Dec. 3, 1968 R. B. ENGLE ETAL 3,414,267

GOLF SWING TRAINING DEVICE

Filed Oct. 3, 1966

FIG. 1.

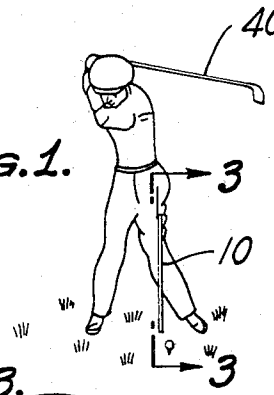


FIG. 2.

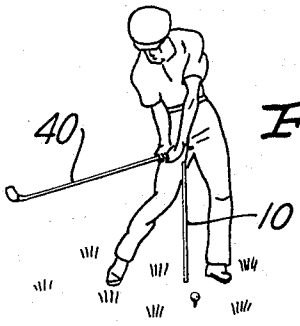


FIG. 3.

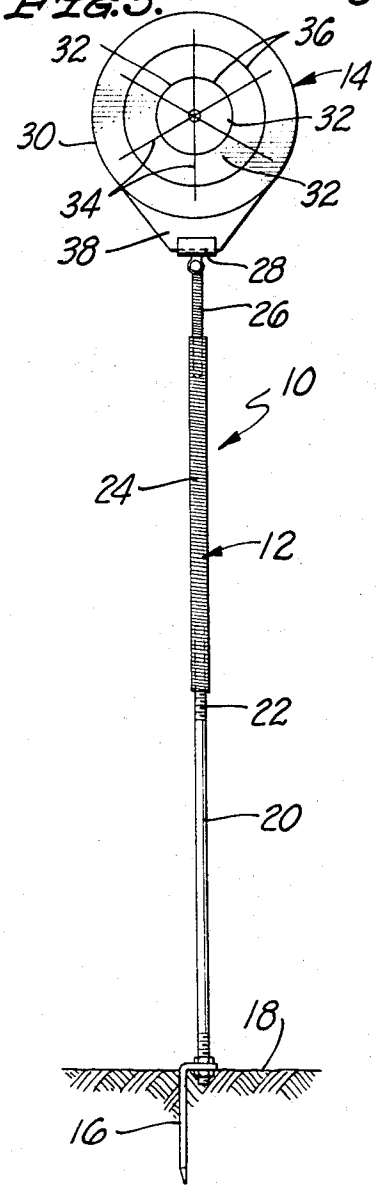


FIG. 4.

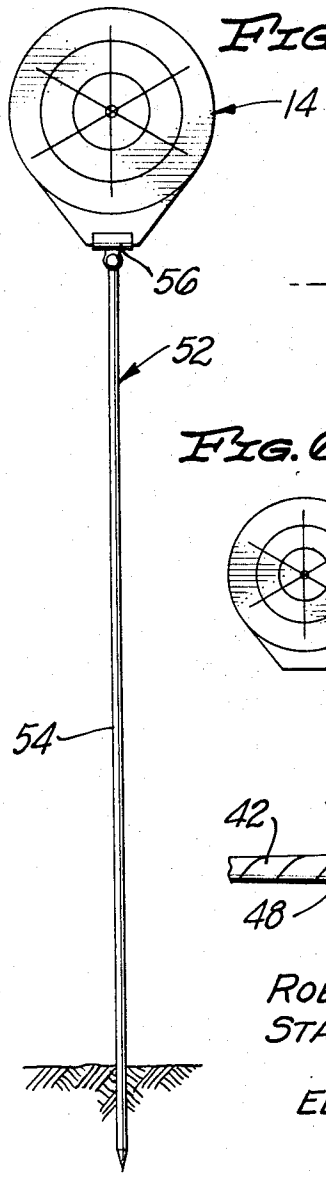


FIG. 5.

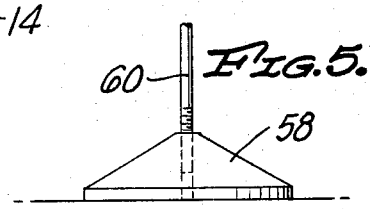
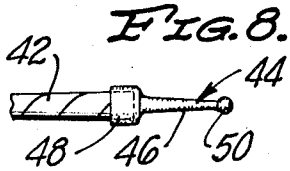


FIG. 6.

FIG. 7.



FIG. 8.



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GOLF SWING TRAINING DEVICE

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ABSTRACT OF THE DISCLOSURE

A target element having a penetrable target opening therein is supported on a vertically adjustable resilient post and positioned adjacent the golfer's hands as he addresses a golf ball. An extension element is adapted to be secured to the handle of a golf club which, if properly swung, will result in said extension element passing through the penetrable target opening and snatching the target element from the post.

