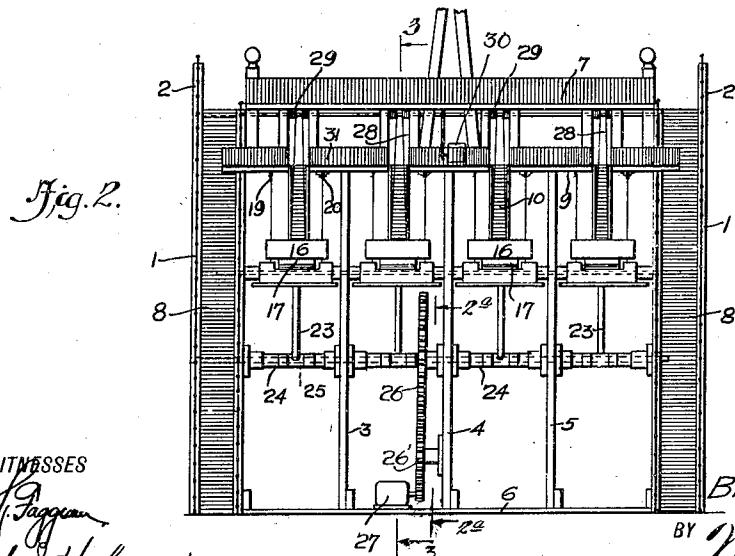
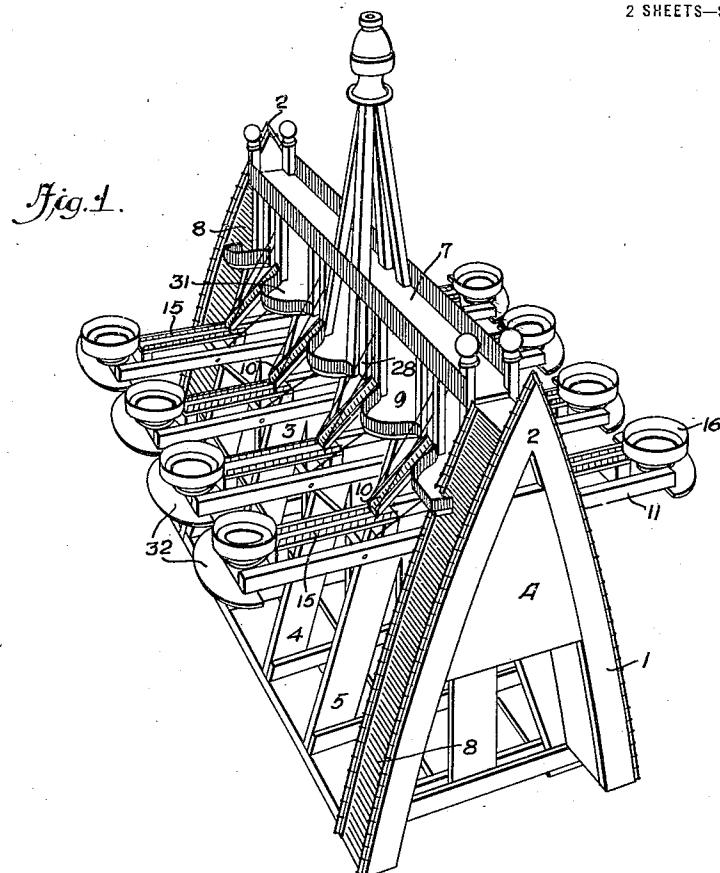


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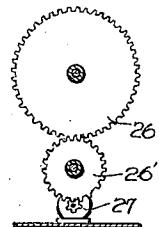
B FINAZZO,  
AMUSEMENT DEVICE,  
APPLICATION FILED JAN. 25, 1921.

Patented Nov. 28, 1922.

2 SHEETS—SHEET 1.



*Fig. 2'*



WITNESSES

Frank J. Taggart  
Robert J. Helziger.

