Feb. 22, 1966 C. E. WREN 3,236,518

OSCILLATING ROTARY AMUSEMENT RIDE

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Fig. 1.

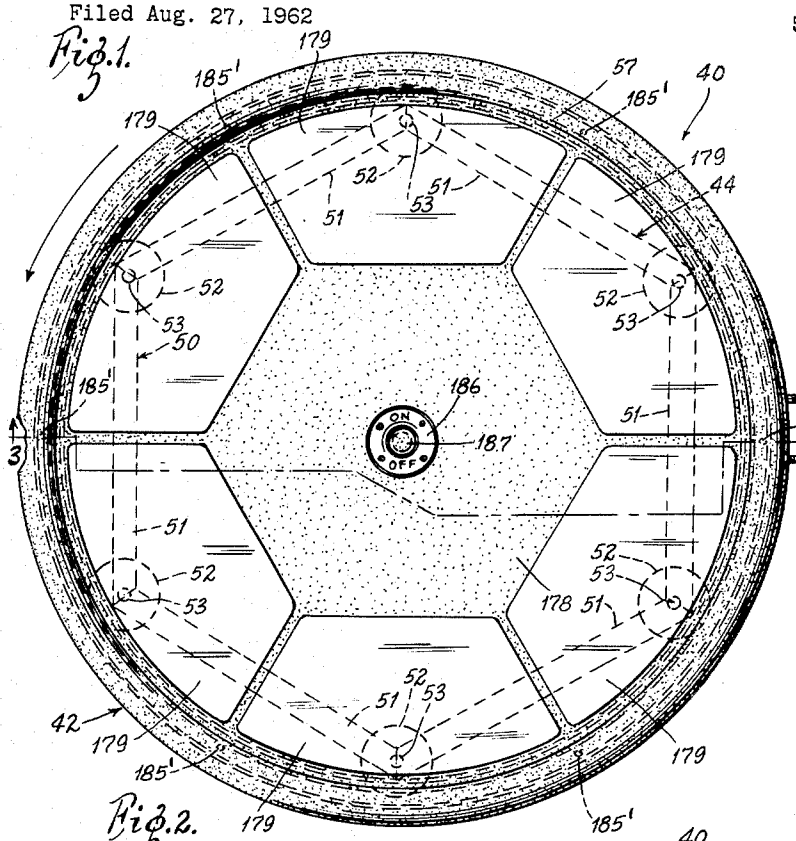


Fig. 2.

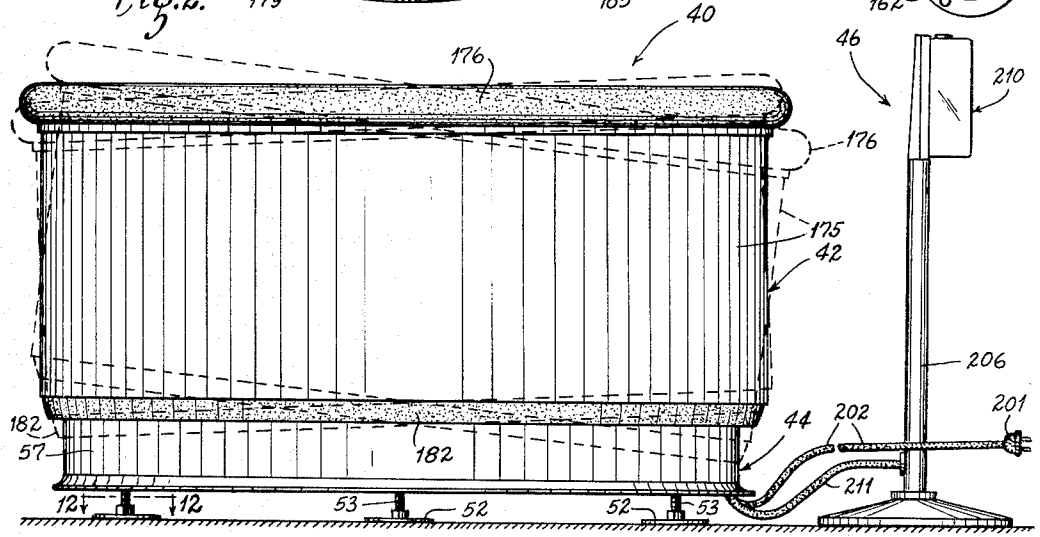


Fig. 32.

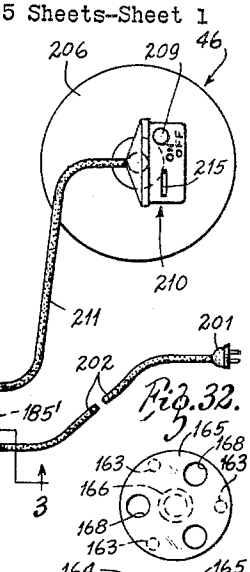


Fig. 33.

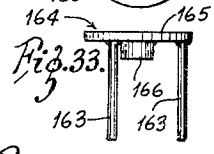


Fig. 34.

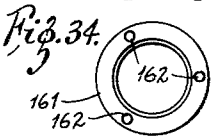


Fig. 12.

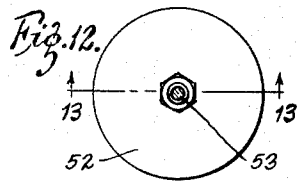
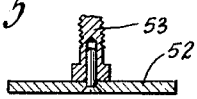


Fig. 13.



