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(54) SOCCER TRAINING DEVICE

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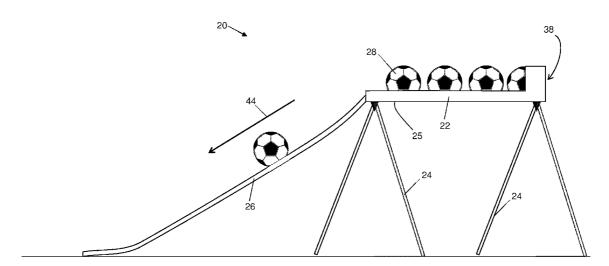
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(57) ABSTRACT

A soccer training device has a deployment trough defining a ball support surface for supporting a plurality of soccer balls, at least one sidewall, a deployment opening, and a back end opposite the deployment opening. The sidewall(s) of the deployment trough are constructed and arranged to restrain soccer balls between the deployment opening and the back end of the deployment trough. The training device has a plurality of legs connected to the deployment trough to suspend the deployment trough at a height above ground level. The training device has a release guide connected to the deployment trough proximate to the deployment opening. The release guide has a rolling surface and extends from the deployment trough. The release guide is constructed and arranged to guide each soccer ball from the deployment trough to the ground along the rolling surface.



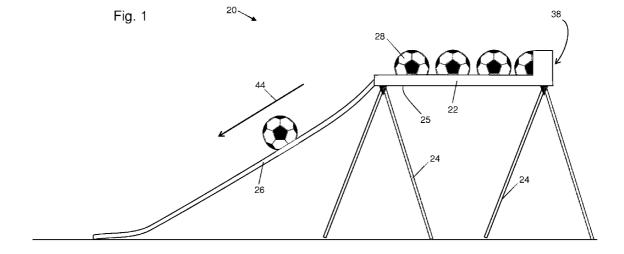


Fig. 2

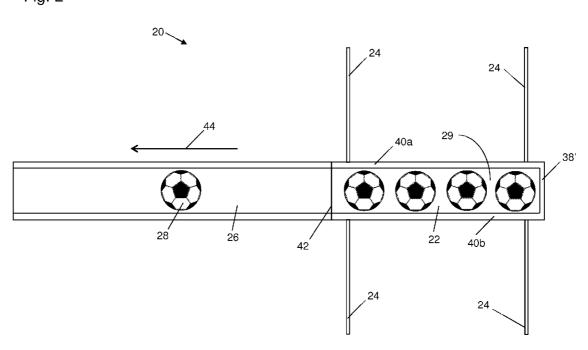


Fig. 3a Fig. 3b Fig. 3c

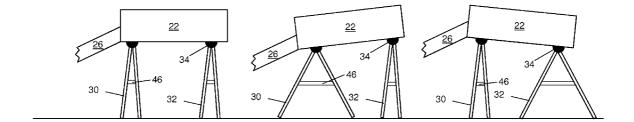


Fig. 4a

Fig. 4b

Fig. 4c

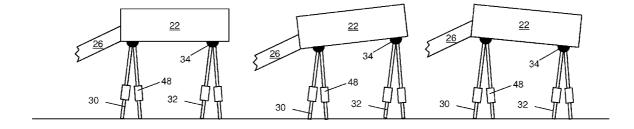


Fig. 5

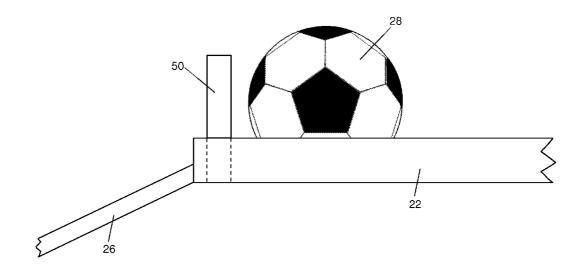


Fig. 6

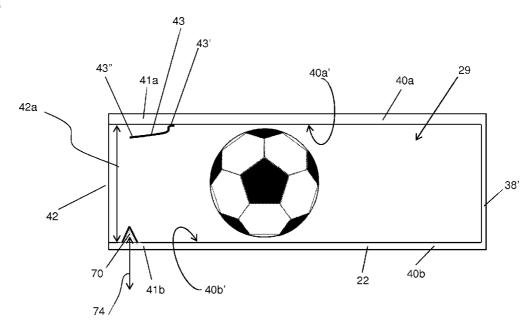
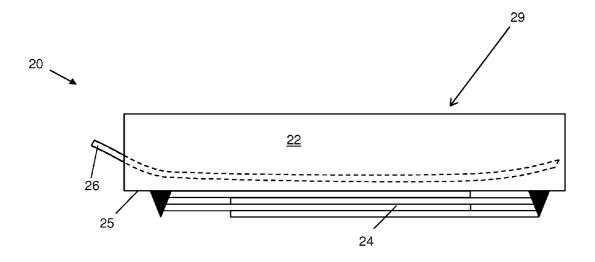


Fig. 7



SOCCER TRAINING DEVICE

[0001] This application claims the benefit of U.S. provisional patent application No. 61/446,231, filed on Feb. 24, 2011.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The invention relates to sports training devices, and more particularly, to an apparatus to improve the efficiency of soccer training drills.

[0004] 2. Description of the Prior Art

[0005] Soccer is a popular sport throughout the world. For example in the United States, organized soccer is the most heavily participated organized sport for children. There are thousands of various public soccer leagues throughout the country that children may join. Because the popularity of organized soccer for youth is so high and part of this popularity is due to the inexpensive nature of the sport, professional soccer coaches are typically not employed and youth soccer teams are typically coached by one or more of the children's parents.

[0006] Since youth soccer participants are typically not as skilled as older or more experienced players, coaches designate a significant amount of practice time to developing fundamental skills including passing, dribbling, and shooting. It can be hectic to have all of the youth soccer participants practicing at the same time. Accordingly, the players are often arranged into one or more lines so that they can practice these skills sequentially to allow the coach to pay attention to each child as they perform the skill.

[0007] Often these types of line drills involve the coach rolling a soccer ball to each player at the front of the line so that the player can receive the ball and practice the designated skill.

