A golf swing connector training device for maintaining a user's upper arms and/or legs at a fixed distance relative to one another during a dual-arm swing. The golf swing connector training device having first and second arm/leg-receiving cuff assemblies and assembly-adjusting means, each cuff assembly comprising a band assembly, the band assemblies each having an are length and a longitudinal cuff axis. The assembly-adjusting means extending intermediate. The band assemblies enable the user to selectively and rigidly fix the distance intermediate the band assemblies. The assembly adjusting means includes two transverse members configured such that a first member receives a second member. The first member includes an extending push button, the second member includes at least two apertures such that the apertures receive the push button and allow the push button to move from one end of the aperture to an opposite end of the aperture, the band assemblies receiving a user's upper arms, the assembly-adjusting means fixing the distance intermediate the user's upper arms, the golf swing connector training device thus for maintaining the user's upper arms at a fixed distance relative to one another during a dual-arm swing.
BACKGROUND OF THE INVENTION

[0001] 1. Field Of The Invention

The present invention generally relates to a training device for improving an athlete's gross connected body motor movement. More particularly, the present invention relates to a training/practice device in order to create the proper connection between the big muscles and small muscles of the lower body and upper body for a golfer's swing to maximize the most effective, kinetic motion in an unencumbered, natural manner.

[0002] 2. Description Of The Prior Art

The present invention, preferably known as a golf swing connector or device, relates to a golf training/practice device. It is understood in the game of golf that the swing process is one of the more fundamental and important aspects in obtaining a consistent, dependable, and powerful result. However, in order to become proficient, a golfer must utilize a consistent, connected, and powerful motion that produces a result along a pre-selected path and pre-selected distance managed by the motions of the connected upper body and lower body. Such a motion often takes years of practice and lessons to develop.

[0003] It is also recognized that the most effective swing motion is one that incorporates the big muscles in a very connected manner allowing the arms to move freely together originating the swingers connected big muscles. Generally the larger shoulder muscles of the upper body are much more controllable than the smaller arm and hand muscles and therefore provide the real power and control needed in the swing process. However, most amateur and recreational golfers who attempt to develop the described swing often fail in correctly connecting their big muscles and maintain this connection from start to finish of the swing. As a result, all other types of small muscles take over producing all sorts of inconsistent swing results in distance and path. They are not connected to their big muscles. A number of attempts have been made to develop apparatuses or devices to aid the golfing enthusiast to achieve more consistent swing results. Some of the more pertinent prior art relating to golf swing improvement devices and the like is described hereinafter.

[0004] U.S. Pat. No. 4,239,228 ("228 Patent"), which issued to Norman et al., for example, discloses a Golf Swing Training Device. The "228 Patent teaches an adjustable tether for joining the upper arms of a golfer together to coordinate the relative motion of the arms of the golfer during his swing. The arm joining tether comprises first and second generally Y-shaped flexible straps each having a sleeve portion which is bifurcated so as to terminate in branch portions which may be joined by suitable fasteners to form arm engaging loops. The stem portions may also be joined by a suitable two-element separable fastener and when in use, the joined stem portions span the chest of the user. It has been found that mating hook and loop type fasteners are ideally suited for joining the Y-shaped flexible strap members, one to the other, and in coupling the branch portions of each to form the aforesaid arm engaging loops. Further, each of the individual Y-shaped strap members is marked with a suitable graduated marking to facilitate the sizing of the device to golfers of different physical size.

[0005] Further, U.S. Pat. No. 5,203,567 ("567 Patent"), which issued to Erlinger et al., discloses a Golf Putting Trainer. The "567 Patent teaches certain trainer embodiments to aid a golfer in practicing a putting stroke. The trainers define a pair of open concave surfaces supported in spaced coplanar relationship to encourage active participation of the golfer's arms and shoulders in the practice by requiring them to maintain the trainer in place. The trainer is configured to be spaced from the golfer's chest when in use. Structure for adjustment of the extent of the spaced relationship and various locking structures therefore are provided.

[0006] U.S. Pat. No. 5,470,073, ("073 Patent"), which issued to Vasquez, discloses a Golf Instructional Device. The '073 Patent teaches an improved golf instructional device with a support member adapted to be held against a conventional or standard golf club. A cap is secured to the support member. A pair of links is formed integrally with and extends from the cap. An arm pad is formed integrally on each generally opposite end of each of the links so that both arms are properly and unalterably positioned relative to the grip and the club. The improved golf instructional device is integrally formed of a conventional material.