Background

Many instruction devices are available. These instruction devices attempt to produce the proper golf swing. These prior devices have not been eminently satisfactory to train to provide the most desirable swing.

The most desirable swing begins with the arms raised and the club behind the golfer's shoulders, with the wrists fully bent or cocked. At the beginning of the swing, the arms are brought around and forward, but the wrists remain cocked at approximately 90° until the hands are substantially in front of the right leg. At this point, the club is swung by the wrists. This is the fundamental correct swing and is the reason that professional golfers can drive golf balls such tremendous distances. With the wrists fully cocked until the arms are brought downward to the forward position, the golfer utilizes the conservation of angular momentum to bring the club head to maximum speed. Prior devices for golf swing instruction have not been directed to this character of the proper swing and thus have not been able to develop the optimum swing pattern.

Description

Accordingly, it is an object of this invention to provide a device for golf swing instruction which aids in training the golfer so that he can execute the proper golf swing. It is a further object of this invention to provide a device for golf swing instruction which is particularly directed to train a golfer to retain his wrists in fully cocked position until the proper down swing zone is reached. It is another object of this invention to provide a device for golf swing instruction which is economic, so that it can be used by many people and which is easy to use so that no training is needed to use the instruction device. It is a further object of this invention to provide a device for golf swing instruction which is of long life and of low maintenance. Other objects and advantages of this invetnion will become apparent from a study of the following portion of this specification, the claims, and the drawings.

FIG. 1 is a front elevation view of a golfer at the beginning of his swing, showing his positioning in relationship to the target for golf swing instruction of this invention.

FIG. 2 is similar to FIG. 1, showing the golfer at the bottom of his down swing.

FIG. 3 is an enlarged sectional view, taken along the line 3—3 of FIG. 1 showing the preferred embodiment of the target for golf swing instruction of this invention.

FIG. 4 is an elevational view of another embodiment thereof.

FIG. 5 shows an alternative base for the target for golf swing instruction of this invention.

FIG. 6 is a view of an alternative target.

FIG. 7 is a view of a further alternative target.

FIG. 8 is a side elevational view, with parts broken away, showing the extension attached to the end of the golf club handle.

Referring now to the drawings in more detail, the preferred embodiment of the target for golf swing instruction is generally indicated at **10**. The target **10** comprises support **12** and a target element **14**. Referring particularly to FIG. 3, support **12** comprises spike **16** which has a sharpened lower end particularly adapting it to insertion in the ground **18**. Supported on spike **16** is post **20** which is in the form of a rigid rod. The upper end of post **20** carries threads **22**. Coil spring **24** is screwed onto the threads **22** so as to make firm interconnection therebetween. The major part of coil spring **24** is hollow so that the upper end of it is bendable with respect to the ground, without dislodging post **20** with respect to the ground. A smaller coil spring **26** is screwed into the interior of coil spring **24** from the upper end. Height adjustment can be accomplished by screwing coil spring **26** with respect to spring **24**, and/or screwing coil spring **24** with respect to post **20**.

The upper end of spring **26** carries friction clamp **28**. Friction clamp **28** has a pair of jaws which are spring urged together. These jaws are flat faced so that when the target element **14** is clamped therebetween, it may be frictionally withdrawn.

Target element **14** is preferably a flat piece of tough, resilient material. Target element **14** is clamped within friction clamp **28**. The clamping is of such nature that the target element may be withdrawn from the clamp with only moderate force. Target element **14** is preferably a relative flat piece of tough, flexible material. A number of polymer composition materials are suitable for this service. For example, polyethylene sheet of a sufficient thickness to be able to stand upright is of suitable character. Furthermore, an injection molded styrene, vinyl or nylon would also be suitable. The only requirement is that the target element **14** be resilient and tough. Target element **14** comprises a continuous outer periphery **30** to which is secured a plurality of panels **32**. As is seen in FIG. 3, these panels lie adjacent each other so that in front elevation the target element **14** appears to be continuous, with several cut lines thereacross. In fact, the target element **14** can be made in that way. The panels, as well as the cut lines, meet at the center of target element **14**. The cut lines are indicated at **34**. In addition to the cut lines, visible lines **36** can be arranged concentrically about the center to give the target-like appearance. Target element **14** preferably has a peripheral extension **38** at its bottom for the purpose of insertion in the friction clamp **28**. Such is not absolutely necessary, but is helpful in positioning the center of the target element a further distance away from friction clamp **28** and the upper end of the metallic portion of the target.

A golf club is illustrated at **40**. Golf club **40** has handle **42**, see FIG. 8, and upon the end of the handle **42** is secured extension **44**. Extension **44** has shank **46**, one end of which carries cup **48** which is adapted to be secured on the end of the handle. The other end of shank **46** carries knob **50**.