SUMMARY OF THE INVENTION

[0008] Unfortunately there are deficiencies to the above described conventional soccer practice techniques. For example, the handling of multiple soccer balls can be cumbersome for a coach supervising line drills. The coach is forced to either enlist additional help (e.g., assistant coaches) to assist in the gathering and deployment of soccer balls to the soccer players in line or slow down the pace of practice to gather and release the balls in an inefficient manner. Additional assistant coaches are not always available and inefficient ball deployment can result in the children failing to practice their basic skills enough during the allotted soccer practice.

[0009] Another deficiency to the above described conventional soccer practice techniques is that the coach is forced to be in the location of where the soccer balls are being deployed. This means that the coach would be unable to be in other positions, such as next to one of the players to oversee that the soccer skill is being performed adequately.

[0010] What is needed, therefore, is a training device to hold and release multiple soccer balls to the same location at a rapid pace and while the coach is either at a proximate or distant position relative to the training device. Additionally, the training device should be of a simple, portable, and inexpensive construction because soccer coaches are usually volunteers with limited funds and cargo space.

[0011] It is an object of the present invention to provide a soccer training device that is configured as a collapsible structure.

[0012] It is an object of the present invention is to provide a device that can hold multiple soccer balls for release to a consistent location.

[0013] It is an object of the present invention is to improve the efficiency of soccer practice.

[0014] It is an object of the present invention is to provide a device that reduces the need for additional people in order to conduct soccer practice drills.

[0015] The present invention achieves these and other objectives by providing a soccer training device that has a deployment trough defining a ball support surface for supporting a plurality of soccer balls, at least one sidewall, a deployment opening, and a back end opposite the deployment opening. The sidewall(s) of the deployment trough are constructed and arranged to restrain multiple soccer balls between the back end of the deployment trough and the deployment opening. A plurality of legs are connected to the deployment trough, to suspend the deployment trough at a height above ground level. The plurality of legs include at least one front leg positioned proximate to the deployment opening and at least one back leg positioned proximate to the back end. The device has a release guide connected to the deployment trough proximate to the deployment opening. The release guide extends from the deployment trough and has a rolling surface. The release guide is constructed and arranged to guide each of the soccer balls from the deployment trough to the ground along the rolling surface.

