Abstract Title: Exercise board or skateboard

A generally rectangular board 2 having a singular rotatable sphere 3 substantially at its centre point, the lower corners of the board having either a raised portion, skids 4a castors or skate wheels. In use the participant places their feet upon either end of the board upper surface which preferably has an anti slip profile and tries to balance the board in a horizontal manner. The more skilled participant is capable of riding down inclines whilst balancing generally horizontally upon the board, the sphere 3 rotating within its housing 3a acting as a spherical wheal. In order to change direction the participant dips the required rear corner of the footboard bringing the raised skid, castor or skate wheel in contact with the gradient surface. In further embodiments the rotatable sphere housing 3a can slide lengthways within a central slot 6; the sphere can be replaced by a central fixed half-spheroid (7, Fig 4, not shown); for static embodiment where the board is used for exercising lower body muscles, this half-spheroid can rest in a cup (8) preventing damage to the floor; the board can include a spirit level (5, Fig 1a, now shown) and a hand grip; the board could also be polygonal or circular.
Field of Invention

This invention relates to a leisure device likened to a skateboard, which is a narrow board on roller skate or castor wheels on which one balances to ride down inclines.

Background to the Invention

The use of skateboards by ten year olds down suburban pavements has moved on to the use of the skateboard by teenagers and twenty something’s to perform spectacular and mostly dangerous tricks and stunts involving a greater need for balance. The basic design of a skateboard like device has not changed in more than twenty years although their change of use from a large one footed skateboard to one of being used to try and perform the ultimate skilled balancing trick certainly has. A further use of the present invention is that of a fitness or toning device, there are many fitness or toning aids that concentrate on the forming of firm leg and calf muscles, however most of these devices are incapable of exercising or toning all of the lower body muscle in one device.
Summary of the Invention

According to the present invention there is provided a skateboard like device comprising of a generally rectangular footboard having a singular rotatable sphere within a suitable housing at its centre point. The outer corners of the foot board having either raised sides, skids, castors or skate wheels. In one embodiment the device can be used as a multi directional see saw (teeter board in the USA) like device where the rotatable sphere acts as a half spheroid shaped pivot point in order to provide a balancing board comprising of a substantially flat foot board which can be made to see saw on any generally flat surface. The outer corners of the foot board can be usefully formed into skids or pads which come into contact with the flat surface during use. The height of the pivot point compared to that of the pads defining the movement of the device. In use the participant places their feet on the footboard either side of the spherical pivot point. The participant can now shift their bodyweight from one foot to the other in a see saw like action in order to exercise their lower body muscles. Merely by changing the participant’s foot placing or bias of bodyweight. The Olaboard can be made to operate in a different plane in order to exercise a greater range of lower body muscles. The Olaboard can also be made to pivot around its rotatable sphere in a twisting type motion.

In a further embodiment of the present invention the Olaboard has either raised skids, castors or skate wheels fitted on the lower corners of the footboard. In use the participant places one foot upon either end of the foot board upper surface which preferably has an anti slip profile and tries to balance the board in a horizontal manner, the board preferably having a circular spirit level fitted to its upper surface,
as an indicator. The more skilled participant is capable of riding down inclines whilst balancing generally level to the gradient upon the rotatable sphere, the sphere rotating within its housing within the footboard acting as a spherical wheel similar to a ball transfer unit used in conveyor systems. In order to change the direction of motion of the Olaboard the participant dips the required rear corner of the footboard bringing the raised skid castor or skate wheel on that corner in contact with the gradient surface. In yet a further embodiment of the present invention the rotatable sphere housing can slide lengthways within a central slot within the footboard in order that the participant can create unequal leverage from one limb to the other in order to exercise one limb more than the other if required. When the Olaboard is used as a balancing device the fact that the rotatable sphere can now also move lengthways within the central slot adds a further degree of difficulty.
Reference to the Drawings

A specific embodiment of the invention will now be described by way of example with reference to the accompanying drawings in which :-

Figure 1 – Shows in perspective the Olaboard illustrating the central rotatable sphere the footboard underside having skids or pads fitted within its corners. Further illustrating the centre slot within which the rotatable sphere can slide.