[0007] U.S. Pat. No. 5,711,716 ("716 Patent") which issued to O'Brien et al., discloses a Golf Putting Training Device. The '716 Patent teaches a golf putting training device for a golfer comprising an elongate rigid support member, a pair of arm-embracing members for receiving therethrough and partially encircling the golfer's forearms, each arm-embracing member mounted on the support member for longitudinal movement relative to the other arm-embracing member and for independent pivotal movement relative to the bar about a pivot axis extending substantially perpendicularly of the longitudinal extent of the bar. The arm-embracing members each comprise a tapered, tubularly formed sleeve having a larger diameter at one end of the sleeve for fitting snugly over the golfer's upper forearm adjacent the crook of the elbow and a smaller diameter at the opposite end of the sleeve for fitting snugly over the golfer's lower forearm adjacent the wrist. The sleeves are mounted on the bar by threaded bolts which pass through the sleeves and an elongated, generally longitudinally arranged slot formed in the bar and are held thereon by manually adjustable wing nuts on each threaded bolt. The wing nuts may be hand loosened and tightened to permit longitudinal sliding of each bolt in the slot for adjusting the longitudinal spacing between the sleeves and pivotal movement of each sleeve about the bolt passing therethrough as a pivot axis for adjusting the angular position of the sleeve.

[0008] U.S. Pat. No. 7,033,282 ("282 Patent"), which issued to Flood, discloses a Golf Training Device. The '282 Patent teaches an apparatus including a transverse housing having a length sized to fit between the shoulder blades of a human; and a descending shaft coupled to and bisecting the transverse housing, the descending shaft including a length suitable to extend from the transverse housing to a shaft of a golf club when a human assumes an addressing stance and the transverse housing is engaged the biceps of the is human; and a distal end having a dimension suitable to fit within a bleeper hole of a golf club grip. A method including coupling a training device to a shaft of a putter through the bleeper hole, the training device including a transverse housing and a descending shaft coupled to and bisecting the transverse housing; and engaging the transverse housing of the training device between the shoulder blades.

[0009] From a review of these publications and other prior art generally known in the relevant art, it will be seen that the prior art does not teach an golf swing connector training...
device having arm-receiving cuffs constructed from flexibly resilient materials and transversely formed in a general C-shape for enabling the cooperative cuffs to provide arm alignment or arm retention means during a dual-arm swing, but further allows the arms to safely release from the device should a safety concern arise. The prior art thus perceives a need for an golf swing connector training device of the type heretofore described as a means to further the state of the art in golf swing connector training devices generally and golf swing training devices particularly.

SUMMARY OF THE INVENTION

[0012] Accordingly, it is an object of the present invention to provide a golf swing connector training device that connects the upper body big muscles of the user to the lower body big muscles in proper relation whereby the user’s swing will begin connected and finish connected to the big muscles for maximum power and coordination. It has been found that the beginner, recreational, and amateur golfers are prone to begin unconnected and finish disconnected to their big muscles in the swing process whereby significantly diminishing their power and accuracy in their swing results.

[0013] By completing the swing triangle in a physical method aids the user to visualize, feel, and understand the proper big muscle connection principle in the proper swing action. The golf swing connector invention has as its primary objective to provide a physical means which forms a solid connection between user’s upper arms and big shoulder muscles (base of the upper body triangle) to ensure a truly connected swing activated and perpetuated by turning of the big muscles (shoulders) which then allows the arms (sides of the triangle) and hands (apex of triangle) to be free and fluid in reaction to the power created by the connected swing action. The golf swing connector invention has as another primary objective to provide a physical means which forms a solid connection between user’s legs (base of the lower body triangle) to ensure a truly solid feet-ground connection against which is needed for maximum power activated by the connected upper body swing.

[0014] Another objective of the present invention is the provision of golf swing connector having means for connection to the upper arms (cuffs) that is flexible yet holds upper arms securely in place during swing action and a solid, robust connection in between cuffs to sustain swing loads and proper, sustainable distance between upper arms without encumbrance or tension.

[0015] Another and further objective of the present invention is the provision of a golf swing connector having means to be portable so device can be easily stored in golf bag or other small travel devices. Another and further objective of the present invention is the provision of a golf swing connector having means to be adjustable so device can be easily fit to persons of various sizes and can be adjusted for various swing processes: full swing; chip swing; putting swing.

[0016] To attain these and other readily apparent objectives, the present invention provides a golf swing connector training device for maintaining a user’s upper arms at a fixed distance relative to one another during a dual-arm swing, such as a full golf swing, a chipping type golf swing, or a putting type golf swing. Another apparent objective of the present invention, when the device is applied between legs, provides for maintaining a user’s legs at a fixed distance relative to one another during a dual-arm swing. The golf swing connector training device preferably comprises first and second arm-receiving cuff assemblies and certain means for maintaining the cuff assemblies at a certain displacement relative to one another. Each cuff assembly preferably comprises a generally tapered U-shaped band member and a fixedly attached telescopic member. The band members each have an arc length, a dynamic radius of curvature, and a longitudinal cuff axis.