[0016] In another embodiment of the invention, the soccer training device at least one of the legs is pivotably connected to the deployment trough. In another embodiment of the invention, the soccer training device has at least one legs coupler fixedly attached to the soccer ball deployment trough. At least one of the plurality of legs is pivotably attached to a legs coupler.

[0017] In another embodiment of the invention, at least one of the plurality of legs has an adjustable length.

[0018] In another embodiment of the invention, the soccer training device has a removable angle restrainer connected between two adjacent ones of the plurality of legs. In another embodiment of the invention, the removable angle restrainer is a string, rope, a chain, a bar, or a flexible ligature.

[0019] In another embodiment of the invention, the adjustable length is fixed with a device such as a threaded collar, a threaded bolt, a threaded nut, a pin, a locking lever, a spring-loaded plunger, or a clamp.

[0020] In another embodiment of the invention, the release guide is a ramp, a chute, a tube, or a plurality of parallel bars. In another embodiment of the invention, the release guide is connected to the deployment trough with a device such as a hinge, a bracket, a catch, a hook, or a fastener.

[0021] In another embodiment of the invention, the soccer training device has a ball gate connected to the deployment trough proximate to the deployment opening. The ball gate is adjustable between an open position, where the ball gate blocks the deployment opening to the plurality of soccer balls, and a closed position, where the deployment opening is open to the plurality of soccer balls. In another embodiment of the invention, the ball gate is capable of adjustment between the open position and the closed position with a device such as a rope, a lever arm, or radio control.

[0022] In another embodiment of the invention, a ball-stop device is connected to the deployment trough. The ball-stop device is configured to inhibit passage of the plurality of soccer balls through the deployment opening. In another embodiment of the invention, the ball-stop device is a protrusion, a ridge, a bracket, a fringed member, or a narrowed gap between opposing sidewalls. In another embodiment of the invention, the ball-stop device is selectively adjustable between an active position, where the ball-stop device engages at least one of the plurality of soccer balls, and an inactive position, where the ball-stop device does not engage the plurality of the plurality of soccer balls.

BRIEF DESCRIPTION OF THE DRAWINGS

[0023] FIG. 1 is a side view of one embodiment of a soccer training device.

[0024] FIG. 2 is a top view of the soccer training device of FIG. 1.

[0025] FIG. 3a is a side view of a portion of an embodiment of a soccer training device equipped with optional legs couplers and angle restrainers as may be used to achieve a first position.

[0026] FIG. 3b is a side view of a portion of the embodiment of a soccer training device shown in FIG. 3a as may be used to achieve a second position.

[0027] FIG. 3c is a side view of a portion of the embodiment of a soccer training device shown in FIG. 3a as may be used to achieve a third position.

[0028] FIG. 4a is a side view of a portion of an alternate embodiment of a soccer training device equipped with optional adjustable length legs as may be used to achieve a first position.

[0029] FIG. 4b is a side view of a portion of the alternate embodiment of a soccer training device shown in FIG. 4a as may be used to achieve a second position.

[0030] FIG. 4c is a side view of a portion of the alternate embodiment of a soccer training device shown in FIG. 4a as may be used to achieve a third position.

[0031] FIG. 5 is a side view of a portion of an alternate embodiment of a soccer training device equipped with a ball gate.

[0032] FIG. 6 is a top view of a portion of an alternate embodiment of a soccer training device equipped with various embodiments of a ball-stop device.

[0033] FIG. 7 is a side view of the soccer training device of FIG. 1 in a collapsed storage position.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0034] A soccer training device provides a collapsible structure that can hold multiple soccer balls and release them rapidly to the same location. By rapidly releasing the soccer balls, the efficiency of soccer practice is improved so that additional drills can be performed in the allotted practice time. Additionally, by holding and releasing multiple soccer balls, additional assistant coaches do not need to be enlisted to conduct soccer practice.

