

[54] PRACTICE GOLF CLUB

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[51] Int. Cl. A63b 69/36

[58] Field of Search..... 273/186, 183, 163, 273/164, 193, 194

[56] References Cited

UNITED STATES PATENTS

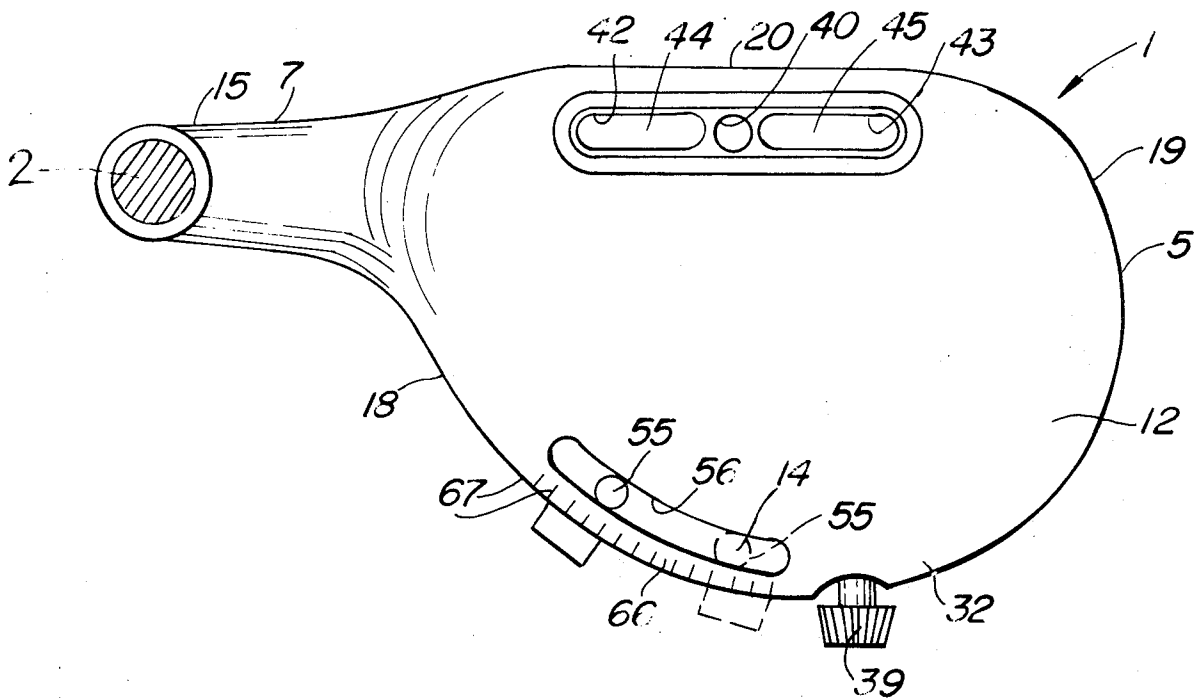
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2,158,211	5/1939	Aitken.....	273/186 A
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Primary Examiner—George J. Marlo
Attorney—Root and O'Keefe

[57] ABSTRACT

The top surface of a golf club head includes a first lens adjacent the striking face and a second lens adjacent the rear of the club head. A small battery-energized light bulb is positioned below the first lens. The second lens is located in the remote end of a light transmitting cylinder which has its other end positioned adjacent the light bulb. The light transmitting cylinder is mounted so that it may be moved to various positions along an arcuate path generally parallel to the rear surface of the club head. The light beam transmitted upwardly by each lens may be used by a golfer to provide information relating to the position of the club striking face during practice swings. The sole plate of the club head is removably mounted to permit the weight of the club head to be varied. To permit access into the interior of the club head, the head is made in two parts, the upper one of which is bolted to the lower part.

