April 13, 1965 L. CARDWELL 3,178,187

GOLFER'S HEAD MOVEMENT INDICATOR

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Fig. 2.

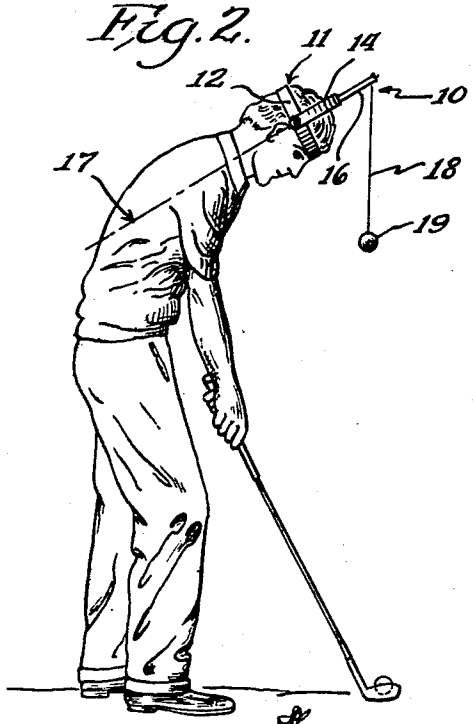


Fig. 3.

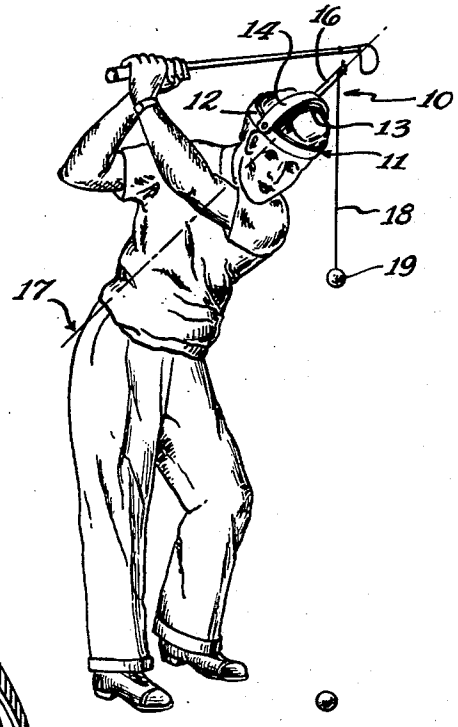
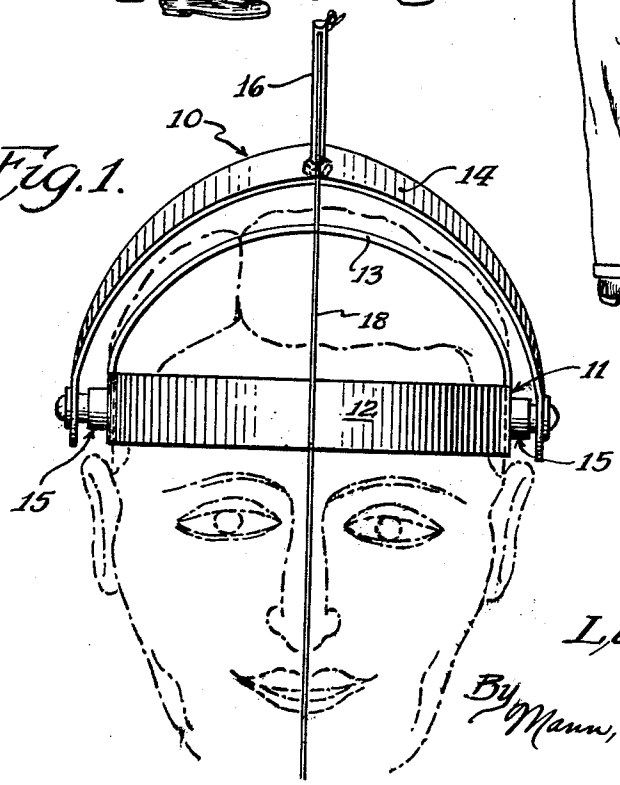


Fig. 1.



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GOLFER'S HEAD MOVEMENT INDICATOR

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This invention relates to an accessory for use by golfers to aid self improvement practice in the execution of a golf swing and more particularly the invention is concerned with providing a device for indicating improper head movements occurring at initial address or during actual execution of the golf swing.

The average golfer does not appreciably improve his game in spite of years of practice and play. One reason for this is that he cannot see himself swinging a golf club and thus cannot observe mistakes of form. Moreover, in many instances rather minor departures from proper stance may cause serious defects in the ultimate swing. In particular, the position of the head of a golfer is a very important factor to proper stance and execution and it is also a reliable indicator of numerous errors in stance and execution. Improper head position is also probably the most common defect, and all, except professional golfers, are guilty at one time or another. If the head is moved either up or down or sideways or fore and aft, the execution of the golf swing is spoiled because the golf ball is not in the same relative position to the body of the golfer at the time of impact as it was at the time of address. Limited rotation of the head, about an axis of turning movement projecting centrally through the head and shoulders, is desirable and necessary and should not be indicated.

Accordingly, the principal object of this invention is to provide an accessory for indicating any shifting movement made by the head of a golfer; for indicating improper head position when the golfer assumes his initial address stance; for indicating the nature and direction of any undesired head movements to aid in analyzing the cause thereof and thereby facilitate correction; and finally for accommodating certain limited rotation of the head of the golfer without producing any corresponding indication.

Other objects and advantages will become apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same:

FIG. 1 is an enlarged front view illustrating a headpiece mounting arrangement for a golfer's accessory embodying the concepts of this invention;

FIG. 2 illustrates the accessory in use on a golfer with the golfer being shown at the address position preliminary to the execution of a golf swing; and

FIG. 3 illustrates the accessory in use on a golfer with the golfer illustrated in the backswing position.

