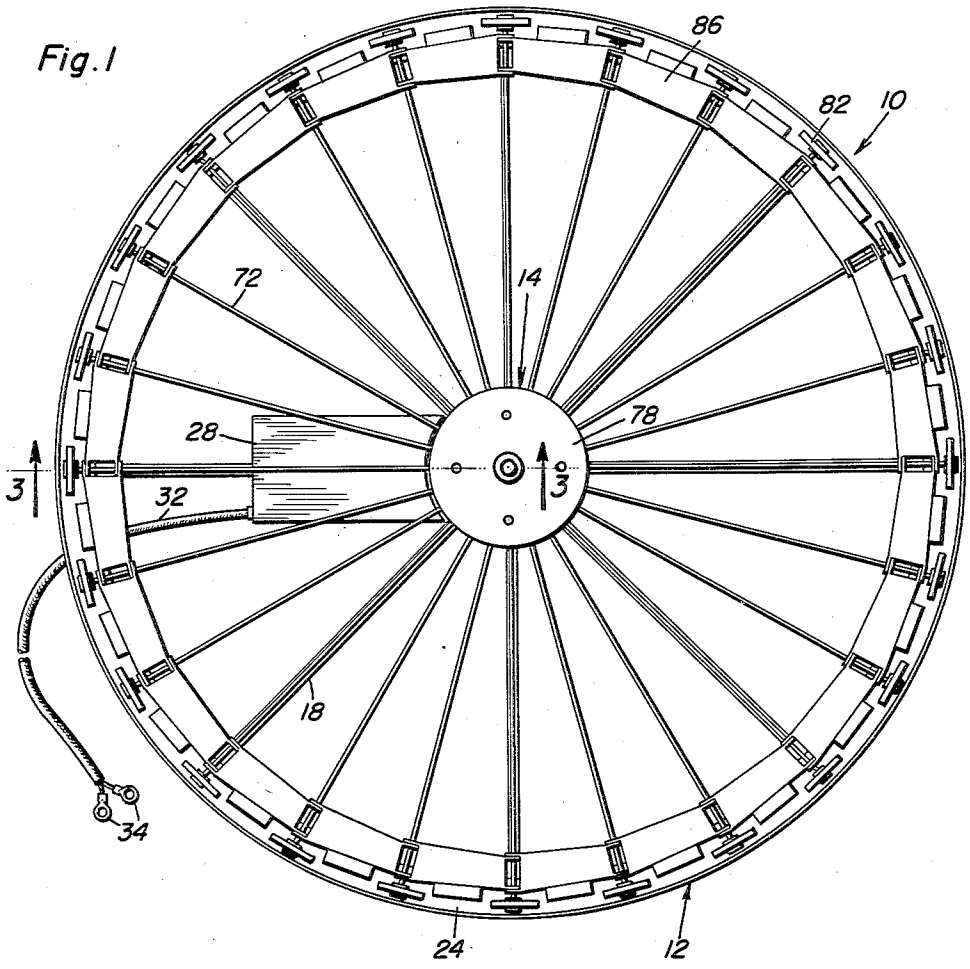
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TOY ROUNDABOUT

