**SPORTS TRAINING APPARATUS AND METHOD OF USING THE SAME**

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**Abstract**

An apparatus is provided that is placed on a support surface and used by an individual to practice or play with a sports ball. The apparatus generally includes a support assembly and a target member connected thereto with a coupling member. The support assembly may be formed by one or more pole assemblies having multiple pole sections telescopically mounted to one another. The target member has an opening forming a target area having a boundary that generally defines a target plane. The target area is sized and adapted so that the ball may pass therethrough. The coupling member has a released state whereby the target member may be selectively positioned to orient the plane in a selected angular orientation relative to the support surface and a secured state whereby the target member is retained in the selected angular orientation. The apparatus may include a chute depending from the target member.
SPORTS TRAINING APPARATUS AND METHOD OF USING THE SAME

FIELD OF THE INVENTION

[0001] The present invention broadly concerns training equipment for sports and recreational activities. More particularly, the present invention concerns a sports training apparatus useful for improving skills related to a particular sport. Specifically, the present invention relates to a sports target useful for improving skills to impart the desired speed, location, and trajectory of a sports ball. The present invention also relates to a method of using one or more sports targets to improve skills useful for playing a particular sport such as volleyball.

BACKGROUND OF THE INVENTION

[0002] Society enjoys recreation. It is a welcome relief from work and a means of socialization and exercise. Sports activities such as tennis, football, basketball, soccer, golf, and volleyball, are popular weekend past times. While many participate in these sports activities for the social interaction, others seek to play on a more competitive level. In either case, such sports activities offer an enjoyable way to both socialize and achieve physical fitness.

[0003] Many sports activities require skills of addressing or otherwise throwing the sports ball so that it travels along a certain trajectory. For example, a golfer endeavors to strike the golf ball with a selected golf club to impart a desired trajectory and advance the golf ball to the target hole. A basketball player strives to properly shoot the basketball with the proper arc to enable the basketball to pass through the basketball hoop. Football players also endeavor to either throw the football so as to be received by a teammate or attempt to kick the football through the goal posts. In volleyball, players strategize ways to hit the volleyball in the opposing team’s court.

[0004] Many sports participants, particularly those who play on a more competitive level, train to improve the skills that enable them to send the sports ball to the desired target or location. Repeated training and conditioning improves visual and muscle memory, which can dramatically affect one’s overall game score.

[0005] Various known training apparatuses or techniques exist for the various sports activities mentioned above. Perhaps the most common technique is to repeatedly hit or throw the sports ball until the technique has been improved. To this end, golf courses provide different facilities for the golfer to practice different strokes. Driving ranges help players improve their golf swing and are employed to practice an initial shot such as would be used off of a tee box. Sometimes golf courses provide a practice facility known as a chipping green wherein golfers practice lofting or “chipping” a golf ball from a distance of a few feet to fifteen to seventy-five yards onto a designated green towards one or more pins located on that green.

[0006] Participants of team oriented sports, such as basketball, football, and volleyball greatly improve their game skills through scrimmages and matches, but can also derive great benefit from solo practice with repeated shots aimed at a target. Basketball players can improve their ball handling skills and the accuracy of their shots by standing at varying distances from the basketball hoop and repeatedly practicing their shots. Football players can improve their skills by suspending tires or other such target, and repeatedly throw footballs through the opening for practice.

[0007] Similarly, volleyball players also practice various skills related to the game. Particularly, the bump-set-spike is an offensive strategy wherein a teammate “bumps” or passes the ball to another teammate called the setter. The setter then sets the ball so as to position it for another teammate to drive or “spike” the ball over the net and into the opposing team’s court. The setter’s placement of the ball for the hitter is important. Drills helpful to improve the speed, location, and trajectory of the ball condition and hone these techniques.

[0008] For each of these activities, professional athletes and social participants alike can improve their skills to maximize their overall game and scoring capability through repetition of these techniques. However, a training aid or practice apparatus may accomplish this process more efficiently and, furthermore, could possibly help reduce the risk of developing bad techniques. Many training aids or devices that do exist for training purposes are typically only applicable to one sport or one type of sports ball. Accordingly, there is a need for devices and methods that are versatile such that they may be used to train a variety of skills related to one sports activity, but that is also adapted for use as a training device for a variety of sports activities. The present invention is directed to meeting these needs.

