Dec. 10, 1968 R. M. VICKERS 3,415,524

GOLF SWING TRAINING APPARATUS

Filed Jan. 28, 1965

FIG. 1

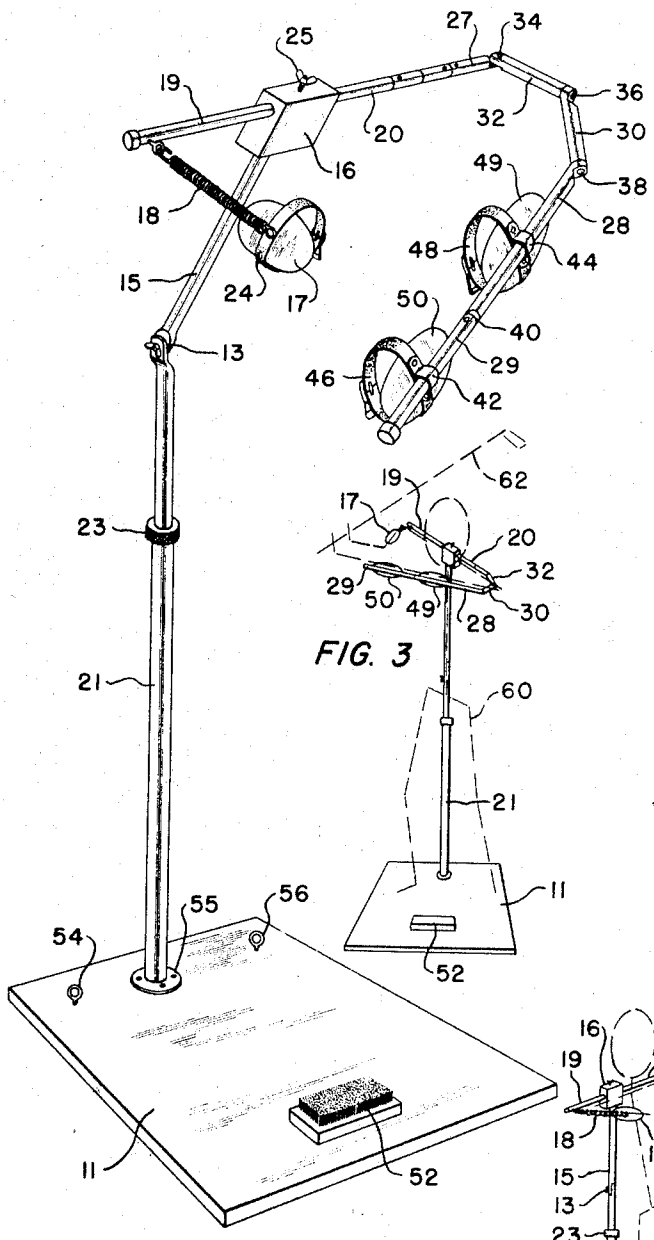


FIG. 2

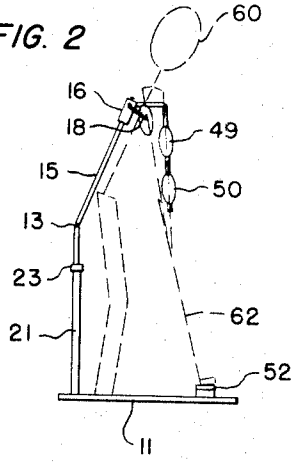


FIG. 3

FIG. 4

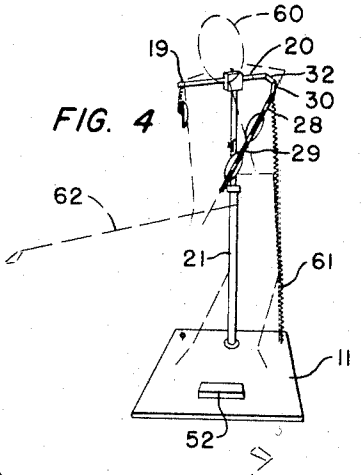
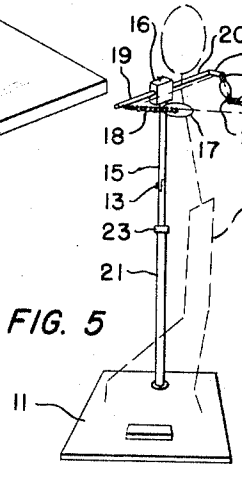


FIG. 5



INVENTOR.
ROBERT M. VICKERS

BY Eqon D. Muller

ATTORNEY

United States Patent Office 3,415,524
Patented Dec. 10, 1968

3,415,524

GOLF SWING TRAINING APPARATUS

Robert M. Vickers, 5101 Dawne St.,
San Diego, Calif. 92117

Filed Jan. 28, 1965, Ser. No. 428,646
4 Claims. (Cl. 273—189)

ABSTRACT OF THE DISCLOSURE

An elongated member, vertically and angularly adjustable relative to a supporting base, is adapted to be positioned substantially horizontal 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 letter 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 golf swing 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 drawing and 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.

Referring now to FIGURE 1, a base or platform **11**, 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

52 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 rotating 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 aforesaid 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 a golf 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 a sub-

stantially 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 sway. 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.

References Cited

UNITED STATES PATENTS

1,699,219	1/1929	Bemish et al.	273—189
1,936,143	11/1933	Shea	273—190
2,466,214	4/1949	Deaton	46—126 X
2,498,006	2/1950	Ridill	273—189
2,809,043	10/1957	Brower	273—189
2,893,736	7/1959	Tesi	273—188
3,138,388	6/1964	Herold	273—188 X

FOREIGN PATENTS

27,103 1910 Great Britain.

ANTON O. OECHSLE, *Primary Examiner.*

G. J. MARLO, *Assistant Examiner.*

U.S. Cl. X.R.

272—80