(No Model.)

T. KENNEDY.

PLATFORM RAILWAY.

No. 514,756. Patented Feb. 13, 1894.

Fig. 1.

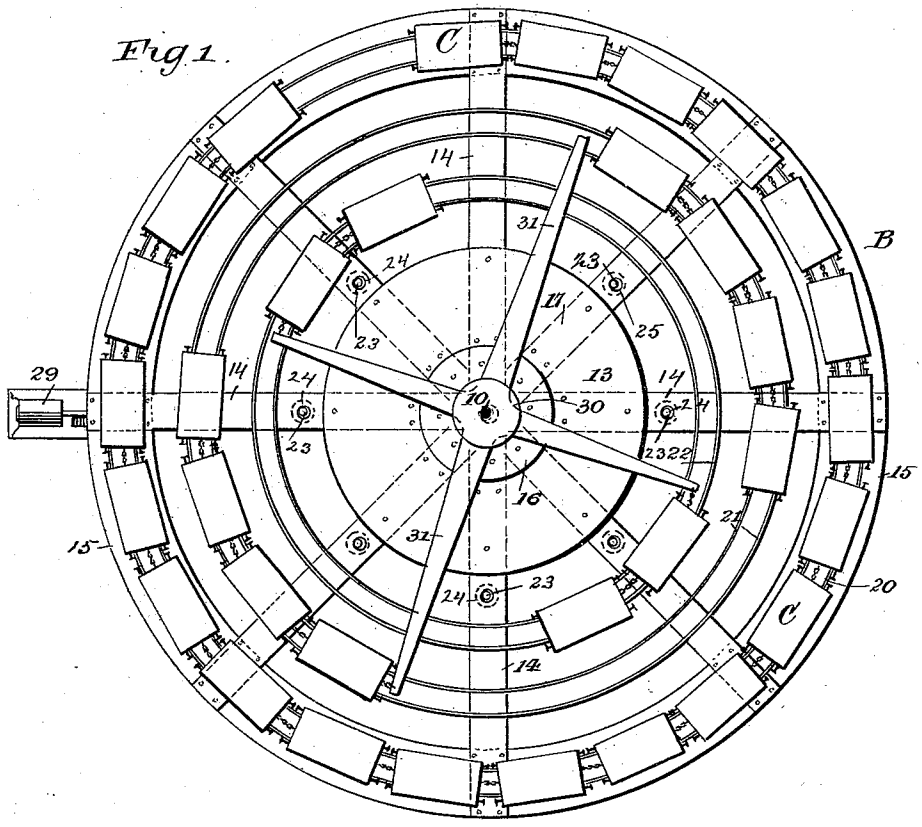
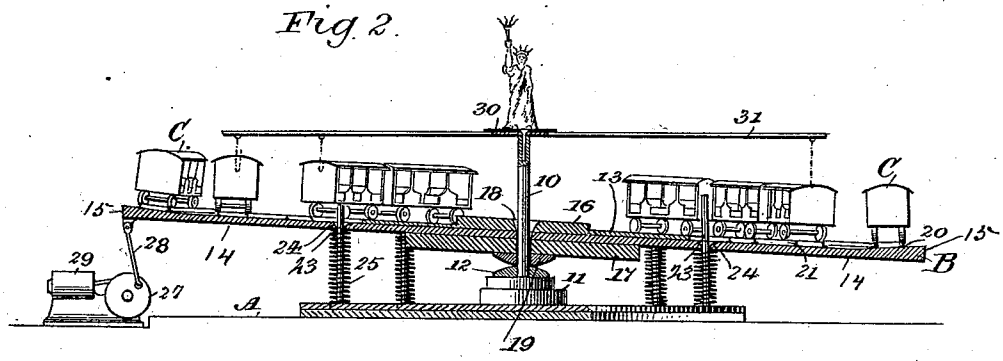


Fig. 2.



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PLATFORM RAILWAY.

SPECIFICATION forming part of Letters Patent No. 514,756, dated February 13, 1894.

Application filed January 25, 1893. Serial No. 459,694. (No model.)