[0035] FIG. 1 and FIG. 2 show a soccer training device 20 and a plurality of soccer balls 28 (i.e., one or more soccer balls 28). The soccer training device 20 includes a soccer ball deployment trough 22, a plurality of legs 24, and a soccer ball release guide 26. The soccer ball deployment trough 22 includes a back end 38, one or more sidewalls 40a, 40b, a

deployment opening 42, and a ball support surface 29 to support a plurality of soccer balls. Ball support surface 29 may be a planar surface, such as a metal sheet or mesh, or a plurality of substantially parallel bars spaced to support a soccer ball and connected together with cross pieces or "ribs" (not shown).

[0036] As seen in FIG. 1 and FIG. 2, one embodiment of the soccer training device has a pair of sidewalls 40a, 40b, which extend upwardly from ball support surface 29 (e.g., floor) of trough 22. In other embodiments, trough 22 has only one sidewall 40a. In such an embodiment, soccer balls 28 are retained in trough 22 by biasing balls 28 towards sidewall 40a. By incorporating a sloping ball support surface 29, or by tilting trough towards one side, soccer balls 28 are biased by gravity against sidewall 40a.

[0037] The plurality (or set) of adjustable legs 24 connect to a bottom portion or base 25 of deployment trough 22 to elevate trough 22 above ground level. Legs 24 are preferably adjustable in position, length, or both. The adjustable feature of legs 24 enable deployment trough 22 to be suspended at a variety of different heights and angles relative to the ground. For example, in one embodiment, the height range of deployment trough 22 is adjustable between waist and chest height (i.e., between about 30" and about 48" above ground).

[0038] Soccer ball release guide 26 connects to deployment trough 22 at or near deployment opening 42 and extends towards ground level. Release guide 26 is attached to the deployment trough 22 in any suitable way, including a hinge, a bracket, a catch, or one or more fasteners. An end of release guide may also simply rest upon ball support surface 29 at opening 42 of trough 22, which may be facilitated by a tongue or other feature (not shown) on trough 22 and/or guide 26. In the preferred embodiment, guide 26 attaches to trough 22 at or near opening 42 with a hinge. Because guide 26 may pivot up and down, this arrangement enables the non-attached side of release guide 26 to lay at ground level regardless of the height of deployment trough 22. In one embodiment, the hinge is a separating or "lift apart" hinge. In this way, release guide 26 can be pivotably attached to trough 22 during use, but removed for storage. Additionally, while release guide 26 is depicted as a slide or ramp in FIG. 1 and FIG. 2, any suitable alternative may be used, including a chute, tube, two or more parallel bars, and the like.

[0039] Multiple soccer balls 28 may be disposed within deployment trough 22 in a preferably linear fashion between the back end 38 and deployment opening 42. In one embodiment, the gap 42a between sidewall 40a and sidewall 40b is slightly larger than the diameter of soccer ball 28. Accordingly, soccer balls 28 are substantially maintained in a straight line by sidewalls 40a, 40b. Soccer balls 28 come in different sizes (e.g., sizes 3, 4 and 5). In some arrangements gap 42a between the sidewalls 40a, 40b is based on the diameter of the largest size soccer ball (i.e., a size 5 soccer ball) so that soccer balls of all sizes can be accommodated. However in other arrangements, gap 42a between sidewalls 40a, 40b is based on the diameter of the soccer ball 28 used for the particular age group of the soccer team. Additionally, the length of the deployment trough 22 between back end 38 and deployment opening 42 is typically long enough to hold multiple soccer balls but short enough to be easily transportable. For example, in some arrangements, the length of deployment trough 22 is long enough to hold six to ten soccer balls 28.