[0017] Each telescopic member comprises a longitudinal member axis. The radii of curvature enable a relaxed cuff profile and an actuated cuff profile, the relaxed cuff profile defines the longitudinal cuff axis, and the actuated cuff profile enables a user’s upper arm to pass into and out of coaxial alignment with the longitudinal cuff axis. The telescopic members are telescopically members and extend intermediate the band members, the telescopic members comprise a lateral adjustment mechanism for enabling the user to selectively alter the distance intermediate the cuff assemblies or cuff displacement relative to one another. The band members receive a user’s upper arms, generally in superficial adjacency to the bicep-triceps region and the lateral adjustment mechanism thereby selectively fixes the distance intermediate the user’s upper arms. The band members also receive a user’s legs, generally in superficial adjacency to the middle thigh region, just above the knees, and the lateral adjustment mechanism thereby selectively fixes the distance intermediate the user’s legs. The user may then practice his or her golf swing via repeated connected movements. Thus, the golf swing connector training device of the present invention may well function to maintain the user’s upper arms at a fixed distance relative to one another during a dual-arm swing and provide the proper connection between the arms and chest, may well function to maintain the user’s legs at a fixed distance relative to one another during the golf swing motion and provide the proper connection between the legs and feet.

[0018] Other objects of the present invention, as well as particular features, elements, and advantages thereof, will be elucidated or become apparent from, the following description and the accompanying drawing figures.

DESCRIPTION OF THE FIGURES

[0019] FIG. 1 is a fragmentary depiction of a user donning the device 10 adjacent the upper arm regions for enabling a full golf swing;

[0020] FIG. 2 is a perspective view of the cuff assembly;

[0021] FIG. 3 is a side view of the cuff assembly;

[0022] FIG. 4 is fragmentary top plan view of the cuff assembly illustrating the cuffs ability to expand to fit a user’s arm;

[0023] FIG. 5 is a top plan view depicting the cuff assembly;

[0024] FIG. 6 shows the telescopic members in a separated fashion for ease of travel;

[0025] FIG. 7 is a fragmentary depiction of a user donning the golf swing connector training device showing device placement perspective within a swing triangle for full golf club swing use;

[0026] FIG. 8 is a fragmentary depiction of a user donning the golf swing connector training device showing device placement perspective within a swing triangle for putting golf club swing use;

[0027] FIG. 9 is an enlarged fragmentary top plan view of the cuff assemblies shown in FIG. 4 depicting the cuff assemblies in solid lines in a relaxed cuff profile;
FIG. 10 is an enlarged fragmentary top plan view of the cuff assemblies shown in FIG. 4 depicting the cuff assemblies in broken lines in an actuated cuff profile;

FIG. 11 is an enlarged fragmentary top plan view of the right most cuff assembly shown in FIG. 4 depicting the cuff assembly in broken lines in an actuating cuff profile and receiving a cross-section of a user’s upper arm;

Figure No. 12 is an enlarged fragmentary top plan view of the right most cuff assembly shown in FIG. 11 depicting the cuff assembly in solid lines in a relaxed cuff profile having received the cross-section of the user’s upper arm;

FIG. 13 is a diagrammatic depiction of device placement perspective within a swing triangle during two points of an arm swing through an arm swing arc length;

FIG. 14 is bottom plan view of an alternative design of a cuff assembly; and

FIG. 15 is a top plan view of the alternative design of the assembly shown in FIG. 14.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT(S)

Referring now to the drawings, the preferred embodiment of the present invention generally concerns a golf swing connector training device 10 as generally illustrated and referenced in Figure Nos. 1-8. The golf swing connector training device 10 of the present invention essentially functions, when donned by a user, to maintain a user’s upper arms 100 at a fixed distance relative to one another during a dual-arm swing such as during a golf swing as generally depicted in FIGS. 1, and 7-9. FIG. 1 is a fragmentary depiction of a user donning the device 10 adjacent the upper arm regions for allowing a full golf swing. Similarly, FIG. 7 depicts the golf swing connector training device 10 as donned by a user and showing device placement perspective within a swing triangle (shown in broken lines) for full swing use. FIG. 8 depicts the golf swing connector training device 10 as donned by a user adjacent the elbow regions and showing device placement perspective within a swing triangle (shown in broken lines) for chopping and putting swings. Notably, the arm-receiving cuff assemblies 11 are repositioned about a user’s upper arm depending on the type of swing training. In this regard, it will be seen that the arm-receiving cuff assemblies 11 are positioned proximally on the upper arm in superficial adjacency to the bicep region for full-swing swing training (as generally depicted in FIGS. 1 and 7) and are positioned distally on the upper arm in proximal adjacency to the elbow region for chopping and putting-swing swing training (as generally depicted in FIG. 8).

