

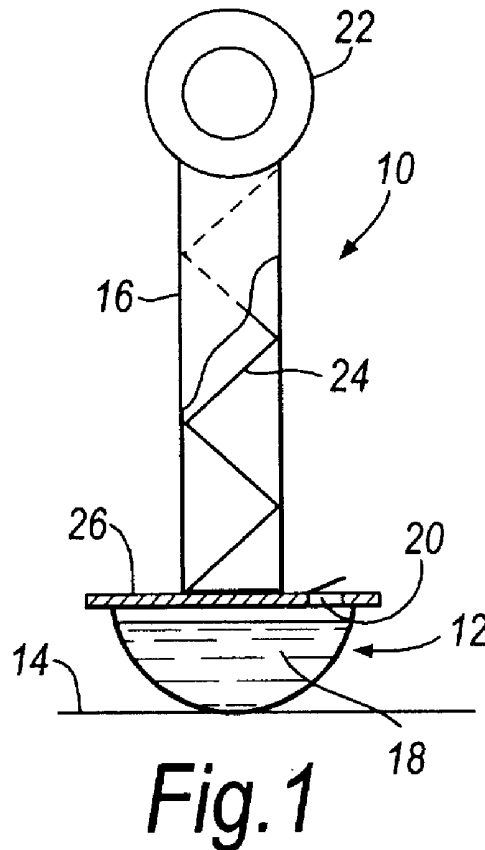
(12) UK Patent Application (19) GB (11) 2 401 796 (13) A

(43) Date of A Publication 24.11.2004

(21) Application No:	0311740.5	(51) INT CL ⁷ :	A63B 69/00 63/00 // A63B 69/34
(22) Date of Filing:	22.05.2003	(52) UK CL (Edition W):	A6D DTH D117T
(71) Applicant(s): Leslie Lilley 67 Powster Road, BROMLEY, Kent, BR1 5HC, United Kingdom		(56) Documents Cited:	EP 0933098 A2 FR 002747578 A US 6454670 A US 5669833 A US 5246229 A US 5181725 A US 4921257 A US 4286786 A US 2937872 A US 2237599 A US 20030030218 A
(72) Inventor(s): Leslie Lilley		(58) Field of Search:	UK CL (Edition W) A6D INT CL ⁷ A63B Other: Online:WPI,EPODOC,JAPIO
(74) Agent and/or Address for Service: Graham Watt & Co LLP, Patent & Trade Mark Attorneys St Botolph's House, 7-9 St Botolph's Road, SEVENOAKS, Kent, TN13 3AJ, United Kingdom			

(54) Abstract Title: **Self-righting ball skill enhancement device**

(57) A self-righting ball skill enhancement device comprises a part-spherical hollow base 12 supporting a hollow elongate body 10 which extends generally vertically from the base in use. The base includes a closeable inlet 20 through which a weighting medium 18 can be passed into the hollow interior of the base. A further ball skill enhancement device (see fig.4) comprises a frame, and first and second sheets of material supported by the frame. The first sheet has at least one aperture through which a ball may pass rearwardly. The first sheet is orientated in a generally vertical plane with a top and bottom edge and the second sheet is positioned behind the first sheet and extends rearwardly upwardly from a position spaced below the bottom edge of the first sheet to a position proximate the level of the top edge of the first sheet. The second sheet receives any ball passing through the aperture of the first sheet and returns it forwardly through the spacing between the bottom edge of the first sheet and the second sheet.



GB 2 401 796 A

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date but within the period prescribed by Rule 25(1) of the Patents Rules 1995.

This print takes account of replacement documents submitted after the date of filing to enable the application to comply with the formal requirements of the Patents Rules 1995