[0040] In some embodiments, deployment trough 22 has a more open shape that permits trough 22 to hold more balls 28

than can be held when balls **28** are arranged in a line. For example, trough **22** may have outwardly-curved sidewalls **40***a*, **40***b* that, together with back wall **38**' at back end **38** of trough **22**, enclose an oval, rectangle, kidney shape, or some other shape capable of holding more soccer balls **28** than balls **28** in a linear arrangement. Depending on the shape of trough **22**, back wall **38**' may not be needed. For example, ball support surface (e.g., the floor) of trough **22** may curve upwardly at back end **38** to contain soccer balls **28**. Alternately, sidewalls **40***a*, **40***b* may taper towards each other to prevent soccer balls **28** from exiting back end **38** of device **20**. [**0041**] When one or more soccer balls **28** are released from the soccer balls **28** are released from the soccer balls **28** recess through **32** mass as through **33** mass of the soccer balls **28** mass at through **33** mass of the soccer balls **28** mass at through **33** mass of the soccer balls **28** mass at through **33** mass of the soccer balls **28** mass at through **33** mass of the soccer balls **28** mass at through **33** mass of the soccer balls **28** mass at through **33** mass of the soccer balls **28** mass at through **33** mass of the soccer balls **28** mass at through **33** mass of the soccer balls **28** mass at through **33** mass of the soccer balls **34** mass at through **35** mass of the soccer balls **36** mass of the soccer balls **37** mass at through **37** mass of the soccer balls **38** mass of the soccer ball

[0041] When one or more soccer balls 28 are released from deployment trough 22, each soccer ball 28 passes through deployment opening 42 and down release guide 26 towards ground level (this is depicted by arrow 44).

[0042] FIGS. 3a-3c and 4a-4c show example embodiments of the plurality of adjustable legs 24. The plurality of adjustable legs 24 includes a set of front legs 30 and a set of back legs 32. Soccer training device 20 preferably has two pair of legs 30, 32 for optimal stability. However, a total of three legs 24 may be used to support trough 22. Alternately, an appropriately-configured release guide 26 may take the place of a leg 24 or set of legs 24 to support trough 22.

[0043] In some arrangements, set of front legs 30 and set of back legs 32 attach to the deployment trough 22 via a legs coupler 34. In other arrangements, the set of front legs 30 and the set of back legs 32 attach directly to the deployment trough 22. Legs coupler 34 may be of any suitable form to provide a sturdy attachment. However, the preferred embodiment incorporates a pivotable legs coupler 34 to allow positional adjustment of the legs 24 and, when device 20 is not in use, to allow legs 24 to be folded up against deployment trough 22 for convenient storage and transportation (see FIG. 6)

[0044] As seen in FIGS. 3a-3c, one embodiment incorporates legs 30, 32 that are capable of angular adjustment. In this embodiment, the height of the set of front legs 30 is adjusted by changing the angle between each of the front legs 30. While the overall length of each front leg 30 remains constant, (i) a wider angle between each of front legs 30 creates a smaller vertical distance between the suspended deployment trough 22 connection point and ground level, and (ii) a narrower angle between each of front legs 30 creates a larger vertical distance between the suspended deployment trough 22 connection point and ground level.

[0045] Similarly, in this embodiment, the height of the set of back legs 32 is adjusted by changing the angle between each of back legs 32. While the overall length of each individual of back legs 32 remains constant, (i) a wider angle between each of the back legs 32 creates a smaller vertical distance between the suspended deployment trough 22 connection point and ground level, and (ii) a narrower angle between each of back legs 32 creates a larger vertical distance between the suspended deployment trough 22 connection point and ground level.

[0046] The adjusted angle between each of front legs 30 and between each of back legs 32 is preserved at the adjusted level by an angle restrainer 46. Angle restrainer 46 may be of any suitable form to adjustably fix the length between attachment points on each of front legs 30 or each of back legs 32. Examples of angle restrainers include a string, rope, or chain connected between the legs; a bar that connects between or attaches removably to front legs 30 and/or back legs 32; a flexible ligature connected between front legs 30 and/or back

legs 32, such as a rubber connector with eyelets to engage a hook, pin, or other feature on the legs; threaded bolts, and the like.

[0047] As seen in FIGS. 4a-4c, another embodiment of device 20 incorporates adjustable length legs 30, 32. In this embodiment, the height of front legs 30 is adjusted by changing the overall length each of front legs 30. While the overall angle between front legs 30 remains constant, (i) a shorter overall length for each of front legs 30 creates a smaller vertical distance between the suspended deployment trough 22 connection point and ground level, and (ii) a longer overall length for each of front legs 30 creates a larger vertical distance between suspended deployment trough 22 connection point and ground level.

