March 10, 1925. 1,529,512

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CARROUSEL

Filed Dec. 6, 1923 2 Sheets-Sheet 1

FIG. 1.

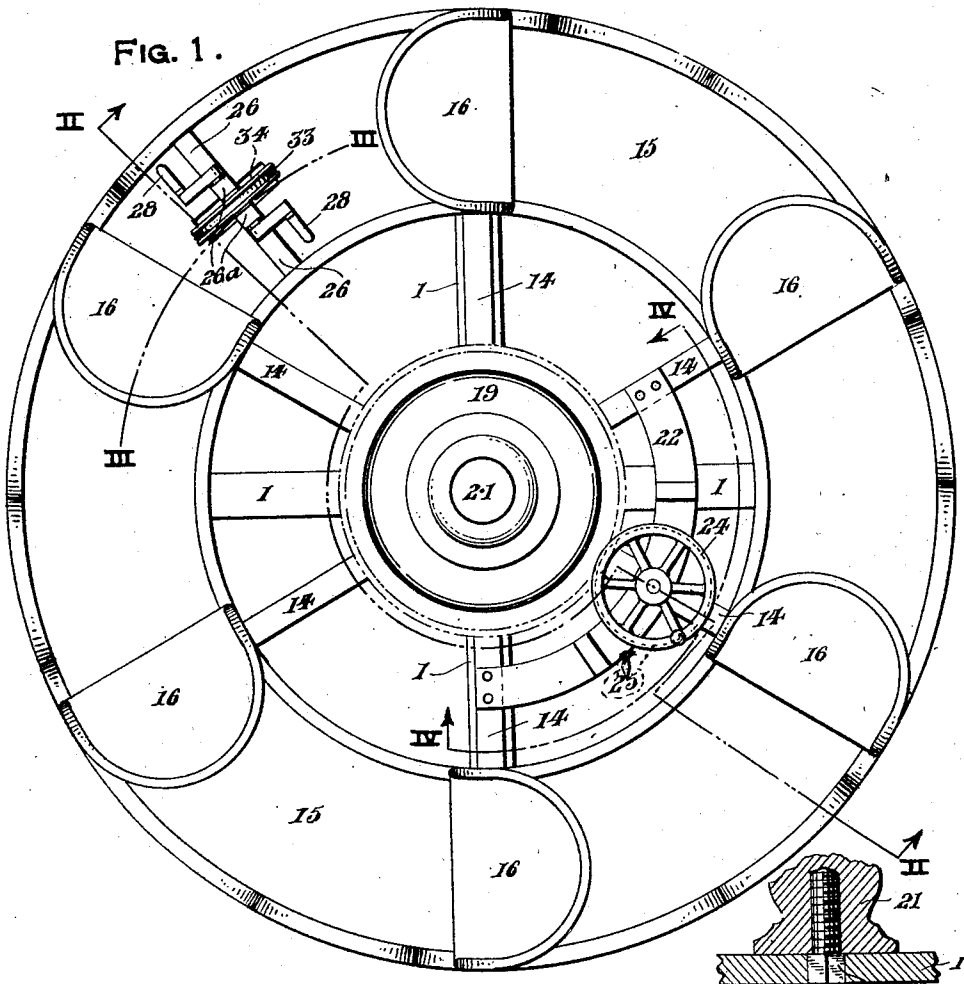

FIG. 6.

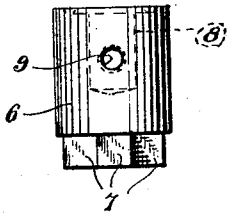

FIG. 5.

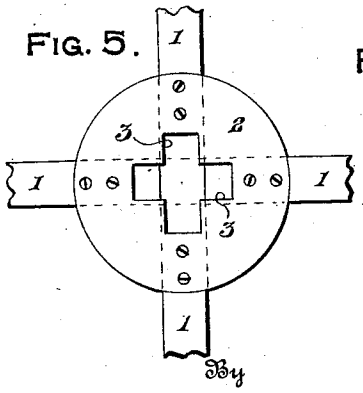

FIG. 7.

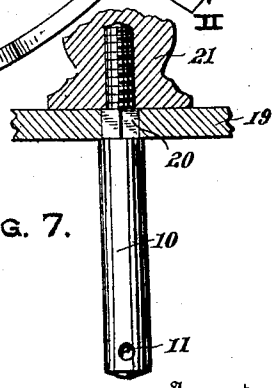

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FIG. 2.