The golf swing connector training device 10 of the present invention preferably comprises two tapered U-shaped, upper arm-receiving cuff assemblies 11 as illustrated and referenced in FIGS. 1-12; and certain displacement maintenance means for selectively maintaining the cuff assemblies 11 at a fixed displacement relative to one another. The displacement maintenance means may be preferably defined by a telescopic cuff-displacement assembly 12 as further illustrated and referenced in FIGS. 1-8.

In other words, the golf swing connector training device 10 of the present invention may preferably comprise first and second arm-receiving cuff assemblies 11 and certain cuff-displacement maintenance means. Each cuff assembly 11 preferably comprises a radially inward inner pad member 13 as illustrated and referenced in FIGS. 2, 4-6, 9, and 12; and a radially outward, tapered U-shaped, flexibly resilient band member 14 as illustrated and referenced in FIGS. 1-9, and 12.

Pad member 13 is preferably constructed from closed cell Neoprene brand EPDM padding with rubber PSA on the exposed side having about 5 millimeter thickness and band member 14 is preferably constructed from polycarbonate having about 3 millimeter thickness with a hardness rating of Rockwell R118 and impact rating of: 18 foot-pounds/inch. In view of the preferred materials of construction and from an inspection of the noted figures, it will be seen that the pad member 13 preferably comprises a certain pad member length and is affixed in inward adjacency to the band member 14. It is contemplated that pad member 13 is preferably affixed via state of the art adhesives to band member 14, the adhesive(s) to extending intermediate pad member 13 and band member 14.

Being preferably constructed from a high memory, flexibly resilient material such as polycarbonate, and being transversely formed in a general open circular tapered U-shape, the band member 14 gives certain transverse tapered U-shaped form to the pad member 13 preferably constructed from closed cell Neoprene brand padding having low memory. Further, the band member 14 preferably comprises a certain arc length substantially equal in magnitude to the pad member length as may be seen from an inspection of the noted figures. The arc length is preferably subtended by an angle intermediate 1.75 radians and 1.833 radians for encircling a substantial portion of a user’s upper arm 100 as generally depicted in FIGS. 1, 7, 8, 11, and 12.

A rough transverse cross-section of a user’s upper arm 100 is depicted in FIGures Nos. 11 and 12 for ease of illustration to demonstrate how an arm-receiving cuff assembly 11 of the present invention receives a user’s upper arm 100. It is not intended that the structure shown at reference numeral 100 be anatomically correct, but rather to show that radius of curvature of pad member 13 and band member 14 may be cooperatively and dynamically altered so as to receive or release a user’s upper arm 100. When the user’s upper arm 100 is fully released as generally depicted in FIG. 12, the pad member 13 form fits to the outer surface of the received structure.

It is thus contemplated that each cuff assembly 11 preferably comprises a dynamic radius of curvature, the radius of curvature being substantially uniform (the cuff assembly 11 being roughly circular) when in a relaxed state as generally depicted in solid lines in FIGS. 2, 4-6, 9 and 12; and non-uniform when in an actuated state as generally depicted in broken lines in FIGS. 4, 10, and 11. The relaxed state thereof defines a static longitudinal cuff axis 101 as referenced in FIGS. 4-6, 9, and 12. Further, each actuated or actuating state essentially functions to enable a user’s upper arm 100 to pass into and out of coaxial alignment with the static cuff axis 101, and each pad member 13 essentially function to provide a padded interface or serve to buffer the user’s upper arm 100 from the band member 14 when in said coaxial alignment.

To insert a user’s arm, the band member 14 may be manually forced open (as depicted at vector arrows 105 in FIGS. 10 and 11) against the inner (elastic) material forces 106 in the material so as to widen the gap 107 (as referenced in FIG. 4) of the cuff assembly 11 for enabling arm insertion as generally and generically depicted in FIGS. 11 and 12. After full arm insertion (as depicted in FIG. 12), the inner (elastic) material forces 106 in the band member 14, other-
wise unimpeaded by the forces 105 of larger magnitude, force the band member 14 in the relaxed position for encircling a significant portion of the user’s upper arm 100.

[0042] The cuff-displacement assembly 12 preferably comprises a first telescopic member 15 as illustrated and referenced in FIGS. 2-6, 9, and 10; a second telescopic member 16 as illustrated and referenced in FIGS. 2-6, and 9-12; and certain telescopic member adjustment maintenance means or means for selectively adjusting the telescopic extension of member 15 relative to member 16. The movable first and second telescopic members 15 and 16 are thus selectively telescopic as enabled by the lateral adjusting mechanism or assembly adjusting means for selectively adjusting the telescopic extension of member 15 relative to member 16 along a linear adjustment axis extending through the telescopic members 15 and 16 as generally referenced at 102 in FIGS. 5, 9, and 12.

