

Jan. 13, 1931.

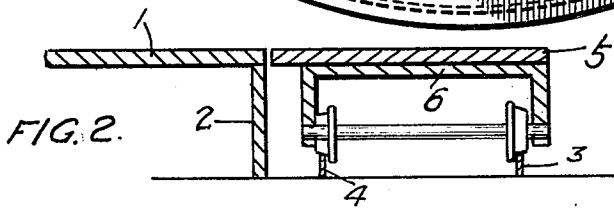
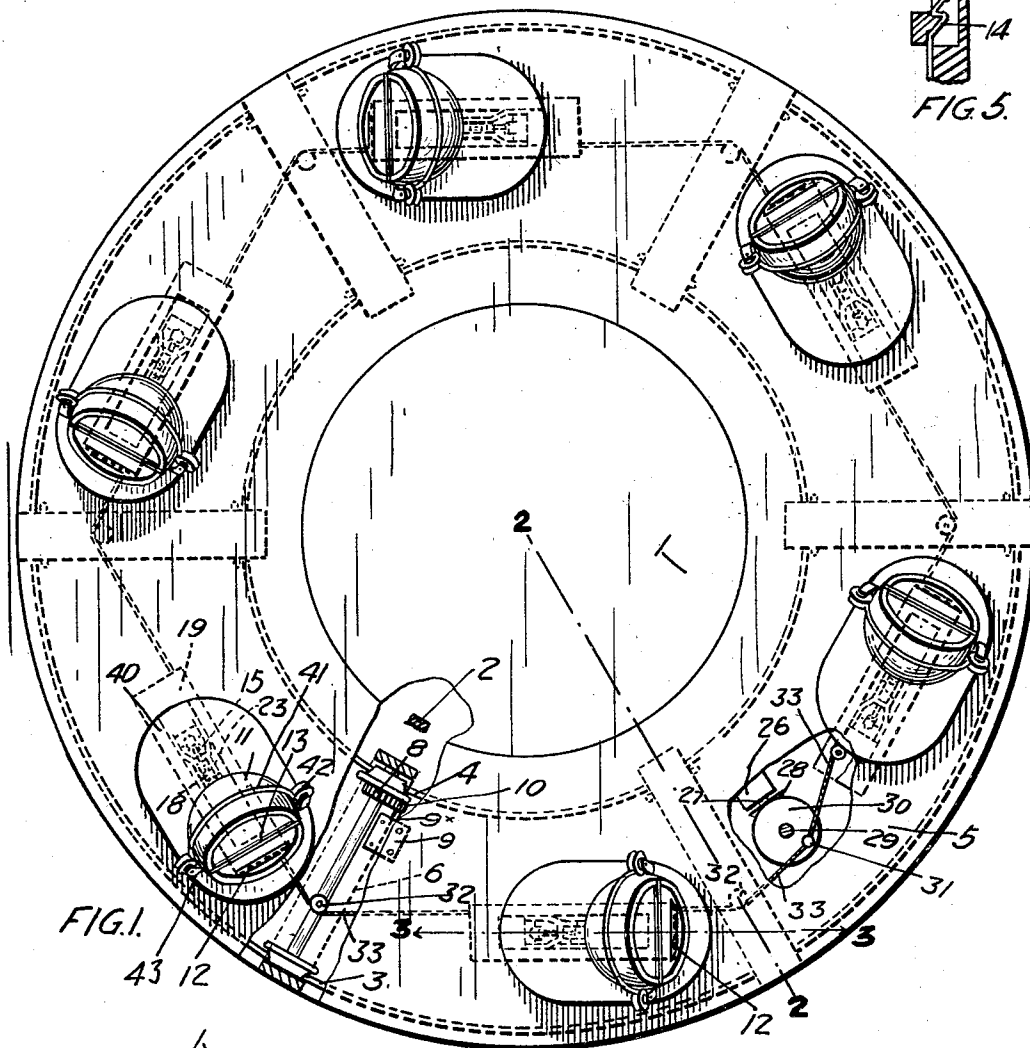
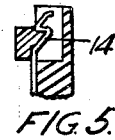
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1,789,260

