Nov. 24, 1936. R. F. DALTON 2,061,695

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Fig. 1.

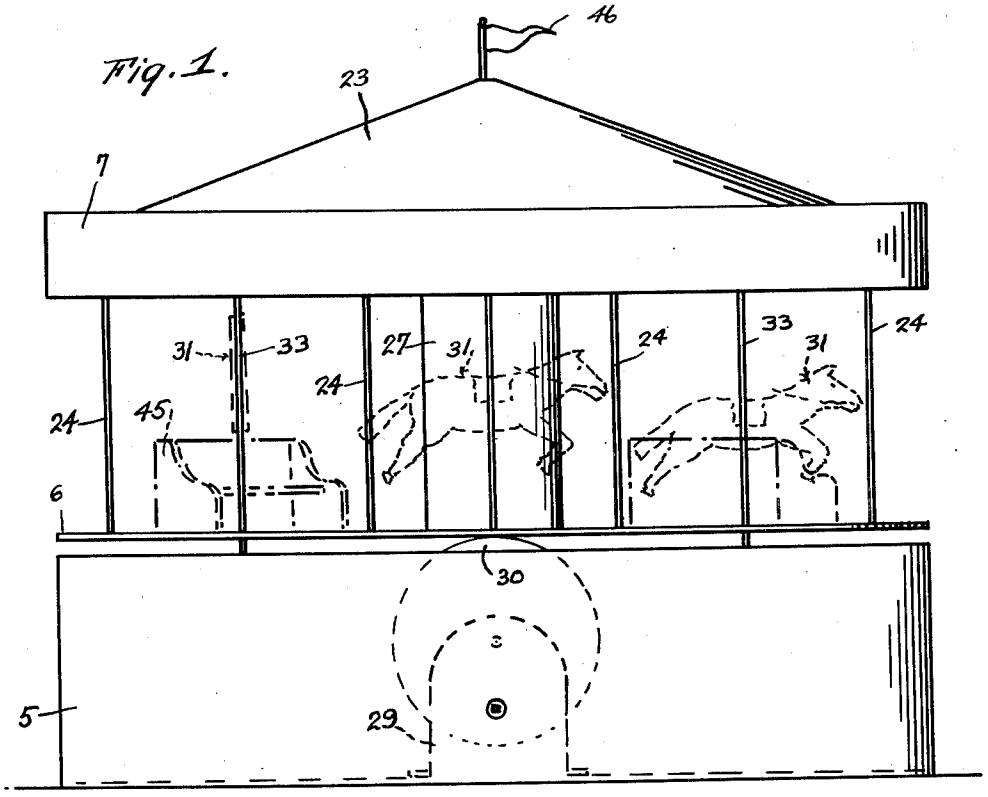


Fig. 12.

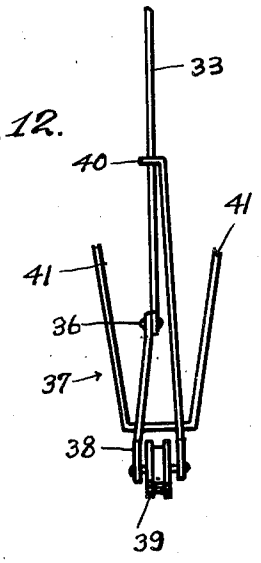
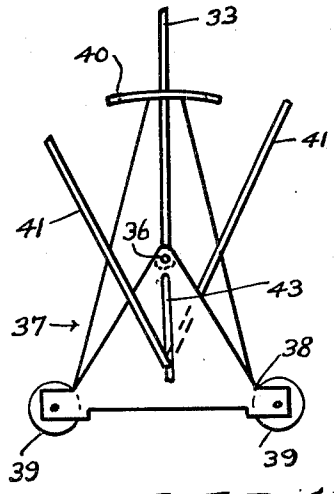


Fig. 13.



Inventor

R. F. Dalton

By Clarence A. O'Brien and Hyman Berman Attorneys

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Fig. 9.