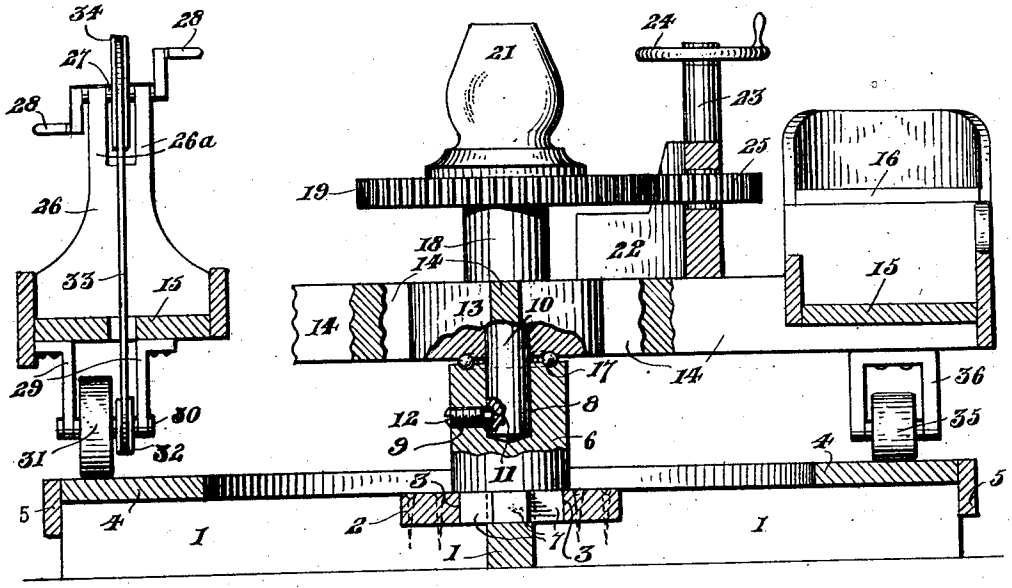


FIG. 3.

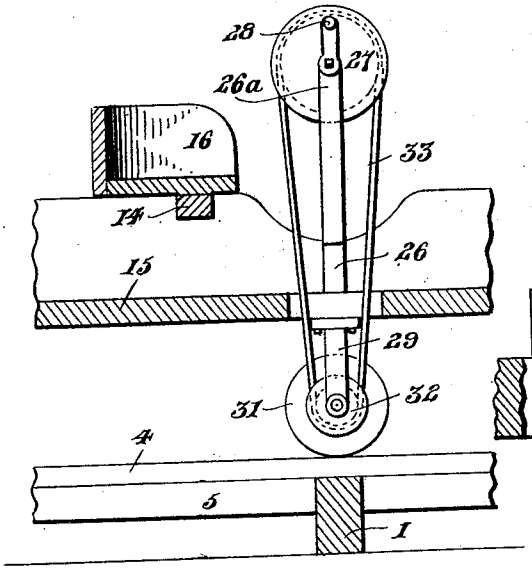
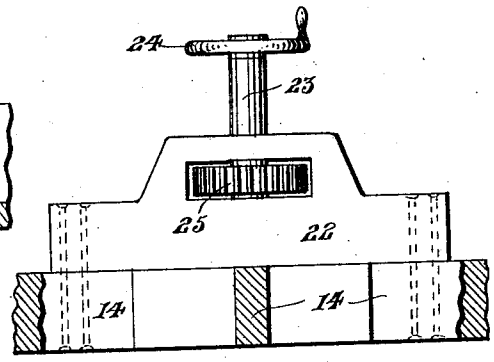


FIG. 4.



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Patented Mar. 10, 1925. 1,529,512

UNITED STATES PATENT OFFICE.

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CARROUSEL.

Application filed December 6, 1923. Serial No. 678,861.

To all whom it may concern:

Be it known that I, MIKE SMERECHANSKI, a citizen of Ukraine, residing at Nanticoke, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Carrousels, of which the following is a specification.

This invention relates to certain new and useful improvements in carrousels and particularly to the type that are manually operated by persons riding therein.

The primary object of the invention is to provide an improved propelling means for a carrousel wherein a chair carrying frame rotatably supported upon a vertical and rigidly supported shaft has gear mechanism associated therewith to effect rotation of the chair carrying frame.

A further object of the invention is to provide another type of driving or operating means for the rotatable platform of a carrousel in the form of a manually operable friction disk carried by the rotatable platform and in engagement with a stationary track positioned beneath the platform.

With the above and other objects in view as the nature of the invention is better understood, the same consists of the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawings and claims.

In the drawings, wherein like reference characters designate corresponding parts throughout the several views—

Figure 1 is a top plan view of a carrousel constructed in accordance with the present invention,

Figure 2 is a cross sectional view taken on the line II—II of Fig. 1 showing the two types of operating mechanism for the rotatable platform of the carrousel,

Figure 3 is a detail sectional view taken on line III—III of Fig. 1 showing the manually operable friction disk drive for the rotatable platform,

Figure 4 is a detail sectional view taken on line IV—IV of Fig. 1,

Figure 5 is a fragmentary top plan view of a portion of the base supporting structure,

Figure 6 is a side elevational view of the bearing slot for the lower end of the vertical shaft that supports the rotatable platform, and

Figure 7 is a fragmentary detail sectional view showing the connection between the main gear and the platform supporting shaft.

Referring more in detail to the accompanying drawings, there is illustrated a carrousel embodying a base supporting frame having crossed bars 1 cutaway at their points of intersection to support a disk plate 2 having centrally positioned crossed slotted openings 3 as shown in Fig. 5 for purposes presently to appear, the upper sides of the outer ends of the crossed bars 1 supporting a circular track 4 and with an enclosing band 5 at the extreme outer ends thereof.

