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ROTATABLE PLAYGROUND DEVICE

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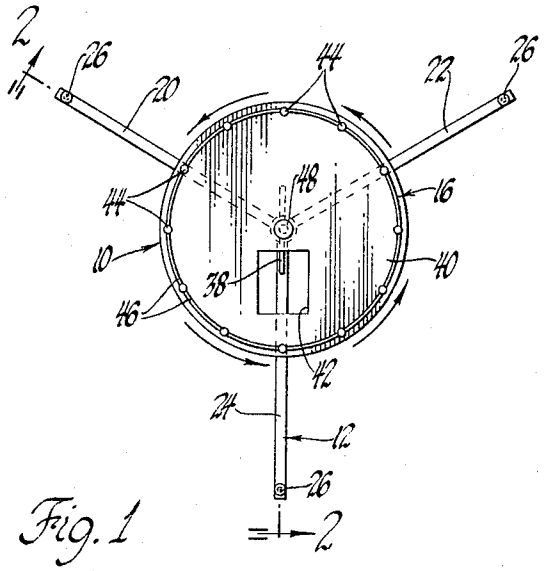


Fig. 1

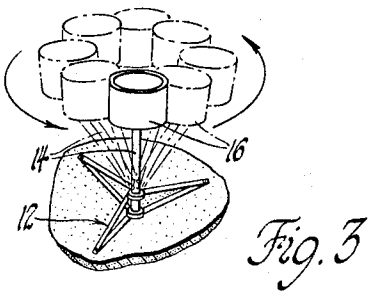


Fig. 3

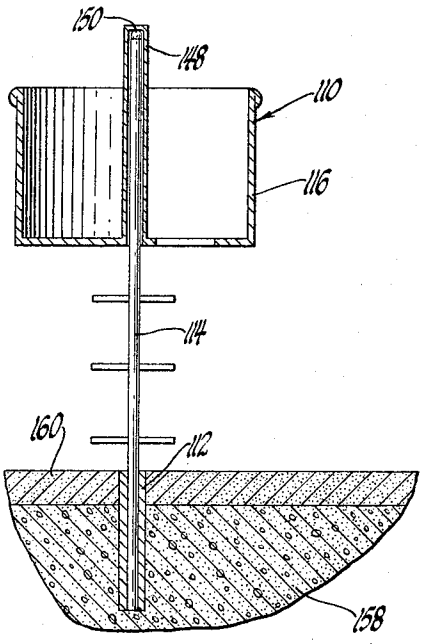


Fig. 4

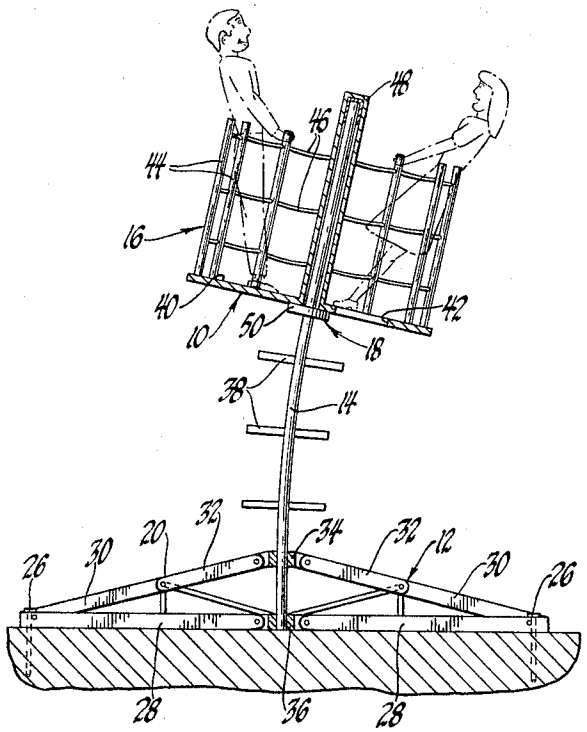


Fig. 2

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ROTATABLE PLAYGROUND DEVICE

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This invention relates to playground equipment in general and more particularly to a new and different piece of equipment for use in playgrounds, back yards and elsewhere and which is fun to use and helps build strong young minds and bodies.