INVENTOR  
Biagio Finazzo

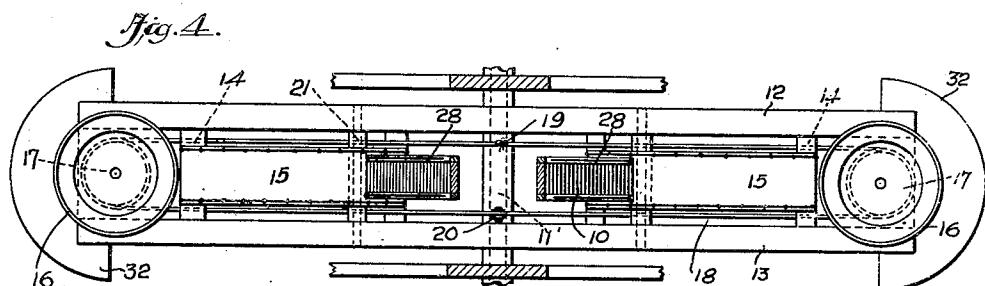
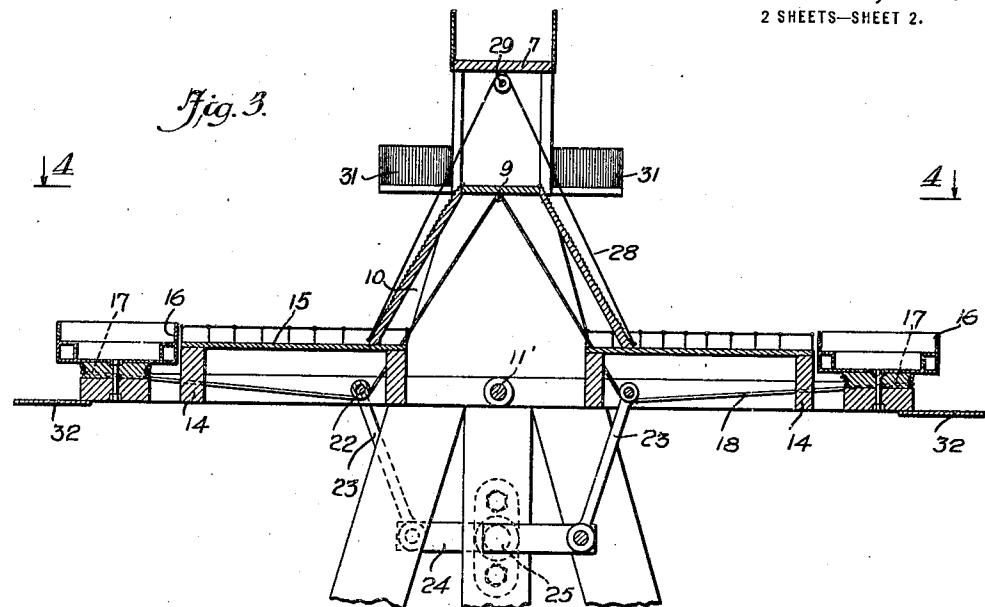
BY *Thurber*  
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2 SHEETS—SHEET 2.



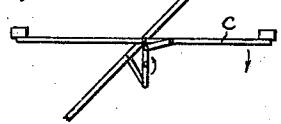
*Fig. 5.*



*Fig. 6.*



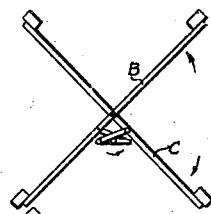
*Fig. 7.*



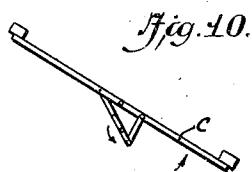
WITNESSES

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*Fig. 8.*



*Fig. 9.*



INVENTOR

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## UNITED STATES PATENT OFFICE.

BIAGIO FINAZZO, OF BROOKLYN, NEW YORK.

## AMUSEMENT DEVICE.

Application filed January 25, 1921. Serial No. 439,782.

*To all whom it may concern:*

Be it known that I, BIAGIO FINAZZO, a subject of the King of Italy, 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.

This invention relates to a new and improved form of amusement device. The object of the invention resides in the provision of the particular construction and arrangement of parts shown and described and set forth in the following claims.