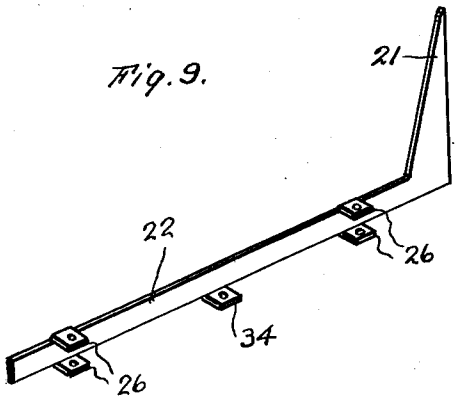


Fig. 10.

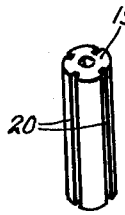


Fig. 11.



Fig. 2.

Inventor

R. F. Dalton

By Clarence A. O'Brien and Hyman Berman Attorneys

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Fig. 3.

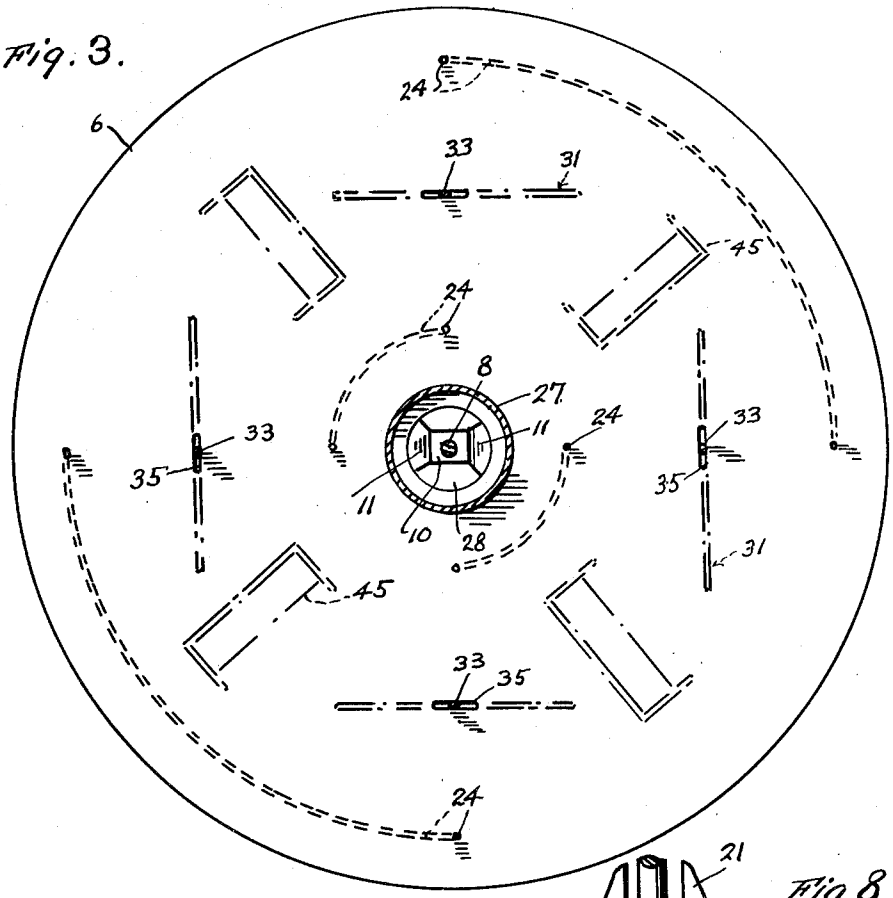


Fig. 7.