Playground equipment hasn't changed much over the years. The old standards are still used without much variation. Swings, see-saws and slides are still most common. Merry-go-rounds and monkey-climbs are probably next in popularity. Although, such as trampolines have been proposed, these things are usually too dangerous for children to use without some instruction and supervision.

Ideally this sort of body-building equipment for children, whether for playground, back yard or indoor use in gyms or the like, should be simple and sturdy in construction to withstand any possible mistreatment. It should be relatively inexpensive for maximum use and popularity. It should also be maintenance free for like reasons. It should require little or no instruction as to use. And it should be fun and a challenge to bright-eyed competitive youngsters.

From a physical education standpoint, a good piece of playground or like equipment will be sufficiently attractive and fun to encourage its own use by youngsters. It will also require some physical exertion, preferably of new and different muscles not ordinarily given enough attention, and some coordination of senses and body movements, so that stronger and more natural aptitudes will aid in the development of dormant and less developed senses and reflexes. Ideally, it will be usable by two or more persons, as well as one, for cooperative or competitive play.

These and other goals come readily to mind and emphasize the true multipurpose use that every piece of playground or like equipment should serve.

It is an object of this invention to provide a playground or like device which will be attractive and fun to use for children of all ages.

It is an object of this invention to provide a playground, back yard or like device which is simple to use and helps build strong young well coordinated bodies and minds. In this latter respect, it is usable by one or more persons and requires the development of reflex actions and coordinated movements under constantly changing conditions.

It is an object of this invention to provide a multipurpose piece of playground or like equipment which is simple and relatively inexpensive in construction to enable widespread use and maximum popularity.

More specifically, it is an object of this invention to provide a piece of playground or like equipment which includes a vertically disposed bar that is fixed at one end, will support one or more persons on the other end and can be made to sway and oscillate back and forth as they shift their weight about. In addition, the means for supporting one or more persons on the bar is rotatable so that a combination of movements is obtainable and other movements and sensations are produced; the most common being a gyration or nutational movement synonymous with the movement of an "outer space platform" in the minds of youngsters.

It is an object of this invention to provide a device productive of the aforementioned nutational movement

by means of a rod having a length-to-radius ratio and/or being of a material causing it to bend or lean under a load. It must also have a stiffness whereby it may be made to oscillate when deformed beyond its load balancing capacity, but still (and always) within its elastic limits. Quite obviously the ferrous metal or plastic bar or pole must have a safety factor preventing any mishap, but this presents no problem.

The platform for supporting youngsters, and which is rotatable on the vertically disposed bar, will also include a peripheral rail or support, at between waist and shoulder height for youngsters, which will enable them to lean back and hold on as they shift their weight back and forth or sideways to produce the oscillating and nutational movements that can be accomplished.

These and other objects and advantages to be gained in the practice of this invention will be better understood and appreciated upon a reading of the following specification in regard to a preferred embodiment of the invention and having reference to the accompanying drawings wherein:

FIGURE 1 is a top plan view of a playground device made in accord with and embodying different aspects of this invention.

FIGURE 2 is a side plan and partially cross-sectioned view of the playground device shown by FIGURE 1 as seen substantially in the plane of line 2—2 thereon with one phase of oscillation demonstrated.

FIGURE 3 is a small perspective of the device shown by FIGURES 1 and 2 as it would appear in use.

FIGURE 4 is a side plan view, partially cross-sectioned, showing a playground device made in accord with the teachings of this invention and including certain modifications.

The playground device **10** is shown to include a stand **12** which supports a vertical rod **14**. A platform member **16** is rotatably supported by means **18** on the upper end of the vertical rod **14**.

The stand **12** is shown to include a tripod arrangement with legs **20**, **22** and **24**. Each of the legs include an anchor **26** which is provided near its outer end. The lower links **28** of the arms cooperate with the upper locking links **30** and **32** to make the stand collapsible for shipping, transportation and storage purposes. However, it will be appreciated that the stand is used as shown and that its ends are securely fixed by leg bolt anchors **26** into soil or mass concrete, when used outside, or into other fixed media when used in a gymnasium or the like.

The stand **12** includes spaced journal bearings **34** and **36** which receive the lower end of the rod **14** therein to support it in a vertically disposed relation.