15 The device, in general, comprises a supporting framework or tower on which one or more pivoted oscillating platforms are mounted. These oscillating platforms are connected by suitable means to a power source, the resultant connection with which causes the movement of the platforms in an oscillatory or rocking manner in a vertical plane, in accordance with the arrangement of the connections between each platform and 20 the source of power. A passenger car is arranged on the ends of each platform, and operating connections extend between the power and the passenger cars in such manner that as the rocking platforms move up 25 and down the passenger cars rotate in one direction and another upon their axes, thus giving a very unique resultant motion.

The invention is illustrated in the drawings, of which—

35 Figure 1 is a perspective view of the entire apparatus;

Figure 2 is a side view of the same;

Figure 2<sup>a</sup> is a detail view of the gearing for actuating the device;

40 Figure 3 is a vertical transverse section taken on the line 3—3 of Figure 2;

Figure 4 is a partial plan view from the line 4—4 of Figure 3; and

45 Figures 5 to 10, inclusive, diagrammatically represent the positions of the rocking platforms at different periods of their motion throughout a complete cycle of motion.

The embodiment of my invention as illustrated in the drawings comprises a supporting platform or tower A. This platform comprises triangularly-shaped end supports 1 and 2 and spaced intermediate bracing supports 3, 4 and 5. The bottoms of these various supports are connected in any suitable manner by a longitudinal bracing mem-

ber, such as 6. The tops of these supports are connected by an observation walk or platform 7 to which passengers have access by means of stairs, such as 8, disposed adjacent the end supports 1 and 2. Below the 60 observation platform 7 is disposed a gallery 9 to which access can be had from the stairs 8 and from which the passengers may descend by means of ladders 10 onto any one of a plurality of oscillating platforms, such as 11. These oscillating platforms are pivotally mounted on a shaft 11' which is supported on the towers or platforms A. These platforms, as shown more particularly in Figure 3, comprises longitudinally extending members 12 and 13 cross braced by members such as 14 and on which cross members a passenger walk 15 is disposed.

Rotatably mounted on the ends of the oscillating platforms 11, adjacent the ends of the passenger walk 15, are passenger cars 16, preferably cuplike in shape. Each of these cars is provided with a drum 17 beneath the car around which a cable, such as 18, is passed any desired number of times. 80 This cable, as shown particularly in Figure 4, is connected at two ends to a point such as 19, which is fixed. This point may be any convenient portion of the supporting tower. The cables from this fixed point pass in opposite directions around the drums 17 of the passenger cars disposed at opposite ends of the particular platform 11 under consideration, and then are joined and passed over a pulley, such as 20, also fixed to the tower. 90 Intermediate the length of the cable 18 it passes under pulleys, such as 21, which are rotatably mounted on a shaft 22 the ends of which are journaled in the longitudinal frame members 12 and 13. This shaft is also adapted to engage with connecting rods, such as 23. A single connecting rod extends from each rocking platform 11 to a crank arm such as 24 connected to a power shaft such as 25. The crank arm, such as 24, connected to one oscillating platform 11 will be disposed at a suitable angle, such as that shown, of 180° with respect to the crank arm connecting the adjacent rocking platform 11 with the power shaft. In this manner a plurality of oscillating platforms may be connected to and operated from a common power shaft. As shown in Figures 2 and 2<sup>a</sup>, this power shaft may be operated by means of gears 26 and 26' from a motor 27.

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Ropes such as 28 passing over pulleys such as 29 may be operated by an auxiliary motor 30 to raise the ladders whenever the oscillating platforms have received the desired number of passengers and are about to operate. The gallery 9 may be provided with any desired number of balconies such as 31 from which the persons using this device may observe the operation and enjoyment of 10 the other passengers in the cars 16. At the ends of each of the oscillating platforms, there are provided in any suitable manner fan blades 32 which, due to the motion of 15 the platform, causes a circulation of air or a breeze for the benefit of the passengers.

In the operation of the device, assuming that at the instant of starting the device the crank arms 24 are in a horizontal position extending in opposite directions from the 20 power shaft 25, then the various oscillating platforms 11 will be in the position shown in Figure 5. However, immediately after starting and turning in the direction indicated by the arrow in Figure 6, and assuming 25 that we are looking at the side of two rocker platforms, we find that the platforms start to move together as shown in this figure. However, in Figure 7, designating one rocker 30 platform by the letter B and the other by the letter C, we find that the connections between the power shaft and C have passed dead center and, therefore, are commencing to reverse the motion of C, whereas the motion of B is continuing in the original direction, and, as shown in Figure 7, at the time 35 the operating shaft has made a quarter of a revolution the degree of inclination of B is considerable.