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OSCILLATING ROTARY AMUSEMENT RIDE

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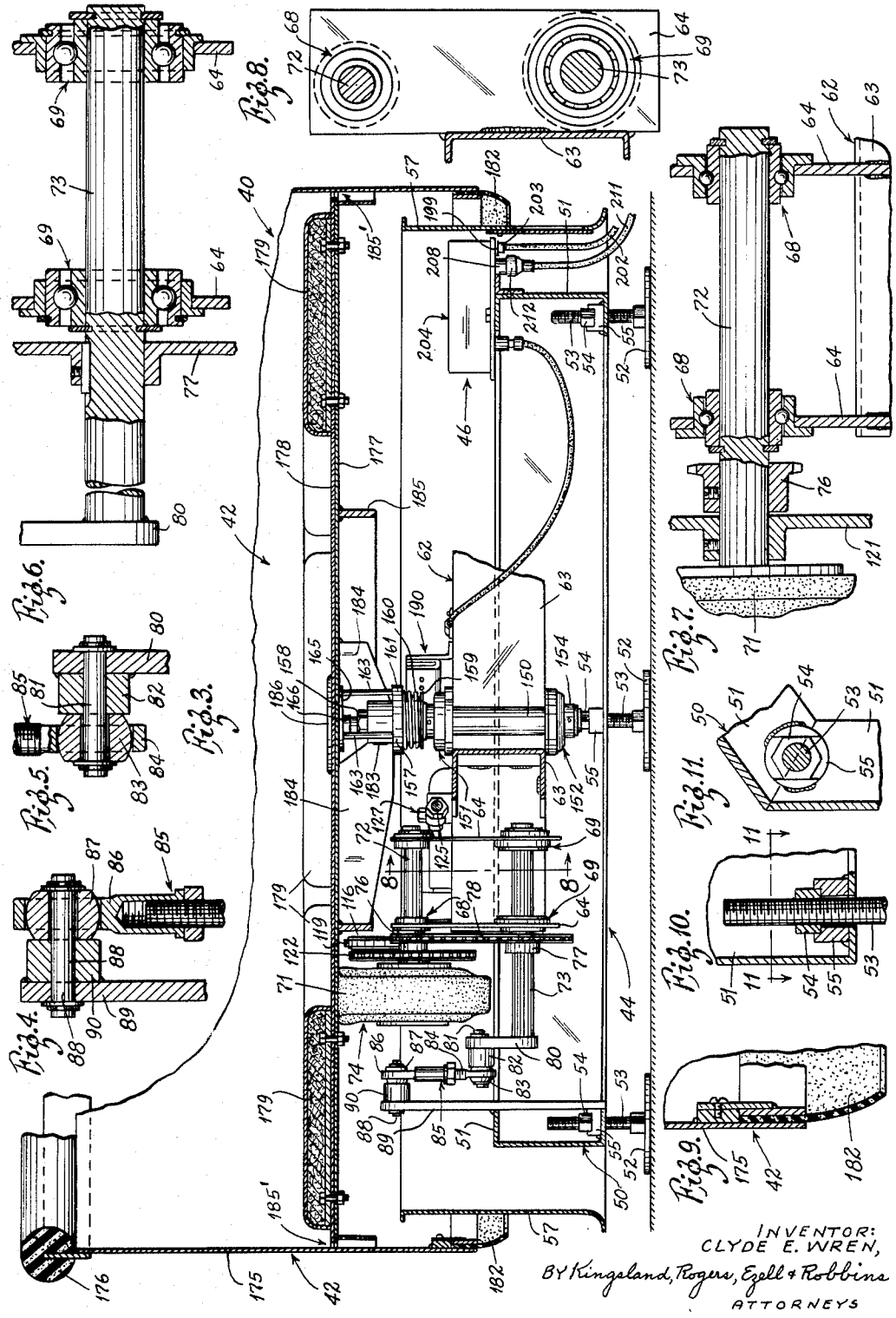

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Fig. 14.

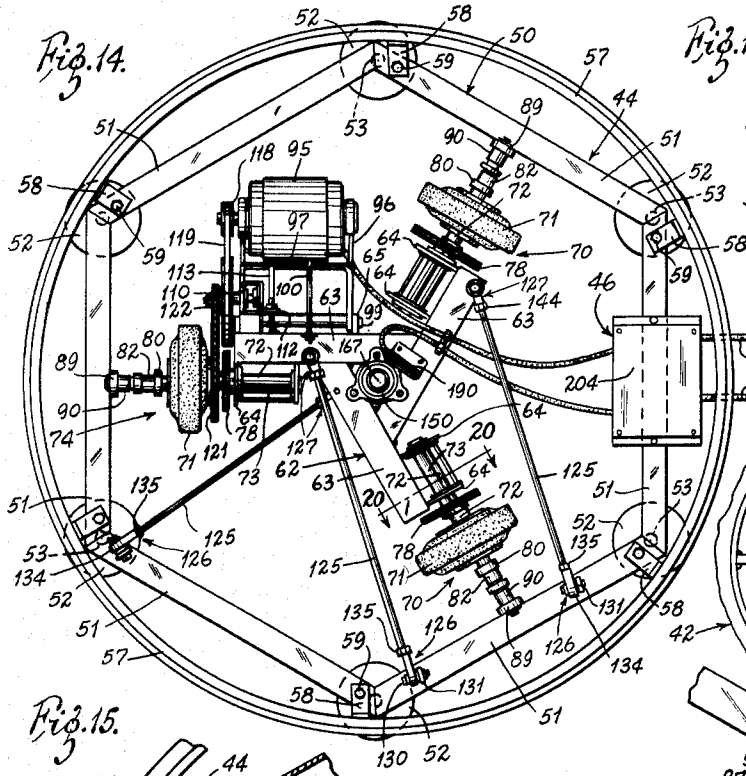

Fig. 16.

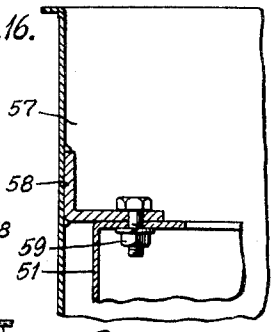

Fig. 30.

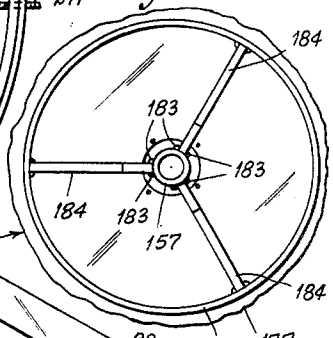

Fig. 15.

