April 19, 1966 M. M. SHOAF, JR 3,246,898

GOLF SWING TRAINER

Filed Sept. 26, 1963

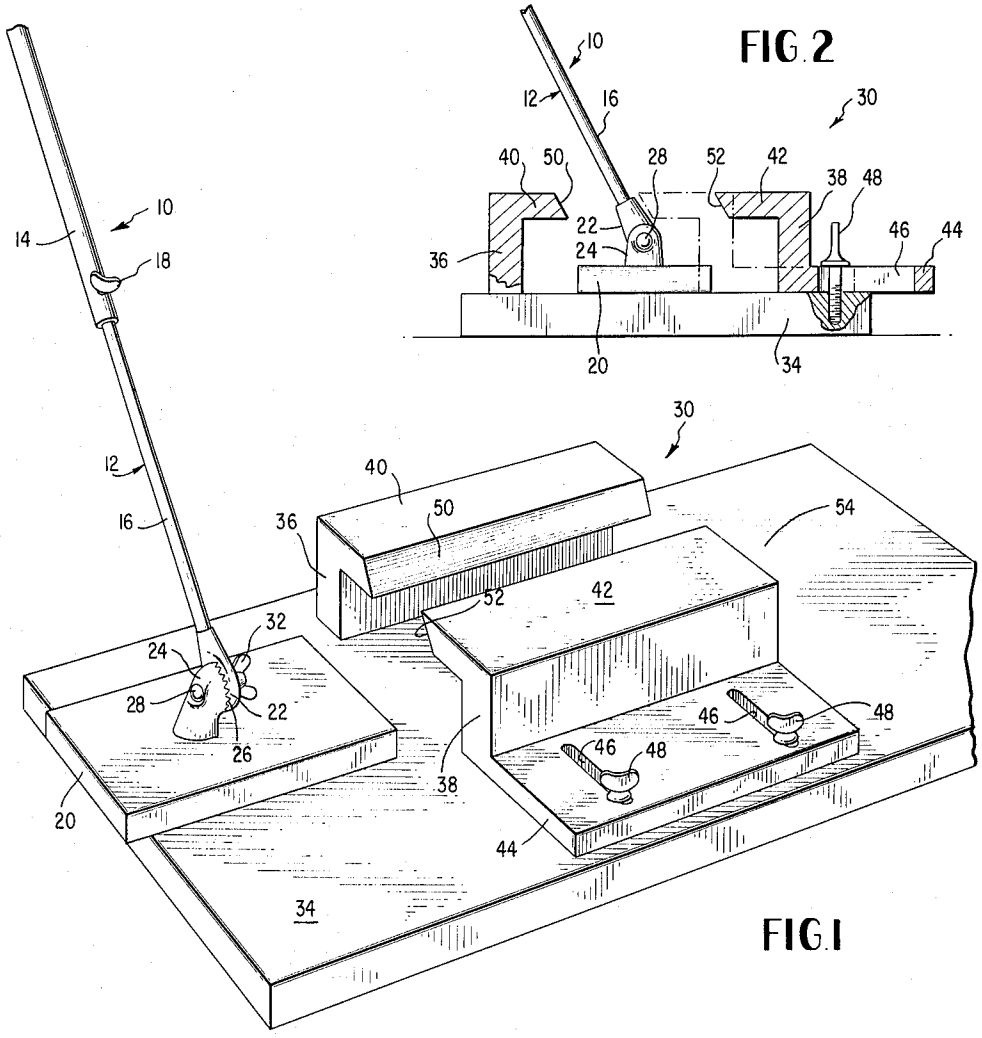


FIG. 1

FIG. 2

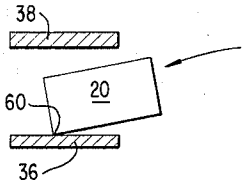


FIG. 3

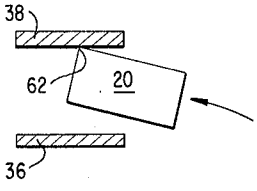


FIG. 4

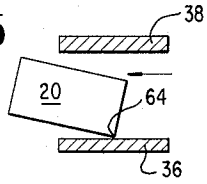


FIG. 5

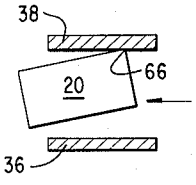


FIG. 6

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GOLF SWING TRAINER

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This invention relates to golfing equipment and more particularly to an improved training device useful in the acquisition of a correct golf swing.

Golf swing trainers currently in use are only partially effective, because they do not provide a suitable indication of the nature of the faults in an improper swing.

It is a primary object of the present invention to provide an improved golf swing trainer capable of warning the user of such faults of an improper swing as would result in a slice, hook, smothered, topped and similar defective shots so that corrective measures may be taken immediately.

It is another object of the invention to provide a golf swing training device which is useable indoors, outdoors, at home, on the practice range or any other suitable place where space for a full swing exists.