Figure 1a – Shows in perspective the Olaboard showing the shaft and handgrip, also the spirit level the underside of the footboard having castors fitted to its corners.

Figure 1b – Shows in perspective the Olaboard showing the topside of the footboard illustrating the central rotatable sphere the footboard having skate wheels fitted to its corners.

Figure 2 – Illustrates the Olaboard side elevation being propelled down an incline whilst the participant balances on the central rotatable sphere.

Figure 3 – Shows in perspective a circular Olaboard wherein the central rotatable sphere is replaced with a fixed half spheroid on the lower surface. The half spheroid capable of swivelling within the spheroid cup.

Figure 4 – Illustrates in perspective the Olaboard being used as a lower body exercise device.
Description of the Embodiments

With reference to the accompanying drawings the following numbers relate to the following features

1. The Olaboard
2. The footboard
   2a The footboard upper surface
   2b The footboard lower surface
   2c The footboard corners
2d Anti slip profile
3. The rotatable sphere
   3a. The rotatable sphere housing.
4. Corner raised portion
   4a Corner raised skids
   4b Corner raised castors
   4c Corner raised skate wheels
5. Circular spirit level
6. Slot
7. Half spheroid
8. Half spheroid cup
   8a Half spheroid inner surface
   8b Half spheroid base
9. Upright shaft
9a. Handgrip
Referring to the drawings the Olaboard (1) comprises a foot board (2) with an upper surface (2a), lower surface (2b), corners (2c) and anti slip profile (2d) a single rotatable sphere (3) and housing (3a) is substantially at the footboard (2) centre point. The footboard (2) can have either have raised corner portions (4) skids (4a), castors (4b) or skate wheels (4c). The footboards upper surface (2c) can also have a circular spirit level (5) fitted. The rotatable sphere housing (3a) in a further embodiment can slide lengthways within a central slot (6). In an even further embodiment the rotatable sphere (3) is replaced by a fixed half spheroid (7) rotatable within a half spheroid cup (8) with an inner surface (8a) and base (8b). As in figure 1 and 1b the footboard corners (2b) are formed into raised portions (4) with skids (4a), castors (4b) or skate wheels (4c) as required. As shown in figure 2 the Olaboard (1) can be used as a multi directional see saw like device whereas the rotatable sphere (3) acts as a crescent shaped pivot point. The height of the pivot point compared to that of the raised portions (4) on the footboard corners (2b) defining the pivotal movement of the device (1). As shown in figure 4 the participant places one foot on the footboard (2) either side of the spherical pivot point (3), the participant can now shift their bodyweight from one foot to the other in a see saw like action in order to exercise the lower body muscles, as illustrated in figure 1, the Olaboard (5) can be further fitted with a central slot (6) within which the rotatable sphere housing (3c) can slide. By biasing the rotatable sphere housing to one end of the footboard (2) or the other, the participant can derive a greater degree of exercise of one limb to the other. The Olaboard (1) can also be made to pivot around its rotatable sphere (3) in a twisting type motion in a further exercise routine. A further embodiment of the present invention is illustrated in figure 1, la and 1b whereas the footboard (2) has fitted on
its lower corners raised skids (4a), castors (4b) or skate wheels (4c). As shown in figure 2 the participant places their feet upon either end of the footboard upper surface (2a) which preferably has an anti slip profile (2d) and tries to balance the footboard (2) in a horizontal manner. The footboard upper surface (2a) preferably having a circular spirit level (5) fitted as in as an indicator. As shown in figure 2 the more skilled participant is capable of riding down inclines whilst balancing generally horizontally upon the rotatable sphere (3). The sphere (3) rotating within its housing (3a) within the footboard (2) acting as a spherical wheel similar to a ball transfer unit used in conveyor systems. In order to change the direction of motion of the Olaboard (1) the participant dips the required rear corner of the footboard bringing the raised skid (4c) castor (4b) or skate wheel (4c) on that footboard corner (2c) in contact with the gradient surface. Figure 3 illustrates a further embodiment of the invention whereas the rotatable sphere (3) is replaced with a fixed half spheroid (7) fitted to the footboard lower surface (2b) substantially at the footboard (2) centre point. The Olaboard (1) during use can see saw or swivel around the half spheroid (7) in order to exercise the lower body. A separate half spheroid cup (8) can be usefully provided to lessen or even prevent the potential floor damage caused by the rotation of the half shaped spheroid (7) during use. The half shaped spheroid (7) or rotatable sphere (3) rotating within the matching profile of the half shaped spheroid cup inner surface (8a) the flat base (8b) the half shaped cup (8) distributing the substantially downwards pressure of the half shaped spheroid (7) or rotatable sphere (3) over a much greater area during use.
Claims