SUMMARY OF THE INVENTION

[0009] An object of the present invention is to provide a useful training apparatus and method for developing skills related to a particular sport;

[0010] Another object of the present invention is to provide a training apparatus useful for developing both visual and muscle memory skills related to volleyball, basketball, and golf;

[0011] A further object of the present invention is to provide a training apparatus that is both portable and easy to assemble and disassemble;

[0012] Yet another object of the present invention is to provide a training apparatus that has a height adjustable target;

[0013] A still further object of the present invention is to provide a training apparatus that is moveable once assembled;

[0014] Another object of the present invention is to provide a training apparatus that is made of lightweight, durable material that can withstand repeated use; and

[0015] Yet another object of the present invention is to provide a method of developing sports related skills for achieving a competitive advantage.

[0016] According to the present invention, there, an apparatus is provided that is adapted to be placed on a support surface for use by an individual while practicing or playing with a sports ball. In an exemplary embodiment, the apparatus broadly includes a support assembly disposed on the support surface, a target member supported thereby, and a coupling member that interconnects the support assembly.
and the target member. The coupling member has a released state whereby the target member may be selectively positioned so as to orient the target plane in a selected orientation relative to the support surface as well as a secured state whereby the target member is retained in the selected orientation.

[0017] The support assembly may include one or more pole assemblies, each having a plurality of pole sections telescopically mounted to one another and a base member adapted to engage the support surface. More particularly, the pole assembly may include a lower pole section supported by the base member and extending upwardly therefrom, a middle pole section telescopically received by the lower pole section, and an upper pole section telescopically received by the middle pole section.

[0018] The target member has an opening forming a target area that is sized and adapted so that the sports ball may pass therethrough and a boundary that has a target boundary generally defining a target plane. The target member may be an annular ring having a diameter selected from approximately 19 inches, approximately 24.5 inches, and approximately 14 inches. The target member is rotatably supported by the support assembly so that it can be selectively rotated about a rotation axis that is generally parallel to the support surface when in the released state.

[0019] The support assembly of a training apparatus contemplated by the present invention may particularly include a first pole assembly oriented along a first axis and a second pole assembly oriented along a second axis parallel to the first axis wherein both the first and second axes are generally perpendicular to the support surface. Each pole assembly is supported by a base member and may be comprised of a plurality of pole sections telescopically mounted to one another. In this embodiment, the target member may include two spaced apart arm members whereby a respective pole assembly supports each arm. The training apparatus may further include a first coupling member supported by the first upright pole assembly and a second coupling member supported by the second upright pole assembly to interconnect the support assembly and the target member. Here again, the coupling members have a released state and a secured state whereby the target plane is selectively positioned when the coupling members are in the released state and wherein the target member is retained in the selected orientation when in the secured state.

[0020] The training apparatus of the present invention may also be provided with a receptacle supported by the support assembly and adapted to receive the sports ball once it passes through the target area. The receptacle may be received by or seated in a bay that is formed in the support assembly. A chute may also be provided, which depends from the target member and guides the sports ball after it passes through the target area.

[0021] The present invention is also directed to a method of improving a player’s skills associated with a selected sports activity. The method includes the step of elevating a target member a selected distance above a support surface and then positioning the target member so as to orient the target plane at a selected first angular orientation relative to the support surface. The method includes the step of securing the target member to retain the selected first orientation of the target plane whereby the player may then project a sports ball through the target opening. The target member may then be oriented at a second angular orientation to the support surface and thereafter secured to retain the second selected orientation.