Original Printed on Recycled Paper

1/1

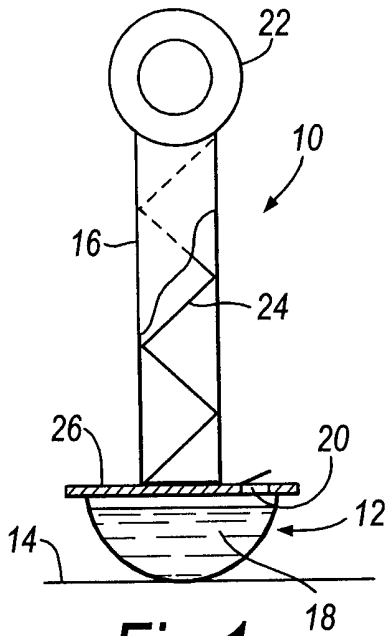


Fig. 1

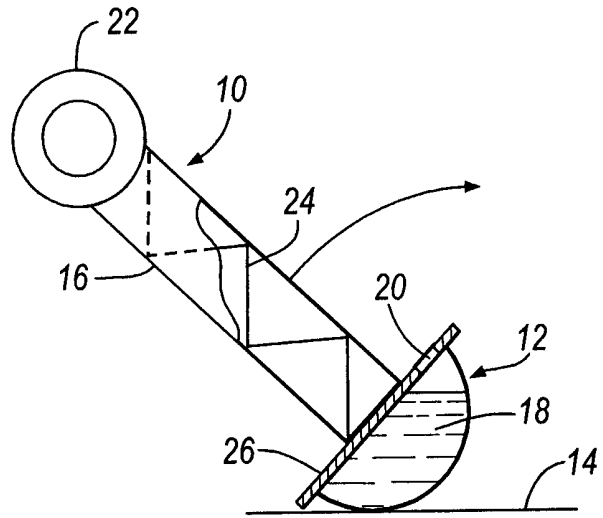


Fig. 2

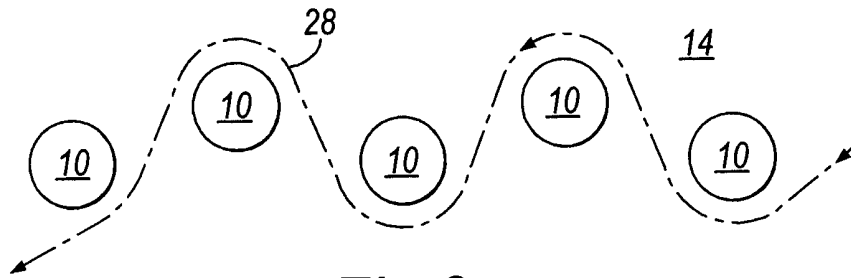


Fig. 3

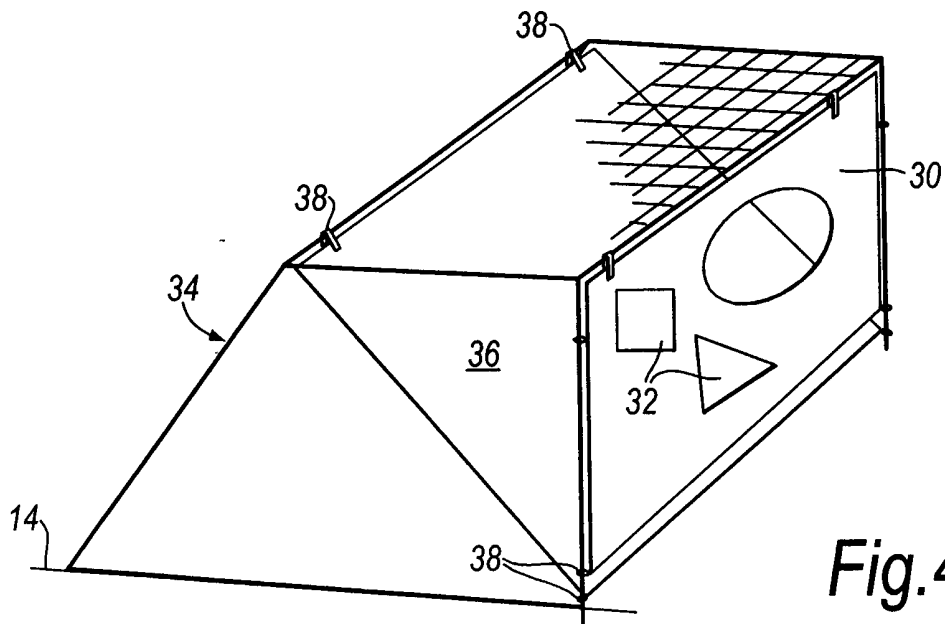


Fig. 4

5

BALL SKILL ENHANCEMENT

10

DESCRIPTION

15

The invention relates to devices and apparatus for enabling an individual or group of individuals to increase or enhance their skill with balls – in particular for increasing their ability to control the motion of balls.

Two particular areas of ball skill enhancement are: firstly, increasing the ability of one or more individuals to move with a ball he/she cannot carry, e.g. a soccer or basketball player must be proficient in weaving his body between and/or around opposing players whilst controlling a ball not held by him/her but simply being kicked or bounced; secondly, other skills required especially of soccer players and golfers require the accurate control of a ball launched at a target.

Objects of the invention are to provide devices and apparatus enabling these skills to be practised and so enhanced.

10 In a first aspect the invention provides a device comprising a base portion for placement in use on a surface, the base portion supporting an elongate body arranged to extend in use in an operative position substantially vertically away from the base portion and said surface, the device being so configured and arranged that the elongate body is constrained to move to said
15 operative position if displaced therefrom.

Preferably the base portion and the elongate body are rigidly interconnected.

With advantage the base portion is shaped to promote the movement of the elongate body to its said operative position.

20 To achieve this the base portion may be weighted

Desirably the device is of a plastics material.