[0043] In this last regard, it is contemplated that said means or said lateral adjusting mechanism may be preferably defined by a spring-actuable, ball nose plunger assembly 17 housed in member 15 as generally depicted in FIG. 3 cooperatively receivable in a plurality of button-receiving apertures 18 formed in member 16 as illustrated and referenced in FIGS. 2, 4-6, and 9-12. Ball nose plunger assembly 17 preferably comprises a spring member 19 as illustrated and referenced in FIG. 3 and a push button 20 as illustrated and referenced in FIGS. 2-6. Push button 20 may be selectively depressed thereby actuating spring member 19. Once push button 20 is removed from an aperture 18, member 15 may be extended or axially displaced relative to member 16. The desired telescopic extension may be finally selected by allowing push button 20 to finally lodge in a final aperture 18 for further training use.

[0044] Thus, the telescopic members 15 and 16 may be selectively telescoped and extend intermediate the cuff assemblies 11. The means for selectively adjusting the telescopic extension of member 15 relative to member 16 or the means for selectively and rigidly fixing the distance intermediate the cuff assemblies 11 fix the distance intermediate the cuff assemblies 11. In other words, there when the push button 20 is finally inserted into a selected aperture 18, no cuff displacement will normally occur either under tension or under compression. The cuff assemblies 11 may thus receive a user’s upper arms 100 and the cuff-displacement assembly 12 fixes the distance therebetween. The golf swing connector training device 10 of the present invention may thus effectively function to maintaining the user’s upper arms 100 at a fixed distance relative to one another during a dual-arm swing.

[0045] The golf swing connector training device 10 of the present invention may thus be described as a device for maintaining a user’s upper arms 100 at a fixed distance relative to one another during a dual-arm swing. To achieve this and other readily apparent objectives, the golf swing connector training device 10 of the present invention preferably comprises first and second arm-receiving cuff assemblies 11 and certain means for maintaining the distance intermediate said cuff assemblies 11. Each cuff assembly preferably comprises a tapered U-shaped band assembly and a fixedly attached telescopic member such as member 15 or member 16. The band assemblies each have a certain arc length, a dynamic radius of curvature, a longitudinal cuff axis (such as cuff axis 101), and a transverse cuff axis 102 as referenced in FIGS. 5, 9, and 12.

[0046] In this last regard, it will be seen from an inspection of the noted figures that the transverse cuff axis 102 preferably intersect the arc lengths at a point substantially equidistant intermediate the arc length termini 21. Each telescopic member (such as member 15 and member 16) preferably comprises a longitudinal member axis 103, which member axis 103 are preferably substantially coaxial with the transverse cuff axis 102. The radii of curvature of each cuff assembly 11 has a relaxed cuff profile as generally depicted in solid lines in FIGS. 4, 5, 9, and 12, and an actuated cuff profile as generally depicted in broken lines in FIGS. 5, 10, and 11. The relaxed cuff profile defines the longitudinal cuff axis (such as cuff axis 101), and the actuated cuff profile enables a user’s upper arm 100 to pass into and out of coaxial alignment with the longitudinal cuff axis. The telescopic members 15 and 16 are telescopically mated and extend intermediate the band assemblies. The means for selectively and rigidly fixing the distance intermediate the band members (i.e. no cuff displacement while under tension and no cuff displacement while under compression) fixes the distance intermediate the user’s upper arms after the band assemblies receive the same. The golf swing connector training device 10 thus functions to maintain the user’s upper arms at a fixed distance relative to one another during a dual-arm swing.

[0047] The band assemblies of the golf swing connector training device 10 may be further defined by preferably comprising a radially inward inner pad member 13 and a radially outward band member 14. As previously specified, the pad member 13 of the present invention has a certain pad member length and is preferably affixed inwardly adjacent to the band member 14, the band member 14 thereby giving tapered U-shaped form to the pad 20 member 13. The band member 14 preferably has an arc length substantially equal in magnitude to the pad member length. Each pad member 13 essentially function to buffer the user’s upper arm from the band member when in coaxial alignment.

[0048] The band member 14 is preferably formed from a flexibly resilient material to effect a dynamic radius of curvature for receiving and releasing a user’s upper arm and the arc length of the band member is preferably subtended by an angle intermediate 1.75 radians and 1.833 radians for receiving and releasing a user’s upper arm via the dynamic radius of curvature.