[0022] These and other objects of the present invention will become more readily appreciated and understood from a consideration of the following detailed description of the exemplary embodiments of the present invention when taken together with the accompanying drawings, in which:

BRIEF DESCRIPTION OF THE DRAWINGS

[0023] FIG. 1 is a perspective view of a first exemplary embodiment of the training apparatus according to the present invention;

[0024] FIG. 2 is an exploded view in perspective of a portion of the target member and a portion of the upper pole section and a fastening element used to interconnect these components of the training apparatus shown in FIG. 1;

[0025] FIG. 3 is a bottom plan view of the platform of the training apparatus shown in FIG. 1;

[0026] FIG. 4 is an exploded view in perspective of a clamp contemplated by the present invention to couple the middle pole section and the lower pole section;

[0027] FIG. 5 is a perspective view of a second exemplary embodiment of the training apparatus according to the present invention;

[0028] FIG. 6 is an end view in elevation of a rotatable fastener for connecting the target member and the upper pole section of the training apparatus shown in FIG. 5;

[0029] FIG. 7 is an exploded front view in elevation of the rotatable fastener of FIG. 6 that may be employed to change the angle of the target member of the apparatus shown in FIG. 5;

[0030] FIG. 8 is a perspective view of a third exemplary embodiment of the training apparatus according to the present invention;

[0031] FIG. 9 is a side view in elevation of the training apparatus shown in FIG. 8;

[0032] FIG. 10 is a front view in elevation of the training apparatus shown in FIG. 8 shown without the net;

[0033] FIG. 11 is a bottom plan view of the training apparatus shown in FIG. 8;

[0034] FIG. 12 is a front view in elevation of the target member of the training apparatus shown in FIGS. 8-10;

[0035] FIG. 13 is a side view of two embodiments of the training apparatus contemplated by the present invention in use by an individual in practicing the method according to the present invention;

[0036] FIG. 14 is a side view of a golfer using a training apparatus contemplated by the present invention; and

[0037] FIG. 15 is a side view of a basketball player using a training apparatus contemplated by the present invention.

DETAILED DESCRIPTION OF THE EXEMPLARY EMBODIMENTS

[0038] The present invention broadly relates to training equipment for sports and recreational activities. More par-
particularly, the present invention relates to a multi-purpose training apparatus useful for improving skills associated with many different sports. The present invention has specific usefulness in training skills and improving visual and muscle memory useful to sports activities involving a sports ball, such as volleyball, golf, and basketball, to name a few.

[0039] Generally, the training apparatus of the present invention comprises a support assembly that is adapted to be disposed on the support surface and a target member supported thereby. The target member is of a selected size and configuration and is selectively positionable at an orientation relative to the support surface.

[0040] To better appreciate the structure of the sports training apparatus of the present invention, reference is first made to FIG. 1, which shows a first exemplary embodiment of a training apparatus 10 according to the present invention. Generally, training apparatus 10 includes target member 20 supported by support assembly 40 shown here assembled and supported on support surface 12, which may be the ground, paved surface area, or floor of a gymnasion or volleyball court, for example.

[0041] As shown, support assembly 40 includes base member 50, which receives and supports pole assembly 41 comprised of a plurality of pole sections mounted to one another. Pole assembly 41 includes upper pole section 42, which is telescopically received by middle pole section 44 as well as lower pole section 46 that telescopically receives middle pole section 44. Base member 50 includes wheeled pedestal 48 and stanchion 54, which extends upwardly from a substantially central location. Stanchion 54 may be permanently fixed therein or may be a removable component. Upper end portion 56 of stanchion 54 is sized and adapted to receive lower pole section 46 for removable attachment thereto. Lower pole section 46 may be attached to stanchion 54 by nut and bolt fasteners passing through aligned holes formed therein, and may include an enlarged head or knob 58 to facilitate attachment. As should be appreciated, any number of devices known in the art such could be used to attach lower pole section 46 to stanchion 54 such as locking pins or other cooperating fastener.

[0042] The telescoping pole sections of pole assembly 41 allows the height of target member 20, above the support surface, to be varied to accommodate different uses and trainees, as well as to vary the drills to develop the particular skills. Pole sections 42, 44, and 46 may be hollow tubular pole components formed of a lightweight yet sturdy material to enable the apparatus to be easily portable and withstand being hit by the sports ball during use. For example, the pole sections can be formed of PVC pipe, plastic, wood, aluminum, metal, or a combination thereof. Moreover, while illustrated to be circular in cross-section, these tubular members may take other cross-sectional geometries, such as square, rectangular, oval, and the like are within the scope of the invention.