The base portion and the elongate body may be resiliently interconnected, means being provided to promote the movement of the elongate body to its said operative position. For example, the base portion and elongate body may be interconnected by a spring member.

5 The elongate body may be provided with support means upon which insignia may be mounted. Such support means may comprise a portion of enlarged size at the end of the elongate body remote from the base portion.

 The elongate body may be collapsible when not in use. A further spring member may be provided to hold the elongate body extending away from
10 the base portion in use.

 With advantage the elongate body is hollow and said further spring member is provided within the elongate body.

 Additionally the base portion may be collapsible when not in use and be adapted to have placed therein a weighting medium – for example a
15 quantity of water. In such circumstances the interiors of the base portion and elongate body are physically separated by a wall.

 Apparatus embodying the invention may include a plurality of devices each as defined above.

 A second aspect of the invention provides a device including a first
20 sheet of material supportable in a frame and having at least one aperture therein through which a ball may pass and a second sheet of material also supportable

by said frame in a position to one side of said first sheet to receive any ball passed through said first sheet from the second side thereof and to return said ball to said second side thereof.

With advantage the first sheet extends substantially vertically in use
5 and the second sheet extends rearwardly upwardly from a position at or below the level of the bottom of said first sheet to a position proximate the top edge of the first sheet.

With advantage the first and second sheets are of a textile fabric material.

10 The said first sheet may be provided with a plurality of apertures

The device may incorporate a frame for supporting the said sheets or in the alternative the sheets may be adapted to fitment to an existing frame, of, for example a goal

If the device is for fitment to an existing frame then the sheets are
15 preferably provided with clips, clamps or other suitable means for attachment to the frame.

A third aspect of the invention provides a plurality of devices in accord with the first above noted aspect located proximal a device in accord with the second above noted aspect.

The above and other aspects of the invention will become apparent from the following description of embodiments thereof now made with reference to the accompanying drawings, in which:-

Figure 1 is a part sectional face view of a first device embodying
5 the invention,

Figure 2 shows the device of Figure 1 in use,

Figure 3 illustrates a plurality of devices as shown in figure 1 in use,
and

Figure 4 depicts a second device embodying the invention.

10 With reference now to the drawings, Figures 1 and 2 illustrate a first device embodying the invention and in particular show the device 10 to comprise a base portion 12 for placement in use on a surface 14. Base portion 12 supports a hollow elongate body 16 arranged to extend in use in an operative position substantially vertically away from the base portion 12 and said surface 14. Device
15 10 is configured and arranged that the elongate body is constrained to move to its operative position, Figure 1, if displaced therefrom for example as shown in Figure 2.

The base portion 12 and the elongate body 16 are rigidly interconnected.

Base portion 12 is generally part spherical and, in use, is weighted as shown at 18 so that in use it promotes the movement of the elongate body to the position shown in Figure 1.

Base portion 12 is provided with a closable inlet 20 through which a
5 weighting medium – for example water may be passed to its interior.

Both the base portion 12 and the elongate body 16 are of any suitable plastics material and are collapsible when not in use

The elongate body 16 comprises a hollow generally circular in section member and is provided with a portion 22 of enlarged size at the end of
10 the elongate body 16 remote from the base portion 12. Any suitable insignia may be placed on portion 22.

A spring member 24 is provided within the hollow elongate body 16 to hold the elongate body extending away from the base portion 12 in use. Spring member 24 extends from a wall 26 separating the base portion and
15 elongate body 16.

As an alternative to the above the base portion 12 may be fixable in the surface 14 and the base portion 12 and elongate body 16 resiliently interconnected. For example, the base portion 12 and elongate body 16 may be interconnected by a spring member [not shown].

20 Apparatus embodying the invention may include a plurality of devices each as described above.

It is envisaged that the devices described above will be fooled flat when not in use and will be sold, stored and transported with a suitable tube holding say five of them.

A plurality of devices 10 may be placed on surface 14 as shown in Figure 3 enabling an individual to train their ball skills – for example by controlling movement of a football as they pass between the devices 10 following the meandering path 28 as shown.

A further device embodying the invention includes a first sheet 30 of a textile fabric material having a number of apertures 32 therein through which a ball may pass. The first sheet 30 is mountable in the mouth of a frame 34 to extend substantially vertically as shown.

A second sheet 36 of textile fabric material is also supported in frame 34 behind the first sheet 30 and receives any ball passed through an aperture 32. The second sheet 36 extends rearwardly upwardly from a position at or below the level of the bottom of said first sheet 30 to a position proximate the top edge of the first sheet 30. In this position the second sheet 36 catches any ball passing through first sheet 30 and returns it to the front side of that sheet.

The device may incorporate the frame 34 for supporting the sheets 30 and 36 or in the alternative the sheets may be adapted to fitment to an existing frame, for example of a goal

The sheets 30 and 36 are provided with clips, clamps or other suitable means 38 for attachment to the frame 34.