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Fig. 1



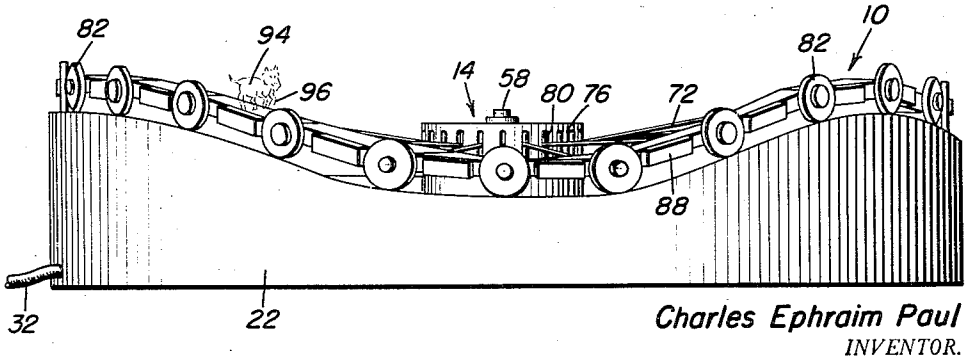


Fig. 2

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Fig. 3

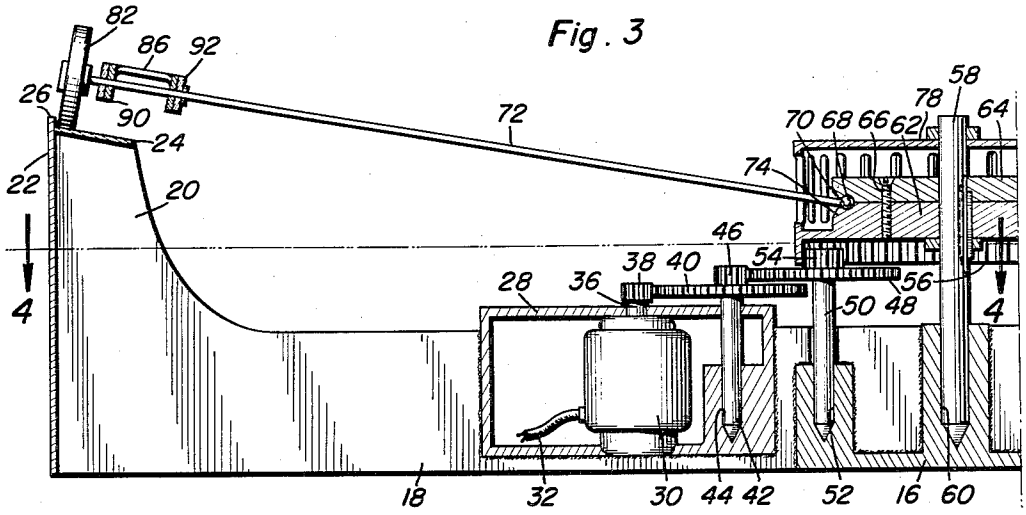


Fig. 4

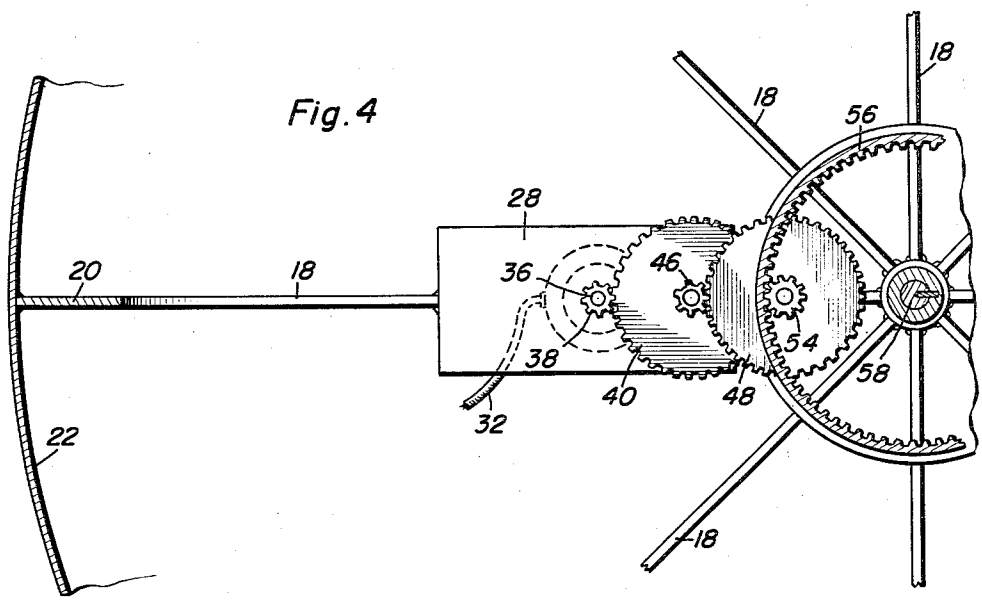
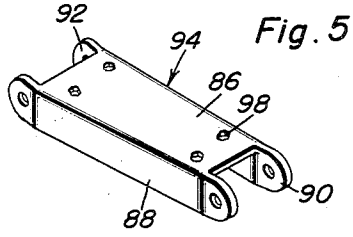


Fig. 5



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TOY ROUNDABOUT

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Application December 31, 1954, Serial No. 479,141

1 Claim. (Cl. 272—31)

This invention generally relates to a toy and more specifically includes a rotatable turret having a plurality of radial arms extending therefrom with simulated vehicles interconnecting the ends of the arms together with simulated animals or like objects mounted thereon for providing a novel and intriguing toy.