[0043] Target member 20 has an opening 24 forming a target area that is sized and adapted to allow a sports ball therethrough. The boundary of target area 24, shown here as annular ring 22, generally defines a target plane “P”. Target area 24 may be any suitable size for the selected sports ball. For example, annular ring 22 may be approximately 24.5” in diameter, which is a size useful for volleyball training. Alternatively, annual ring 22 could be smaller so as to be approximately 14” in diameter, which is helpful for golf training or approximately 19” in diameter for basketball training. Further, the boundary 22 is not limited to an annular configuration, but may be of a selected configuration such as a U-shaped, square, a triangle, or an ellipse, to name a few.

[0044] With reference now to FIGS. 1 and 2, it may be seen that ring 22 is not a continuous piece but rather includes ends 26 that are sized and adapted to receive T-shaped neck piece 28. As perhaps best shown in FIG. 2, neckpiece 28 interconnects ring 22 and upper pole section 42, which are held in position with fastening pin 30 and cooperating hairpin 32. Neckpiece 28 includes diametric holes such as hole 34 that are adapted to align with diametric holes such as hole 36 formed in upper pole section 42 for receipt of locking pin 30 and fastened by hairpin 32. Other fastening means known in the art may be used to couple these two components such as a nut and bolt. However, it is desirable that the fastening means employed be strong enough to hold the components together while the training apparatus is in use and be easy to fasten and unfasten for ease of assembly and disassembly of the apparatus.

[0045] With reference next to FIGS. 1 and 3, pedestal 48 includes castors 52 which allow for training apparatus 10 to be easily moved about the support surface 12 when assembled. Castors 52 may further include locking mechanisms, as known in the art, so as to help maintain training apparatus 10 in the desired location.

[0046] As discussed above, pole assembly 41 includes telescopically engaging pole sections. Clamps 60 permit the selective positioning of middle pole section 44 along the length of sections 42 and 46. More particularly, as shown in FIG. 1, clamps 60 couple middle pole section 44 to both upper and lower pole sections 42 and 46 and thus are of a construction that accommodates the difference in diameter among the pole sections.

[0047] FIG. 4 shows a representative clamp 60 shown in use with middle pole section 44 and lower pole section 46. Middle pole section 44 has a diameter D1 which is greater than diameter D2 of lower pole section 46. Clamp 60 has a lengthwise slit 62 and a circumferential slit 64 to pass around, which divide clamp 60 into first finger 66 and second finger 68. First finger 66 includes a pair of first nubs 67 each provided with a first bore 70. A fastener, such as threaded bolt 72 may be received by first bore 70 and fastened to nubs 67, for example, with a nut. As should be understood, thinning threaded bolt 72 causes nubs 67 to move toward each other thereby to tighten first finger 66 so as to accommodate D1 of middle pole section 44.

[0048] Second finger 68 has a separate pair of second nubs 69 each provided with a lower bore 74. A second fastener, such as threaded fastener 76 may be received by bore 74 and fastened to nubs 69 with a nut so as to clamp second finger 68, in the manner discussed above in a manner that accommodates D2 of lower pole section 46. Fastener 76 further includes knob 78 as it is contemplated that first finger 66 of clamp 60 will remain secured to middle pole section 44 while first finger 68 will be used release and secure clamp 60 along the length of lower pole section 46. Further, as should be appreciated, clamp 60 allows middle pole section 44 to be completely separated from upper and lower pole sections and allow for the disassembly and reassembly of the apparatus.
[0049] A second exemplary embodiment of the training apparatus of the present invention is shown in FIG. 5. Here, assembled training apparatus 110 is shown supported on a support surface 112 and includes target member 120 supported by support assembly 140. Similar to target member 20 described above with reference to FIG. 1, target member 120 has an opening 124 that forms a target area and has a target boundary in the form of ring 122 that generally defines a target plane “P.” Target member 120 further includes chute 180 depending from ring 122, which guides the sports ball after it passes through the target area 124. Chute 180 is fastened about ring 122 with cuffs 182 having cooperating fasteners such as snaps. Other suitable means of attaching chute 180 to ring 122 may be used, such as hook and loop fasteners, ties, buttons, and the like.