AMUSEMENT DEVICE

Filed June 8, 1929

2 Sheets-Sheet 1



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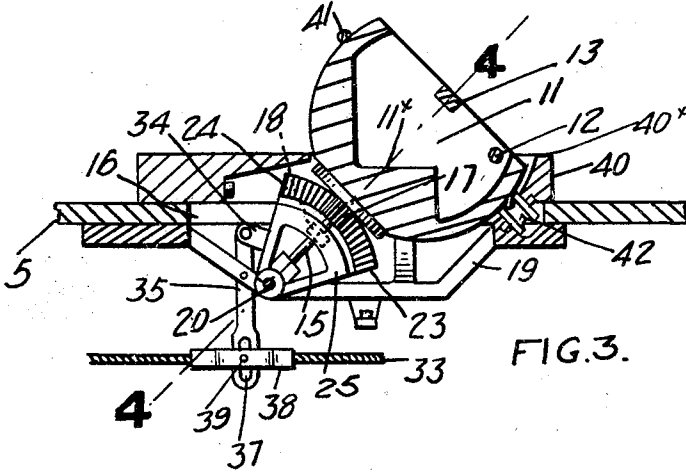


FIG. 3.

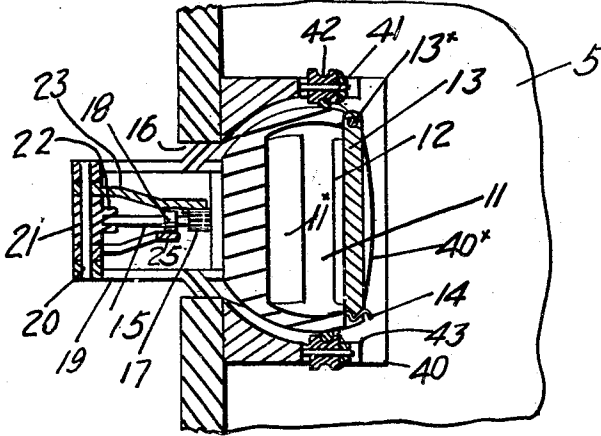


FIG. 4.

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AMUSEMENT DEVICE

Application filed June 8, 1929. Serial No. 369,467.

My invention relates to improvements in amusement devices, and the object of the invention is to devise a novel form of rotary carriage which will impart to the occupant a simultaneous rotary and rocking movement, and it consists essentially of the arrangement and construction of parts as hereinafter more particularly explained.

Fig. 1 is a plan view of my device.

Fig. 2 is a sectional view on line 2—2, Fig. 1.

Fig. 3 is a sectional view on line 3—3, Fig. 1.

Fig. 4 is a sectional view on line 4—4, Fig. 3.

Fig. 5 is an enlarged detail view of a catch device employed in my construction.

In the drawings like characters of reference indicate corresponding parts in each figure.

1 indicates a centre circular platform mounted in a stationary position upon a structure 2. 3 and 4 are outer and inner circular tracks concentric with the centre of the platform 1 and upon which is carried an annular platform 5 by means of radial carriages 6 provided with carrier wheels 7 travelling on the tracks 3 and 4. One of the axels 7* of the carrier wheel 7 is provided with a gear 8 secured thereto.

9 is a motor secured to the annular platform 5 the shaft 9* of which is provided with a pinion 10 meshing with the gear wheel 8 so as to drive the wheels 7 and revolve the platform 5 continuously around the stationary platform 1. 11 is a series of carriers. Each carrier is in the form of a segment of a hollow sphere in which a seat 11* is located.

12 is a cross bar forming a foot rest, and 13 is a cross bar hinged at one side of the carrier 11, as indicated at 13*, and detachably fastened at its opposite end at the other side of the carrier by means of a spring snap 14 of any suitable form. The cross bar 13 serves as a hand-hold for the occupant of the carrier. Each carrier is provided with a shaft 15 which is set at an angle preferably of about 45 degrees. 16 are orifices formed in the platform 5, an orifice 16 being located beneath each carrier 11 so that the shaft 15 extends through the centre thereof.

17 is a small gear secured upon the upper end of each shaft 15, and 18 is a roller also

secured to the shaft 15 beneath each of the gears 17. 19 is a supporting bracket secured to the platform 5 beneath each orifice 16 and between the side portions of which extends a cross shaft 20 upon which is mounted a sleeve 21 provided with a step bearing 22 in which the lower end of the shaft 15 is journaled. 23 is a quadrant secured to the shaft 20 and provided with a face gear 24 meshing with the gear 17.

25 is an arch-shaped bar secured to the quadrant 23 and extending to the opposite side of the shaft 15 so that the roller 18 travels in contact therewith and out of contact with the opposing face of the quadrant 23. It will thus be seen that by swinging the quadrant 23 alternately in opposite directions the shaft 15 will be rolled between the faces of the gear 24 and bar 25 to reciprocate so as to rock the carrier 11 alternately in opposite directions. In order to impart this movement to each of the quadrants 23 simultaneously, I provide a pulling device, which I will now describe.

