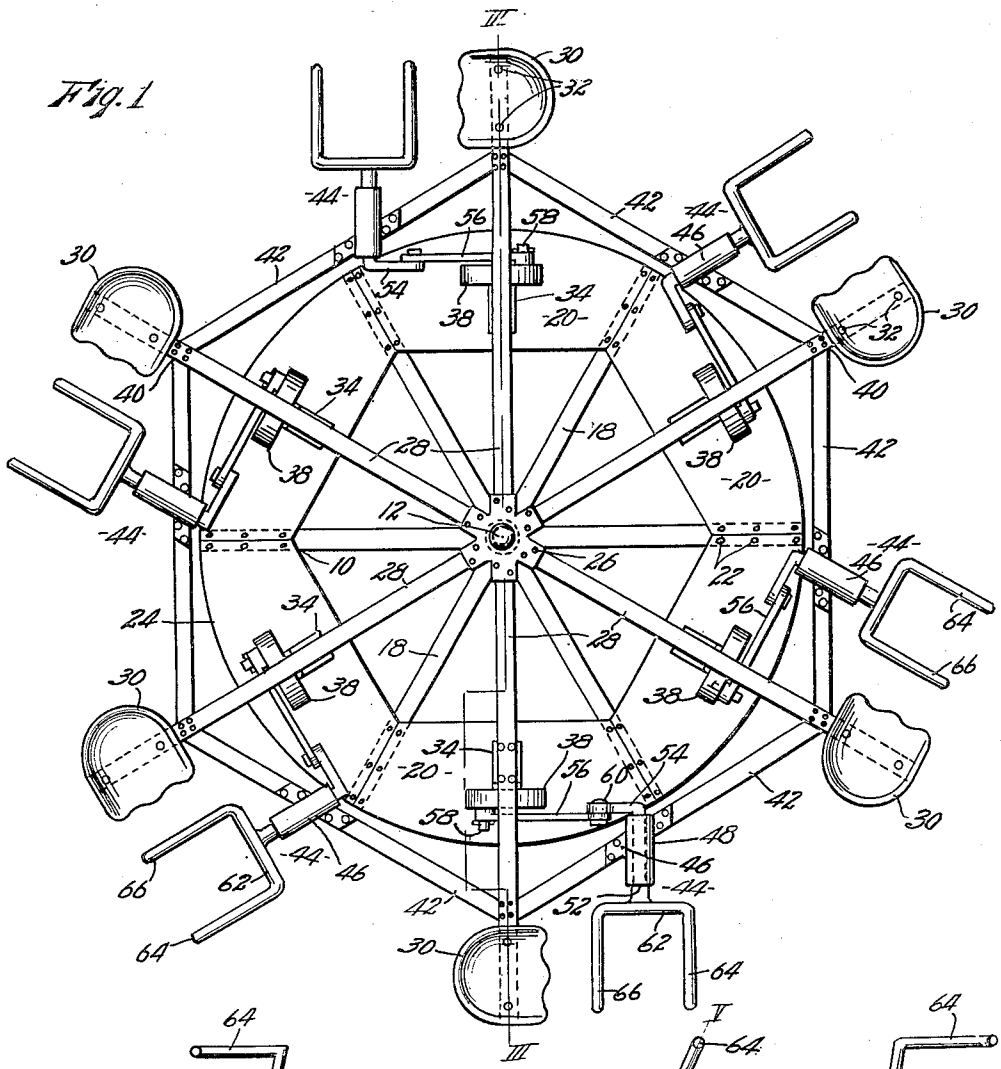
Dec. 12, 1950 H. HANSEN ET AL 2,533,368

UNDULATING TRACK OCCUPANT PROPELLED ROUNDABOUT

Filed Nov. 18, 1946 2 Sheets-Sheet 1

Fig. 1



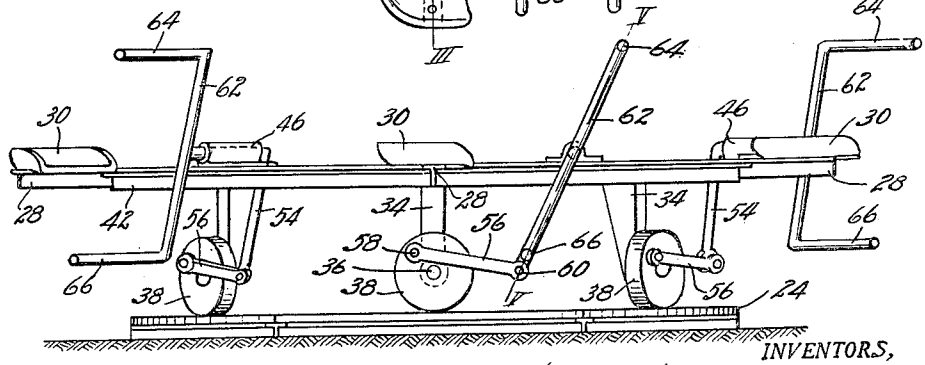




Fig. 2

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UNDULATING TRACK OCCUPANT PROPELLED ROUNDABOUT