[0050] Similar to support assembly 40 described above with reference to FIG. 1, support assembly 140 includes a pole assembly 141 comprised of a plurality of telescoping engaging pole sections, including upper pole section 142, middle pole section 144, lower pole section 146, all supported by base member 150. Clamps 160, which are identical in construction to clamps 60 described above, permit the selective positioning of middle pole section 144 along the length of sections 142 and 146.

[0051] Here, base member 150 includes platform 148, which may be formed of any suitable material such as plastic, wood, and the like. Castors 152 are supported by platform 148 and are adapted to engage the support surface enable training apparatus 110 to be moved about the support surface 112. Base member 150 further includes stanchion 154 extending upwardly from platform 150 reinforced by strut 155. Stanchion 154 receives lower pole section 146 and secures it in place by a threaded fastening member, which may be tightened or loosened by, for example, knob 158.

[0052] As shown in FIG. 5, coupling member 130 interconnects support assembly 140 and target member 120. More particularly, coupling member 130 is supported by upper pole section 142 and is adapted to receive target member 120 therein. Coupling member 130 has a released state whereby target member 120 may be selectively positioned so as to orient the target plane “P” at a selected orientation relative to support surface 112. Coupling member 130 also has a secured state whereby target member 120 is retained in the selected angular orientation. More particularly, when coupling member 130 is in the released state, it permits target member 120 to be selectively rotated about rotation axis “X”, which is generally parallel to the support surface 112.

[0053] The components of coupling member 130 will first be introduced so that its function in relation to the training apparatus can be appreciated. Turning then to FIG. 6, coupling member 130 includes a first locking jaw 132 and a second locking jaw 134. First locking jaw 132 includes teeth 136 while second locking jaw 134 includes teeth 137. Teeth 136 and 137 extend from the inner surface (not shown) of a respective locking jaw. Coupling member 130 also includes a cooperating fastening member 170 operative to tighten or loosen jaws 132 and 134. Fastening member may be, as shown, a threaded screw 172 that passes through both locking jaws 132 and 134 to mate with nut 174 and further includes knob 176 to facilitate the tightening and loosening thereof.

[0054] With continued reference to FIG. 6, coupling member 130 is shown in the secured state. When in the secured state, fastening member 170 is tightened so that teeth 136 and 137 are fully meshed to restrain the rotational movement thereof. As should be understood, then, when in the released state, fastening member 170 is loosened so that jaws 132 and 134 are spaced apart and teeth 136 and 137 are no longer meshed to permit rotation.

[0055] With reference now to both FIGS. 6 and 7, coupling member 130 is supported by upper pole section 142 and couples to necklace 128 of target member 120. Accordingly, when coupling member 130 is in the released state, it is adapted to permit the selective rotation of target member 120 an angle of “a”, approximately 130° in either direction about rotation axis “X”. Once the desired angle of target member 120 is selected, fastening member 170 may be used to tighten jaws 132 and 134 so that teeth 136 and 137 are meshed together to restrain further rotational movement of the coupling member. As should be understood, the ability to selectively position target member 120 increases the versatility of training apparatus 110 to accommodate various teaching techniques for improving the skills that are being developed.

[0056] A third exemplary embodiment of the training apparatus according to the present invention is shown in FIGS. 8-11. With reference first to FIGS. 8-10, assembled training apparatus 210 is shown on a support surface 212. Training apparatus 210 includes target member 220 rotatably supported by support assembly 240. Here, support assembly 240 includes base member 250 which supports first upright pole assembly 241 and a spaced apart second upright pole assembly 243. Further, as shown in FIG. 10, pole assembly 241 is oriented along a first axis “A” while second pole assembly 243 is oriented along second axis “B”. Axes A and B are parallel to one another and generally perpendicular to the support surface 212. Each pole assembly 241 and 243 are similar in structure to pole assembly 140 described above in reference to FIGS. 5-7. As such, only a brief summary of those features that are similar to pole assembly 140 is provided and, in an effort to be concise and for readability, only one pole assembly 241 will be discussed since the structural features of the second pole assembly are identical.