26 is a motor provided with a shaft 27 to which is secured a bevelled gear 28. 29 is a stud shaft carried by the platform 5 upon which is mounted a bevelled gear 30 meshing with the bevelled gear 28. 31 is a pin extending from the upper face of the gear 30. 32 are guide rollers arranged at suitably spaced apart positions around the platform 5, a guide roller 32 being located between each pair of carriers 11. 33 is a cord or cable extending around the platform adjacent its lower face and secured at its ends to the pin 31, such cord extending to the outside of the rollers 32.

34 is a lug extending from each quadrant 23. 35 is a lever pivotally secured at its upper end to the lug 34 and intermediately of its length to the bracket 19 as indicated at 36. 37 is a slot formed in the lower end of each lever 35. The cord or cable 33 is preferably divided at each side of each lever 35, the divided portions being provided with a slotted connector 38 through which the lower end of the lever extends, the cross pin 39 extending transversely of the connector slot and through the longitudinal slot 37 of the lever 35 as clearly indicated in Fig. 3.

40 is a block secured to the platform 5. A block 40 is located at each carrier 11 and provided with an orifice 40*, in which the carrier rocks. The blocks 40 are sufficiently large to form a cover for the quadrant 23 and the mechanism coacting therewith. Each carrier 11 is provided with an annular track 41, and 42 are grooved wheels carried in stationary brackets 43 mounted upon the block 40 so that the track 41 travels therein as the carriers 11 are rocked back and forth.

When the device is operated the customer mounts upon the platform 5 and enters the carrier 11 and takes his place upon the seat 11*, placing his feet upon the bar 12 and gripping the cross bar 13. The motors 9 and 26 are then actuated by the operator so as to revolve the platform 5 and simultaneously revolve the gear wheel 30 which alternately pulls the cord or cable 33 in opposite directions so as to simultaneously swing the quadrants back and forth and revolve the gears 17 and shafts 15 in opposite directions so that each carrier is turned so that the occupant thereof assumes a head-down position and is then carried back by the reverse movement of the carrier to normal position.

From this description it will be seen that I have devised a very simple device which will carry the occupant thereof in a circular path and at the same time impart a rocking movement so that they alternately assume a head-down or head-up position.

What I claim as my invention is:—

1. An amusement device, comprising a stationary circular platform, an annular platform mounted to revolve concentrically around the stationary platform, means for revolving the annular platform, a series of hollow segmental spherical carriers mounted upon the annular platform each carrier being provided with a seat for the occupant, a shaft extending from each carrier in an angular direction to the platform, a gear mounted upon each shaft, a quadrant pivotally supported from the platform and coacting with each gear, a motor, a cord extending continuously around the annular platform, a connection between the cord and each quadrant, and means operated by the motor for pulling the cord alternately in opposite directions.

2. An amusement device, comprising a centre stationary platform, an annular platform concentric with the stationary platform, means for revolving the annular platform, a series of segmental spherical carriers mounted upon the annular platform, a shaft extending downwardly from each carrier through the platform in an angular direction, a gear mounted upon each shaft, a quadrant pivotally supported upon the platform and meshing with each of the aforesaid gears, a lever adjacent each quadrant, means for pivotally supporting each lever interme-

mediate of its height, a pivotal connection between the upper end of the lever and the corresponding quadrant, a motor carried by the annular platform, a cord extending continuously around the platform, bearing rollers supporting the cord, a connection between the cord and each of the aforesaid levers, and means operated by the motor for pulling the cord alternately in opposite directions.

3. An amusement device, comprising a centre stationary platform, an annular platform concentric with the stationary platform, means for revolving the annular platform, a series of segmental spherical carriers mounted upon the annular platform, a shaft extending downwardly from each carrier through the platform in an angular direction, a gear mounted upon each shaft, a quadrant pivotally supported upon the platform and meshing with each of the aforesaid gears, a lever adjacent each quadrant, means for pivotally supporting each lever intermediate of its height, a pivotal connection between the upper end of the lever and the corresponding quadrant, a motor carried by the annular platform, a cord extending continuously around the platform, bearing rollers supporting the cord, a connection between the cord and each of the aforesaid levers, a gear provided with a crank pin to which the cord is connected, and a driving connection between the gear and the aforesaid motor.

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