[0048] Similarly, in this embodiment, the height of back legs 32 is adjusted by changing the overall length each of each of back legs 32. While the overall angle between back legs 32 remains constant, (i) a shorter overall length for each of back legs 32 creates a shorter vertical distance between suspended deployment trough 22 connection point and ground level, and (ii) a longer overall length for each of back legs 32 creates a longer distance between suspended deployment trough 22 connection point and ground level.

[0049] The adjusted length for each of the front legs 30 and back legs 32 is preserved at the adjusted level by a length restrainer 48. Length restrainer 48 may be of any suitable form to adjustably fix the length for each of front legs 30 and each of back legs 32. Example length restrainers 48 include telescopic tighteners (e.g., a threaded collar), threaded fasteners (bolt, screw, nut, etc.), a pin passing through a hole in a leg, a locking lever, a spring-loaded plunger and corresponding opening, and a clamp.

[0050] As seen in FIGS. 3a-3c and FIGS. 4a-4c, the heights of front legs 30 and back legs 32 may be independently adjusted from each other. This independent height adjustment allows for deployment trough 22 to be at a variety of different angles with respect to ground level. For example as seen in FIG. 3a and FIG. 4a, the heights of front legs 30 and back legs 32 are maintained at the same level. This arrangement results in deployment trough 22 being parallel to ground level, and the force of gravity does not bias soccer balls 28 held in trough 22 towards either deployment opening 42 or back wall 38'.

[0051] Additionally, as seen in FIG. 3b and FIG. 4b, the height of front legs 30 is adjusted to be at a lower level than back legs 32. This arrangement results in deployment trough 22 being non-parallel to ground level, and the force of gravity biases soccer balls 28 held in trough 22 towards deployment opening 42. With soccer balls 28 biased in this way, soccer balls 28 roll down release guide 26 unless a user (e.g., the soccer coach) holds balls 28 or trough 22 is equipped with a ball gate 50 (discussed below) or other device to prevent or control release of balls 28.

[0052] Similarly, as seen in FIG. 3c and FIG. 4c, the height of front legs 30 is adjusted to be at a higher level than back legs 32. This arrangement results in deployment trough 22 being non-parallel to ground level and the force of gravity biases soccer balls 28 held in trough 22 towards back end 38 or back wall 38'. With soccer balls 28 biased in this way, soccer balls 28 roll toward back end 38 of deployment trough 22 to remain in trough 22 unless a user (e.g., the soccer coach) pushes balls 28 forward toward release guide 26 to release balls 28 along release guide 26.

[0053] FIG. 5 shows an optional ball gate 50 that is constructed and arranged to (i) prevent soccer balls 28 from

passing through deployment opening 42 when ball gate 50 is in a closed position and (ii) freely allow soccer balls to pass through deployment opening 42 when ball gate 50 is in an open position. Ball gate 50 may be any suitable device that toggles between open and closed positions. In some arrangements, ball gate 50 is configured to allow a user to toggle ball gate 50 between open and closed positions at a remote distance from training device 20. Example methods for remote control include a rope tied to the gate 50, an elongated lever arm attached to the gate 50, radio controlled mechanism that controls the opening and closing of gate 50, and the like. For example, a hand-held transmitter may be used to communicate a signal to an electronic switch located in trough 22 to control operation of ball gate 50. In other arrangements, ball gate 50 is configured to allow a user to directly toggle ball gate 50 between open and closed positions, by, for example, moving a lever attached to ball gate 50 or direct contact with ball gate 50.

[0054] FIG. 6 illustrates an embodiment of a trough 22 of soccer training device 20 that optionally includes various embodiments of a ball-stop device 70. Ball-stop device 70 may be any physical obstruction that inhibits or prevents soccer balls 28 from freely passing through deployment opening 42.

