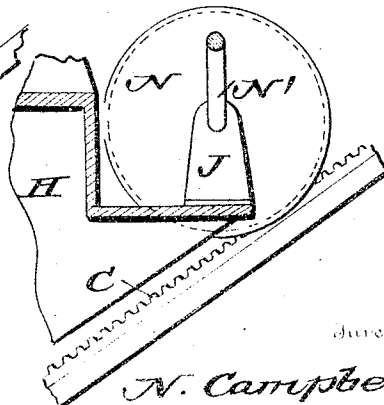
2 SHEETS—SHEET 2.



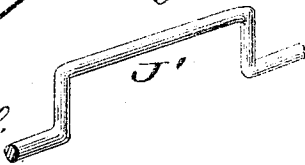
*Fig. 4.*



*Fig. 6.*



*Fig. 5.*



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Witnesses  
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# UNITED STATES PATENT OFFICE.

NELSON CAMPBELL, OF DECATUR, ALABAMA.

## COASTER.

SPECIFICATION forming part of Letters Patent No. 774,348, dated November 8, 1904.

Application filed May 21, 1904. Serial No. 209,106. (No model.)

*To all whom it may concern:*

Be it known that I, NELSON CAMPBELL, a citizen of the United States, residing at Decatur, in the county of Morgan and State of Alabama, have invented a new and useful Improvement in Coasters, of which the following is a specification.

This invention relates to a novel form of coaster in which the person using the device descends upon an endless traveling belt, the cars being used for the ascent only and are connected by a cable, so that the descent of one car will aid the ascent of the loaded car.

In the usual form of gravity-coaster a track is employed, on which travels the car, and in the ordinary form of chute an elevator is employed, by which the top of the incline is reached. In this form of coaster the car remains at the head of the incline until a sufficient number of persons have gathered, and the car is then started down. In my device no car is required, as the person descending takes his place on the endless belt and his weight will be sufficient to move the belt.

The invention consists in the novel features of construction and combination of parts hereinafter set forth, particularly pointed out in the claims, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my coaster. Fig. 2 is a plan view of the upper portion. Fig. 3 is a vertical sectional elevation, the belt and rollers being shown in elevation. Fig. 4 is a detail view of the car, partly shown in section. Fig. 5 is a perspective view of the crank. Fig. 6 is a sectional view showing a slight modification in the means for moving the car.

In the drawings, A represents the framework of the incline, which may be erected in parks, upon beaches, or in the water. At the head of the incline is arranged a platform B, and the foot of the incline is terminated at a distance of from two to four feet above the ground or surface of the water, and a mattress B' is placed adjacent the foot of the incline when the incline terminates above the land. The incline itself comprises two par-

allel cog-tracks C, spaced some distance apart, and between the tracks and parallel with same is an endless belt D. This belt at the head and foot of the incline runs over the rollers D', the spindle or shaft portions of which are journaled in the longitudinal beams E, forming a portion of the framework. Between the rollers D' and parallel to them are a plurality of rollers F, also journaled in the beams E, and the descending portion of the belt rests upon these rollers. One of the vertical standards of the frame A is longitudinally slotted, and the end portions of the shaft of a roller G are adjustably journaled in this slotted portion, the belt traveling under the roller, and by adjusting the roller vertically in its bearings the belt can be tightened or slackened.

The car H has a seat arranged at such an angle to the bottom of the car that the seat H' will be substantially in a horizontal position with reference to the ground while the car is ascending or descending the track. The car H is provided with flanged and cogged wheels H<sup>2</sup>, adapted to travel upon the cog-track C. At one end of the car—the forward end as the car ascends—are arranged standards J, in which are journaled the ends of the cranked shaft J', the cranked portion of the shaft serving as a hand-grasp for the occupant of the car. On the shaft J' is fixed a sprocket-wheel J<sup>2</sup>, and a sprocket-chain J<sup>3</sup> runs over a sprocket-wheel J<sup>4</sup>, secured on one of the car-axles.

At the upper end or head of the incline and beneath the platform B are arranged vertically-mounted pulleys K, and to the rear of these are the horizontally-mounted idle pulleys K'. A cable M is connected to one car at one end and passed over the pulleys K and K' and connected at its opposite end to the other car. The length of the cable M is such that when one car H is at the foot of the incline on one track the other car H is at the head of the incline upon the opposite track. Steps L are arranged at the sides of the incline, by means of which easy access is had to the cars H.

In Fig. 6 I have shown a slightly-modified

manner of winding the car to the top of the incline, a large cog-wheel N being employed, journaled on the shaft N', having a cranked portion, thus doing away with the sprocket wheels and chains.

In use the party desiring to use the coaster takes the car H that is at the foot of the incline and grasping the cranked portion of the shaft J' gradually propels the car upward, the other car descending at the same rate of speed and assisting the upward movement of the other car by reason of the weight of the descending car. To descend, the party slides down the incline on the belt D, and it will be obvious that as soon as the person is seated upon the belt the portion of the belt resting on the rollers F will move downward, and the user will travel upon the belt with more pleasure and safety than upon a stationary incline. It is obvious that many slight changes may be made in the construction without varying the original idea—as, for example, steps may be arranged giving direct access to the platform B for the use of those who do not care to use the cars, and loops of leather or cloth may be attached to the belt and may be grasped by the user, so that he will not travel downward at a greater rate of speed than that of the belt, and, if desired, any automatic form of brake can be applied to check too great a speed of the belt. The addition of these devices does not change the general construction or materially affect the operation of the device as shown and described.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. A device of the kind described comprising parallel inclined tracks, an endless belt arranged between the tracks, cars adapted to move on the tracks, and a cable connecting the cars.

2. The combination with an inclined track, a plurality of rollers arranged adjacent the track, an endless belt adapted to travel over the rollers, and a car adapted to convey a person to the head of the inclined belt, as and for the purpose specified.

3. A coaster comprising parallel cog-tracks, cars adapted to move thereon, and an endless belt adapted to travel over a plurality of rollers.

4. A coaster of the kind described comprising inclined parallel beams, a plurality of rollers journaled in said beams, an endless belt adapted to travel over the rollers, cog-tracks, and cars adapted to move upon the said tracks, as and for the purpose set forth.

5. A coaster having a plurality of rollers arranged on an incline, a belt running over the said rollers, a platform at the head of the belt, parallel cog-tracks leading to the platform, cars adapted to move on the tracks, idle pulleys arranged beneath the platform, and a cable passing over said pulleys and connecting the cars, as and for the purpose set forth.

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Witnesses:

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F. C. BROWN.