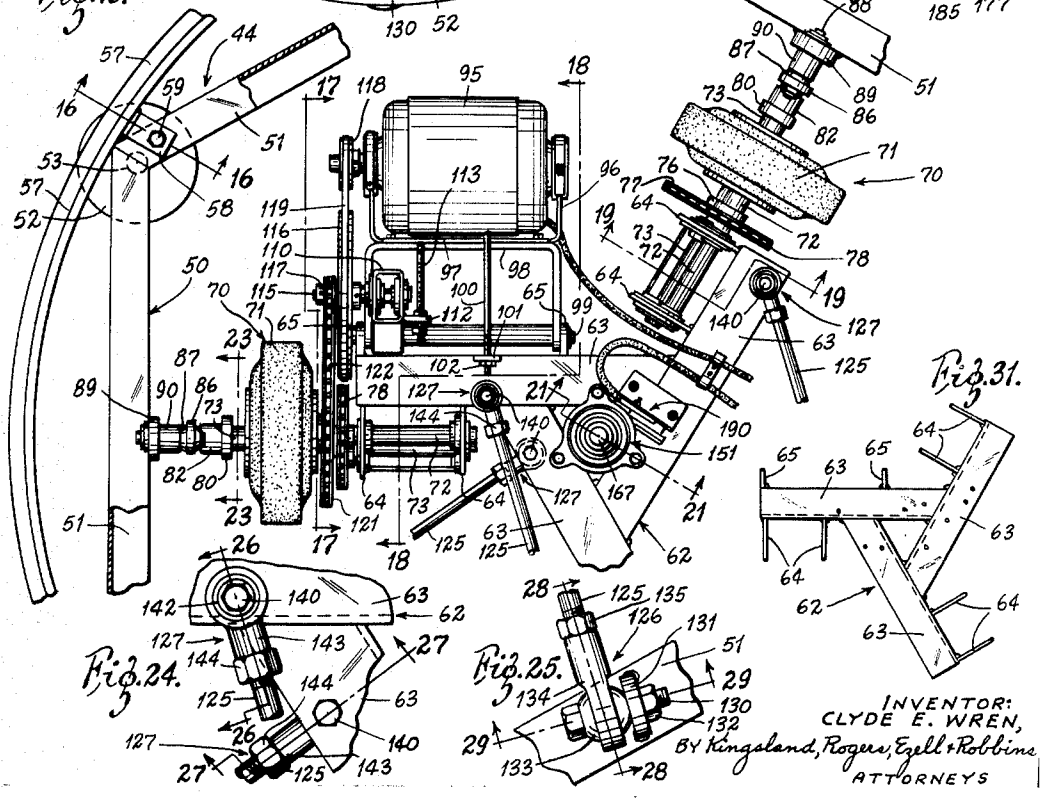

Fig. 24.

Fig. 25.

Fig. 31.

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Fig. 17.

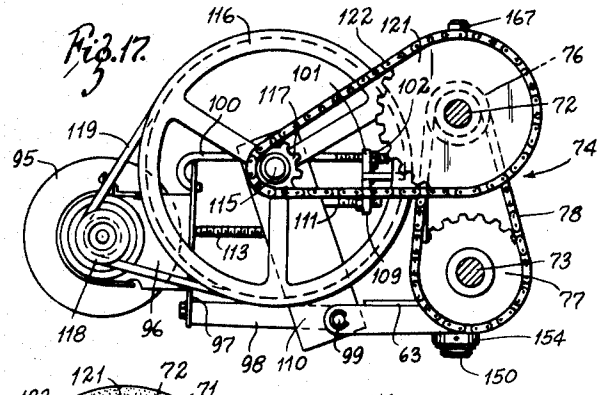


Fig. 18.

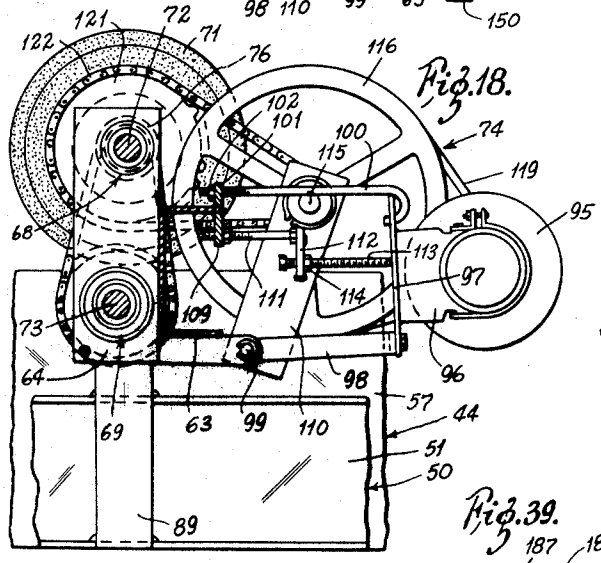


Fig. 19.

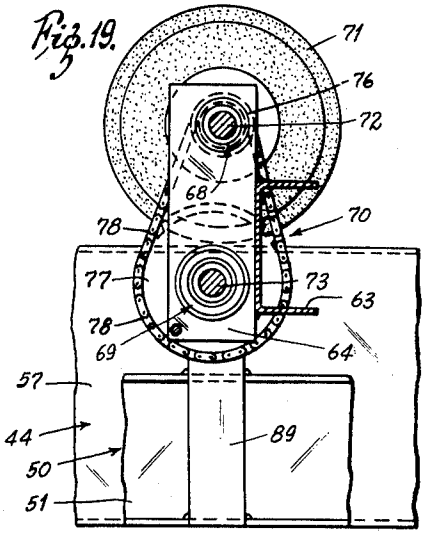


Fig. 20.