[0055] In one embodiment of ball-stop device 70, a ridge or protrusion in trough 22 is positioned proximate to opening 42 and extends from sidewall 40b of trough 22. Ball-stop device 70 may also be a protrusion that extends from both sidewalls **40***a*, **40***b*, and/or from the ball support surface **29** (i.e., floor) of trough 22. Similar to a parking block, a ball-stop device 70 configured as a protrusion inhibits soccer ball 28 from passing through opening 42. In an embodiment where ball-stop device 70 is a protrusion extending upward from floor 29 of trough 22, soccer balls 28 will be retained unless training device 20 is positioned at a steep angle towards the ground to provide sufficient gravitational force to overcome the resistance of ball-stop device 70. Alternately, the user may overcome ball-stop device 70 by pushing or rolling soccer ball 28 past ball-stop device 70. After overcoming the resistance of ball-stop device 70, soccer ball 28 proceeds past ball-stop device 70 and through opening 42 to release guide 26. Similar to ball gate 50, ball-stop device 70 may be configured to be actuated between multiple positions (e.g., an active (blocking) position, an intermediate position (partially-blocking) and an inactive (non-blocking) position). For example, ballstop device 70 may be moved between an active position and an inactive position as indicated by arrow 74. Examples of ball-stop device 70 include a bump, ridge, protrusion, flexible barrier, or frictional engagement with ball 28.

[0056] In one embodiment of ball-stop device 70, a frictional force is provided by a narrowing gap 42a between sidewalls 40a, 40b proximate to opening 42. Gap 42a may narrow, for example, by shaping sidewalls 40a, 40b to taper towards each other as they reach opening 42. As the gap 42a narrows, sidewalls 40a, 40b engage soccer ball 28. Due to the ball's ability to change shape or be compressed, the ball may be forced through narrowed gap 42a to pass through opening 42. In another embodiment, sidewalls 40a, 40b are flexible and resilient at sidewall ends 41a, 41b proximate to opening 42. With sufficient force acting against the natural bias of sidewalls ends 41a, 41b, this flexibility and resiliency permits sufficient lateral deflection of sidewall ends 41a, 41b of sidewalls to allow ball 28 to pass and then return to a narrowedgap state. For example, as walls 40a, 40b extend towards

opening 42, gap 42a between them reduces or tapers to less than the diameter of soccer ball 28. The flexibility and resiliency of sidewall ends 41a, 41b allows ball 28 to laterally deflect the sidewall ends 41a, 41b to increase the size of gap 42a and allow ball 28 to pass. As sidewall ends 41a, 41b return to their narrowed-gap position, the sidewall ends 41a, 41b inhibit the next ball 28 in line from passing through opening 42.

[0057] In another embodiment, gap 42a narrows due to a bracket 43 or other device attached to the inside surfaces 40a', 40b' of one or both sidewalls 40a, 40b, respectively. Other devices include fringe (similar to a brush or broom) attached to one or both inside surfaces 40a', 40b' of sidewalls 40a, 40b, respectively; a retractable or fixed protrusion extending from the floor or ball support surface 29 of deployment trough 22, a retractable or fixed protrusion extending from one or both sidewalls 41a, 40b; or other devices, or combinations thereof. [0058] FIG. 6 shows an exemplary embodiment of the invention with a bracket 43 attached to inside wall surface 40a' of deployment trough 22. Bracket 43 is attached at a first end 43' to sidewall 40a. A second end 43" of the bracket 43 is unattached and extends into gap 42a between sidewalls 40a, 40b. Bracket 43 is preferably flexible and resilient. As such, it is naturally biased to extend into gap 42 and return to that position after being deflected. When soccer ball 28 is moved towards deployment opening 42, ball 28 overcomes the natural bias of bracket 43, thereby laterally deflecting unattached end 43" of bracket 43 towards sidewall 40a. This action sufficiently increases gap 42a for passage of ball 28 past bracket 43 and through deployment opening 42. Alternately, a rope or other device connected to unattached end 43" (passing over or through sidewall 40a, if needed) may be used to deflect bracket 43 towards sidewall 40a to enlarge gap 42a and allow ball 28 to pass.