An object of this invention is to provide a toy that is simple in construction, novel in appearance and operation, entertaining, well adapted for its intended purposes and relatively inexpensive to manufacture.

Another object of the present invention is to provide a toy having a circular trackway with vehicles positioned on the trackway together with arms secured to the vehicles and pivotally mounted on a central rotating turret wherein the vehicles will be moved over the trackway and the trackway being provided with various elevations will guide the vehicle over a generally wavy path which follows the contours of the trackway.

Still another important object of the present invention is to provide a toy driven by an electric motor together with novel means for attaching radial arms to the central turret for permitting vertical swinging movement of such arms but also urging the arms in a circle defined by the center of the rotatable turret.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a top plan view of the toy of the present invention;

Figure 2 is a side elevational view of the toy showing the general variations in elevation of the trackway;

Figure 3 is an enlarged, fragmental sectional view taken substantially upon a plane passing along section line 3—3 of Figure 1 showing the details of construction of the trackway and the driving mechanism;

Figure 4 is a top plan sectional view taken substantially upon a plane passing along section line 4—4 of Figure 3 showing further structural details of the drive mechanism for the toy of the present invention; and

Figure 5 is a perspective view showing the construction of the articulated parts or platforms on which the simulated animals are detachably mounted.

Referring now specifically to the drawings, it will be seen that the numeral **10** generally designates the toy of the present invention. The toy **10** generally includes a circular trackway designated by the numeral **12** and a central turret generally designated by the numeral **14**. The toy **10** includes a central support member **16** joined by a plurality of radial spoke members **18** which terminate in vertically upstanding web portions **20** which are secured to a peripheral side wall **22** on their outer ends and to a trackway **24** on their upper ends. The trackway **24** is peripherally attached to the side wall **22** and

the web portion **20** of the plurality of spokes **18**. The web portions **20** of the spokes **18** are of varying heights thereby providing a trackway **24** of various elevations as generally illustrated in Figure 2. The peripheral side wall **22** is also constructed of varying heights in general conformance to the changes in elevation of the web portions **20** and the trackway **24**. Also, it will be seen that the side wall **22** projects slightly above the upper surface of the trackway **24** as indicated by the numeral **26**. Also, the trackway **24** and the upper edges of the web portions are inwardly and downwardly inclined thereby forming a trackway extending about the central support member **16**.

In one of the spokes **18** is provided an enlarged housing **28** having a motor **30** therein of any well known construction that is powered by electricity received through a suitable conduit **32** which may be connected to any 6–16 volt source by connectors **34**. The electric motor **30** is provided with a drive shaft **36** projecting through the upper surface of the housing **28** and having a drive gear **38** mounted thereon. The drive gear **38** is in meshing engagement with a larger idler gear **40** that is mounted on a shaft **42** positioned in a socket **44**. Integrally secured to the shaft **42** above idler gear **40** is a smaller gear **46** in meshing engagement with another idler gear **48** mounted on a shaft **50** that is journalled in a socket **52** in the central support member generally designated by the numeral **16**. Secured at the upper end of the shaft **50** is a drive pinion **54** in meshing engagement with an internal ring gear **56** mounted on a rotatable shaft or post **58** journalled in a socket **60** in the central member **16**. Integrally formed on the ring gear **56** is a bottom clamp plate **62** and movably positioned over the shaft **58** is a movable clamp plate **64** which is secured to the bottom clamp plate **62** in clamping relation by screw fasteners **66**. The lower clamp plate **62** and the upper clamp plate **64** are provided with generally semispherical recesses **68** on the facing surfaces thereof for receiving spherical balls **70** on the inner end of a plurality of radially extending arms **72**. Each of the arms **72** is provided with a ball **70** seated in complementary recesses **68** and extending outwardly through notches **74** in the peripheral surfaces of the facing edges of the clamp plates **62** and **64**. A peripheral vertical wall **76** is secured to the shaft **58** by an upper wall **78** and the vertical wall **76** is provided with a plurality of vertically disposed elongated closed end slots **80** for permitting vertical swinging movement of the arms **72** but assuring that the arms **72** will rotate about the center of the shaft **58** as driven by the electric motor **30**.