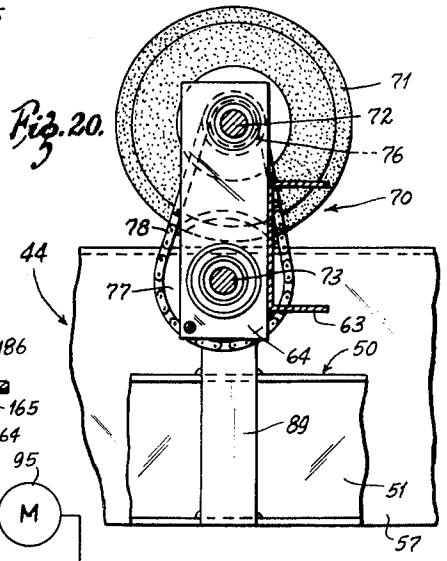
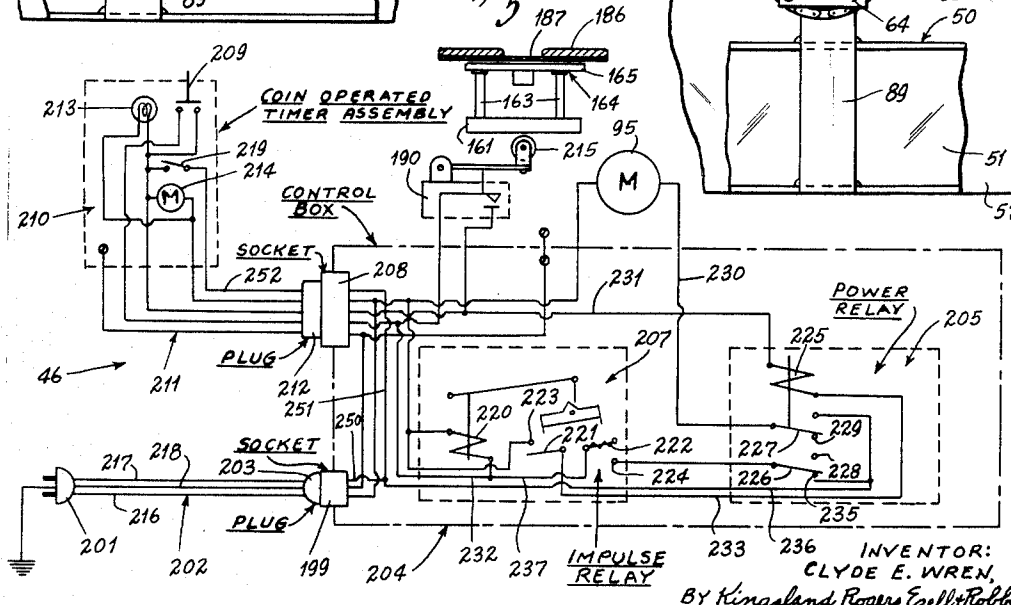


Fig. 39.



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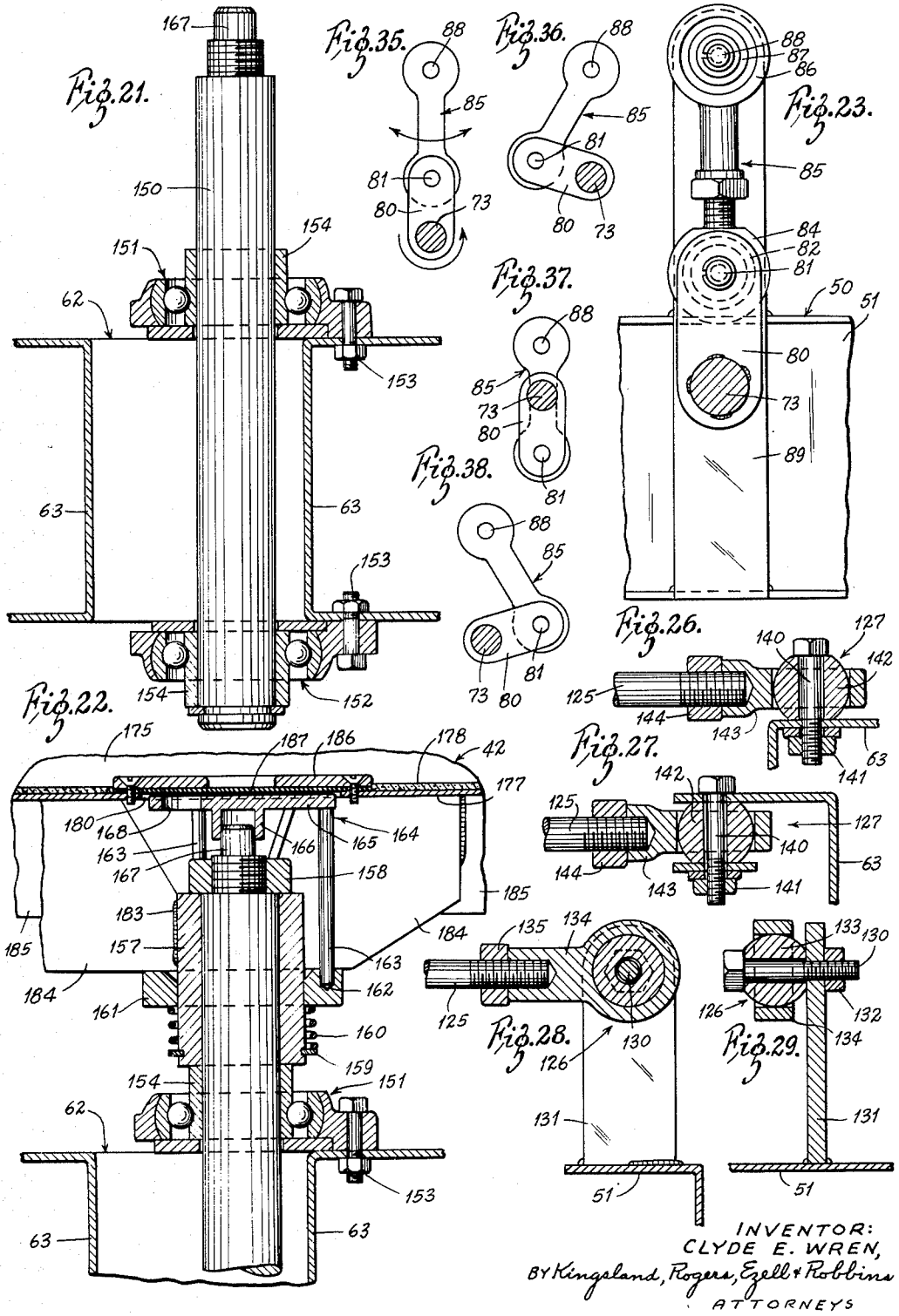

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United States Patent Office 3,236,518 Patented Feb. 22, 1966

3,236,518

OSCILLATING ROTARY AMUSEMENT RIDE

Clyde E. Wren, Rte. 2, Fulton, Mo.

Filed Aug. 27, 1962, Ser. No. 219,673
5 Claims. (Cl. 272—50)

The present invention relates generally to amusement rides, and more particularly to a novel rotary ride.