It is a further object of the invention to provide an improved golf swing training device which can be used by both right and left hand golfers.

Another object of the invention is to provide an improved golf swing trainer having an adjustable guide and a simulated club with telescoping handle which may be adjusted to any suitable angle and length representative of different golf clubs, whether woods or irons, and to suit the height of the user.

Still another object of the invention is to provide a golf swing training device which is simple in construction and is economical to produce in that it may be formed of plastic, metal, wood, rubber or other relatively sturdy but inexpensive material.

The novel features that are considered characteristic of the invention are set forth with particularity in the appended claims. The invention itself, however, both as to its organization and its method of operation, together with additional objects and advantages thereof, will best be understood from the following description of a specific embodiment when read in connection with the accompanying drawings, wherein like reference characters indicate like parts throughout the several figures and in which:

FIG. 1 is a perspective view of a golf swing trainer constructed in accordance with the invention;

FIG. 2 is a vertical cross section showing the guide rails separated to their maximum spacing in solid lines and closed to their minimum spacing in phantom lines; and

FIGS. 3–6 are diagrammatic plan views illustrating the indicative positions of the simulated club head in various improper swings as it passes into the space between the guide rails.

Referring now more particularly to the drawings, the improved golf swing trainer is shown in FIG. 1 as comprising a simulated golf club referred to generally by the numeral **10**, in combination with a guide member having the general reference number **30**. The club comprises a shaft **12** desirably formed of a light weight metal in tubular sections **14** and **16** which telescope with respect to each other for adjusting the length of the club. A screw with a wing head **18** is threaded through an opening in the outer section into engagement with the inner section to fix the shaft sections in any desired relative position. At the base of the shaft is secured a head **20** which preferably is formed as a flat, thin rectangular block of rubber, plastic, wood or metal. A pair of relatively rotatable discs **22** and **24** each having teeth **26** projecting

toward each other are respectively affixed to the shaft section **16** and the head **20**. The discs **22** and **26** are pivoted on a bolt **28** and are clamped together by a wing nut **32**. By loosening the wing nut the shaft **12** can be turned about the bolt **28** and reclamped at any desired angle to the head **20**.

It will be readily apparent that by means of the telescoping sections **14** and **16** and the adjustable pivot connection of the shaft to the head that the shaft may be adjusted to suit the height of any individual and to simulate clubs of different length and having different angled shafts. Any suitable materials may be used to form the shaft and the head, but preferably the materials should be selected so that the simulated club has the same weight and feel as a normal golf club. It is intended that practice with the trainer will groove the swing into a proper arc. Once a grooved swing has been obtained, the user can shift to a normal golf club and maintain the same grooved swing.

The guide member **30** comprises a flat plate-like base **34** supporting a pair of upright rails **36** and **38** having inturned flanges **40** and **42**, respectively, at their upper edges. The rails **36**, **38** are parallel and spaced apart a distance greater than the width of the club head **20** so as to permit the passage between them. Desirably, one of the rails, such as **38** in FIG. 1, is secured to an adjustable member, for example, the flat plate **44** having a pair of slots **46** for reception of fixing bolts **48** whose lower ends are threaded in openings in the base plate **34**. By loosening the nuts **48**, the member **38** may be moved away from the rail **36** to its maximum open position as illustrated in solid lines in FIG. 2. The broken lines in FIG. 2 illustrate the rail **38** adjusted to its closest position to rail **36** which is a distance slightly wider than the width of the club head **20**. The flanges **40** and **42** are preferably beveled at **50** and **52** to conform with a normal angle of the club shaft **12**. As the club head passes through the space between the rails **36** and **38**, the shaft **12** passes through the space between flanges **40** and **42**.

The height of flanges **40**, **42** above the base **34** corresponds approximately to the diameter of a golf ball. The lengths of rails **36** and **38** correspond to the distance in which a club head desirably moves in the direction of the ball target just before the club head strikes the ball. Accordingly, such length should be approximately 5 inches and in the trainer the club head **20** is made approximately the same length.

In utilizing the training device described above, a ball is not actually used but the position of a ball with respect to the swing would be as indicated at the point marked by reference numeral **54** for a right handed golfer and at the opposite end of the space between the rails for a left handed golfer. Desirably, at least one or more of such parts as base **34**, rails **36**, **38**, flanges **40**, **42** and the club head **20** are made of a somewhat resilient material such as rubber to reduce the shocks of the head striking another part when the trainer is utilized by a novice golfer having an improper swing.

In using the trainer, the guide **30** can be placed on the ground or on the floor of a basement or other room and the club **12** is grasped by the user who takes a normal golfing stance as if a ball were positioned at the point **54**. The club is then swung in a full arc as the body is pivoted to the rear. At the conclusion of the upswing the club is returned approximately in the same arc on the down swing so that the club head **20** passes through the rectangular opening between the rails **36** and **38** and below the flanges **40** and **42**. If the swing is proper the club head will pass through the space between the flanges **40** and **42** without striking any of these parts. During early stages of practice for novice golfers the rail **38** is adjusted to provide a maximum opening between the rails and flanges, and as the user obtains experience and a

more grooved swing, the rail 38 can be adjusted closer and closer to rail 36 to reduce the space between the rails to a minimum.