Rotatably positioned on the outer end of each arm **72** is a wheel member **82** which engages the upper surfaces of the trackway **24** thereby supporting the arms **72** in relation thereto.

Pivotally interconnecting and attached to the outer ends of the arms **72** is a plurality of carts or vehicles generally designated by the numeral **84** and including an upper surface **86** having depending side flanges **88** with projecting ears **90** and **92** thereon. The width of the top surface **86** generally tapers from front to rear as illustrated in Figure 5 so that the ears **90** on the front thereof are spaced a smaller distance apart than the ears **92** on the rear end thereof so that the ears **90** on the forward end of one of the carts **84** will be received between the corresponding rear ears **92** on the next adjacent cart **84** thereby pivotally articulating the outer ends of the radial arms **72** for retaining the arms **72** in spaced relation and also supporting a plurality of simulated animals **94** thereon. The animals **94** are provided with legs **96** for detachable engagement with polygonal apertures **98** in the upper surface **86** of the carts **84**

thereby providing interchangeability of the animals **94** as desired.

In operation, the toy **10** of the present invention is activated by the electric motor **30** which may be of any well known construction such as a type adaptable for use with various voltages that may be available. The motor **30** drives through the reduction gearing system formed by the meshing gears **38**, **40**, **46**, **48**, **54** and **56** thereby rotating a central turret defined by the vertical peripheral plate **76** together with the upper and lower clamp plates **62** and **64** which secure the arms **72** thereto for rotation therewith and vertical swinging movement in relation thereto. As the arms rotate about the center formed by the rotatable post or shaft **58**, the wheels **82** will move along the trackway **24** and generally follow the contour thereof wherein the various carts **84** will proceed along the variations in elevation of the trackway **24**. It will be seen that various types of animals **94** or other objects may be positioned on the carts **84** as desired and they may be interchangeable to show any sequence or arrangement of animals that may be employed in certain instances. The slots **80** in the vertical wall **76** limit and guide the vertical swinging movement of the arms **72** and also retain the arms **72** in a radial relation in relation to the clamp plates **62** and **64**.

It will be understood that the device of the present invention may be utilized in various ways and is primarily designed as a toy that may be constructed of any suitable materials lending itself to relatively inexpensive manufacturing procedures so that the toy of the present invention may be relatively inexpensively manufactured.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

A toy comprising an enlarged circular undulated trackway, a central turret, a plurality of radially extending

arms attached to said turret, a rotatable wheel on the outer end of each arm engaging the upper surface of the trackway, simulated vehicles having a flat upper surface pivotally interconnecting the outer ends of said arms adjacent the wheels for retaining the arms in spaced relation and forming a generally continuous articulated member, simulated objects removably mounted on said vehicles, and means for rotating said turret thereby moving the arms and wheels around the trackway, a central support member, a plurality of spokes extending radially from said central support member to said trackway for rigidly interconnecting the central support member and the trackway, said central support member having a socket therein, a vertical post rotatably journaled in said socket, said turret mounted on said post for rotation therewith, a ring gear mounted on said turret in engagement with the rotating means, and means interconnecting said arms and turret for permitting vertical swinging movement of said arms, said arm and turret interconnecting means including a spherical ball on the end of each arm, a pair of separable clamp plates with one of said plates being secured to said post for rotation therewith, the facing surfaces of said plates having a plurality of complemental recesses for receiving said ball ends, said recesses being substantially semi-spherical in shape for permitting angular movement of the arms in relation to the plates and preventing longitudinal movement of the arms, said one plate having a rigid upstanding peripheral guide plate surrounding said clamp plates in concentric spaced relation, said guide plate having a plurality of closed end slots vertically disposed therein for receiving the arms thereby guiding and limiting the vertical swinging movement of said arms and transmitting rotational force to the arms from the turret.

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