There are many amusement and thrill rides in operation in amusement parks, carnivals, fairs, and other places throughout the world. In addition, there are individual rides which are used by both children and adults, which are located at grocery stores, air terminals, and other places where a minimum of space and utility of the ride are available. There has long been the need of a combination amusement and thrill ride, particularly for the latter purpose, which can accommodate children or adults with complete safety. Too often thrill rides involve movements which are dangerous, particularly to small children. Hence, the further need has existed for an adequate thrill ride which does not involve dangerous movements.

Therefore, an object of the present invention is to provide a novel amusement and thrill ride which supplies the long-felt need as set forth above and which also may be employed on the wider scale of amusement parks, and the like, if desired.

In brief, the present novel rotary ride includes a base mechanism incorporating interrelated working parts, a removable tub construction disposed on the base mechanism, and controll mechanism therefor. The base mechanism includes a stationary frame within which is a movable frame mounted on the stationary frame by a plurality of crank elements and associated parts which are moved through suitable elements to impart to the central frame a peculiar oscillating, wallowing movement. Simultaneously, a plurality of rubber-tired wheels mounted on the central frame are rotated, one through an electric motor and the others through the tub construction disposed on the rubber-tired wheels. The tub construction rotates and simultaneously oscillates and wallows to provide a safe amusement and thrill ride which is enjoyed by children and adults. The control mechanism is illustrated as coin controlled.

Therefore, another object is to provide a novel rotary ride which gives the occupant a combination of rotary, oscillating and wallowing movements combined to be highly effective as a safe amusement thrill ride.

Another object is to provide a novel rotary ride of the kind disclosed, which can be coin or otherwise controlled and which can be occupied by either children or adults with safety.

Another object is to provide a novel, safe rotary ride which can be installed at any convenient location, as a grocery store, or the like, and which is powered from standard 110 volt lines.

Another object is to provide a novel, safe rotary ride which is sturdy in construction and highly effective for its intended purpose through hundreds of hours of operation with minimum maintenance.

Another object is to provide a novel, safe rotary ride which incorporates a unique composite rotary ride movement which is highly effective as an amusement thrill ride, and which can be energized and deenergized by a rider at will.

Another object is to provide a novel, safe rotary ride which can be moved from location to location by small truck, which can be adjusted at the site of operation to provide for an uneven support, and which requires no hold-down means, the weight of the machine and occupants being sufficient to maintain it in position during operation thereof.

The foregoing and other objects and advantages are apparent from the following description taken with the accompanying drawings, in which:

FIGURE 1 is a top plan view of a rotary ride mechanism incorporating the teachings of the present invention;

FIGURE 2 is a side elevational view of FIGURE 1, showing in broken lines some of the numerous wobbling and undulating positions of the tub as it revolves;

FIGURE 3 is a partial transverse, vertical section taken approximately on the irregular line **3—3** of FIGURE 1;

FIGURE 4 is a fragmentary vertical sectional view of the upper portion of the crankshaft linkage;

FIGURE 5 is a similar view of the lower portion of said linkage;

FIGURE 6 is an enlarged view, partly in section, of the crankshaft supporting construction;

FIGURE 7 is a view similar to FIGURE 6 of the drive shaft;

FIGURE 8 is a vertical section on an enlarged scale taken on the line **8—8** of FIGURE 3;

FIGURE 9 is an enlarged fragmentary sectional view of the lower left hand portion of the tub;

FIGURE 10 is an enlarged fragmentary sectional view of the lower left hand portion of the hexagonal frame;

FIGURE 11 is a horizontal section taken on the line **11—11** of FIGURE 10;

FIGURE 12 is a horizontal section taken on the line **12—12** of FIGURE 2;

FIGURE 13 is a vertical section taken on the line **13—13** of FIGURE 12;

FIGURE 14 is a top plan view of the base structure with the tub and associated parts removed;

FIGURE 15 is a fragmentary view similar to FIGURE 14 on an enlarged scale;

FIGURE 16 is a vertical section on an enlarged scale, taken on the line **16—16** of FIGURE 15;

FIGURE 17 is a vertical section on an enlarged scale taken on the line **17—17** of FIGURE 15;

FIGURE 18 is a vertical section on an enlarged scale on line **18—18** of FIGURE 15;

FIGURE 19 is a vertical section on an enlarged scale on line **19—19** of FIGURE 15;

FIGURE 20 is a vertical section on an enlarged scale on line **20—20** of FIGURE 14;

FIGURE 21 is a vertical section on an enlarged scale on line **21—21** of FIGURE 15;

FIGURE 22 is a vertical section similar to FIGURE 21 with the tub and supporting elements in place;

FIGURE 23 is a vertical section on an enlarged scale taken on line **23—23** of FIGURE 15;

FIGURE 24 is a fragmentary enlarged top plan view of a portion of FIGURE 14;

FIGURE 25 is a fragmentary enlarged top plan view of a portion of FIGURE 14;

FIGURE 26 is a vertical section on an enlarged scale taken on line **26—26** of FIGURE 24;

FIGURE 27 is a vertical section on an enlarged scale taken on line **27—27** of FIGURE 24;

FIGURE 28 is a vertical section on an enlarged scale taken on line **28—28** of FIGURE 25;

FIGURE 29 is a vertical section on an enlarged scale taken on line **29—29** of FIGURE 25;

FIGURE 30 is a bottom plan view of the tub supporting ring construction;

FIGURE 31 is a top plan view of the three-piece central frame structure;

FIGURE 32 is a top plan view of the tripod;

FIGURE 33 is a side elevational view thereof;

FIGURE 34 is a top plan view of the contact ring;

FIGURES 35, 36, 37 and 38 are diagrammatic illustrations of the crankshaft action; and

FIGURE 39 is a wiring diagram.

Referring to the drawings more particularly by reference numerals, 40 indicates generally a rotary amusement ride, constructed in accordance with the concepts of the present invention. Broadly, the ride 40 includes a removable tub construction 42, a base mechanism 44 which includes interrelated working parts set forth with particularity below, and control mechanism 46.

The base mechanism 44 includes a hexagonal frame 50 comprising six channel member segments 51 integrated by welding, or other preferred means (FIGS. 3, 14 and 15). The frame 50 is supported on six substantially equally spaced foot plates 52 which are adjustably connected to the bottom flanges of the channel segments 51 by threaded posts 53, stationary rider nuts 54 and blocks 55 welded to the lower flanges of the channel segments 51 (FIGS. 10, 11, 12 and 13). Surrounding the frame 50 is an annular protective member 57 of the cross section shown on the drawings which is secured by brackets 58 and nut and bolt assemblies 59 to the upper flanges of the channel segments 51 (FIGS. 15 and 16).

