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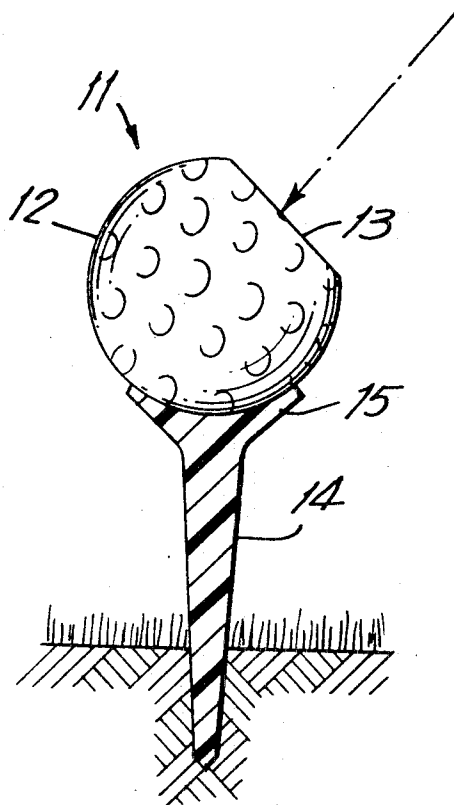
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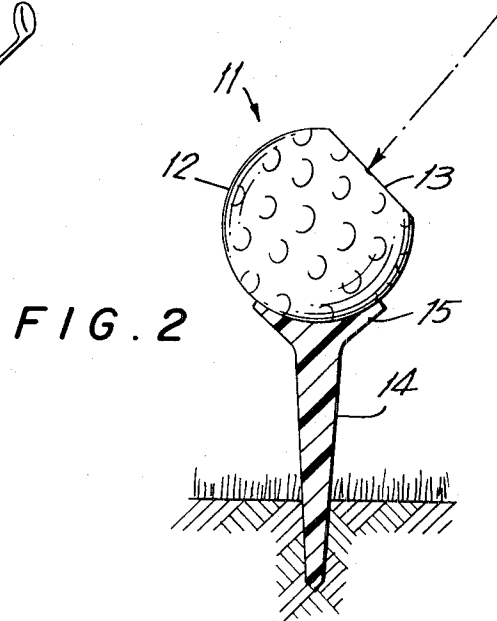
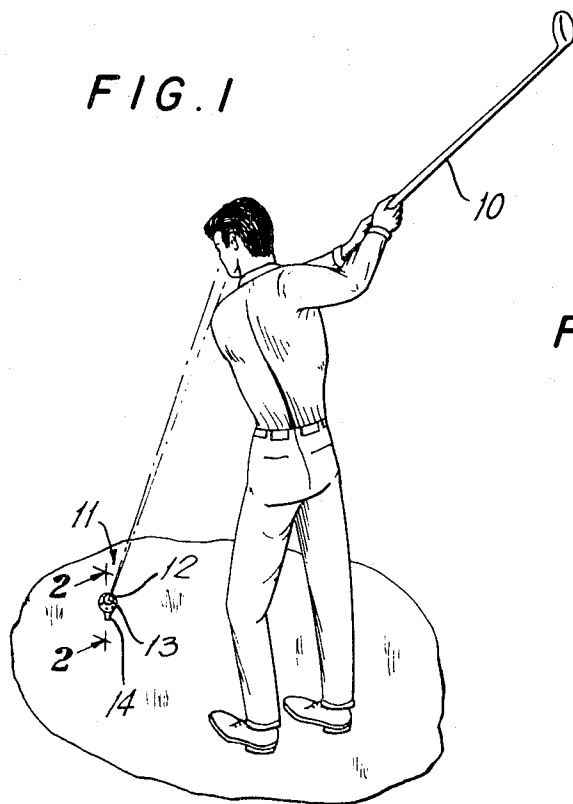
[54] GOLF BALL INCLUDING PLANAR MIRROR SURFACE

1 Claim, 2 Drawing Figs.

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ABSTRACT: A golf training device comprising a planar mirror member disposed on a planar surface of a golf ball, the mirror being so oriented as to reflect a portion of the golfer's head, permitting the golfer visually to check the stability of his head throughout the golf swing by noting any movement of that portion of his head reflected in the mirror when the ball is struck, the flight characteristics of a spin imparted thereto will be accentuated, because of the ball's nonaerodynamic shape.





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GOLF BALL INCLUDING PLANAR MIRROR SURFACE

This application is a division of my copending U.S. Pat. application, Ser. No. 683,360, filed Nov. 15, 1967, entitled Practice Golf Tee including Mirror Means, now U.S. Pat. No. 3,459,428.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention is in the field of golf training devices. It is well known and accepted golf theory that the proper execution of any golf stroke, from the shortest putt to the longest drive, should be accomplished without movement of the head. Golfers may not be conscious of head movements, and when it is considered that a minor movement of the head can result in a major displacement of the swing arc from the desired one, the advantage of bringing to the golfer's attention the fact of his head movement will be readily apparent.

2. Description of the Prior Art

When a beginning or advanced golfer finds his shots straying, he will typically visit his professional. The professional may spot swing flaws, including head movement, and report the same to the golfer, who will thereupon attempt, by practice, to eliminate the previously spotted errors. It is difficult, however, without the attention of a skilled professional for the golfer to maintain the proper habits which he developed during supervised instruction.