In Figure 8, which shows the position of 40 the two platforms B and C a quarter of a revolution later, when the power shaft has made a half revolution from the initial position, the two platforms have moved to their extreme inclined position in opposite directions,

As shown in Figure 9, the tower shaft has made three-quarters of a revolution and the platform C and the platform B are moving together. As shown in Figure 10, at a point 50 in the travel of the tower shaft about seven-eighths of a complete cycle, the two platforms are in alignment again and both are moving up to the normal position shown in Figure 5. It will be seen that this motion is 55 unique and irregular. Therefore, devices of this sort are novel and would furnish considerable excitement and amusement for those persons availing themselves of it.

At the same time that these periodic variations in the movements of the various 60 platforms are taking place, the passenger cars 16 are rotating on their axes. Considering Figure 3 and remembering that one point in the continuous cable 18 is fixed to 65 the tower or support A, it will be seen that

when any given oscillating platform moves in one direction that a certain amount of slack will occur in the cable on one side of the platform, due to the approach of that side of the platform to the fixed point in the 70 cable, and this will be taken up by the pull in the cable on the other side which is receding from this fixed point. Therefore, the movement of the cable relative to the drums 17 will cause the rotation of the passenger 75 cars in one direction when the end of the rocking platforms on which each car is mounted moves in one direction and will cause a rotation in the opposite direction when the direction of movement of the rocking 80 platform is reversed. This rotating movement of the passenger cars on their axes, combined with the rocking movement of the oscillating platforms at the same time, gives a unique motion.

It, of course, will be apparent that the particular style of tower or supporting platform used is not essential to the operation of this device in accordance with the principle of the invention, and various modifications 90 in the arrangement of the parts can be made without departing therefrom.

What I claim is:

1. An amusement device comprising a 95 tower or supporting base, a vertically oscillating non-rotating platform pivoted to said tower on the horizontal axis and adapted to oscillate in a vertical plane, a passenger car disposed on each end of said platform and adapted for oscillation about a fixed axis at 100 right angles to the longitudinal axis of the platform, means for oscillating said platform, and means for oscillating said cars around their axes in accordance with the movement of the platform.

2. An amusement device comprising a 105 tower or supporting base, a vertically oscillating non-rotating platform pivoted thereto on the horizontal axis and adapted for actuation in a vertical plane, a passenger car on 110 each end of said platform adapted for oscillation in a plane at right angles to the longitudinal axis of the platform, a continuous cable fixed to the tower at one point and passing around the body of said cars, and means for oscillating said oscillating platform whereby said cars are caused to oscillate in accordance with the movement of the platform.

3. An amusement device comprising a 120 tower or supporting base a plurality of oscillating platforms pivoted thereto on a horizontal axis and adapted for oscillation in a vertical plane, a power shaft, a plurality of crank arms on said shaft spaced a definite 125 angular distance apart, connecting rods extending from each crank arm to one of said platforms, a passenger car disposed on the ends of each rocking platform and having its axis at right angles to the longitudinal 130

axis of the platform, a continuous cable fixed at one point to the tower and passing around the body of said car, and means for oscillating said platforms whereby said cars are caused to move in accordance with the movement of the platform.

4. An amusement device comprising a tower or supporting base, a plurality of oscillating platforms pivoted thereto on a horizontal axis and adapted for movement in a vertical plane, a passageway on each platform extending from the tower outwardly, a passenger car disposed on the ends of each oscillating platform adjacent the ends of the

passageway, a power shaft, a plurality of 15 crank arms spaced on said shaft at an angular distance of  $90^{\circ}$  apart, connecting rods extending from each crank arm to an oscillating platform, a cable fixed to one point of the tower and passing continuously around the 20 bodies of the passenger cars, and means for moving said power shaft continuously in one direction whereby the platforms are oscillated in a vertical plane and the passenger cars are oscillated in accordance with the 25 movement of the platform.

BIAGIO FINAZZO.