Within the frame 50 is a centrally disposed fabricated frame structure 62 which is integrated with the frame 50 for movement in respect thereto in the manner detailed below (FIGS. 3, 14 and 31). The central frame structure 62 includes three channel segments 63 welded together as shown with the bottoms in vertical planes, as is clear from FIGURES 18, 19 and 20. Welded in pairs to the outer surfaces of the bottoms of the channel segments 63 at right angles thereto are vertical opposed supporting plates 64. Welded to the bottom of one channel segment 63 are two spaced fingers 65, each of which is apertured at its free end (FIGS. 14, 15 and 31).

Supported in each of the two pairs of vertical plates 64 disposed to the right in FIGURE 31 is a wobbly wheel assembly 70, including a rubber-tired wheel 71 secured to a shaft 72 for rotation thereof, the latter being rotatably mounted in the spaced plates 64 by ball bearing assemblies 68 (FIGS. 3, 7 and 8). A second shaft 73 is also rotatably mounted in the plates 64 beneath the shaft 72 on ball bearing assemblies 69, and extends outwardly beneath and beyond the wheel 71, as is illustrated in FIGURE 3 in respect to a third wobbly wheel assembly 74. A small sprocket 76 is secured to the shaft 72, a large sprocket 77 being secured to the shaft 73 therebeneath, said sprockets 76 and 77 receiving a chain 78.

Welded to the free end of each shaft 73 is a link 80 which pivotally receives at its free end a stub shaft 81 (FIGS. 3 and 5). The stub shaft 81 is maintained in substantially right angular relationship with the link 80 by heavy sleeve 82 welded against the face of the link 80. Freely rotatable on the shaft 81 and adjacent to the heavy sleeve 82 is a ball segment 83 which receives the lower end portion 84 of an adjustable link 85, the upper end portion 86 thereof being rotatably associated with a similar ball segment 87 rotatably mounted on the outer end of a second stub shaft 88 supported at the upper end of a plate 89 by means of a heavy sleeve member 90 welded to the upper end of the plate (FIG. 4). The plate 89 is welded to the spaced sides of the channel segments 51 (FIG. 3). The three plates 89 are spaced a substantially equal distance apart (FIG. 14). It is manifest that the ball segments 83 and 87 provide for a universal movement of the ends of the adjustable link 85. It will be understood that rotary movement is imparted to the two shafts 73 of the assemblies 70 from the wheels 71, as is more particularly detailed below.

The wobbly assemblies 70 are similar to the wobbly assembly 74, except the former do not include a large sprocket 121, since the shafts 72 thereof are rotated by the rubber-tired wheels 71 which are, in turn, rotated by the support tub construction 42, as appears below. In addition, th large sprockets 77 of the assemblies 70 are predeterminately larger in size than the sprocket 77 of the assembly 74, the sprockets 77 of the assemblies 70 being of different sizes (FIGS. 17, 19 and 20).

The wheel 71 of the wheel assembly 74 is driven by an electric motor 95 having a U-plate mounting base 96 that includes a plate 97 disposed generally in a vertical plane and which is bolted at the bottom to a U-strap 98, the latter being pivotally mounted at its free ends on a shaft 99 which is pivotally mounted in the apertured ends of the two spaced fingers 65 (FIGS. 15, 17 and 18). For snugly adjusting the position of the motor 95 for tensioning of the motor belt, a hook member 100 engages at its free hook end through an aperture in the plate 97, the other end being threaded and extending through a plate 101 welded to a channel segment 63 and receiving a nut 102 against the side of the plate 101 remote from the hook portion of the hook member 100.

An elongated supporting member 110 of rectangular cross section is pivotally mounted on the shaft 99, which is maintained in selected position of adjustment by adjusting means including a shaft 111 secured at one end to a bracket 112 welded to the side of the member 110, said shaft 111 being threaded at the other end and extending through a plate 109 welded to the channel segment 63 beneath the plate 101 and being maintained in relation therewith by a suitable nut threaded on the member 111. A threaded member 113 is threadedly mounted in the bracket 112 and engages the plate 97, being secured in selected position by a nut 114.

The member 110 rotatably supports at its upper end a stub shaft 115, one end of which receives a large pulley 116 and a small sprocket 117, said pulley 116 and said sprocket 117 being secured to the stub shaft 115 for simultaneous rotation (FIGS. 17 and 18). A small pulley 118 is secured to the drive shaft of the motor 95. A belt 119 is trained about the two pulleys 116 and 118. The shaft 72 forming part of the wheel assembly 74 receives a large sprocket 121 between the small sprocket 76 and the wheel 71. A drive chain 122 is trained about the sprockets 117 and 121. It is manifest from the foregoing that the electric motor 95 drives the wheel 71 of the wheel assembly 74 through the aforesaid elements. It is also manifest that the motor 95 likewise drives the shaft 73 of the wheel assembly 74.

Three supporting rods 125 are provided for assisting in maintaining the aforesaid relationship of the several enumerated parts, and extend between the central frame structure 62 and the hexagonal frame 50 (FIGS. 14, 24, 25, 26, 27, 28 and 29). There are similar universal connections 126 and 127 at the ends of the rods 125, but at ninety degrees to each other, as is clear from the drawings.

Each of the universal connections 126 includes a stub shaft 130 in the form of a bolt extending through an aperture in the upper end of a vertical plate 131 welded to the top of a channel segment 51 maintained in place by a nut 132 (FIGS. 25, 28 and 29). Between the head of the stub shaft 130 and the plate 131 is a ball segment 133 which receives for universal movement an eye member 134 threaded on the end of the rod 125 and maintained in position by a suitable nut 135.

Each universal connection 127 is similar to the universal connection 126, including a stub shaft 140 in the form of a bolt, which is received directly by the channel segment 63 and is maintained in position by a nut 141 and suitable washer (FIGS. 24, 26 and 27). Between the head of the stub shaft 140 and the channel segment 63 is a ball segment 142 which receives an eye member 143 threaded on the end of the rod 125 and maintained in position by a suitable nut 144.