Filed Nov. 18, 1946 2 Sheets-Sheet 2

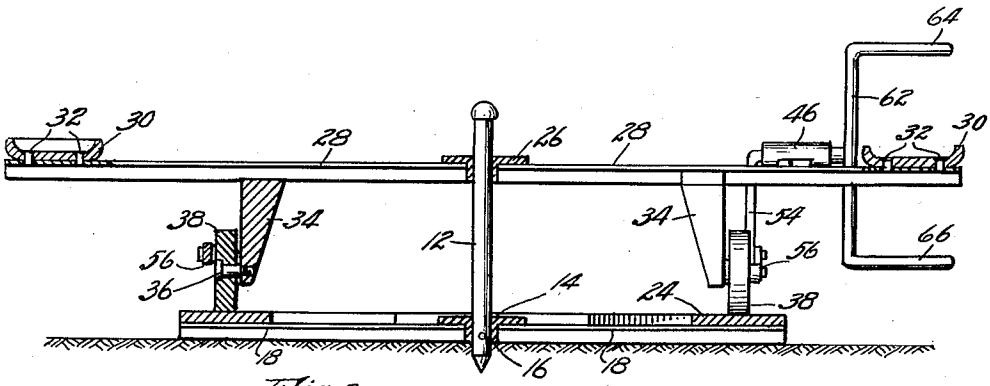



Fig. 3

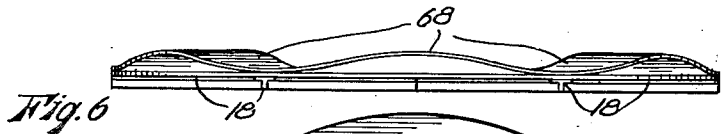



Fig. 6

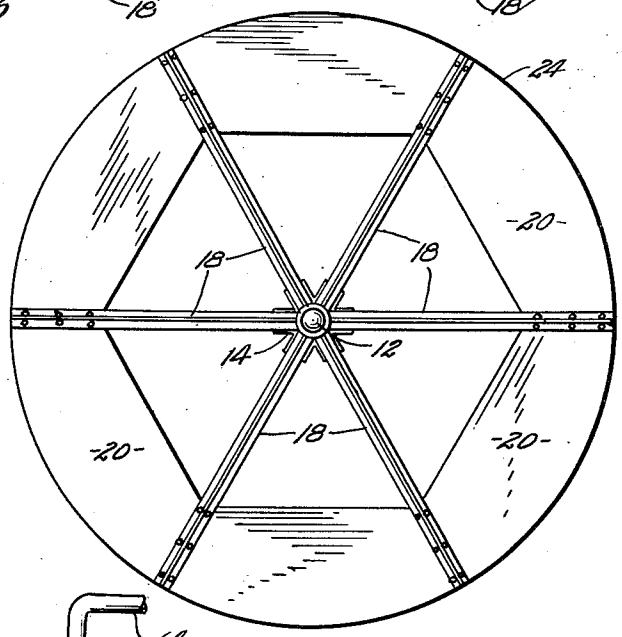



Fig. 4

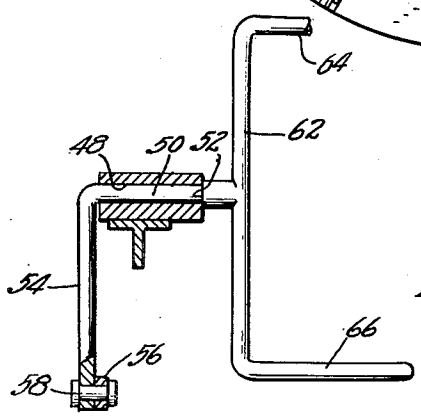



Fig. 5

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# UNITED STATES PATENT OFFICE

