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B. L. COPLIN ETAL
AMUSEMENT AND EXERCISING TOY

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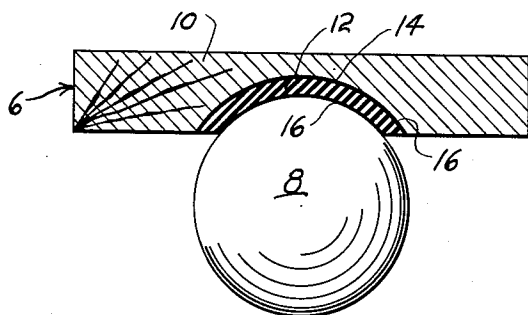


Fig. 2

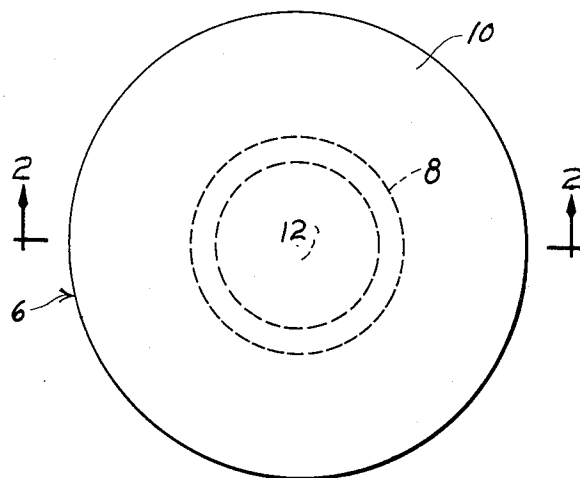


Fig. 1

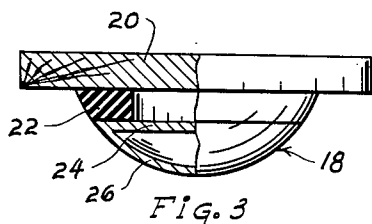


Fig. 3

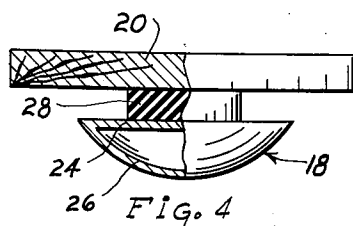


Fig. 4

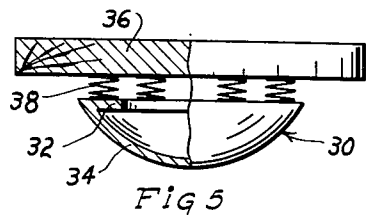


Fig. 5

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AMUSEMENT AND EXERCISING TOY

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1 Claim. (Cl. 272—57)

This invention relates to improvements in exercising type toys of the type illustrated in U.S. Patent No. 2,803,461.

The above-mentioned patent discloses an exercising toy comprising a pair of rocker members which are notched for assembly in crossing relation, and a standing board supported on top of the rocker members by rubber pads or the like, such that the entire toy may be rocked in any desired direction and the standing board may be tilted relative to the rocker members to provide a toy giving considerable amusement to adults as well as children. A toy as disclosed in said patent provides an interesting amusement device, as well as providing considerable exercise for a user of the toy. However, the crossed rocker members do not provide a uniform tilting movement of the toy in all directions; it is difficult to execute a semi-rotating or gyrating movement with the toy, and the toy is expensive to manufacture.

The present invention contemplates an improved exercising type toy generally comprising a base member having its lower end portion rounded in form of a portion of a sphere, and including a standing plate or board supported on the base member by elastic means, the present toy may be tilted uniformly in any desired direction, and the user may partially roll the toy during use, as well as move the toy across a room or the like by a combination of upward, downward and forward movements while standing on the toy. Also, the spherically-shaped base member lends itself to economical and efficient manufacturing techniques.

A general object of this invention is to provide a toy which will give not only amusement, but also exercise to the user thereof.

A more specific object of this invention is to provide an exercising type toy which may be tilted uniformly in any desired direction and partially rolled while the user is standing on the toy.

Another object of this invention is to provide an exercising type toy which may be economically manufactured and which will have a long service life.

A further object of this invention is to provide an exercising type toy which requires some skill to use and which is appealing to both adults and children.

Other objects and advantages of the invention will be evident from the following detailed description, when read in conjunction with the accompanying drawings which illustrate our invention.

In the drawings:

FIGURE 1 is a plan view of a toy constructed in accordance with this invention.

FIGURE 2 is a vertical sectional view as taken along lines 2—2 of FIG. 1, with the ball-shaped base member being shown in elevation.

FIGURE 3 is an elevational view of another toy constructed in accordance with this invention, with approximately one quarter of the toy being cut-away to illustrate details of construction.

FIGURE 4 is a view similar to FIG. 3 of still another modified toy constructed in accordance with this invention.

FIGURE 5 is another modified toy constructed in accordance with this invention and illustrated in the same manner as the toy shown in FIG. 3.