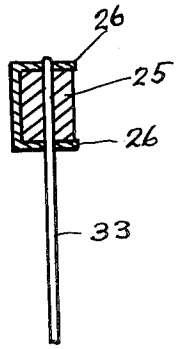
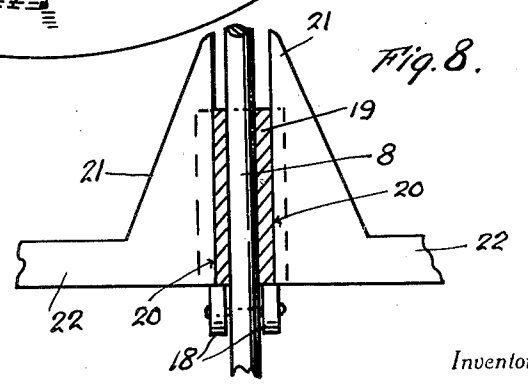


Fig. 8.



Inventor

R. F. Dalton

By Clarence A. O'Brien and Hyman Berman Attorneys

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Fig. 4.

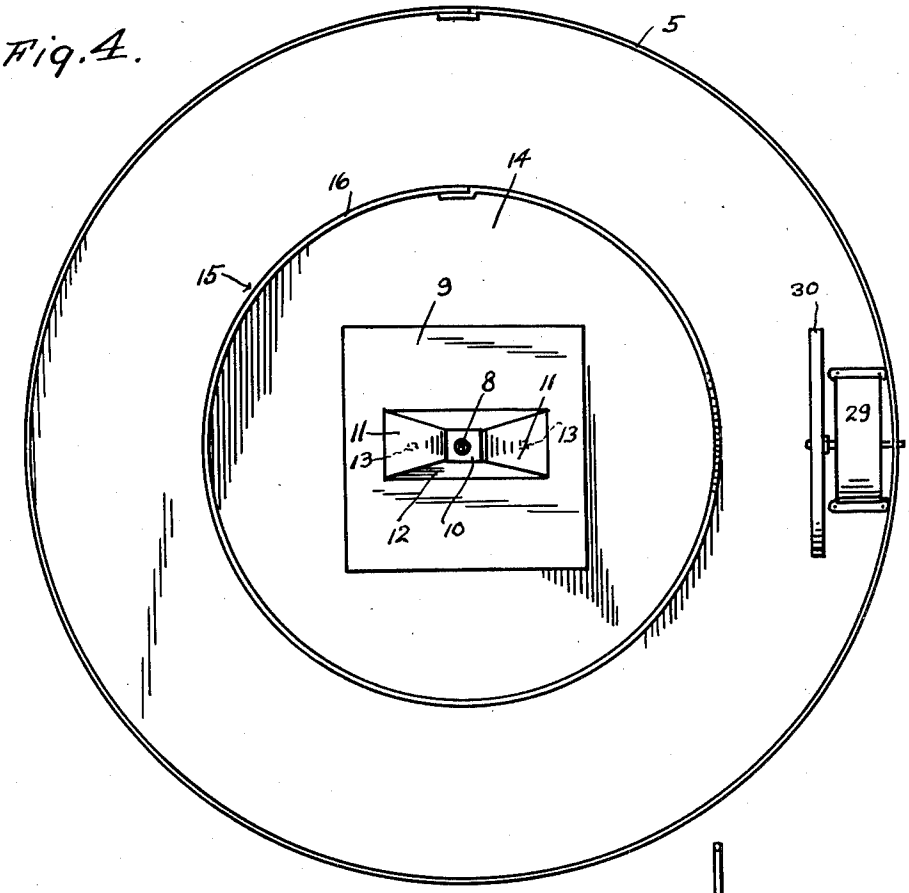


Fig. 5.

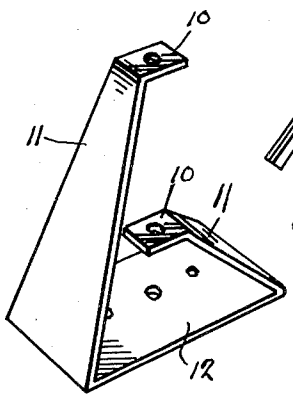


Fig. 14.