2,533,368

## UNDULATING TRACK OCCUPANT PROPELLED ROUNDABOUT

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Application November 18, 1946, Serial No. 710,544

5 Claims. (Cl. 272—33)

1

This invention relates to improvements in merry-go-rounds and has particular reference to a child's manually operable device.

The principal object of the present invention is the provision of a merry-go-round having foot and hand propulsioned means whereby the merry-go-round is operated.

Another object of this invention is the provision of a merry-go-round having manually operable propulsion means whereby the device may be rotated in either direction.

A further object of the invention is the provision of a merry-go-round so constructed as to preclude to a large degree any possible injury to the children.

Other objects are simplicity and sturdiness of construction, ease and efficiency of operation, and adaptability for use by children of different ages.

With these objects in view, as well as other objects which will appear during the course of the specification, reference will be had to the drawings wherein:

Figure 1 is a plan view of a merry-go-round embodying this invention.

Fig. 2 is a side elevation of the merry-go-round shown in Figure 1.

Fig. 3 is a cross sectional view of the merry-go-round taken on line III—III of Figure 1.

Fig. 4 is an inverted view of the base or track construction.

Fig. 5 is an enlarged sectional view taken on line V—V of Figure 2.

Fig. 6 is a modified form of the base, provided with a vertically undulated track.

Throughout the several views like reference characters refer to similar parts and the numeral 10 designates a base section having a central post 12 on which is mounted a bracket 14 which is securely attached by means of a pin 16. Radial arms 18 are rigidly attached at their inner ends to bracket 14 by any suitable means so that they may be disengaged for shipping. It is quite conceivable that they might be riveted or welded together when they are permanently located.

Mounted on the outer extremities are a series of track members 20 which are rigidly attached by means of rivets 22. These track sections may be made of planar sheets of plywood, metal or any other suitable material. It will be noted that the arms 18 are made of T iron with depending ribs which tend to hold the base against movement relative to the ground surface. The central post 12 is disposed perpendicular to the

2

plane of the track 24 and extends below the bracket 14 to engage in the ground below the base member. This extension serves to positively set the merry-go-round in a given position.

Slidably mounted for vertical adjustment on post 12 is a bracket 26 similar to that of bracket 14, and having radially disposed arms 28 made of T irons and provided at their outer extremities with seats 30 which are secured in position by means of rivets. Intermediate the ends of each of said radial arms is a depending bracket 34 having a horizontally disposed radially projecting axle member 36 on which are rotatably mounted wheels 38 which are adapted to rest on track 24 and which support the load of the revolving member 40.

The arms 28 are joined together by a series of segmentally disposed bars 42 which extend entirely about member 40, just inside the seats 30. Each child positioned in the various seats is provided with an individual, manually propulsioned means 44. Each of these propulsion members is identical in structure and comprises a bearing bracket 46 rigidly affixed to bar 42 which is provided with a bearing member 48 having its axis parallel with the axis of the adjacent wheel 38.

Rotatably mounted in bearing 48 is an oscillatable axle 50 shouldered at 52 at one end of the bearing and having a right angled depending arm 54 at the other end of said bearing. A driving link 56 pivoted at its one end to a pin 58 disposed eccentrically on the face of wheel 38 is pivoted at its other end to the lower extremity of arm 54 by means of pin 60. The outer extremity of axle 52 is provided with a U-shaped propulsion member 62 having an upper hand grip 64 and a lower foot rest, so positioned relative to the adjacent seat 30 that the child may conveniently engage the hand grip 64 and the foot rest 66 to oscillate axle 50, and through the connections just described, cause wheel 38 to rotate to drive the rotatable member 40 either forwardly or backwardly.