[0049] Alternatively, the golf swing connector may, as seen in FIGS. 14-15, incorporate some additional features such that the user will appreciate beneficial changes. One alternative is to change the button-receiving apertures 18, except for the first two apertures 40, 42 from a round configuration to that of an oval 44 while the push button 20 remains the same shape and size. Thus during one’s swing push button 20 is movable between position A and B when the left pad member 13 rotates in direction D while the right pad member 13 rotates in direction C. It is important to note that since there is no requirement for the golfer to always place a particular cuff on the left arm versus the right arm and also because some people are left handed versus right handed, both cuffs are rotatable in opposite directions. Thus push button 20 is movable from A to B and back while remaining in the cent of the aperture if there is no rotation in the golfer’s arm movement. The movement of the push button from A to B allows for torque in the slightly rotating telescopic members 15, 16 to be dissipated thus reducing the stress on the telescopic members to prevent breakage of the device.
Some golfer’s swing is so dynamic and forceful that the connection between the telescopic members 15 and 16 to the cuffs 13 might not be strong enough. To add an increase in the tension dispersion during a golfer’s swing, wings 46 and 48 have been added to the connecting means 50. The wings provide good dispersion of energy while in the middle of the full force of the swing thus eliminating the tension and stress on the telescopic members 15, 16.

The cuffs may be double injected molded of PVC to provide more flexibility in the cuff design and an over mold of an embossed gripping material to eliminate cuff slippage during use. The open design of the cuffs 13 produced too much stress on the arms to keep the connector in place during a full swing motion. The open shape also made it difficult to position the cuffs on the arms and to remove the same, and the open shape also limited size options. To increase the ease of placing the cuffs on the arm and remove the same a tapered portion 54 has been added to the end of the open cuff shape, thereby increase the ability of the training device to remain in place during the full force of a golfer’s swing.

The first two static apertures 40, 42 remain as round holes as these are settings for putting practice where the golfer prefers there to be no rotation of the golfer’s arms. The round apertures prevent rotation of the telescopic extension of member 15 relative to member 16.

While the above description contains much specificity, this specificity should not be construed as limitations on the scope of the invention, but rather as an exemplification of the invention. For example, the invention may be used to further disclose certain methodology as reflected by or inherently taught by the underlying supporting structure(s) of the present invention. In this regard, it is contemplated that the present invention further discloses a golf swing connector training method for fixing the distance intermediate a user’s arms during swinging motion of the user’s arms. The method may be said to comprise the steps of dynamically increasing at least one radius of curvature of a first arm-receiving cuff (assembly, such as may be taught by cuff assembly 11) thereby enabling first arm insertion; coaxially aligning a first arm with the first arm-receiving cuff; dynamically increasing at least one radius of curvature of a second arm-receiving cuff thereby enabling second arm insertion; coaxially aligning a second arm with the second arm-receiving cuff; fixing the distance intermediate the first and second arm-receiving cuffs (which step may be performed before donning device 10 or after donning device 10); and executing one or more dual-arm swing motions through a dual-arm swing arc length 104 as generally depicted in FIG. 13. Notably, the dual-arm swing motion may be preferably executed through multiple arm swing arc lengths 104 for improving dual-arm swing motion consistency as achieved through arm swing practice or training.

The method may be said to further comprise the step of dynamically decreasing the otherwise increased radii of curvature after arm insertion for securing the skin-receiving cuffs about the user’s arms. Further, for reasons going to device safety, the method may further comprise the step of summarily increasing the radii of curvature while executing the dual-arm swing motion for enabling arm removal from a select arm-receiving cuff 15 should the dual-arm swing motion be improperly executed. In other words, if the arm-removing forces (as generated by either of the user’s arms) are greater than the arm retaining forces (as generated by either of the band members 14), the radii of curvature may be summarily increased for releasing the user’s arms from the band member(s) and otherwise prevent injury thereto. Thus, it is contemplated that a select user’s arm may be removed from the select arm-receiving cuff while increasing the radii of curvature during dual-arm swing motion execution to prevent injury to the select user’s arm.

A further aspect of the golf swing connector training method may be directed to training for various types of arms, as for example, is necessary for a full golf club swing as compared to a chipping type golf club swing as further comparable to a putting golf club swing. In this regard, it is contemplated that the golf swing connector training method functions to fix at least one distance intermediate a user’s arms during swinging motion of the user’s arms and essentially comprises the steps of fixing a first distance intermediate first and second arm-receiving cuffs thereby enabling fixed alignment at the first distance of the user’s first and second arms; dynamically altering the radius of curvature of a first arm-receiving cuff thereby enabling first arm insertion; coaxially aligning a first arm with the first arm-receiving cuff; dynamically altering the radius of curvature of a second arm-receiving cuff thereby enabling second arm insertion; coaxially aligning a second arm with the second arm-receiving cuff; and swinging the first-distance fixed first and second arms through an arm swing arc length. Should the user or practitioner of the method elect to practice a different type of swing, he or she may elect to fix a second distance intermediate the first and second arm-receiving cuffs after swinging the first-distance-fixed first and second arms through an arm swing arc length.

It is further contemplated that the device 10 of the present invention can be constructed in various sizes to don variously sized users, such as an adult male, an adult female, and children. Accordingly, although the invention has been described by reference to a preferred embodiment and certain methodology, it is not intended that the novel device or assembly be limited thereby, but that modifications thereof are intended to be included as falling within the broad scope and spirit of the foregoing disclosure, the following claims and the appended drawings.