The rod **14** may be solid, hollow, of ferrous metal, or fiberglass, or of any suitable general shape and material which will enable it to have sufficient axial rigidity to support a member on the upper end thereof and to have lateral give which will enable it to bend under a load but still have sufficient stiffness to "bounce back" and therefore be caused to oscillate back and forth. Normally, this will mean that the rod **14** should have a length-to-radius ratio commensurate with the modulus of elasticity of the material of which the rod is made so that lateral deformity is possible, without set and permanent deformation, as will be better understood in the description of the use of the playground device **10** which is subsequently given.

It will be noted that the vertical rod **14** includes spaced cross bars **38** which provide a ladder for climbing up to the platform member **16**.

The platform member **16** includes a bottom wall **40** in which is provided a trap door **42**. Stanchions **44** are provided peripherally about the bottom wall **40** and stand-

ing thereover. They are connected together by wire rope or chain **46** which provides leaning support for persons using the playground device as will later be better understood.

A center sleeve column **48** is provided centrally over a hole in the bottom wall **40** for receiving the end of the vertical rod **14** therein.

A bearing support **50** receives and supports the whole platform member **16** rotatably on the upper end of the vertical rod **14**.

From the foregoing description and reference to the drawing figures, it should be apparent that one or more persons may climb the cross bar ladder **38** provided on the vertical rod **14** and gain access to the platform member **16** through the trap door **42** provided in the bottom wall **40** thereof. By standing on one side of the platform member **16** and leaning back against the wire rope or chain **46** which extends between the stanchions **44**, and then leaning forward towards the vertical rod **14**, a person's weight in shifting back and forth can be made to cause the vertical rod **14** to oscillate back and forth.

It will also be apparent that the platform members **16** may be made to rotate about the vertical rod **14** since it is not fixed thereto but is, in fact, rotatable on the bearing support **50**. Such rotation is accomplished by persons standing on the platform shifting their weight to the right or left at the same time that they lean back and forth to cause the rod to oscillate.

The combination of the back and forth and side ways shifting or one's weight will produce nutational movement of the platform member **16** and rod **14** as is best shown by FIGURE 3.

The sensation created is unknown in present playground equipment. It may be likened to a swing upside down, a merry-go-round in part and the whip of the amusement park. In any respect, it is different and inspring to youngsters. Furthermore, it is wholesome, safe and helps develop coordinated minds and bodies in the reflex action and planning necessary to make the device perform as has been described.

The fun which one person can have with the playground device **10** is doubled when used by two people and they may cooperate together, in a team effort, to make the platform sway back and borth on the vertical rod or to rotate on the rod in the course of its oscillation. They may also compete with each other to prevent the platform member **16** from being "placed in orbit" or, in other words, operated in the manner which has been described.

FIGURE 4 shows a few simple variations in a like piece of playground equipment **110**. The platform member **116** is more of a closed gondola and is supported by bearing means **150** within the closed end of the center sleeve **148** and the end of the vertical rod **114**.

The playground device **110** is shown having the vertical rod **114** thereof supported within a sleeve **112** in concrete mass **158** covered with sand, sawdust or other media **160**.

It will be appreciated that the playground device **110** is used in the same manner as the playground device **10** previously described.

Although a preferred embodiment of this invention has been shown and described in detail, and one modification thereof, it will be appreciated that other modifications and improvements are within the scope of the teachings set forth. Such of these improvements and modifications as are within the spirit of this invention and are not specifically excluded by the language of the hereinafter appended claims are to be considered as inclusive thereunder.

I claim:

1. A playground device, comprising:
a vertically disposed member having means of fixed support provided at the lower end thereof,
a turntable including means for leaning support for persons standing thereon,
means rotatably mounting said turntable on the upper end of said member,
and said member having a length-to-radius ratio permissive of oscillating movement under the control and influence of persons supported on said turntable and in the course of shifting their weight.

2. The playground device of claim **1**,
said turntable being rotatable in the course of oscillating movement of said vertically disposed member and in the relocation of the weight of persons supported on said turntable in the course of rotation for inducing nutational movement of the assemblage.

3. The playground device of claim **1**, including:
a stand having radially disposed arms and means provided thereon for fixed ground engagement,
and vertically disposed means provided on said stand for receiving and supporting said vertically disposed member and said turntable thereover.

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