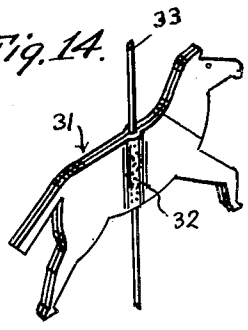
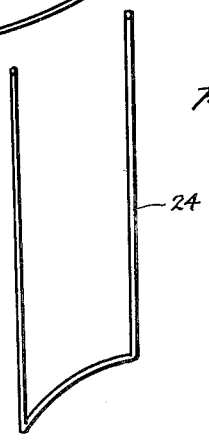


Fig. 6.



Inventor

R. F. Dalton

By Clarence A. O'Brien and Hyman Berman Attorneys

Patented Nov. 24, 1936 2,061,695

UNITED STATES PATENT OFFICE

2,061,695

TOY

Robert F. Dalton, Mansfield, Ohio

Application June 4, 1936, Serial No. 83,572

3 Claims. (Cl. 272—31)

This invention relates to toys, and more particularly to a toy of the miniature merry-go-round type.

An object of the present invention is to provide a miniature merry-go-round characterized by simplicity of construction, simplicity of assembly, and other such characteristics as permit of the same simulating to a high degree merry-go-rounds of the type usually found at carnivals and other outdoor places of amusement.

Further in accordance with the present invention a toy of the character suggested is provided wherein certain parts thereof serve as a receptacle for the other elements of structure permitting the device to be vended in compact package form and for a reasonable price.

The invention together with its objects and advantages will be best understood from a study of the following description taken in connection with the accompanying drawings, wherein:

Figure 1 is a side elevational view showing the toy set up;

Figure 2 is a vertical sectional view through the toy when set up for use;

Figures 3 and 4 are horizontal sectional views taken substantially on the lines 3—3 and 4—4, respectively of Figure 2;

Figure 5 is a perspective view of the center standard support;

Figure 6 is a perspective view of a brace member;

Figure 7 is a detail sectional view taken substantially on the line 7—7 of Figure 2;

Figure 8 is a fragmentary detail sectional view showing the manner of securing spreader members forming part of the invention together at one end of the spreaders;

Figure 9 is a perspective view of a spreader member;

Figure 10 is a perspective view of a bearing member hereinafter more fully referred to;

Figure 11 is a perspective view of a wood block hereinafter more fully referred to;

Figure 12 is a front elevational view of a carriage member;

Figure 13 is a side elevational view thereof; and

Figure 14 is a perspective view of one of the manikins.

Referring to the drawings by reference numerals, it will be seen that the merry-go-round toy, in miniature form, and in the preferred embodiment of the invention comprises a substantially cylindrical combination box and base 5 having a bottom and a peripheral wall as shown, and when the toy is in a knocked-down condition adapted to house the elements of the toy to facilitate the vending of the toy. Also the base 5 serves, when the toy is set up, to house certain parts of the toy as will be hereinafter made manifest.

For the box 5 there is also provided a lid which includes a crown member 6, which when the toy is set up, serves as a revolving platform for the toy, and a skirt 7 for the lid which is adapted to telescope the upper portion of the box 5 with the crown member 6 confined within the skirt 7 in a manner to cooperate therewith for forming a complete top for the box 5.

When the toy is set up, the skirt 7 which is in the form an an annulus serves as a part of the canopy for the toy as will be hereinafter made manifest.

Further, in accordance with the present invention there is provided a center pole or standard 8 which has one end fixed within a suitable block 9 secured within the bottom of the base member 5 and which extends upwardly, when the toy is set up, through apertured guide lugs 10 provided on the ends of inclined arms 11 that are integral with and extend upwardly at an acute angle to an attaching plate 12 detachably secured to the block 9 through the medium of fastening means 13. The guide for the standard 8 consisting of the attaching plate 12, arms 11, and guide bearings 10, is formed from a single blank of metal or other suitable material.

Further, positively secured within the base 5 between the bottom of the base and the block 9 is a plate 14 that has an upstanding marginal wall 15, the upper edge of which presents an undulating edge 16 as and for the purpose hereinafter explained.