A vertical shaft 150 is mounted centrally of the central frame structure 62 by means of ball bearing assemblies 151 and 152 secured by nut and bolt assemblies 153 to the channel segments 63, as is clearly disclosed in FIG-

URES 14, 21 and 22. It is to be understood that the center sleeves **154** are press-fitted onto the shaft **150** to maintain it in the desired position, although other means for this purpose may be employed, if desired. A sleeve **157** forming part of the tub construction **42** is disposed about the upper end of the shaft **150**, being maintained in position against the upper end of the upper sleeve **154** by a suitable nut **158** threaded onto a threaded reduced upper portion of the shaft **150**. A spring-split washer **159** is disposed in a groove about the sleeve **157** near the lower end thereof which supports a compression spring **160**.

Resting on the compression spring **160** is a ring **161** (FIG. 34), having three spaced wells **162** which receive the three posts **163** of a switch actuator **164** (FIGS. 32 and 33), which also includes a top plate **165** depending from which is a central integral ring **166** which fits around a further reduced end portion **167** of the shaft **150** as a guide. The plate **165** also has three equi-spaced finger openings **168** for holding the actuator **164** while mounting the same in operative position. It is manifest that the switch actuator **164** can be moved downwardly against the spring **160** to depress the ring **161** for a purpose set forth below.

The tub construction **42** is annular in configuration and includes an annular side wall **175** (FIGS. 2, 3, 9 and 22). Around the top edge of the annular wall **175** is a sponge rubber safety edge **176** of annular cross section. Between the top and bottom of the wall **175** is a floor plate **177** on which is a rubber mat **178**. Cushions **179** spaced about the wall **175** are bolted to the floor plate **177**. The floor plate **177** has a central aperture **180**. Secured to the bottom edge of the wall **175** is a depending annular skirt **182** of suitable flexible material which serves as a guard. The tub construction **42** includes a reinforcing ring **185** and three vertically disposed reinforcing fins **184** welded to the bottom of the floor plate **177**, the three fins **184** being welded at **183** to the sleeve **157** (FIGS. 3, 22 and 30).

Inasmuch as the ride **40** is usually installed outdoors, means are provided for draining water from the interior of the tub in case of rain, as indicated at **185'** in FIGURES 1 and 3.

A ring **186** is secured by screws to the floor plate **177** about the aperture **180** and within an aperture formed in the mat **178** (FIG. 22). A diaphragm **187** is trapped between the ring **186** and the floor plate **177**. As is shown in FIGURE 1, the ring **186** is marked "on" and "off," indicating an operative association with a switch **190** (FIGS. 14 and 39). An occupant within the tub construction **42** can sart and stop rotation of the ride **40** by successively depressing the diaphragm **187**, assuming that a coin has been placed in the control mechanism described below.

The motor **95** is energized to drive the rotary ride **40** through the control mechanism **46**. The ride **40** is operated from a standard 110-volt power source and is connected thereto by a plug **201**, a cord **202**, and a quick disconnecting plug **203** (FIGS. 3, 14 and 39). The length of the cord **202**, of course, is dependent upon the particular installation. The plug **203** is connected into a suitable socket **199** projecting from an electrical relay control box **204** bolted in position on one of the channel segments **51**, as is clear from FIGURES 3 and 14. Within the relay control box **204** is a motor power relay **205** which is employed for starting and stopping the motor **95**. An impulse relay **207** is employed to activate the power relay **205** by means of a remote push button **209** the diaphragm **187**. When the diaphragm **187** is depressed, the switch actuator **164** is also depressed, its three posts **163** forcing the ring **61** downward, thereby depressing the roller **215** and lever arm of the switch **190**. The switch **190** is normally a open contact switch, as illustrated, used to actuate the impulse relay **207**.

In standard installations, a coin operated timer assembly **210** is employed, which is mounted on a convenient portable stand **206** (FIGS. 1 and 2), and which is connected into the control box **204** by a multi-line cord **211** through a quick disconnect plug **212** which engages a socket **208** mounted in a wall of the control box **204**. Further reference is made to the coin operated timer assembly **210** and its suport below.

Considering the aforesaid control mechanism more in detail, and sequences of operation, to operate the control mechanism **46**, a coin is deposited in the usual slot **215** provided in the coin operated timer assembly **210** which energizes an indicator light **213** and a timing motor **214**. The light **213** indicates the control mechanism **46** as energized and that push button **209** is to be manually actuated to start rotation of the rotary ride **40** when it is loaded and ready for operation. Alternatively, a rider in the tub construction **42** may start rotation thereof by pushing the diaphragm **187** which closes the switch **190**.

The manual actuation of either switch **209** or switch **190** closes the circuit through the impulse relay **207** which, in turn, operates the power relay **205** energizing the motor **95** which drives the ride **40** in a rotating and constantly changing, oscillating wallowing action. The ride **40** continues to rotate, as aforesaid, for a predetermined period of time, as two minutes, unless the push button **209** of diaphragm **187** is depressed for an emergency stop, or for any other desired reason. Such action deenergizes impulse relay **207** the second time, which deenergizes the power relay **205**, in turn, deenergizing the motor **95**, whereupon the ride **40** will come to a standstill.

If the motor **95** is operating when the timing motor **214** completes its cycle, the power relay **205** is deenergized and the motor **95** is thereby deenergized. Simultaneously, the impulse relay **207** is moved to an "off" position, so that the control mechanism **46** will not be restarted when another coin is deposited in the coin slot of the coin operated timer assembly **210**. This arrangement is for safety reasons and to permit each new rider to become acquainted with the "off" and "on" operation of the push button **209** and the push diaphragm **187**.

While it is believed that the foregoing description of the control mechanism **46** is sufficient in view of the standard parts employed, a more detailed explanation of the electrical circuit diagram follows.

As is clear from FIGURE 39, wires **216** and **217** complete the circuit to the power source and a third wire **218** is a safety ground wire. The wire **217** is conected to one terminal of a switch **219** forming part of the coin operated timer assembly **210** through leads **250**, **251** and **252**. The switch **219** is shown in open position. It is closed when a coin is deposited in the assembly **210**. Upon the switch **219** being closed, the indicator light **213** and the timing motor **214** are energized through the leads, as indicated.