To assist the golfer in his self-analysis, various apparatuses which physically constrain the head from movement have been suggested. These devices, which include slings, harnesses, braces, etc., are not only expensive and cumbersome but are not subject to use under actual golfing conditions.

Applicant is also aware of complex mirror devices calculated to permit the golfer, while looking downwardly in the general direction of the ball, to observe his swing.

While such devices are helpful in the sense of permitting a golfer to obtain an overall picture of his swing, they are not effective to alert the golfer to small head movements. Also, they are not susceptible of being utilized under actual playing conditions, and require the golfer's attention to be directed to an area remote from the actual target, i.e. to the mirror, not the golf ball.

SUMMARY OF THE INVENTION

The present invention may be summarized as comprising a planar mirror member of significant size, namely about one-half inch or more, directly embedded in a golf ball. The mirror is oriented so that when the golfer looks down at the ball, the mirror will reflect a given, specific part of his head at address. The golfer may then execute an actual swing, concentrating his attention on the reflection in the mirror. If, in the course of the swing, the reflected image changes, i.e. if a first part of the head is visible at address and during the course of the swing a second part of the head is visible, the golfer will be aware that he has moved his head. Contrariwise, if the same part of the golfer's head is visible throughout the back swing and through actual contact of the club with the ball, then the golfer will be assured that he has maintained a stable head position.

It is therefore an object of the invention to provide a golf practice device which is inexpensive and which may be used under actual playing conditions.

A further object of the invention is the provision of a golf practice device of the type described comprising a mirror on the ball position, which mirror reflects a portion of the golfer's head, whereby minor movements of the head in the course of the swing may be readily detected.

It is a further object of the invention to provide a golf ball of the type described having a reflective portion or component, the addition of such component unbalancing the golf ball so as to render the ball nonaerodynamic and, accordingly, magnifying the erratic flight characteristics which will normally result from an improperly executed swing.

A further object of the invention is the provision of a novel method of swing analysis and, more particularly, a novel method of checking head position throughout the swing which comprises the step of disposing a mirror at the target area of the golf swing, namely, the golf ball, and orienting the mirror so that a specific portion of the golfer's head is reflected therein.

To attain these objects and such further objects as may appear herein or be hereinafter pointed out, reference is made to the accompanying drawing, forming a part hereof, in which:

FIG. 1 is a perspective view of a golfer at the top of the back swing position, displaying the proper orientation of the golf practice device with respect to the golfer.

FIG. 2 is a magnified section taken on the line 2-2 of FIG. 1.

Referring now to the drawing, as shown in FIG. 1 a golfer has executed a body turn and has drawn a conventional golf club 10 to an essentially correct back swing position. The golf practice device 11 is shown oriented in proper relation to the golfer.

The practice device of FIGS. 1 and 2 comprises a conventional golf ball 12, having a flat portion 13 formed thereon, the flat portion 13 being provided with a mirrored surface. The mirrored or planar portion 13 is preferably comprised of a thin metallic film applied by the vacuum deposit method so as to form a lightweight but durable reflective coating.

As shown, the ball 12 is seated on a golf tee 14 having the usual ball-receiving socket 15 which permits adjustment of the position of the ball in both vertical and horizontal planes.

As best seen in FIG. 1, the ball is adjusted on the tee so that the mirror is substantially normal to a line extending from the eyes of the golfer to the ball. It will be observed that variations, particularly in a vertical plane, from the precise normal position are permissible so that, for instance, a golfer may adjust the ball so that the eyes, when directed toward the ball, will be able to perceive a reflection of the nose or the chin of the golfer. When the swing is executed with the golf ball thus positioned, the golfer will be permitted to concentrate his attention where it belongs, on the golf ball, while at the same time being able to perceive any head movements inherent in his swing. Even the slightest deviations of head position will be observed from the fact that the initial reflection, for instance the nose or the chin, will disappear from view if there has been any movement or displacement of the head.

The golf swing may be completed and the ball actually struck, permitting the golfer to execute not only a practice swing but an actual golf stroke.

Due to the off-balance nature of the golf ball and the nonaerodynamic or eccentric configuration thereof provided by the planar portion, the flight pattern of the ball will not be comparable to the flight of a normal ball. However, this is an advantage from the instructional standpoint in that the nonaerodynamic or eccentric condition of the ball will over emphasize the effects of any improper spin imparted to the golf ball. If a clockwise or slice spin is imparted to the golf ball, for instance, the ball will exhibit a more marked slicing tendency than would a conventional ball. This function, coupled with the head movement detection function, render the golf ball a particularly useful and informative teaching tool susceptible to use under actual play conditions.

It will be observed that the utility of the device is not limited to conditions in which the ball is placed on a tee since obviously, by proper manipulation while the golf ball is in a grassy lie, the mirror component may be oriented toward the user in proper position to function in the movement detecting capacity set forth.

As will be apparent, the golf ball, by the addition of the planar mirror component, will not be suitable or permitted for use in championship play but is intended to be used as a fault-detecting, corrective apparatus.

I claim:

1. A golf practice device comprising an essentially spherical golf ball having a planar peripheral portion, planar mirror means disposed on said planar peripheral portion and being of

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a size such as to permit a golfer to check the stability of his head by viewing therein a reflected image of a portion of his head while standing in a position addressing said golf ball, and the extent of said planar peripheral portion being such that

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said ball has a nonaerodynamic shape, whereby when said ball is struck, the flight characteristics of a spin imparted thereto will be accentuated.

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