GOLF SWING TRAINING APPARATUS

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ABSTRACT OF THE DISCLOSURE

An elongated member, vertically and angularly adjustable relative to a supporting base, is adapted to be positioned substantially horizontally parallel to a golfer's shoulders. The opposite ends of the elongated member carry respectively, (1) a coil spring for securement to one of a golfer's arms and (2) elements securable to the other arm for restricting bending of the golfer's elbow. The latter elements are secured to an end of the elongated member which is rotatable about the longitudinal axis of the elongated member.

This invention relates to golf swing training apparatus and more particularly to golf swing training apparatus that coacts with the movements of the body of the golfer to train and guide his swing in a manner to practice and develop a correct golf swing.

In the game of golf there are certain essentials that most golfers accept as being necessary in correctly swinging a golf club. One primary essential is that all the muscular movements of the golfer must be coordinated in a correct, uniform and consistent swing. Other essentials of a correct golfing are maintaining the left arm substantially straight during the backswing and the downswing, releasing the left elbow from the straight condition on the follow-through, refraining from raising or lowering the torso of the body, refraining from swaying the body laterally during the backswing or the downswing, and swinging in a manner that causes the golf club to travel "inside-out" rather than "outside-in" during the downswing.

As every golfer knows, it requires considerable practice, thought and coordinated muscular movements to obtain a correct golf swing. With so many parts of the body functioning in the golf swing, such coordinated muscular control is difficult to obtain. There are too many things to think about to mentally coordinate all the muscular movements required. Some degree of habitual muscular movement must be developed.

It is therefore an object of this invention to provide an improved apparatus for training the swing of a golfer. This and other objects will be apparent from the following description.

Referring to the drawing:

FIGURE 1 is an over-all view of an embodiment of the golf swing training apparatus of this invention,

FIGURE 2 is a schematic sketch of a golfer positioned with the golf swing training apparatus and with the required inclined position,

FIGURE 3 is a schematic sketch of a golfer using the golf swing training apparatus of this invention at the end of his backswing,

FIGURE 4 is a schematic showing of a golfer using the golf swing training apparatus of this invention during the downswing of his golf stroke,

FIGURE 5 is a schematic showing of a golfer using the golf swing training apparatus of this invention during the follow-through of his golf swing,

FIGURE 6 is a base or platform, that may be made of wood, concrete or of other suitable materials, supports an upright element 21 by a flanged collar 55. The platform 11 has a golf ball hitting surface.

Golf swing training apparatus 20, such as a mat, inverted brush or the like. The upright element 21 has a telescoping upright post member inserted therein whose height may be varied by adjusting the friction holding collar 23 in a well known manner. A well known ratchet pivoting member 13 supports a rod 15 that in turn supports a shoulder engaging means or block 16 and positions it at an angle to the upright element 21. The angle of inclination of rod 15 may be adjusted by loosening the wing nut of ratchet member 13 and adjusting the angle in a well known manner.

Rod 15 may be rigidly connected to a shoulder block 16 to prevent relative movement other than rotational movement, such as by welding, screw attachment or by using other well known attachment methods and when connected block 16 swivels or pivots about rod 15 as shown in FIGURES 3, 4 and 5. Passing through the shoulder block 16 is a longitudinal support means 19 that generally lies substantially parallel with the shoulders of the golfers when the golf training apparatus is in use. The longitudinal support means 19 may be slidably moved longitudinally relative to block 16 against a friction fit.

One end 20 of the longitudinal support member has a rotatable end portion 27 that can rotate 360 degrees on the longitudinal axis of the longitudinal support member 20. However, end 27 is rigid against movements in any other direction or plane. A pair of rigid longitudinal members 28 and 29 have pads 49 and 50 and straps 48 and 46 for respective attachment to the upper arm and forearm of the golfer. The two members 28 and 29 are connected together by a well known 90 degree post swivel 40 that allows up to a one-quarter pivot of member 29 relative to member 28 and permits relative movement of the members in only one plane. The other end of longitudinal member 28 is connected by a well known 45 degree angle, 360 degree swivel, to rigid longitudinal member 30 that is in turn connected to rigid longitudinal member 32 by another 45 degree angle, 360 degree swivel 36. The 45 degree angle, 360 degree swivel connections connect the aforementioned members together at a 45 degree angle while permitting the members to rotate axially through a complete circle. Rigid member 32 and the entire left arm apparatus is connected to the end of the rotatable end portion 27 by a 90 degree post swivel 34. A pad 17 having a strap 24 for securing the pad to the upper portion of the right arm of the golfer is secured to the other end of the longitudinal support means 19 by a spring 18.