[0057] With reference, then to FIGS. 8-9, pole assembly 241 includes three telescoping engaging pole section—upper pole section 242, middle pole section 244, and lower pole section 246—interconnected to one another by clamps 260, such as clamp 60 described above with reference to FIGS. 4, 5, or other such construction as is known in the art.

[0058] Additionally, as perhaps best shown in FIGS. 8 and 10, pole assemblies 241 and 243 are reinforced by lateral brace bar 290. Lateral brace bar 290 is releasably attached to lower pole section 246 with clamp 292. Since clamps 292 do not need to accommodate different diameters, as is the case with clamps 260, it should be understood that clamp 292 need not include such structural features. Accordingly, clamp 292 can be any secureable clamp as known in the art that is capable of easily fastening to lower pole section 246 so that brace bar 290 may be moved along the length of the lower pole section as needed.

[0059] Base 250 supports both pole assemblies 241 and 243 and differs in construction from those described above.
with reference to FIGS. 1 and 5. More particularly, as perhaps best shown in FIGS. 8 and 11, base 250 includes two spaced apart feet 248 interconnected at one end by transverse beam 256. Together, feet 248 and beam 256 define bay 259, which may optionally receive a receptacle such as cart or bin 499 (FIG. 13) so that balls may be directed by chute 280 and received therein. Castors 252 may be secured disposed on feet 248 so as to provide training apparatus 210 with mobility once it is assembled.

Extending upwardly from each foot 248 are stanchions 254 and 257, respectively. Stanchions 254 and 257 are each adapted to receive pole assemblies 241 and 243, respectively. Threaded fastening members may be used to secure pole assemblies to the stanchions. For example, threaded fastening member 270, such as a cooperating threaded bolt 274 and nut may be used to secure pole assembly 241 to stanchion 254.

With reference to FIGS. 8 and 9, base 250 further includes struts 255 and 259, which reinforce stanchions 254 and 257, respectively. Struts 255 and 259 may be connected to base 250 with other suitable attachment members known in the art.

As shown in FIG. 8, support assembly 240 supports target member 220. The structure of target member 220 is perhaps best shown in FIGS. 10-12. Target member 220 includes annular ring 222, which is continuous and defines opening 224. Ring 222 is supported by spaced apart arms 226 and 228 and is releasably fastened to each arm with fastening members 231, such as a cooperating fastening pin and hairpin, such as described above with respect to FIG. 2. This permits ring 222 to be removed from target member 220 for ease of storage and transportation thereof. In addition, arms 226 and 228 are interconnected by transverse support brace 234, which is coupled to each arm by suitable fittings 236 as known in the art. If desired, ring 222 can further be releasably fastened to support brace 234 with a suitable fastener such as a cooperating fastening pin and hairpin 287. This additional fastener assists in retaining positioning of ring 222 since it may be hit with the sports ball.

As shown in FIGS. 8-10, arms 226 and 228 are coupled to a respective upper pole section 242 by first and second coupling members 230, having the construction described above with reference to coupling member 130 in reference to FIG. 7. As such, each first and second coupling members 230 permit target member 220 to be selectively positioned to permit the selected orientation of target plane “P”.

Now that the features of the exemplary embodiments have been discussed in some detail, it should be understood that various structures and devices described herein are interchangeable among the embodiments. For example, coupling member 130, shown on training apparatus 110 in FIG. 5, could also be employed by training apparatus 10 shown in FIG. 1. By way of another example, pedestal 48, shown in FIG. 1, could be used in place of platform 148 shown in FIG. 2. Further, various other suitable clamps and fastening devices, as known in the art by the person of ordinary skill in the art, could be used to accomplish the coupling of the various components of training apparatus without departing from the inventive concepts disclosed herein.

Also, as should be appreciated, since the training apparatus is designed to be repeatedly hit by fast moving objects, the present invention is not limited to the number and assembly of the struts or transverse braces that have been shown to buttress the apparatus. Rather, any number of braces or struts and the placement of such members is also contemplated to achieve a sturdy and dependable apparatus.

