Dec. 18, 1962 V. BULECKI 3,069,160

ROTARY TOY

Filed Feb. 23, 1962

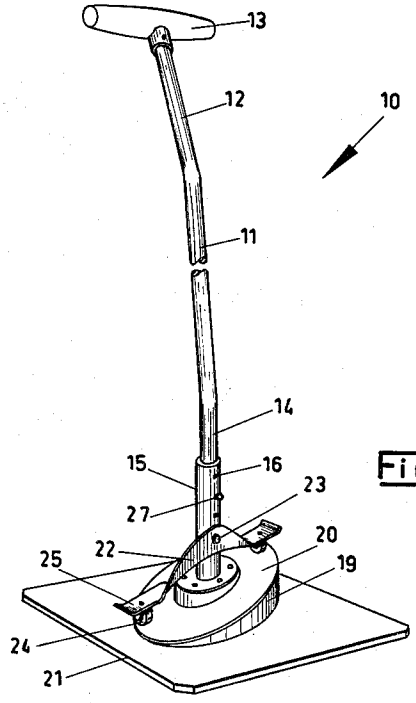


Fig. 1

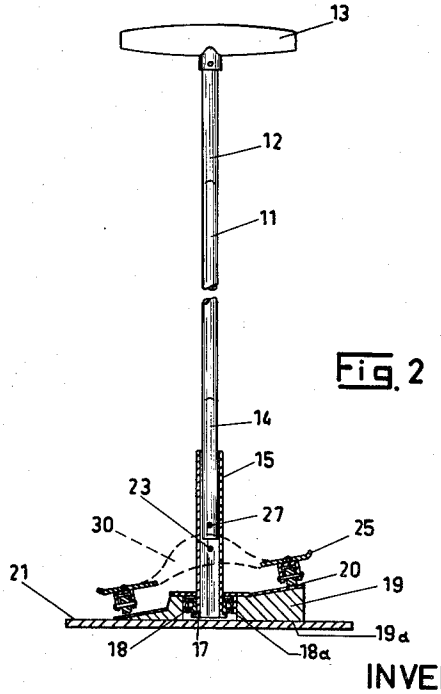


Fig. 2

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United States Patent Office 3,069,160
Patented Dec. 18, 1962

3,069,160

ROTARY TOY

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Filed Feb. 23, 1962, Ser. No. 175,367
5 Claims. (Cl. 272—33)

This invention relates to playground or recreation room toys, and more particularly to rotary toys adapted to both amuse and teach children muscular coordination and balance control.

Present toys of this nature, although requiring muscular coordination and balance control, are restricted to a backwards and forwards linear motion and are rather heavy and substantially non-portable. They also require a fairly large play area in which to be used.

The conventional rotary swing found in recreation centres and parks is generally of a heavy construction and requires at least two, and in many cases, several children to operate it effectively. Also, such swings are of a standard size, this making them unsuitable for very small children and even dangerous in certain cases where older children build up a speed on the swing which is in excess of speeds suitable for very small children. Again, these conventional rotary swings are not suitable for solo operation, and a child attempting to operate them by himself soon loses interest.

It is an object of this invention to provide a rotary playground or recreation room toy, hereinafter referred to as a rotary toy, that will both teach a child muscular coordination and balance control and enable the child to operate it without the aid of other children.

It is another object of this invention to provide a rotary toy that requires practice on the part of a child to become proficient in its operation, thereby maintaining a child's interest.

It is a further object of this invention to provide a rotary toy that is simple in design and sufficiently robust in construction to withstand normal usage and safe in operation.

It is still another object of this invention to provide a rotary toy that can be adjusted to accommodate the physical capabilities of children ranging from the very young and small to the older and larger.

It is yet a further object of this invention to provide a rotary toy that is readily collapsible and portable, occupying a minimum of space and suitable for use either indoors or outside.

These and other objects and features of this invention will become apparent when taken in conjunction with the accompanying drawings in which:

FIG. 1 is a perspective view of a rotary toy embodying the present invention.

FIG. 2 is a mid-vertical, sectional side elevation of the rotary toy illustrated in FIG. 1.