[0059] FIG. 7 shows training device 20 in a collapsed storage configuration. In some arrangements, training device 20 is configured to collapse from its operational configuration (as seen in FIGS. 1-2) to a storage configuration for easy storage and transportation. The storage configuration may be of any form that reduces the overall size of training device 20. For example, in an embodiment shown in FIG. 7, the plurality of adjustable legs 24 are folded to align with base 25 of deployment trough 22. In other arrangements, adjustable legs 24 are detached from base 25 of deployment trough 22 and stored in a cavity 29 of deployment trough 22 between sidewalls 40a, 40b (i.e., the cavity in which soccer balls 28 are retained). In the embodiment shown in FIG. 7, release guide 26 is detached from deployment trough 22 and stored in cavity 29 of deployment trough 22. In other arrangements, release guide 26 remains hinged to deployment trough 22 but folds to be stored in cavity 29 of deployment trough 22.

[0060] Although the preferred embodiments of the present invention have been described herein, the above description is merely illustrative. Further modification of the invention herein disclosed will occur to those skilled in the respective arts and all such modifications are deemed to be within the scope of the invention as defined by the appended claims.

What is claimed is:

- 1. A soccer training device comprising:
- a deployment trough defining a ball support surface for supporting a plurality of soccer balls, at least one sidewall, a deployment opening, and a back end opposite the deployment opening, the at least one sidewall of the deployment trough constructed and arranged to restrain

- the plurality of soccer balls between the back end of the deployment trough and the deployment opening;
- a plurality of legs connected to the deployment trough, the plurality of legs constructed and arranged to suspend the deployment trough at a height above ground level, the plurality of legs including at least one front leg proximate to the deployment opening and at least one back leg proximate to the back end; and
- a release guide connected to the deployment trough proximate to the deployment opening, the release guide extending from the deployment trough and having a rolling surface, the release guide constructed and arranged to guide each of the plurality of soccer balls from the deployment trough to the ground along the rolling surface.
- 2. The soccer training device of claim 1, wherein at least one of the plurality of legs is pivotably connected to the deployment trough.
- 3. The soccer training device of claim 1, further comprising at least one legs coupler fixedly attached to the deployment trough, wherein at least one of the plurality of legs is pivotably attached to one of the at least one legs coupler.
- **4**. The soccer training device of claim **1**, wherein at least one of the plurality of legs has an adjustable length.
- **5**. The soccer training device of claim **4**, wherein the adjustable length is fixed with a device selected from the group consisting of a threaded collar, a threaded bolt, a threaded nut, a pin, a locking lever, a spring-loaded plunger, and a clamp.
- **6**. The soccer training device of claim **1**, further comprising a removable angle restrainer connected between two adjacent ones of the plurality of legs.
- 7. The soccer training device of claim 6, wherein the removable angle restrainer is selected from the group consisting of a rope, a chain, a bar, and a flexible ligature.

- **8**. The soccer training device of claim **1**, wherein the release guide is selected from the group consisting of a ramp, a chute, a tube, and a plurality of parallel bars.
- 9. The soccer training device of claim 8, wherein the release guide connects to the deployment trough with a device selected from the group consisting of a hinge, a bracket, a catch, a hook, and a fastener.
- 10. The soccer training device of claim 1, further comprising a ball gate connected to the deployment trough proximate to the deployment opening, the ball gate being adjustable between an open position, wherein the ball gate blocks the deployment opening to the plurality of soccer balls, and a closed position, wherein the deployment opening is open to the plurality of soccer balls.
- 11. The soccer training device of claim 10, wherein the ball gate is capable of adjustment between the open position and the closed position with a device selected from the group consisting of a rope, a string, a chain, a lever arm, and a radio-controlled switch.
- 12. The soccer training device of claim 1, further comprising a ball-stop device connected to the deployment trough, wherein the ball-stop device is configured to inhibit passage of the plurality of soccer balls through the deployment opening.
- 13. The soccer training device of claim 12, wherein the ball-stop device is selected from the group consisting of a protrusion, a ridge, a bracket, a fringed member, and a narrowed gap between opposing sidewalls.
- 14. The soccer training device of claim 12, wherein the ball-stop device is selectively adjustable between an active position, wherein the ball-stop device engages at least one of the plurality of soccer balls, and an inactive position, wherein the ball-stop device does not engage the plurality of soccer balls

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