(No Model.)

J. S. SPRAGUE.

MERRY-GO-ROUND.

No. 508,994. Patented Nov. 21, 1893.

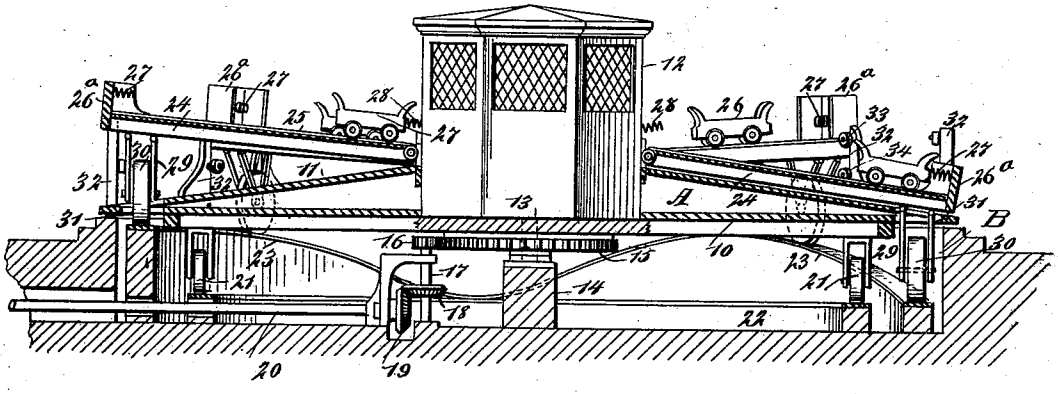

Fig 1

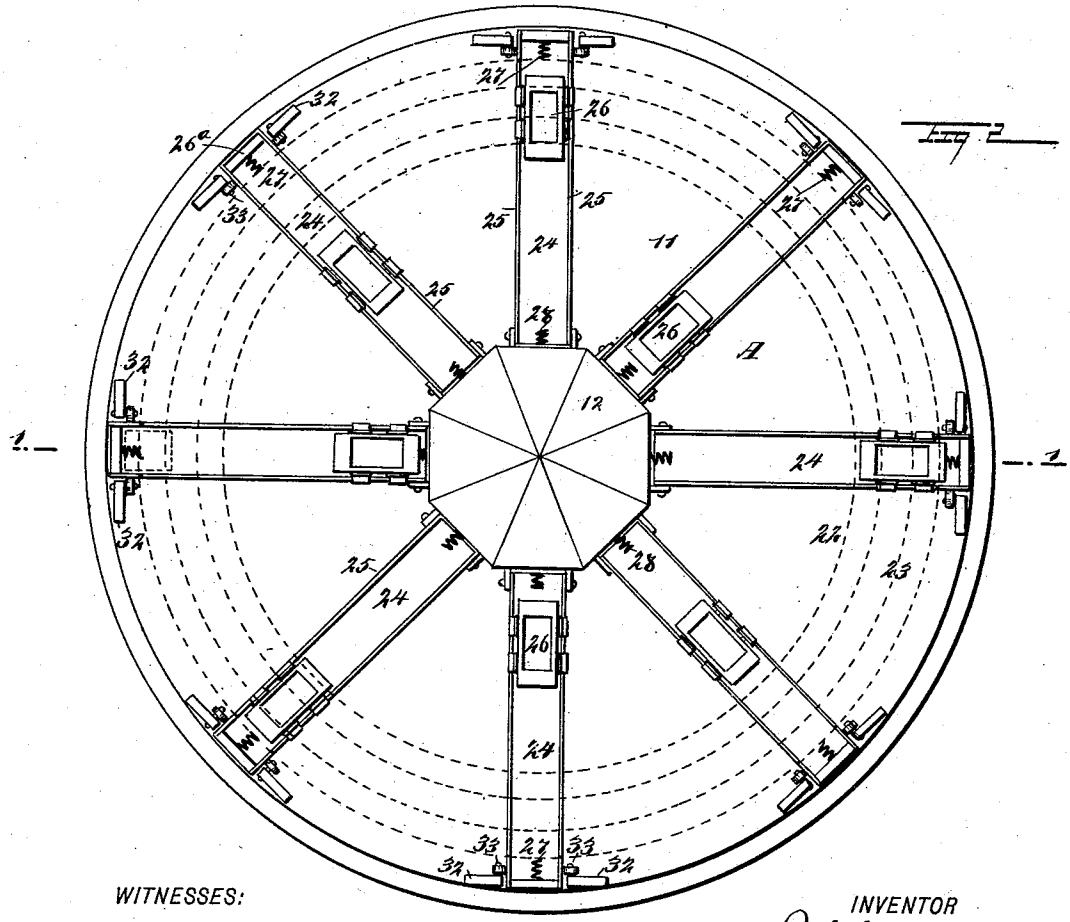

Fig 2

WITNESSES:

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JOHN S. SPRAGUE, OF TOTTENVILLE, NEW YORK.

MERRY-GO-ROUND.

SPECIFICATION forming part of Letters Patent No. 508,994, dated November 21, 1893.

Application filed December 30, 1892. Serial No. 456,798. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. SPRAGUE, of Tottenville, in the county of Richmond and State of New York, have invented a new and Improved Merry-Go-Round, of which the following is a full, clear, and exact description.

My invention is an improvement in that sub-class of merry-go-rounds in which radial inclined planes are hinged to a central portion of the revolving frame and supported at their outer free ends by means of wheels that travel on a serpentine or wave track, so as to rise and fall regularly, as they sweep around the circle.