Adjacent its upper end the center post or standard 8 is provided with rollers 18 against which rests a bearing block 19 sleeved on to the standard 8. Block 19 is provided in its periphery with longitudinal grooves 20 which receive the upstanding end portions 21 of spreader bars 22. Spreader bars 22 may be formed of any suitable material and when the toy is set up for use the ends 21 of the spreader bars are engaged in the grooves 20 of the bearing 19 and are secured within said grooves by an adhesive or in any other suitable manner. Thus the spreader bars 22 radiate from the bearing block 19, there being four of such spreader bars.

At their outer free ends, the spreader bars 22 are secured in any detachable manner to the annulus 7 and thus serve to support the canopy which comprises a substantially frusto conical body 23 of cardboard or other suitable material

which at its apex is supported by the upstanding ends 21 of the members 22 as shown in Figure 2. Thus it will be seen that an efficient and attractive canopy may be readily provided for the toy. It will also be apparent that the parts 19, 22, and 23, together with the part 7, will rotate as a unit about the post 8.

Also, when set up for use, the cover member 6 serves as a platform and is suspended from the aforementioned canopy assembly through the medium of brace rods 24.

The rods 24 are each formed from a single length of wire bent into a substantial U and include a pair of outer rods 24 and an inner pair of rods 24. The arms or side members of the respective rods 24 extend upwardly through suitable openings provided therefor in the platform 6 and at their upper ends extend through blocks 25 of wood or the like secured between pairs of apertured lugs 26 projecting laterally from the spreader bars 22.

Also, for housing and substantially concealing the post 8 there is provided an open ended tubular casing 27 adapted to rest on the platform 6 as shown in Figure 2 and about the post 8, it being noted that platform 6 is also provided with a suitable opening 28 to accommodate the post 8.

For revolving the platform 6 and associated parts, there is suitably provided within the base 5 a motor 29 which may be an electric motor or a spring motor. As is obvious, a spring motor will well serve the purpose and driven from the motor 29 is a friction wheel 30 that has its periphery engaging the under side of the platform 6 in a manner shown in Figure 2 causing said platform and associated parts to revolve.

There are also provided manikins 31 and as best shown in Figure 14, these manikins may be cheaply constructed from cardboard or the like, each being preferably constructed from two plies adhesively united together and suitably formed as at 32 to receive and to be secured to an actuating post 33 provided therefor. The posts 33 may be formed from wire or other suitable material and have their upper ends working through apertured guide lugs 34 povided therefor on the spreader bars 22.

The lower portions of the rods 33 work through suitable slots 35 provided therefor in the platform 6, and at their lower ends are detachably connected as at 36 with riders or carriages 37.

Each carriage 37 as best shown in Figures 12 and 13 is formed from a single blank of metal or other suitable material having relatively long and short tapering ends and intermediate its ends the blank is bent on substantially parallel fold lines into a substantial U, at the closed end of which said blank is provided with pairs of lugs or ears 38 between which are journaled grooved rollers or wheels 39. As shown in Figures 12 and 13, the lower end of a rod 33 is detachably connected as before mentioned as at 36 with the shorter end of the carriage blank 37, while the longer end of said carriage blank is formed to provide an apertured guide flange through the aperture in which the rod 33 operates. Said guide flange indicated by the reference numeral 40 has its aperture in the form of a slot so as to permit the rider 37 to swing or pivot relative to the rod 33 thus permitting the rod 33 in operation to have a somewhat rectilinear motion so that the manikins will have a motion similar to that obtained in bona fide merry-go-rounds of the type found at outdoor amusement parks and the like.

Also for each rider or carriage 37 there is provided a substantially U-shaped guide member 41, the sides of which at their free ends are hinged to the under side of the platform 6 as at 42. At the closed end of the U said guide member 41 operates in suitable slots 43 provided therefor in the opposed portions of the rider 37, as clearly shown in Figure 13. Thus each rider 37 is suitably held so that the rollers 39 thereon will engage the edge of what may be termed the cam 15 in a manner to permit required pivotal movement of each carriage relative to its rod 13 and to prevent any undue lateral or side sway of the carriage thereby insuring the maintaining of the rollers 39 in proper contact with the cam edge 16 of the wall 15 at all times.