It is quite apparent that with this construction the rotary member may be operated by one child, or by any number up to the limit of six, and at all times the weight of the child or children will be directly over the respective traction wheels 38, thus insuring a sufficient traction force to cause the merry-go-round to rotate.

While in the preferred form the track 24 is shown and described as planar; however, in the modified form shown in Figure 6 the track 68 is undulated vertically so as to cause a suitable

vertical movement of the revolving member, including the seat, traction wheel, and propulsioned means, to simulate the customary up and down movement of the ordinary power merry-go-round.

In order to obtain traction on all the wheels in like manner, it is necessary to provide the same number of undulations as there are traction wheels, or a multiple thereof, thus insuring that each wheel at all times will be resting on similar track contours.

The sliding movement of bracket 26 on the center post 12 will permit of vertical movement of the rotary member 40 without interfering with the proper control of said member.

What we claim as new and desire to cover by Letters Patent is:

1. A merry-go-round comprising a base forming a substantially circular track having equally spaced vertical undulations therein and carrying a vertically disposed center post, a rigid member mounted for rotation and vertical movement on said center post, wheels rotatably carried by said rotatable member and adapted to rest on said track, said wheels being equal in number to the undulations of said track and equally spaced circumferentially about said track, seats mounted on said rotatable member and manually operable propulsion means carried by said rotatable member, whereby a child positioned in one of said seats may operate said propulsion means to cause said rotatable member to move.

2. A merry-go-round comprising a base forming a substantially circular track having equally spaced vertical undulations therein and carrying a vertically disposed center post, a rigid member mounted for rotation and vertical movement on said center post, a plurality of equally spaced apart wheels carried by said rotatable member and disposed respectively on radially disposed axles and adapted to rest on said track, said wheels being equal in number to the undulations of said track and equally spaced circumferentially about said track, seats mounted on said rotatable member, and manually operable propulsion means carried by said rotatable member to rotate said wheels, whereby a child mounted on one of said seats may cause said propulsion means to rotate rotatable member.

3. A merry-go-round comprising a base having a circular track having vertical undulations equally spaced about the circumference thereof, a center post disposed perpendicular to the plane of said track, a member mounted for rotation and axial movement on said center post, radial arms extending outwardly beyond said base, said arms being circumferentially spaced equally with the undulations of said track, a seat carried by each of said arms at its outer end portion, a bracket depending from each of said arms, a wheel rotatably carried by each of said brackets to travel on said track about said post, said wheels being equal in number to the undulations of said track and equally spaced about the circumference of said track, and propulsion means carried by said rotatable member and operable by a child positioned in the adjacent seat whereby said wheel is rotated over said track to move said rotatable member.



4. A merry-go-round comprising a circular base track, having vertical undulations equally spaced about the circumference thereof, a center post carried by and disposed at right angles to the plane of said track, a wheel-shaped member mounted for rotation about said center post and for vertical movement thereon, a series of traction wheels carried by said wheel-shaped member whereby it is supported on said track for rotation about said center post, said wheels being circumferentially spaced equally with the undulations of said track, manually operable propulsion means for rotating each of said wheels on said track, and a seat positioned on said wheel member adjacent each of said propulsion means, whereby a child positioned in the respective seats will be positioned to engage and operate said propulsion means to cause said wheel-shaped member to rotate about said post.

5. A merry-go-round comprising a circular base track having equally spaced vertical undulations therein, a center post carried by and disposed at right angles to the plane of said track, a wheel-shaped member mounted for rotation about said center post and for vertical movement thereon, a series of equally spaced apart traction wheels carried by said wheel-shaped member whereby it is supported on said track for rotation about said center post, said wheels being equal in number to the undulations of said track and equally spaced about the circumference of said track, manually operable propulsion means for rotating each of said wheels on said track, and a seat positioned on said wheel member adjacent each of said propulsion means, whereby a child positioned in the respective seats will be positioned to engage and operate said propulsion means to cause said wheel-shaped member to rotate about said post and to intermittently raise and lower thereon.

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