Finally, as indicated above, the present invention further contemplates a method of using one or more of the training apparatuses of the present invention to improve a skill or technique used by a player while participating in sports or recreational activities. By way of example, the training apparatuses discussed above may be employed for improving skills associated with playing volleyball, basketball, and golf, as an example. The method contemplated includes any steps inherent in the various apparatus described above and may employ one training apparatus employ two or more apparatus that are either of the same or different construction.

Among the skills used in playing the game of volleyball is setting and spiking. Setting and spiking involves two players—the setter projects the ball into the air while the hitter strikes the ball forward and downward over the net into the opposing team’s court. The hitter’s chances of successfully hitting the ball over the net are largely dependent upon the speed, trajectory, and location of the ball that is set by the setter. One or more of the apparatuses of the present invention may be used to improve the setter’s placement of the volleyball to the hitter.

Turning then to FIG. 13, the method of training an individual to improve their setting skills is generally illustrated. As shown, a first training apparatus 310 and a second training apparatus 410, of a different construction, are provided. Each sports apparatus 310 and 410 is positioned on a support surface 312, which is shown here in the form of a volleyball court. Further, a conventional volleyball net 316 has been erected and is supported by the support surface 312. The training apparatuses 310 and 410 are spaced apart from one another and are located on a common side of volleyball net 316.

As shown in FIG. 13, setter 318 is positioned on volleyball court 312 so as to be on the same side of volleyball net 316 as the training apparatuses 310 and 410. Target ring 422 is preferably set at a height where volleyball 308 would best follow a trajectory for the hitter to hit the ball in the opposing team’s court. To encourage proper placement of volleyball 308, first apparatus 310 is positioned in between setter 318 and second training apparatus 410. The height of target ring 422 is selectively positioned so that if volleyball 308 has the proper trajectory, it will travel through ring 322 and then through ring 422.

Accordingly, as illustrated, setter 318 receives volleyball 308 from the trainer or other player (not shown). Setter 318 sets volleyball 308, which, as shown, follows the direction of an arrow “c” and passes through target area 324 of first apparatus 310 and subsequently through target area 424 of second apparatus 410. Volleyball 308 is then guided by chute 480 into receptacle 499. The setter may continually set volleyballs to setter to improve placement of volleyball 308. In addition, the trainer may adjust the angle of target member 422 or the height of target member 322 and 422, as desired, to vary the setter’s practice sessions.
[0071] Turning to FIG. 14, a training apparatus 510 is shown in use with golfer 518. Here, target member 520 is not nearly as elevated above the ground 512 as needed for volleyball. As such, it may be preferable to eliminate use of one or more pole sections in the support assembly. Here, training apparatus 510 includes support assembly 540 and target member 520. Support assembly 540 includes first pole section 542 telescopically received by second pole section 544. Support assembly further includes pedestal 548, without wheels, and stance 554, which receives second pole section 544.

[0072] Here, target plane “P” is oriented at an angle that is generally perpendicular to the ground 512 and target area 524 is elevated above ground 512 where golf ball 508 would best follow the desired trajectory. Accordingly, as illustrated, golfer 518 strikes golf ball 508 with club 507. Golf ball 508 follows the direction of arrow “c” and passes through target area 524. Golfer 518 may continually hit golf balls through target area 524 to improve the trajectory and subsequent placement of golf ball 508.

[0073] Finally, with reference to FIG. 15, basketball player 618 is practicing basketball shots using training apparatus 610. As for both the volleyball player and the golfer, target member 620 is elevated above the court 612 as necessary for training purposes. Additionally, target plane “P” is oriented at an angle that is approximately 45° relative to the court 612. As illustrated, basketball player 518 shoots basketball 608, which follows the direction of arrow “c”, passing through target area 624 and into basketball hoop 607. Basketball player may continue to shoot basketballs from this location. If desired, training apparatus 610 may be moved to another location or the target plane “P” oriented at a second angular orientation to practice a different shot.

[0074] Accordingly, the present invention has been described with some degree of particularity directed to the exemplary embodiments of the present invention. It should be appreciated, though, that the present invention is defined by the following claims construed in light of the prior art so that modifications or changes may be made to the exemplary embodiments of the present invention without departing from the inventive concepts contained herein.