The switch beneath the push button **209** and the switch **190** may now be selectively closed for operation of the ride **40**. When either of these switches is operated, in turn, the coil **220** is energized through the line or lead **232** forming a part of impulse relay **207**. The impulse relay **207** is a two-pole double-throw brake over center maintained contact-type unit. It is illustrated in the "off" position. When the coil **220** is momentarily energized the first time, two contact blades **221** and **222** are moved to the "on" position, which is opposite to that illustrated. That is, the contcat blades **221** and **222** engage the terminals **223** and **224**, respectively. Current flows through blade contact **221** by line **233** to coil **225** forming part of the power relay **205**. The power relay **205** is a two-pole double-throw spring return-type relay. When the coil **225** is energized, contact blades **226** and **227** move from the "off" position shown into contact with terminals **228** and **229**, respectively, and remain in that position as long as the coil **225** is energized. When the

contact blade 227 engages terminal 229, the motor 95 is energized through line 230 to rotate the ride 40. Rotation of the ride 40 may be stopped by actuating the push button 209 or the switch 190 through deperessing the diaphragm 187. In either event, line 232 is energized as is, in turn, the coil 220 effecting movement of the contact blades 221 and 222 to the positions shown in FIGURE 39, thereby opening terminals 221 and 223 deenergizing the coil 25, allowing the contact blades 226 and 227 to fall, thereby disconnecting the latter from terminal 29 deenergizing the motor 95.

If the impulse relay 207 is in "on" position, the contact blade 221 engaging terminal 223 and, in turn, contact blade 227 engaging terminal 229, so that the motor 95 is in operation whe nthe timing motor 214 completes its cycle and opens the switch 219, line 231 is reenergized, extinguishing indicator light 213 and deenergizing timing motor 214. In addition, the coil 225 is deenergized, which permits contact blades 226 and 227 to fall, disconnecting the latter from terminal 229, thereby denergizing the motor 95 and stopping rotation of the ride 40. When the contact blade 226 falls and engages terminal 235, the line 236 is energized and, as the impulse relay 207 is still in "on" position, the contact blade 222 is connected with the terminal 224, which energizes the coil 220 through the line 237 moving contact blades 221 and 222 to "off" positions as shown in FIGURE 39. With this action, the control mechanism 46 is back to starting position for another operating cycle.

It will be clear from the foregoing that rotary movement of the tub construction 42 is effected by the driven rubber-tired wheel 71 of the wobbly wheel assembly 74 which is rotated by the motor 95 and the interconnected elements above detailed. The rotary movement of the tub construction 42 effects rotary movement of the rubber-tired wheels 71 of the two wobbly wheel assemblies 70 through contact of the latter with the bottom of the former.

The motor 95 also drives the shaft 73 of the assembly 74, whereas the wheels 71 of the assemblies 70 drive the shafts 73 forming parts thereof. Since the three large bottom sprockets 77 are of different sizes (FIGS. 17, 19 and 20), whereas the upper associated small sprockets 76 are of the same size, the three shafts 73 will rotate at different speeds. Due to this relation of elements, the up and down movements of the shafts 73, as shown diagrammatically in FIGURES 35–38, will vary as to the time to complete the cycle. Hence, the central frame 62 will move up and down in respect to the frame 50 at the points defined by the links 80, but this will be uneven due to the different sized sprockets 77.

Therefore, the tub construction 42 will oscillate unevenly or wobble on the wheels 71 as it rotates, giving the occupants an interesting, safe thrill ride. It is manifest that the wobbly action can be modified by changing sprocket sizes and other elements, as desired.

It is apparent that there has been provided a rotary amusement ride 40 which fulfills the objects and advantages sought therefor.

It is to be understood that the foregoing description and the accompanying drawing have been given by way of illustration and example. It is also to be understood that changes in form of the elements, rearrangement of parts, and substitution of equivalent elements, which will be obvious to those skilled in the art, are contemplated as within the scope of the present invention which is limited only by the claims which follow.

What is claimed is:

1. In combination, an amusement ride comprising a stationary base, a movable base, means mounting said movable base on said stationary base actuatable to effect uneven up and down movement of the former in respect to the latter including a plurality of shafts rotatably mounted on said movable base in spaced relation, a crank at an end of each shaft for rotation therewith, a post mounted on the stationary base adjacent each crank, a link unit and ball joints connecting the link unit to the associated post and crank suspending each crank from its associated post and permitting rotary and up and down movement of the shaft in respect to the post as the shaft rotates the crank, means for holding riders mounted on said movable base for said aforesaid movement therewith, and means for rotating said shafts.

2. The combination of claim 1 in which said means for holding riders is also rotatably mounted in respect to said movable base.

3. The combination of claim 2 and comprising means for rotating said rider holding means including spaced rubber tired wheels rotatably mounted on said movable base for movement therewith, power means for driving at least one wheel operatively connected thereto, said rider holding means resting directly on said wheels.

4. In combination, an amusement ride comprising a stationary base, a movable base, means mounting said movable base on said stationary base actuatable to effect uneven up and down movement of the former in respect to the latter, means for holding riders mounted on said movable base for rotation in respect thereto and for uneven up and down movement therewith, means for rotating said rider holding means and for actuating said mounting means, said rider holding means comprising a tub member of substantial depth, said rotating means including a plurality of wheel members supported on said mounting means, said wheel members supporting said tub member, at least one of said wheel members being power driven, said actuating means for effecting uneven up and down movement of said movable base including a plurality of shaft assemblages mounted on said movable base in spaced relation and operatively connected to said stationary base by cooperating movable linkages and universal joints, and means for effecting a predetermined different speed of movement of each linkage.

5. In combination, an amusement ride comprising a stationary base, means for holding riders mounted on and above said base, mechanism supported on said base and receiving said rider holding means including means for simultaneously rotating and giving wobbly movement to said rider holding means, said rider holding means comprising a tub member of substantial depth, said rotating means including a plurality of wheel members, said wheel members supporting said tub member, at least one of said wheel members being power driven, said means for giving wobbly movement to said tub including a plurality of shaft assemblages mounted on said mechanism in spaced relation and operatively connected to said stationary base by cooperating linkages and universal joints, and means for effecting a predetermined different speed of movement of each linkage.

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