Claim 1 – A leisure device defined as a Olaboard (1) wherein a preferably rectangular shaped footboard (2) has a singular rotatable sphere (3) and its housing (3a) fitted substantially at its centre point in order that a participant upon placing their feet upon the said footboard (2) either side of the said rotatable sphere (3) can try to balance the said footboard (2) into a generally horizontal position upon the pivot point created by the said rotatable sphere (3).

Claim 2 – A leisure device claimed in claim 1 wherein the protruding height from the said footboard lower surface to the rotatable sphere (3) compared to that of the corner raised portions (4) enables a see saw (2b) or teeter board like device to be employed in order if required to exercise the lower body muscles. The said leisure device also being capable of orbital motion around the said rotatable sphere (3).

Claim 3 – A leisure device as claimed in claim 1 and 2 wherein the footboard corners (2c) or end portions have either raised portions (4), skids (4a), castors (4b) or skate wheels (4c) fitted to the footboard lower surface (2b) as required.

Claim 4 – A leisure device as claimed in claim 1,2 and 4 wherein the rotatable sphere (3) acts as a spherical wheel allowing the skilled participant to ride down an incline whilst balancing the footboard (2) around the said singular rotatable sphere (3). The footboard corners (2c) having said skids (4a), castors (4b) or skate wheels (4c) fitted to lessen the degree of accidents and provide a method of changing the direction of the device whilst in motion.
Claim 4 – A leisure device as in claimed in previous claims wherein the rotatable sphere (3) can freely rotate within the spherical housing (3a).

Claim 5 – A leisure device as claimed in previous claims wherein the rotatable sphere (3) and its housing (3a) can further slide both lengthways and sideways [x and y axis] within a slot (6) within the footboard (2).

Claim 6 – A leisure device as claimed in previous claims wherein the upper surface (2a) has a spirit level (5) fitted to enable the participant to gauge his balancing prowess.

Claim 7 – A leisure device as claimed in claim 1 and 2 wherein the rotatable sphere (3) is replaced by a fixed half spheroid (7) fitted to the lower surface (2b) of the footboard (2) substantially at its mid point.

Claim 8 – A leisure device as claimed in claim 1, 2 and 7 wherein the half spheroid (7) fitted to the lower surface (2b) of the footboard (2) can swivel within a separate cup device (8) wherein its dished surface (8a) has an appropriate matching contour to that of the said half spheroid (7) such that the said footboard (2) can freely swivel or pivot around the surface of the said half spheroid (7) whilst substantially preventing potential floor damage by the rotation of the said (7) half spheroid.

Claim 9 – A leisure device as claimed in previous claims where the outer edges of the said footboard (2) are upturned (4).
Claim 10 – A leisure device as claimed in previous claims wherein the upper surface (2a) of the footboard (2) where the participant places their feet during use has an anti-slip profile or coating (2d).

Claim 11 – A leisure device as in claimed previous claims wherein the footboard is generally circular.

Claim 12 – A leisure device as in claimed previous claims wherein the footboard is generally polygonal.

Claim 13 – A leisure device as claimed in previous claims wherein a shaft (9) is fixed substantially vertical to the upper surface (2a) of the footboard (2), in order to provide a handgrip.

Claim 14 – A leisure device defined as an Olaboard (1) substantially as herein before described with reference to, and illustrated, in the accompanying drawings.
Application No: GB 0326017.1
Claims searched: 1 at least
Examiner: Roland Whaite
Date of search: 3 March 2004

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

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Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC®:

A6D; A6M
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The following online and other databases have been used in the preparation of this search report:

| ONLINE:            | EPODOC JAPIO WPI  |