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 claim.

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 vertical central section through the machine, taken practically on the line 1—1 of Fig. 2; and Fig. 2 is a plan view thereof.

In carrying out the invention a platform A, is provided, which platform is preferably circular and is provided with a flat under face 10 and an inclined upper face 11, the inclination of the upper face commencing at the center and extending downward in direction of the edge of the platform. Ordinarily the platform, as shown in the drawings, is made in two sections, the lower section comprising the under surface or face and the upper section the upper surface or face.

Ordinarily, in the center of the platform A a housing 12, is located, in which housing the musician and the instrument upon which the musician is to perform are located; and the uppper section of the platform is made to engage with, and in fact is attached to the outer surface of the housing, the lower portion thereof extending down to the under face of the platform, as shown in Fig. 1. The platform is mounted upon the pivot 13, and that pivot is held to turn in a suitable support 14, and the platform may be revolved in any suitable or approved manner. In the drawings a gear wheel 15, is shown as attached to the pivot 13, which wheel is driven from a pinion 16, mounted upon a vertical shaft 17, the shaft having attached thereto a beveled gear 18, which is in mesh with a like gear 19, fast upon a drive shaft 20, the latter extending to an engine or other power.

The platform A, revolves within a pit B, and the platform upon its under surface at its periphery is provided with a series of friction wheels 21, adapted to travel upon a circular track 22, located in the base of the pit. Within the pit, outside of the circular track 22 and concentric therewith, a second track 23, is located. The inner track 22, has a flat upper face, while the outer track 23, has an undulating upper surface, as is clearly shown in Fig. 1. Above the platform a series of auxiliary platforms 24, are located. These platforms are independent one of the other, and are pivoted at their inner ends to the housing 12, or an upright located at the central portion of the platform A when the housing is not employed. Any desired number of auxiliary platforms 24 may be employed, and they are adapted to extend over the upper surface of the main platform out to the periphery thereof, all of the auxiliary platforms rotating from the center of the main platform. Each auxiliary platform 24, is provided with a track 25, and upon these tracks cars 26, of any approved construction or design are adapted to run, one car being preferably placed upon each track. At the outer or free ends of the auxiliary platforms a vertical hood 26^a, is ordinarily formed; and upon the inner face of the end of each hood a buffer 27, of a yielding or spring character is placed, while a corresponding buffer 28, is attached to the support upon which the inner end of the auxiliary platforms is hinged. These spring buffers 27 and 28, are adapted for engagement with the ends of the cars and serve to prevent any decided shock to the occupants of the cars when the cars reach the ends of the auxiliary platforms. Each auxiliary platform at its free end is provided with a hanger 29, and in each hanger a friction wheel 30, is journaled, the friction wheels of all the auxiliary platforms being adapted to extend downward through openings 31, formed in the main platform A, as shown in Fig. 1, and the said friction wheels rest upon and travel upon the undulating track 23. Thus as the main platform is revolved

the auxiliary platforms are carried around with it, and the wheels supporting the outer ends of the auxiliary platforms when traveling upon the high portions of the undulating track 23, will cause the outer or free ends of the auxiliary platforms to be elevated above their inner ends, while when the wheels 30, reach the lower portions of the undulating tracks the auxiliary platforms at their outer ends are lower than at their inner ends, and the undulations or waves in the outer track 23, are preferably so made that a depression in the track will be opposite an elevation; thus the auxiliary platforms at one side of the track will be elevated at their outer ends, while those at the diametrically opposite side will be depressed at the same portions.

In order that the auxiliary platforms shall have vertical movement only, and in order that they may be guided in such movement, standards 32, are erected upon the main platform, one at each side of the outer end of each auxiliary track, and each standard is provided with two friction rollers 33 and 34, the friction rollers of a set of standards being adapted to engage with opposite sides of the hood 26 of the auxiliary platform located between that set. Thus it will be observed that each auxiliary platform is effectually guided in its upward movement; and it will be further observed that in the operation of the machine, as the main platform is revolved the auxiliary platforms will be revolved also, and their inner ends will be at times elevated above their outer ends, and vice versa, causing the cars located upon the tracks of the auxiliary platforms to travel from end to end thereof, up or down inclined planes, and it is obvious that the occupants of the cars will experience a pleasing and peculiar sensation,—that of a combined rotary, horizontal, vibratory and undulating movement. The upper face of the outer track 23, may be said to be serpentine as well as undulating in its character.

I desire it to be understood that any equivalent of the standards and friction rollers may be employed as guides for the auxiliary platforms, and that if friction rollers are employed they may be in constant engagement with the platforms; also that any form of cushion may be substituted for the springs 27. The lower member 10 of the platform A, may also be omitted if desired.

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

In a merry-go-round, the combination, with a rotary platform, a track located beneath the platform, friction wheels attached to the platform and traveling upon the track, the face of the track being flat, a fixed support located upon the platform, and a series of auxiliary platforms, hinged at their inner ends to a fixed support and extending outwardly over the main platform, of a serpentine or undulating track located beneath the main platform, friction wheels connected with the outer ends of the auxiliary platforms and held to travel upon the serpentine track, guide devices located at each side of the auxiliary platforms, cushions located at the ends of the auxiliary platforms, and cars held to slide freely upon the said auxiliary platforms, as and for the purpose specified.

JOHN S. SPRAGUE.

Witnesses:
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