In use, target **10** is positioned in front of the golfer, almost exactly in line with the ball, as is seen in FIGS. 1 and 2. The correct distance in front of the golfer and the correct height of target element **14** is established by a golfer taking the correct stance and making a slow, correct, practice swing. The center of target element **14** is positioned so that extension **44** engages in the center of target element **14** during this slow, correct, practice swing.

The target **10** is held in position by insertion of spike **16** in the ground, and height is regulated by adjustment of spring **24** with respect to spring **26** of threads **22**. Target element **14** is positioned in friction clamp **28**.

Thereafter, the golfer swings. He attempts to keep his wrists fully cocked and drive the extension **44** through the center of target element **14**. This positioning of the target element requires that the wrists remain fully cocked to this position. Thus, only when the wrists are maintained cocked, can the golfer engage the target elements on the extension **44**. When the extension **44** enters the slits in the target between panels **32**, target element **14** is withdrawn from friction clamp **28**. Knob **50** retains the target element upon the extension. If the golfer straightens his wrists too soon, the angular relationship between extension **44** and target element **14** does not permit picking up of the target element upon the extension. Instead, the target element is knocked on the ground. Thus the golfer knows he did not swing correctly. Since this wrist action is correct in all types of golf swings, whether using woods or irons, the golfer can practice with any club.

Referring now to FIG. 4, a further embodiment of the target for golf swing instruction is illustrated therein. This embodiment of the target is generally indicated at **52**. Since the target element is the same as target element **14**, it is indicated by the same reference numeral. Target **52** comprises a straight, rigid rod **54** which is sharpened at the lower end for insertion into the ground and which carries friction clamp **28**. Thus, target **52** is functionally the same as target **10**, except for the resiliency and bendability of springs **24** and **26**, and the overall height adjustment. The more experienced golfer does not need the resiliency, for his swing is sufficiently uniform that his hands or club will not engage upon the support rod. Furthermore, height adjustment can be made by varying the amount the rod **54** is thrust into the ground. Thus, target **52** is adequate for most instruction.

In those cases where the golfer desires to practice his swing indoors, or other places where he cannot insert a rod into the ground, base **58**, see FIG. 5, is provided. Base **58** supports rod **60** which can be the lower end of a rod of the nature of rod **20**, or lower end of a rod of the of the nature of rod **54**. By this means, the target for golf swing instruction can be supported upon any flat support surface.

Target elements **62** and **64** are identical to target element **14**, except for the overall size. As a golfer becomes more proficient, he can replace the target element **14** in clamp **28** or **56**, with one of the smaller target elements. Target elements **62** and **64** have a continuous outer periphery and panels therein divided by cut lines, in the manner previously described with respect to target element **14**. Again, target elements **62** and **64** are of a resilient, tough material so that they may be engaged upon extension **44** with the club handle moving at full speed, with the result that the target element is impaled upon the extension and withdrawn from the friction clamp.

This invention having been described in its preferred

embodiment, and additional embodiments disclosed, it is clear that this invention is susceptible to numerous modifications and changes within the skill of the routine artisan and without the exercise of the inventive faculty. Accordingly, the scope of this invention is defined by the scope of the following claims.

What is claimed is:

1. A golf swing instruction device comprising an upright post, a target element detachably secured to said post, said target element having a penetrable opening therein, an elongated extension having one end thereof adapter to be secured to the handle of a golf club and the other end thereof adapted to pass through said opening, the length of said post being such that said target element may be positioned between a golfer and a teed golf ball at a height adjacent to the golfer's hands at the golf ball address position, whereby a golfer may swing a golf club to which said extension has been attached and cause said other end of said extension to enter said opening in said target element and detach said target element from said upright post.

2. The device of claim **1** wherein said post has a sharpened lower end adapted to be engaged in the ground and a friction clamp secured to its upper end adapted to frictionally hold said target element.

3. The device of claim **2** wherein said post is resilient so that upon being struck said post is capable of bending.

4. The device of claim **3** wherein said post is at least partially comprised of a coil spring.

5. The device of claim **4** wherein said post comprises upper and lower coil springs, said upper and lower coil springs being interengaged with each other so that overall height of said post can be adapted by changing the amount of interengagement of said first and second springs.

6. The device of claim **2** wherein said post is rigid.

7. The device of claim **1** wherein said target element comprises a substantially flat sheet of tough, resilient polymer composition material.

8. The device of claim **7** wherein said target element is substantially circular and has a plurality of adjoining panels defining said opening so that said target element may be retained on said extension.

9. The device of claim **1** wherein said extension has an elongated shank, a cup secured to one end of said shank, said cup being adapted to be secured to the upper end of the golf club handle, a knob on the other end of said shank, said knob being adapted to pass through said target opening and retain said target element on said extension.

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