1. A golf swing connector training device, the golf swing connector training device for maintaining a user’s upper arms and/or legs at a fixed distance relative to one another during a dual-arm swing, the golf swing connector training device comprising first and second arm/leg-receiving cuff assemblies and assembly-adjusting means, each cuff assembly comprising a band assembly, the band assemblies each having an arc length and a longitudinal cuff axis, the assembly-adjusting means extending intermediate the band assemblies for enabling the user to selectively and rigidly fix the distance intermediate the band assemblies, the assembly adjusting means including two transverse members configured such that a first member receives a second member, said first member includes an extending push button, said second member includes at least two apertures such that said apertures receive said push button and allow the push button to move from one end of the aperture to an opposite end of the aperture, the band assemblies receiving a user’s upper arms, the assembly-adjusting means fixing the distance intermediate the user’s upper arms, the golf swing connector training device thus for maintaining the user’s upper arms at a fixed distance relative to one another during a dual-arm swing.

2. The golf swing connector training device of claim 1 wherein each cuff assembly comprises a dynamic radius of...
curvature, the dynamic radii of curvature for effecting a relaxed cuff profile and an actuating cuff profile, the relaxed cuff profile for maintaining the cuff in arm-encircling relation about the user’s upper arm, the actuating cuff profile for enabling the user’s upper arm to pass into and out of alignment with the cuff axis.

3. The golf swing connector training device of claim 1, wherein each cuff further includes a tapered flange at each end of the cuff assemblies.

4. The golf swing connector training device of claim 1, wherein each cuff assembly is connected to the assembly-adjusting means extending intermediate the band assemblies with a connecting means, said connecting means includes at least two protuberances adjacent the connecting means and attaching to said cuff assemblies to add stability to the training device.

5. The golf swing connector training device of claim 1 wherein the cuff assemblies each comprise a transverse cuff axis, the transverse cuff axis intersecting the arc lengths at a point equidistant intermediate the arc length termini.

6. The golf swing connector training device of claim 5 wherein the assembly-adjusting means comprise a linear adjustment axis, the linear adjustment axis being substantially coaxial with the transverse cuff axis.

7. The golf swing connector training device of claim 1 comprising a radially inward inner pad member and a radially outward band member, the pad member having a pad member length and being affixed inwardly adjacent to the band member, the band member giving arm-encircling form to the pad member, the band member having an arc length substantially equal in magnitude to the pad member length, each pad member for buffering the user’s upper arm from the band member when in coaxial alignment.

8. The golf swing connector training device of claim 7 wherein the band member is constructed from a high memory, flexibly resilient material for effecting the dynamic radii of curvature.

9. The golf swing connector training device of claim 7 wherein the arc length is subtended by an angle intermediate 1.75 radians and 1.833 radians, the arc length for maintaining each cuff assembly about the user’s upper arms during dual-arm swing use.

10. A golf swing connector training method, the golf swing connector training method for fixing the distance intermediate a user’s arms or legs during swinging motion of the user’s arms, the method comprising the steps of:

fixing a first distance intermediate first and second arm-receiving cuffs; dynamically increasing at least one radius of curvature of a first arm-receiving cuff thereby enabling first arm insertion;

coaxially aligning a first arm with the first arm/leg-receiving cuff; dynamically increasing at least one radius of curvature of a second arm/leg-receiving cuff thereby enabling second arm/leg insertion;

coaxially aligning a second arm with the second arm-receiving cuff; and swinging the first-distance-fixed first and second arms through a dual-arm swing arc length.

11. The method of claim 10 wherein the first-distance-fixed first and second arms are swung through multiple dual-arm swing arc lengths for improving dual-arm swing motion consistency and connection.

12. The method of claim 10 wherein a second distance intermediate the first and second arm-receiving cuffs is fixed after swinging the first-distance-fixed first and second arms through the dual-arm swing arc length.

13. The method of claim 10 wherein the radii of curvature are dynamically decreased after arm insertion for securing the arm-receiving cuffs about the user’s arms.

14. The method of claim 13 wherein the radii of curvature are dynamically increased after swinging the first-distance-fixed first and second arms through the dual-arm swing arc length.

15. The method of claim 14 wherein a select user’s arm is removed from a select arm-receiving cuff while increasing the radii of curvature to prevent injury to the select user’s arm.

16. An golf swing connector training method, the golf swing connector training method for fixing the distance intermediate a user’s arms during dual-arm swing motion, the method comprising the steps of:

dynamically altering the radius of curvature of a first arm-receiving cuff thereby enabling first arm insertion;

aligning a first arm with the first arm-receiving cuff;

dynamically altering the radius of curvature of a second arm-receiving cuff thereby enabling second arm insertion;

aligning a second arm with the second arm-receiving cuff;

fixing the distance intermediate the first and second arm-receiving cuffs; and

executing a dual-arm swing motion through a first arm swing arc length.