Referring to FIGS. 1 and 2, a rotary toy **10** comprises a vertical tube **11** having at its upper extremity **12** a transverse holding handle **13** detachably attached thereto. The opposite end **14** of tube **11** is slidably located in a vertical tubular housing **15**, the tubular housing **15** having a plurality of diametrical holes **16** formed therethrough in vertical spaced apart relationship. Tubular housing **15** terminates in a flange **17** and carries ball race **18** around the periphery thereof, the lower surface of said ball race **18** being shouldered against flange **17**.

The outer race **18***a* of ball race **18** is retained within a base unit **19**. Base unit **19** is substantially frusto-cylindrical in configuration, having an angularly disposed upper end face **20**.

The undersurface **19***a* of base unit **19** is horizontal when in use and is rigidly attached to a substantially rectangular base plate **21**.

A stirrup unit **22** comprising a cross bar **30** having its ends **25** shaped in the form of footrests is pivoted centrally to housing **15** about a pivot pin **23**. Cross bar **30** is adapted to move in a vertical plane, substantially coplanar with the axis of housing **15**.

A roller unit **24** is mounted on the underside of each end **25** of stirrup unit **22**. Roller units **24** bear on a track plate **26** formed on the upper surface **20** of base unit **19**, the stirrup unit **22** aligning itself parallel to said track plate **26**.

In use, handle **13** may be adjusted to a convenient height by the tubular member **11** being telescopically adjustable within tubular housing **15** by means of a retaining pin **27** passing through a selected hole **16** and through a similar hole, not shown, formed through the lower end of tube **11**. In this manner, toy **10** may be adapted to children of varying heights. Upon operating the rotary toy **10**, a child grasps handle **13** and places his feet on the footrests **25** of stirrup unit **22**. By placing his weight on the highest foot, the particular roller unit **24** attached to the affected end **25** of stirrup unit **22** is caused to move downwardly and traverse the angularly disposed track plate **26**. At the same time, the opposite foot is carried to the highest position, whereupon the weight may be shifted to said foot and, in this manner, a child, by a coordination of leg and arm muscles and balance may circle around the base plate **21** indefinitely.

The general design of the individual parts of the invention as explained above may be varied according to requirements in regards to manufacture and production thereof, while still remaining within the spirit and principle of the invention, without prejudicing the novelty thereof.

The embodiments of this invention in which an exclusive property or privilege is claimed are defined as follows:

1. A rotary toy including a horizontal base member; a substantially vertical support member axially rotatable upon said base member; an upper surface of said base member on an inclined plane; a stirrup assembly pivotally attached to said support member and movable in a vertical plane; opposite ends of said stirrup assembly defining footrests; and anti-friction means interposed between and supporting said footrests upon said upper surface.

2. A rotary toy as defined in claim 1 including handle means attached to the upper end of said vertical support member.

3. A rotary toy as defined in claim 1 in which said vertical support member includes a lower support tube having an open upper end and a flanged lower end; bearing means retaining said lower end within said base member in axially rotatable relation therewith; an upper support tube having its lower end insertable within the upper end of said lower support tube; selective means for retaining said lower end of said upper support tube in said lower support tube; and handle means attached to the upper end of said upper support tube.

4. A rotary toy as defined in claim 1 in which said anti-friction means includes a roller unit rotatably located under each of said footrests; and an annular track plate integral with said upper surface of said base member forming a support track for said rollers.

5. A rotary toy including a horizontal base member; a substantially vertical support member axially rotatable upon said base member; an upper surface of said base member on an inclined plane; a stirrup assembly pivotally attached to said support member and movable in a vertical plane; opposite ends of said stirrup assembly defining footrests; anti-friction means interposed between and supporting said footrests upon said upper surface; handle

means attached to the upper end of said vertical support member; said vertical support member including a lower support tube having an open upper end and a flanged lower end; bearing means retaining said lower end within said base member in axially rotatable relation therewith; an upper support tube having its lower end insertable within the upper end of said lower support tube; selective means for retaining said lower end of said upper support tube in said lower support tube; said anti-friction means including a roller unit rotatably located under

each of said footrests; and an annular track plate integral with said upper surface of said base member forming a support track for said rollers.

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