It will be seen that the devices of Figures 1 to 3 may be used in conjunction with the device of Figure 4 – enabling an individual to train first in
5 dribbling a football and then in shooting at a goalmouth.

It will also be seen that the devices embodying the invention are not limited in use to training soccer players. The devices of Figures 1 to 3 are of use to anyone attempting to enhance their skills when moving with a ball, for example, basketball players. Again, the device of Figure 4 may be used by
10 anyone wishing to improve his or her accuracy in aiming a ball – for example a person practising golf.

CLAIMS

1. A self-righting ball skill enhancement device comprising a part-spherical hollow base supporting a hollow elongate body which extends generally vertically from the base in use, the base including a closeable inlet through which a weighting medium can be passed into the hollow interior of the base.
2. The device according to claim 1, wherein the base and the elongate body are rigidly interconnected.
3. The device of claim 1, wherein the base and the elongate body are resiliently interconnected.
4. The device of claim 3, wherein the base and the elongate body are interconnected by a spring member.
5. The device of any preceding claim, wherein the elongate body carries insignia support means located at a position remote from the body.
6. The device of any preceding claim, wherein the base and the body are collapsible when the device is not in use.
7. The device of claim 6, wherein a spring member is provided to hold the body extending away from the base in use.
8. The device of any preceding claim, wherein a wall separates the hollow interior of the base from the hollow interior of the body.

9. The combination of one or more self-righting ball skill enhancement devices of any preceding claim and means for constructing a further ball skill enhancement device comprising a first sheet of material supportable by a frame and having at least one aperture through which a ball may pass rearwardly, and a second sheet of material supportable by the frame, the arrangement being such that when the first sheet is supported by a frame in a generally vertical plane with a top and bottom edge, and the second sheet is supported by the frame in a position behind the first sheet to extend rearwardly upwardly from a position spaced below the bottom edge of the first sheet to a position proximate the level of the top edge of the first sheet, the second sheet receives any ball passing through the aperture of the first sheet and returns the ball forwardly through the spacing between the bottom edge of the first sheet and the second sheet.

10. A ball skill enhancement device comprising a frame, a first sheet of material supported by the frame and having at least one aperture through which a ball may pass rearwardly, and a second sheet of material supported by the frame in a position behind the first sheet, the arrangement being such that when the first sheet is orientated in a generally vertical plane with a top and bottom edge, the second sheet extends rearwardly upwardly from a position spaced below the bottom edge of the first sheet to a position proximate the level of the top edge of the first sheet to receive any ball passing through the aperture of the first sheet and to return the ball forwardly through the spacing between the bottom edge of the first sheet and the second sheet.

11. The combination of claim 9 or the device of claim 10, wherein the first sheet is formed of fabric material.

12. The combination of claim 9 or the device of claim 10 or 11, wherein the second sheet is formed of fabric material.

5 13. The combination of claim 9 or the device of any one of claims 10 to 12, wherein a plurality of apertures are provided in the first sheet.

10 14. The combination of claim 9 or the device of any one of claims 10 to 12, wherein a plurality of apertures of different shapes and sizes are provided in the first sheet.



Application No: GB0311740.5
 Claims searched: 9-14

Examiner: Mark Sexton
 Date of search: 15 September 2004

Patents Act 1977
Further Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	9-12	EP 0933098 A2 (PATENT CATEGORY CORPORATION) - see whole document, noting the embodiment of fig. 13
X	9,10 & 12-14	US 2003/030218 A (ZUCCHI ET AL.) - see whole document
X	9,10,13 & 14	US 5246229 A (CAREY) - see whole document
X	9-13	US 4921257 A (HELLER) - see whole document, note especially the figures
X	9-13	US 4286786 A (PAPADOPOULOS) - see whole document noting figure 4 & target 54
X	9,10 & 12-14	FR 2747578 A (TORRES) - see WPI Abstract accession no. 97-538968/50
A	-	US 5181725 A (LERAS ET AL.)

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:



INVESTOR IN PEOPLE

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

A6D

Worldwide search of patent documents classified in the following areas of the IPC⁰⁷

A63B

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

Online: WPI, EPODOC, JAPIO



Application No: GB0311740.5
 Claims searched: 1-9

Examiner: Mark Sexton
 Date of search: 2 August 2004

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular reference
X	1-3 & 8	US 6454670 A (BEERS) - see whole document
X	1-3, 6 & 8	US 2937872 A (GILMAN) - see whole document
X	1-3 & 8	US 2237599 A (GILMAN) - see whole document
A	-	US 5669833 A (STONE)

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

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

A6D

Worldwide search of patent documents classified in the following areas of the IPC⁰⁷

A63B

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

Online: WPI, EPODOC, JAPIO