Referring now to the drawings, the accessory as shown herein, for purposes of illustrative disclosure, is designated generally at **10** and in the illustrated embodiment employs a headpiece **11** having a head band **12**, a transverse arcuate cross-strap **13** connected at its opposite ends to opposite sides of the head band **12**, and a support structure in the form of a rigid arch **14** pivotally adjustably connected at its opposite ends to opposite sides of the head band **12**. As illustrated herein, the head band **12** and cross-strap **13** are shaped to the general contour of the head and may be either adjustable belt-like structures or elastically deformable structures, or may be custom-fit to the individual user.

The arch **14** projects above the headpiece and may have mounting connections in the form of friction type pivot

joints **15** that grip or lock at any position of rotation to which the arch is set. Headpieces of this general type are available commercially for vastly different uses. For the purposes of the present invention, it will become apparent that any type of headpiece may be employed suitable for giving stable support to the indicator structure that is disclosed herein.

The indicator structure, in the preferred form shown herein for purposes of illustrative disclosure, comprises a rigid rod **16** fixedly attached to the arch **14** centrally thereof and in any suitable manner and projecting therefrom at a predetermined angle which is selectable by adjustment of the rotational position of the arch **14** with respect to the headpiece. In general, the rod **16** extends along a line **17** that may be projected generally centrally through the head and shoulders of the golfer to constitute an axis of turning movement of the head and shoulders during proper execution of a golf swing. The rod **16** supports a suspension element **18** on which a light-weight indicator **19** is hung. The suspension element may be a flexible string or its equivalent of a length to locate the indicator within the generally forward and downward field of vision of the golfer and at a height that avoids any possible interference with execution of the swing.

In FIG. 2 a golfer equipped with the accessory **10** is shown in the address position to illustrate the preferred dimensioning and orientation of the support rod and suspension elements.

In FIG. 3 the golfer is shown in the backswing position and it will be noted that in reaching this position, the golfer rotates his head slightly on an axis of turning movement as indicated by the line **17**, which axis is coincident with the line of the rigid rod such that the turning movement of the head does not cause any corresponding movement of the ball-shaped indicator **19**.

It will be apparent, therefore, that any shifting of the golfer's head up or down, or fore and aft, will cause corresponding shifting movement of the indicator **19** and denote imperfection in the execution of the swing. Moreover, the direction of movement of the indicator **19** will indicate the nature of the incorrect head movement involved and thus serves to inform as to the nature of the defect in form that caused the undesired head movement. An important feature of the invention, in addition to its obvious indicating function, is that it does accommodate required rotation of the head without producing corresponding movement of the indicator.

In the illustrated arrangement, the rigid rod may have a length on the order of 4 inches and the suspension element may have a length on the order of 18 inches but it will be apparent that some adjustment in these dimensions may be required to suit the size and stance of each individual golfer.

It should be understood that the description of the preferred form of the invention is for the purpose of complying with Section 112, Title 35, of the U.S. Code and that the appended claims should be construed as broadly as the prior art will permit.

What is claimed is:

1. An accessory for aiding a golfer in detecting head movements occurring during a golf swing being executed from a proper address position wherein the golfer's head and shoulders are centered upon a line that extends generally upwardly and forwardly and constitutes a common axis of turning movement for the golfer's head and shoulders during proper execution of the golf swing, said accessory comprising a indicator element, a support rod having a length a number of times greater than its diameter, a stringlike element longer than said rod and having one end secured to said indicator element and one end directly secured to one end of said rod, a

headpiece having a substantially horizontal headband for stationary gripping engagement on the golfer's head, and support means carried by the headband and extending above and inwardly of the headband to a central elevated region above the headband to mount the other end of said rod to said headpiece to locate said rod in generally upwardly extending relation above an upper central region of said headpiece such that when said headpiece is located in stationary gripping engagement at a predetermined position on the golfer's head and the golfer assumes said proper address position said rod is oriented along said line, said stringlike element hanging freely from said rod and being of a length to locate said indicator element within the generally forward and downward field of vision of the golfer, whereby normal head rotation accompanying a properly executed golf swing will not shift the indicator element, whereas improper head shifting will cause corresponding movement of said indicator element.

2. An accessory for aiding a golfer in detecting head movements occurring during a golf swing being executed from a proper address position wherein the golfer's head and shoulders are centered upon a line that extends generally upwardly and forwardly and constitutes a common axis of turning movement for the golfer's head and shoulders during proper execution of the golf swing, said accessory comprising a headpiece having a substantially horizontal headband for stationary gripping engagement on the golfer's head, said headpiece having

support structure connected to opposed portions of the headband and extending thereabove to be located centrally above said headband, a rigid rod having a length a number of times greater than its diameter and having one end affixed to a central elevated portion of said support structure to locate said rod in generally upwardly extending position relative to said headpiece, an indicator, and a flexible suspension element longer than said rod and having one end connected to the indicator and the other end connected directly to the other end of said rod such that when said headpiece is at a predetermined position on the golfer's head and the golfer assumes said proper address position said rod is oriented along said line, said stringlike element hanging freely from said rod and being of a length to locate said indicator element within the generally forward and downward field of vision of the golfer, whereby normal head rotation accompanying a properly executed golf swing will not shift the indicator element, whereas improper head shifting will cause corresponding movement of said indicator element.

References Cited by the Examiner

UNITED STATES PATENTS

1,459,705	6/23	Bullock	273—190
2,051,366	8/36	Catron	272—80
2,958,156	11/60	Schmahl et al.	46—51

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