In practicing with the trainer improper swings and their faults will quickly become evident in the following manner.

If the return swing, or downstroke, is above the arc of the back stroke, the club head 20 will strike the flanges 40, 42 or pass completely over them apprising the swinger that this downstroke arc has shifted upwardly and is too high such as would result in a topped golf shot.

If, however, the return swing is too low, such as would result in a fat or skyed ball, the club head 20 will strike the base 34 before or just after it reaches the space between the rails 36 and 38.

If the trainee's return swing, or downstroke, is from the outside in as illustrated by the arrow in FIG. 3, the inner front corner 60 of the club head 20 will strike the rail 36 as the head enters the space between the rails. Therefore, when this occurs the trainee is apprised that this return swing is from the outside in and such as would result in a slice for a right handed golfer.

If, however, the trainee's return swing is from the inside out, as indicated by the arrow in FIG. 4, the outer forward corner 62 of the club head 20 will strike the rail 38 and such occurrence will warn the trainee that his swing is inside out and of the type which will result in a hook.

Assuming that the golfer swings back and returns the club toward the ball properly and in the same arc so that the club head is in position to pass straight through the rails 36, 38, the swing may still be improper in that the wrists may be turned to open or close the club face at the normal time of ball impact, i.e., to tilt the ball striking face upwardly or downwardly, respectively. In the trainer such improper wrist actions result in warnings illustrated in FIGS. 5 and 6 wherein the trailing inside corner 64 of the club head strikes the rail 36 if the wrists are too open and the trailing outside corner 66 strikes the rail 38 if the wrists are too closed. These occurrences will accordingly apprise the trainee that a corresponding stroke with a normal golf club against a golf ball would result in sliced, pushed shots and smothered, hooked shots respectively.

While the device employs a simulated club with a rectangular head differing from a normal golf club in combination with a guide member having corresponding rectangular openings for passage of the head and shaft, this is done for the particular purpose of giving the above stated swing error indications.

It is apparent from the above description that the described golf swing trainer is a very practical device of simple and inexpensive construction, which can be used anywhere and whenever a few moments are available for practice. By warning the user of the types of error in his swing, nearly all types of errors being indicated by the mode in which the club head strikes the guide or passes therethrough, corrective motions can be immediately tried to improve the swing and eventually the proper arc necessary for accurate and long golf shots will be acquired.

While in the preferred embodiment described all of the parts are made as light as possible, it is contemplated that heavier materials can be used and weights may even be added to the club head to more closely simulate an actual golf club. It is also possible to slightly curve the rails 36, 38 in the arc of a swing and to correspondingly curve the club head 20. The device is equally useable by right and left handed persons.

Short periods of practice with the training device will make a proper swing habitual rather than accidental and will ensure that the club head passes through the hitting zone each time the club is swung so that when the trainee repairs to a golf course and utilizes a ball and a standard golf club, his muscular and body control will be such as to obtain consistently good, straight and long shots.

Although a certain specific embodiment of the invention has been shown and described, it is obvious that many modifications thereof are possible. The invention, therefore, is not to be restricted except insofar as is necessitated by the prior art and by the spirit of the appended claims.

What is claimed is:

1. A golf swing training device comprising in combination, a simulated club for swinging in an arc corresponding to a full golf swing and a guide member to be disposed at ground level at the position of a golf ball, said club having a shaft terminating in a head at its bottom, said head being a relatively thin rectangular block parallel to the ground when the shaft is held in normal position of address to a ball, said guide member including a base, a pair of parallel, upstanding rails secured to said base and a pair of inturned flanges respectively fixed to the upper edges of said rails and projecting toward each other without touching, said rails defining a space between them at least equal to the width of said simulated club head and of a length approximately equal to the length of said simulated club head, and said flanges being spaced apart a sufficient distance to permit passage of said shaft when the simulated club head is swung through the space between the rails.

2. A golf swing training device according to claim 1 wherein at least one of said rails, flanges and head is formed of a resilient material to lessen the shock of the head or shaft striking a rail or flange.

3. A golf swing training device according to claim 1 wherein means are provided for adjusting said rails with respect to each other so as to selectively widen and narrow the space between the rails.

4. A golf swing training device according to claim 1 wherein said shaft is formed of telescoping sections for adjusting the length of the shaft and means for securing the sections in adjusted relation.

5. A golf swing training device according to claim 1 wherein said shaft is pivoted to said head and means are provided for fixing the shaft at any desired angle in a plane vertical to said head.

6. A golf swing training device according to claim 1 wherein said flanges have confronting beveled free edges disposed in parallelism.

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