17. The method of claim 16 wherein the radii of curvature are symmetrically decreased after arm insertion for securing the arm-receiving cuffs about the user’s arms.

18. The method of claim 17 wherein the radii of curvature are symmetrically increased while executing the dual-arm swing motion for enabling arm removal from a select arm-receiving cuff.

19. The method of claim 18 wherein a select user’s arm is removed from the select arm-receiving cuff while increasing the radii of curvature to prevent injury to the select user’s arm.

20. The method of claim 16 wherein the dual-arm swing motion is executed through multiple dual-arm swing arc lengths for improving dual-arm swing motion consistency and connection.

21. A golf swing connector training device, the golf swing connector training device for maintaining a user’s upper arms at a fixed distance relative to one another during a dual-arm swing, the golf swing connector training device comprising two tapered U-shaped, upper arm-receiving cuff assemblies and a cuff-displacement assembly, each cuff assembly comprising a radially inward inner pad member and a radially outward tapered U-shaped, flexibly resilient band member, the pad member having a pad member length and being affixed inwardly adjacent to the band member, the band member giving tapered U-shaped fowl to the pad member, the band member having an arc length substantially equal in magnitude to the pad member length, the arc length being subtended by an angle intermediate 1.75 radians and 1.833 radians, each band member having a dynamic radius of curvature, the radius of curvature being substantially uniform when in a relaxed state and non-uniform when in an actuating state, the relaxed state defining a longitudinal cuff axis, each actuating state for enabling a user’s upper arm to pass into and out of coaxial alignment with the cuff axis, each pad member for buffering the user’s upper arm from the band member when in coaxial alignment, the cuff-displacement assembly comprising first and second selectively telescopic members and a
lateral adjustment mechanism, the telescopic members being telescoped and extending intermediate the cuff assemblies, the lateral adjustment mechanism for selectively and rigidly fixing the distance intermediate the cuff assemblies, wherein the lateral adjustment mechanism includes an extending push button, said second member includes at least two apertures such that said apertures receive said push button and allow the push button to move from one end of the aperture to an opposite end of the aperture, the cuff assemblies receiving a user's upper arms, the cuff-displacement assembly fixing the distance between the user's upper arms, the golf swing connector training device thus for maintaining the user's upper arms at a fixed distance relative to one another during a dual-arm swing.

22. A golf swing connector training device, the golf swing connector training device for maintaining a user's upper arms at a fixed distance relative to one another during a dual-arm swing, the golf swing connector training device comprising first and second arm-receiving cuff assemblies and a lateral adjustment mechanism, each cuff assembly comprising a tapered U-shaped band assembly and a fixedly attached telescopic member, the band assemblies each having an arc length, a dynamic radius of curvature, a longitudinal cuff axis, and a transverse cuff axis, the transverse cuff axis intersecting the arc lengths at a point substantially equidistant intermediate the arc length termini, each telescopic member comprising a longitudinal member axis, the member axis being substantially coaxial with the transverse cuff axis, the radii of curvature enabling a relaxed cuff profile and an acting cuff profile, the relaxed cuff profile defining the cuff axis, the acting cuff profile for enabling a user's upper arm to pass into and out of coaxial alignment with the cuff axis, the telescopic members being telescopically mated and extending intermediate the band assemblies, the lateral adjustment mechanism for selectively and rigidly fixing the distance intermediate the band assemblies, wherein the lateral adjustment mechanism includes an extending push button, said second member includes at least two apertures such that said apertures receive said push button and allow the push button to move from one end of the aperture to an opposite end of the aperture, the band assemblies receiving a user's upper arms, the lateral adjustment mechanism selectively fixing the distance intermediate the user's upper arms, the golf swing connector training device thus for maintaining the user's upper arms at a fixed distance relative to one another during a dual-arm swing.

23. The golf swing connector training device of claim 22 comprising a radially inward inner pad member and a radially outward band member, the pad member having a pad member length and being affixed inwardly adjacent to the band member, the band member giving a tapered U-shaped form to the pad member, the band member having an arc length substantially equal in magnitude to the pad member length, each pad member for buffering the user's upper arm from the band member when in coaxial alignment.

24. The golf swing connector training device of claim 23 wherein the band member is constructed from a high memory, flexibly resilient material for effecting the dynamic radii of curvature.

25. The golf swing connector training device of claim 23 wherein the arc length is subtended by an angle intermediate 1.75 radians and 1.833 radians, the arc length and the high memory, flexibly resilient material for maintaining each cuff assembly about the user's upper arms during dual-arm swing use.

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