To all whom it may concern:

Be it known that I, THOMAS KENNEDY, of New York city, in the county and State of New York, have invented a new and useful Improvement in Platform Railways, of which the following is a full, clear, and exact description.

My invention relates to platform railways, and has for its object to construct a railway upon a spring-controlled vibratory platform, and to so manipulate the platform that any number of cars or trains of cars, carriages or other vehicles may be made to constantly travel around the platform during the period the latter is being manipulated, in such a manner as to afford the occupants of the cars or carriages the benefits of a ride in a circular direction on a smooth track, and at the same time enabling them to experience sensations due to a smooth and regular undulating or rocking motion.

Another object of the invention is to provide a device for the amusement of the public, of that order of machines known as merry-go-rounds or carousels, which may be patronized with perfect safety and through the means of which the patrons will be given the benefits of movements not heretofore combined in any device of the same character.

It is a further object of the invention to provide a platform railway which may be utilized for the purpose of display, or may be employed as a toy, the device being so constructed that in addition to a moving platform and rolling objects thereon, means will be provided for the display of various articles, the display frame being given a rotary motion; and any figure or group of figures may likewise be provided to adorn the display frame, and remain stationary or revolve with the frame, as may be found desirable.

The invention consists in the novel construction and combination of the several parts as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in both the views.

Figure 1 is a plan view of the improved platform railway; and Fig. 2 is a vertical section taken practically through the center of the device.

In carrying out the invention a base A, is provided, constructed of any suitable or approved material and given any desired contour. Preferably, however, the upper face of the base is flat and the margin is circular. The base may be constructed in one piece or in many sections; in the drawings two sections are employed, an upper and a lower section, which may be secured together by any suitable fastening devices.

Upon the center of the base a standard 10, is erected, preferably circular in cross section, and this standard ordinarily stands upon a pedestal 11, the pedestal being secured directly to the base. The pedestal 11 has secured upon its upper face around the standard 10, a bearing block 12, the upper surface of which block is cylindrical or convexed, while its lower surface is flat; but if in practice it is found desirable the bearing block 12 may constitute an integral portion of the pedestal. The standard 10, is adapted to constitute a pivot or guide for a platform B, which platform may be made solid or in skeleton form, but ordinarily, as shown in the drawings the platform is made to approximate a wheel in shape, in which event the central portion 13, is solid, and a series of arms 14, is made to radiate from the solid central portion, which arms, at their outer ends, support a ring section 15, which ring section is inclined upon its upper face, the inclination being in direction of the center of the platform, the outer edge of the ring section being therefore thicker than its inner edge, as shown in Fig. 2. The arms 14, may be attached to the ring section 15, or the two parts may be made integral.

The central portion of the platform B, may be reinforced in any approved manner; one means of strengthening this portion of the platform is illustrated in the drawings, in which a circular block or plate 16, is attached to the upper face of the circular solid portion of the platform, while the under face of the platform is strengthened by a plate or block 17, which plate or block may be circular, but preferably is somewhat of spider shape, its several arms, as shown in dotted lines in Fig. 1, being secured to the under faces of the

main arms 14 of the platform. The standard 10, passes loosely through an opening 18, made vertically in the central portion of the platform, the opening extending also through its reinforcing plates or blocks; and as the platform is to have a rocking movement upon its pivot the upper end of the opening 18, may be somewhat flaring. The platform is supported directly at its center by means of a bearing block 19, through which the standard 10 passes, and the said bearing block 19, is constructed with a cylindrical or convexed under face, which convexed surface is brought in contact with the corresponding surface of the pedestal bearing block 12. It is evident that when the platform B, is thus supported it may be rocked very readily upon its bearings. In the general construction of the platform B, it is made as light as possible consistent with strength.