From the above it will be seen that when the toy is set up and the platform 6 driven from the motor 29 in the manner explained, the platform 6 and associated parts will revolve about the post 8 as an axis. Manifestly, this will cause the carriages or riders 37 to ride over the edge 16 of the cam member 15 causing the rods 33 to move up and down and also cause said rods to move rectilinearly so that the manikins 31 will have a motion simulating the motion of the manikins of a full size merry-go-round.

Also, completing the toy, there are provided seats or chariots 45 constructed from any suitable cheap durable material and which may be detachably secured in place on the platform 6 in any suitable manner, thus tending to give to the toy every appearance of a full size merry-go-round.

Also, if desired, such decorations, as for example, a flag or the like 46 may be provided and secured to the top of the post 8 in any suitable manner.

From the above it will be seen that I have provided a miniature toy merry-go-round of a knock-down character which can be readily and easily set up and which will afford amusement, especially to the young.

It will also be appreciated that the miniature toy merry-go-round can be easily knocked down and all the parts thereof positioned or placed within the base 5, a cover for which is formed by assembling the platform 6 and annulus 7, thus reducing the toy to a convenient package for vending.

Having thus described the invention, what is claimed is:

1. A toy in the form of a miniature knock-down merry-go-round comprising a receptacle adapted to house the various elements of the toy when the latter is in a knock-down condition, a cover for said receptacle including mutually separable crown and skirt members, said crown adapted to serve as a revolvable platform for the toy when set up and the skirt portion adapted to serve as a part of a canopy for the toy, said toy further including a supporting bracket mounted within the receptacle at the center thereof, a standard adapted to have its lower end engaged with said supporting bracket, an annular member secured within the receptacle concentric to said support and having an undulating edge, carriage members provided with wheels adapted to ride on the edge of said annular member, guide members for said carriages having end portions engaging in slots in said carriages and sides having their terminals adapted to be hingedly connected with the under side of the crown of the cover member when the latter is used as a platform for the toy, a bearing

member adapted to be sleeved on the upper end of said standard, roller means on said standard supporting said bearing member, spreader bars adapted to be secured at one end to said bearing member to extend radially therefrom and having free ends adapted to be secured to the skirt of said cover member when the toy is set up, a frusto conical canopy member having an opening at its apex to receive the upper end of said standard, substantially U-shaped brace rods having side portions adapted to extend upwardly through openings provided therefor in said crown member, means provided on said spreader members for receiving the upper free ends of the sides of said U-shaped brace members, manikin supporting poles having ends adapted to be pivotally connected with said carriages and upper ends movable vertically through guide lugs provided therefor on said spreader members, manikins secured to said supporting poles for movement therewith, a motor mounted in said receptacle, means driven by said motor adapted to have frictional engagement with said platform for revolving the latter.

2. In a miniature merry-go-round, a platform mounted for revolving movement, a canopy supported above said platform for revolving movement therewith, an annular cam member supported beneath the platform and having an undulating edge, manikin supporting poles, guide means carried by said canopy for the upper portions of said poles, said poles having lower portions working in slots in said platform, carriages pivotally connected with the lower ends of said poles and travelling on the edge of said cam member to impart up and down movement to the said poles, means for restraining said up and down movement to an arcuate path and including U-shaped members at their bight portions engaging in slots in said carriages and at their free ends being hingedly connected to the underside of said platform, and means for revolving said platform.

3. In a toy of the character described, a revolving platform, manikin supporting poles having lower portions working through slots in said platform, a fixed cam mounted beneath said platform, roller equipped carriages pivoted to the lower ends of said supporting poles and riding on said cam, whereby to cause said poles to move up and down during a revolving of said platform, said carriages being hingedly connected to said platform whereby they are constrained to follow arcuate paths during oscillating as well as vertical movement of said poles and driving means for said platform consisting of a motor, and a friction wheel driven from said motor and frictionally engaging the under side of the platform.

ROBERT F. DALTON.