Referring to the drawings in detail, and particularly

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FIGS. 1 and 2, reference character 6 generally designates an exercising type toy comprising a base member 8 in the form of a ball which may be constructed in any desired manner (such as being solid or hollow) and which may be constructed out of any desired material, such as wood or a light-weight metal. A standing plate 10 of wood or other suitable high-strength material is supported on top of the base 8 by a sheet or pad 12 of rubber or other suitable elastic material. The rubber pad 12 is preferably disposed in a rounded indentation 14 in the plate 10 of a size to receive both the rubber pad 12 and the upper portion of the ball 8. Also, the rubber pad 12 is preferably secured in the indentation 14 and on the top of the ball 8 by a suitable adhesive 16, such that the various parts of the toy will remain assembled when the toy is moved from one location to another.

In operation of the toy 6, the user stands on the standing plate 10 and first attempts to balance himself on the ball 8. In this connection it will be observed that the standing plate 10 is circular in configuration and substantially flat, with the outer diameter of the plate 10 being substantially larger than the diameter of the ball 8. When the user stands on the plate 10, the ball 8 will tend to roll in any direction in which the weight of the user is shifted from the vertical center line of the ball 8. Also, the elastic member 12 will tend to flex as the weight of the user is shifted, such that considerable skill is required for the user to remain on the standing plate 10. When a user has become skilled, it is possible to stand on the toy 6 and move from one end of a room to the other by combining an upward and downward movement with a forward movement of the body of the user to skid the ball 8 along a floor or the like.

The form of toy illustrated in FIG. 3 comprises a base, generally designated by reference character 18, and a standing plate 20 supported on the base 18 by an elastic ring 22 of rubber or the like. The base 18 comprises a circular-shaped flat plate 24 and side walls 26 extending downwardly and inwardly from around the outer periphery of the plate 24 to provide a hollow base member having its lower end portion in the form of a partial sphere. It will be understood by those skilled in the art that the plate 24 and the side walls 26 may be cast as an integral member, or the plate and side walls may be formed separately and then secured together in any suitable manner. The elastic ring 22 has an outer diameter substantially equal to the outer diameter of the base member 18 and is therefore supported on the outer peripheral portion of the top plate 24 of the base 18 to facilitate both a tilting and vertical movement of the standing plate 20 with respect to the base 18 when a user stands on the plate 20. The elastic ring 22 may be secured to the base 18 and the standing plate 20 in any desired manner, such that the various parts of the toy will remain assembled when the toy is moved from one location to another. It will be apparent that the toy shown in FIG. 3 will operate in substantially the same manner as the toy 6 illustrated in FIGS. 1 and 2.

The form of toy illustrated in FIG. 4 is similar to the toy illustrated in FIG. 3 in utilizing the base member 18 and the standing plate 20. However, in the form of toy illustrated in FIG. 4 the standing plate 20 is supported on the base member 18 by means of an elastic pad 28 of rubber or the like which is preferably circular in configuration and has a diameter substantially less than the diameter of the base member 18. It will thus be apparent that the standing plate 20 in the toy shown in FIG. 4 may be tilted with respect to the base member 18 with greater ease than in the form of toy illustrated in FIG. 3. The elastic pad 28 may be secured to the top plate 24

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of the base member 18 and to the lower face of the respective standing plate 20 in any desired manner, such as by the use of an adhesive 16 as illustrated in FIG. 2.

In the form of toy illustrated in FIG. 5 a base member, generally designated by reference character 30, comprises a flat top plate 32 in the form of a ring, and side walls 34 extending downwardly and inwardly from the outer periphery of the ring 32 to form a portion of a sphere. In this construction the ring 32 may be easily formed as an integral part of the side walls 34 and facilitate the economy of construction of the toy. The standing plate 36 of the toy illustrated in FIG. 5 is supported on the ring 32 of the base member 30 by a plurality of helical springs 38 positioned in circumferentially spaced relation around the circumference of the ring 32. The springs 38 provide elastic support of the standing plate 36 on the base member 30, and the springs 38 may be anchored to the top plate 32 of the base member 30 and to the lower face of the standing plate 36 in any desired manner. It will be apparent that the toy illustrated in FIG. 5 will operate in substantially the same manner as the toy illustrated in FIG. 3.

From the foregoing it will be apparent that the present invention provides an improved exercising type toy which may be tilted uniformly in any desired direction and which may be partially rolled or gyrated while the user is standing on the toy. The toy provides amusement as well as exercise for the user, and the toy is attractive both to adults and children. Finally, it will be apparent that a

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toy constructed in accordance with this invention may be economically manufactured and will have a long service life.

Changes may be made in the combination and arrangement of parts or elements as heretofore set forth in the specification and shown in the drawings, it being understood that changes may be made in the embodiments disclosed without departing from the spirit and scope of the invention as defined in the following claim.

We claim:

An exercising toy for use on a flat surface comprising a hollow base member having a flat circular top plate and a lower end portion supporting said top plate and rounded in the form of a portion of sphere for uniform tilting movement of the base member on said flat surface in any direction; a flat circular standing plate of larger diameter than said top plate; and elastic means supporting said standing plate on said top plate for tilting and vertical movement of the standing plate relative to said base.

References Cited in the file of this patent

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