A central standard or post includes a lower block 6 having a crossed bar formation 7 upon its lower end that is received in the crossed slot 3 of the disk plate 2 to be interlocked therewith while the upper end of the block 6 is bored as at 8 and is further provided with a transverse threaded opening 9 communicating with the bore. A shaft 10 has its lower end received in the bore 8 of the block 6 and is provided with a side opening 11 adjacent its lower end that alines with the threaded opening 9 in the block, a screw 12 passing through the threaded opening 9 entering the side opening 11 in the shaft 10 for rigidly locking the shaft in the block.

A turn table embodying a central body portion 13 is axially bored to receive the shaft 10 upon which the turn table is journaled, the disk body 13 carrying radial arms 14 to the outer ends of which the carriage section of the turn table is secured. The carriage section includes a floor board 15 upon which spaced seats 16 are mounted. As shown in Fig. 2, bearing balls 17 are interposed between the turn table portion 13 and the upper end of the block 6.

To retain the turn table in position upon the shaft 10, a spacing collar 18 encloses the shaft above the turn table while a relatively large horizontally positioned gear 19 is keyed as at 20 to the shaft 10 above the collar 18, a head block 21 being threaded upon the upper end of the shaft 10 in engagement with the gear 19 for holding the latter in position upon the shaft 10 that is in turn anchored in the block 6.

A block 22 is supported on several adjacent arms 14 and has a vertical shaft 23 journaled therein that carries a hand wheel 24 at its upper end adjacent one of the seats 16, the block 22 being cutaway to permit

lateral projection of a pinion 25 that is fixed to the shaft 23 as shown in Figs. 2 and 4, the pinion 25 meshing with the gear 19. Other propelling means includes a vertical standard 26 carried by the carriage section of the turn table with a shaft 27 journaled in the bifurcated upper end 26[a] thereof, each end of the shaft 27 carrying crank handles 28. Depending bracket arms 29 carried by the lower side of the floor board 15 support a cross shaft 30 at their lower ends to which a friction disk 31 is fixed, the friction disk engaging the circular track 4 as illustrated in Fig. 2. A pulley 32 is also fixed to the shaft 30 and a belt 33 passes over the alined pulleys 32 carried by the shaft 30, and the pulley 34 fixed to the shaft 27 between the bifurcated upper ends 26[a]. The turn table is further supported by rollers 35 journaled in brackets 36 depending from the outer edge of the turn table and in rolling engagement with the circular track 4.

The vertical standards or post construction being locked to the base frame of the device, a person seated in one of the chairs 16 adjacent the shaft 23, rotates the shaft and through the pinion 25 meshing with the stationary gear 19, the turn table is rotated. A person seated in one of the chairs adjacent the standard 26 operates the crank shaft 27 to effect rotation of the friction disk 31 through the belt connection 33 that moves over the circular track 4.

From the above detail description of the device, it is believed that the construction and operation thereof will at once be apparent, and while there is herein shown and described the preferred embodiment of the present invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

What is claimed as new is:—

1. In a carrousel, an annular platform, a standard positioned centrally of the platform, a journal fixed to the upper end of the standard, a hub rotatably mounted on said journal, radial arms carried by said hub, a second annular platform supported on the outer ends of said arms, seats carried by said platform and arranged in diametrically disposed pairs, supporting rollers carried by the ends of certain of said arms and resting on the base platform, a pair of hangers depending from the under side of the second platform in advance of one of said seats, a shaft journalled in said hangers, a friction wheel fixed on said shaft and resting on the first platform, a belt pulley fixed to said shaft, said second platform being provided with a slot above and in alinement with said pulley, a bearing standard having a forked upper end fixed to the second platform and straddling the slot, a crank shaft journalled in the arms of said fork, a belt pulley fixed in the shaft between said arms, and a belt connecting said pulleys and passing through the slot on opposite sides of the bearing standard.

2. In a carrousel, an annular platform, a standard positioned centrally of the platform, a journal fixed to the upper end of the standard, a hub rotatably mounted on said journal, radial arms carried by said hub, a second annular platform supported on the outer ends of said arms, seats carried by said platform and arranged in diametrically disposed pairs, supporting roller carried by the ends of certain of said arms and resting on the base platform, a pair of hangers depending from the under side of the second platform in advance of one of said seats, a shaft journalled in said hangers, a friction wheel fixed on said shaft and resting on the first platform, a belt pulley fixed to said shaft, said second platform being provided with a slot above and in alinement with said pulley, a bearing standard having a forked upper end fixed to the second platform and straddling the slot, a crank shaft journalled in the arms of said fork, a belt pulley fixed in the shaft between said arms, a belt connecting said pulleys and passing through the slot on opposite sides of the bearing standard, a hub, fixed on said journal, a gear fixed on the hub, a bearing on the arm opposite the bearing standard, a vertical shaft journalled in the last mentioned bearing, a pinion fixed on the last shaft and meshing with the gear, and a crank for rotating said pinion.

In testimony whereof I affix my signature.

MIKE SMERECHANSKI.