The platform is adapted to carry any desired number of endless tracks, the tracks being circular, as shown in Fig. 1. In the drawings three tracks are illustrated, an outer track 20, which is laid upon the upper face of the outer or ring section 15, while the inner tracks 21 and 22, are laid upon and secured to the arms 14 of the platform; intermediate of the arms the inner tracks may be braced or supported in any suitable or approved manner. In addition to the support afforded the platform by its central bearing, a spring support is provided; and to that end a number of rods or posts 23 is secured upon the base, their arrangement being a circular one, and these rods or posts extend upward through openings 24 made in the platform to receive them. Each post or rod 23, is encircled by a spring 25, and these springs have bearings at their lower ends upon the base, and at their upper ends against the under face of the platform, the springs being preferably secured at their ends to the surfaces against which they bear. The springs 25, are of different lengths, the longest springs being arranged at one side and the shorter springs at the diametrically opposite side. Thus it will be observed a spring cushion is formed of varying height, and the platform is consequently held in an inclined position.

Cars C, carriages, or other form of vehicles, are adapted to travel upon the tracks; and the vehicles may be coupled together to form trains of any desired length, or said vehicles may be made to travel singly upon the tracks, or in pairs.

In the operation of the device, as the platform B, stands at an inclination, held so by the springs, the tendency of all the cars is to seek the lowest side, and they naturally gravitate in that direction; therefore, by alternately depressing the high side of the platform, and permitting it to rise to its normal level, the cars are compelled during the entire period of manipulation of the platform to constantly travel in one direction around the track, continually seeking the lowest point, which is being regularly and constantly shifted.

The manipulation of the platform may be accomplished in many ways, as, for example, through the medium of a crank disk 27 and a pitman 28 driven by a motor 29, as shown in the drawings; or the depressing of the platform may be accomplished by exerting downward pressure upon a rope, chain or cable attached at the highest point of the platform, as the springs act to return the platform to its normal position the moment the normally high point of the platform is free to rise after having been depressed, but if desired all attachments to the platform imparting motion to it may be dispensed with, and motion may be produced by hand.

When the device is employed as a toy, or for display purposes, a display rack may be used in connection with it, which rack may consist of a central portion 30, pivotally attached to the standard 10, and arms 31, radiating from the body. The arms may be of the same length, or may be graduated in length as illustrated; the latter construction is preferred when more than one track is carried by the platform, and in that event one arm is connected with a car or a train of cars upon each track, as it is preferred that the cars should communicate motion to the display frame. A figure or a group of figures may be secured upon the central portion of the display frame and turn with it, and the arms may be utilized for the display of any article or articles they are capable of receiving and sustaining.

The outer rail of each track is preferably slightly elevated, so as to give the cars a slight inclination inward, in order to insure their remaining upon the track even when they are moving rapidly; and in the display form of the device the inner tracks may be straight, as the arms of the display frame being connected with the cars will serve to prevent them leaving the track.

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

1. In a device of the character described, the combination with a base provided with a standard and rods projecting therefrom, of a rocking platform mounted on the standard and provided with apertures to receive the rods, tracks on the platform and springs surrounding the rods between the platform and base, substantially as set forth.

2. In a device of the character described, the combination with a base provided with a standard and rods projecting therefrom, of a platform mounted to rock on the standard and provided with apertures to receive the rods, springs surrounding the rods between the base and platform, tracks on the platform, and means for rocking the said platform, substantially as described.

3. In a device of the character described, the combination with a rocking platform and

vehicles mounted on the platform and deriving motion therefrom, of a pivoted display frame above the platform and connected with the vehicles, substantially as described.

4. In a device of the character described, the combination with a base provided with a standard, a rocking platform apertured to receive the standard of the base, and provided with concentric tracks and vehicles mounted on the platform and deriving motion therefrom, of a body pivoted to the upper end of the standard and provided with arms of unequal length and connected with the vehicles, substantially as described.

5. In a platform railway, the combination, with a platform and a base having rocking connection with the platform, of springs of varying lengths located around the rocking connection between the base and platform, the springs being connected with the said base and platform, endless tracks located upon the platform, vehicles located upon the tracks, a standard passed loosely through the platform, a display frame pivoted upon the standard, a connection between the display frame and the vehicles, and a depressing mechanism connected with the normally high portion of the platform, substantially as shown and described, whereby when the platform is alternately depressed and elevated the cars are given a circular movement thereon and impart such movement to the display frame, as and for the purpose specified.

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