What is claimed is:

1. An apparatus adapted to be placed on a support surface for use by an individual while practicing or playing with a sports ball, comprising:

   (A) a support assembly adapted to be disposed on the support surface;

   (B) a target member supported by said support assembly and having an opening forming a target area that has a target boundary generally defining a target plane, said target area being sized and adapted so that the sports ball may pass therethrough; and

   (C) a coupling member interconnecting said support assembly and said target member, said coupling member having

      (1) a released state whereby said target member may be selectably positioned so as to orient the target plane in a selected angular orientation relative to the support surface; and

   (2) a secured state whereby said target member is retained in the selected angular orientation.

2. An apparatus according to claim 1 wherein said support assembly includes a plurality of pole sections telescopically mounted to one another.

3. An apparatus according to claim 1 wherein said support assembly includes a base member adapted to engage the support surface.

4. An apparatus according to claim 3 wherein said support assembly includes

   (A) a lower pole section supported by said base member and extending upwardly therefrom;

   (B) a middle pole section telescopically received by said lower pole section; and

   (C) an upper pole section telescopically received by said middle pole section.

5. An apparatus according to claim 1 wherein said support assembly includes

   (A) a first pole assembly oriented along a first axis; and

   (B) a second pole assembly oriented along a second axis parallel to the first axis, wherein the first and second axes are generally perpendicular to the support surface.

6. An apparatus according to claim 1 including a receptacle supported by said support assembly that is sized and adapted to receive said ball.

7. An apparatus according to claim 1 wherein said target member is annular.

8. An apparatus according to claim 7 wherein said annular target member has a diameter selected from approximately 19 inches, approximately 24.5 inches, and approximately 14 inches.

9. An apparatus according to claim 1 wherein said target member includes a pair of spaced apart arm members supported by said support assembly.

10. An apparatus according to claim 1 including a chute depending from said target member, said sports ball being guided by said chute after it passes through the target area.

11. An apparatus according to claim 1 wherein said target member may be selectively rotated about a rotation axis that is generally parallel to the support surface when in the released state.

12. An apparatus adapted to be placed on a support surface for use by an individual with a sports ball, comprising:

   (A) a base member adapted to engage the support surface;

   (B) a first upright pole assembly supported by said base member;

   (C) a second upright pole assembly supported by said base member in spaced relation to said first upright pole assembly; and

   (D) a target member rotatably supported by said first and second upright pole assemblies and having an opening that defines a target area that lies in a target plane, said target area being sized and adapted so that the sports ball may pass therethrough.

13. An apparatus according to claim 12 wherein said first and said second upright pole assemblies include a plurality of pole sections telescopically mounted to one another.
14. An apparatus according to claim 12 including a receptacle supported by said support assembly that is sized and adapted to receive the sports ball.

15. An apparatus according to claim 14 wherein said base member has a bay formed therein that is sized and adapted to receive said receptacle.

16. An apparatus according to claim 12 including

(A) a first coupling member supported by said first upright pole assembly;

(B) a second coupling member supported by said second upright pole assembly; and

(C) wherein said first and said second coupling members interconnect said target member to a respective one of said first and second pole assemblies and wherein said coupling member has

(1) a released state whereby said target member may be selectively positioned so as to orient the target plane in a selected angular orientation relative to the support surface; and

(2) a secured state whereby said target member is retained in the selected angular orientation.

17. An apparatus according to claim 16 wherein said target member may be selectively rotated about a rotation axis that is generally parallel to the support surface when in the released state.

18. An apparatus according to claim 12 wherein said target member is annular.

19. An apparatus according to claim 12 including a chute depending from said target member, said sports ball being guided by said chute after it passes through the target area.

20. A method of improving a player's skills associated with a selected sports activity, comprising:

(A) elevating a target member a selected distance above a support surface wherein said target member has an opening forming a target area that has a target boundary generally defining a target plane, said target area being sized and adapted so that the sports ball may pass therethrough;

(B) positioning said target member so as to orient the target plane at a selected first angular orientation to said support surface;

(C) securing said target member to retain the selected first orientation of the target plane;

(D) projecting a sports ball through the target opening;

(E) thereafter positioning said target member at a selected second angular orientation to said support surface; and

(F) securing said target member to retain the second selected orientation.

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