In operation, the golfer stands on the platform 11 facing the driving pad 52 with his back to the upright means 21. By manipulating collar 23, the height of the shoulder block 16 is adjusted to that height that is correct for the shoulder height of the particular golfer. Also the angle of incline of rod 15 is adjusted by adjusting the ratchet 13. The left arm of the golfer is then connected to the two pads 49 and 50 by securing pad 49 to the upper arm of the golfer by means of strap 48 and securing pad 50 to the forearm of the golfer by means of strap 46. With the foregoing connections, the shoulder block 16 presses against the shoulder with members 32 and 30 carrying the arm members 28 and 29 around the curvature of the shoulder.

In using the training apparatus, the golfer may either just swing the club or swing the club and hit into a ball or the like placed on the hitting pad 52. FIGURE 2 shows schematically the golfer in the apparatus and illustrates how the apparatus restrains the golfer from raising up or bending over during the golf swing which movements are considered to be incorrect in a correct golf swing.

FIGURE 3 illustrates the corrective action of the training apparatus at the top of the backswing of the golf stroke. As may be seen, the forearm is held in an un-
substantially straight position because the two members 28 and 29 attached to the left arm cannot stretch through the 90 degree post swivel connection 40 a sufficient distance around the elbow of the arm to allow the left arm to bend appreciably at the elbow. Further, the restraining action of the positive connections between members 20, 27, 32 and 30 and the preventing of the bending of the elbow by longitudinal members 28 and 29, restrain the golfer from overswinging during the backswing.

FIGURE 4 illustrates the effect of the training apparatus during the downswing. The respective elements coordinate, including spring 18, to restrain the right arm in directing the golf swing, thus allowing the swing to be controlled by the left arm. Movement of the respective elements 20, 27, 32, 30, 28 and 29 forces the body into a correct turn. Further, as may be seen, the upright member 21 maintains the body at a rigid central pivotal position from which is cannot swing. This gives the well known "coiled spring" movement of the body during the correct golf swing.

FIGURE 5 illustrates the coordination of the golf swing training apparatus during the follow-through of the golf swing. As may be seen, elements 27, 32, 30, 28 and 29 all swivel correctly to maintain the correct shoulder positioning while allowing the left arm to move in a correct follow-through of the golf stroke. Spring 18 at this point provides resilient restraint to movement of the right arm, thus restricting the right arm to a correct upward arc movement during follow-through.

Often golfers have a tendency to raise or dip one of their shoulders during the golf swing. The golf swing training apparatus of this invention utilizes a spring 61 that can be secured at one end to any one of several desired points on the connectors 34, 36, 38 or 40. Its other end can be selectively connected to one of the connectors 54 or 56 in the platform 11. The spring functions to exert force against movement in certain directions of that portion of the body adjacent the point of connection of the spring to the golf swing apparatus. Spring 61, for example, can be used to restrain a fast backswing or to aid in coordinating a proper follow-through.

As is evident, the apparatus may be reversed and used in the same manner previously described by left handed golfers.

What I claim is:

1. Golf swing training apparatus comprising: shoulder engaging means; support means on said shoulder engaging means adapted to be horizontally positioned substantially parallel with the shoulders of a golfer for supporting arm movement control means engageable with a golfer's arms; means for securing the upper and lower portions of one arm of a golfer to said support means and restricting bending of said one arm and means including a coil spring for resiliently securing the other end of said support means to the upper portion of the other arm of said golfer so that said spring may be extended and contract during the golfer's swing.

2. The apparatus of claim 1 including, in addition, an upright element adapted to pivotally support said shoulder engaging means and a base on which said upright element is rigidly mounted.

3. Golf swing training apparatus for training the swing of a golfer comprising:
   shoulder engaging means,
   longitudinal support means fixed to said shoulder engaging means and capable of being horizontally positioned substantially parallel with the shoulders of a golfer,
   an extension secured to the first end of said longitudinal support means, said extension being capable of rotating 360 degrees about the axis of said longitudinal support means,
   means for securing said extension to one arm of a golfer, said securing means comprising a first member adapted to be secured to the forearm of said one arm below the elbow and a second member adapted to be secured to the upper part of said one arm above the elbow;
   connection means for movably connecting said first and second members to one another and limiting relative movement therebetween; and
   means including a coil spring for resiliently connecting the upper part of the other arm of said golfer to the second end of said longitudinal support means.

4. The apparatus of claim 3 including, in addition:
   a base;
   an upright element adapted to be rigidly mounted on said base;
   means for adjusting the height of said upright element;
   an extension rod on said upright element; and
   means for adjustably connecting said extension rod to said upright element at desired angles of inclination, said shoulder engaging means being pivotally supported on said extension rod for rotary movement about the longitudinal axis thereof.

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272—80