15 Claims, 14 Drawing Figures



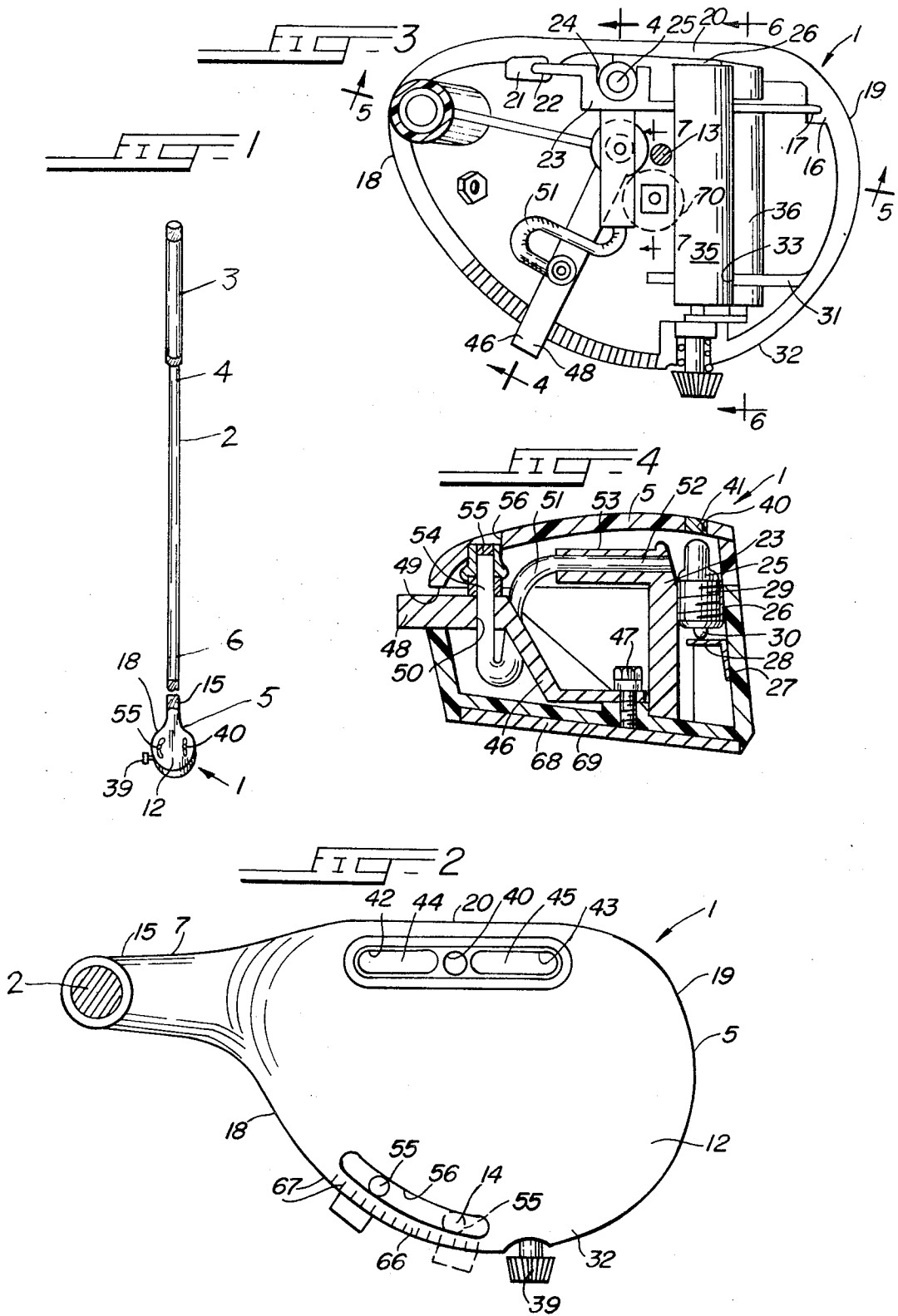


FIG-9

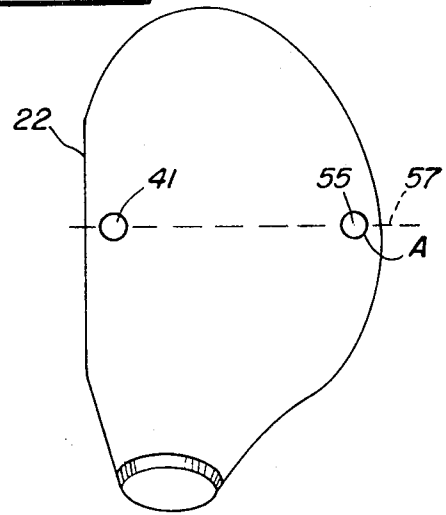


FIG-10

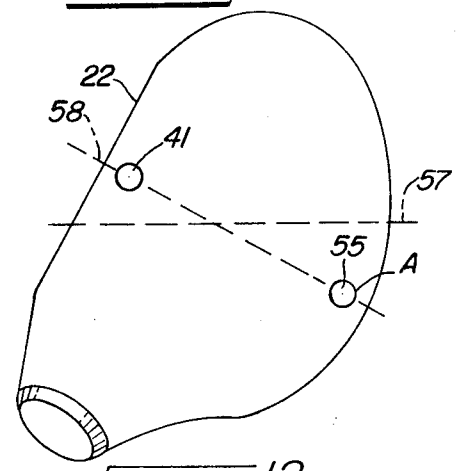


FIG-11

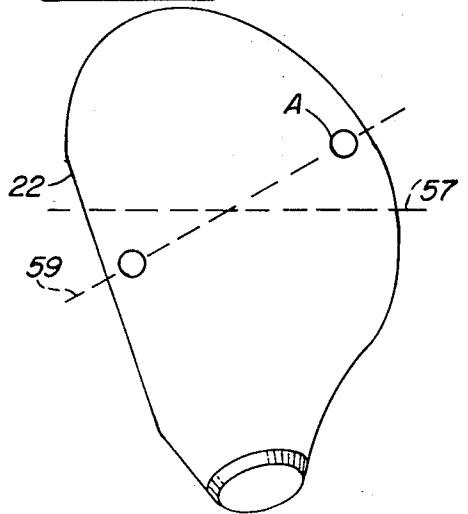


FIG-12

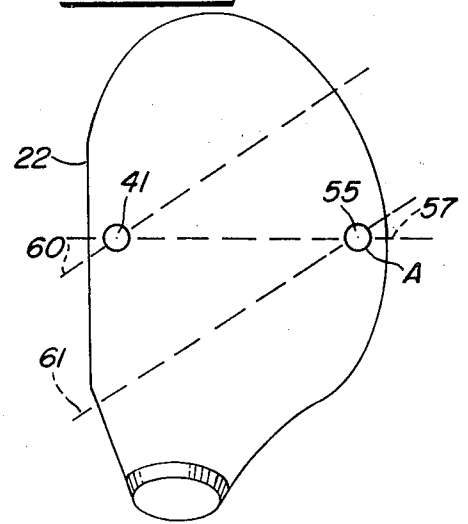


FIG-13

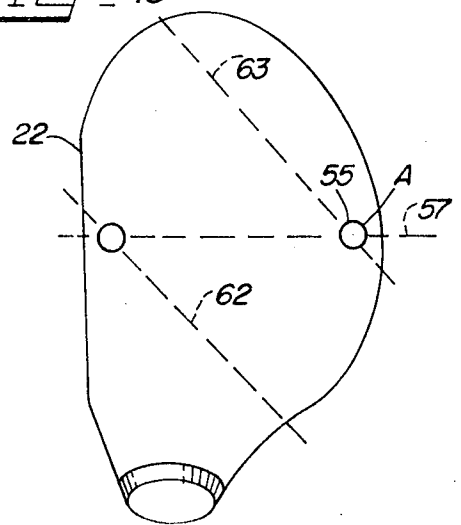
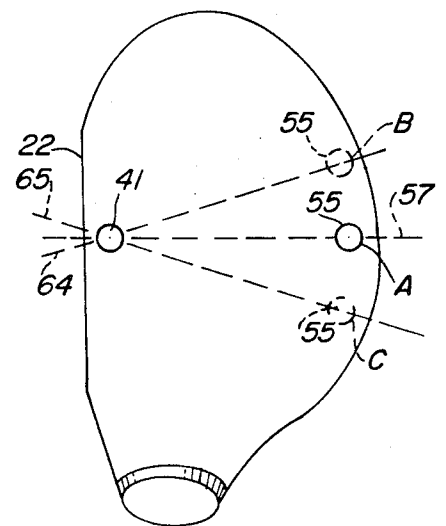


FIG-14



PRACTICE GOLF CLUB

BACKGROUND OF THE INVENTION

This invention relates to practice golf clubs and, more particularly, to practice golf clubs for practicing the proper path of travel of the club during a golf swing.

It is a primary object of the present invention to afford a novel practice golf club.

Another object is to afford a novel practice golf club for use in practicing and developing a golf swing which will cause the club to travel along the proper path of travel effective to cause the type of golf shot desired by the golfer.

Normally, what will be herein referred to as a "perfect" golf shot results when a golf swing is executed in such a manner that at the instant the club head engages the golf ball the front face of the club head is horizontally perpendicular to the line between the ball and the intended target, and the path of movement of the club head is along this same line, resulting in the ball traveling in an arc directly along the vertical projection of the line between the ball and the target area. As is well known to golfers, a golf swing wherein either the front face of the club is disposed in some other position, or the path of travel of the club head is along some other line of travel at the instant of impact of the club head with the ball, will normally cause the ball to travel along some line other than directly toward the intended target.

Thus, for example, as is well known to golfers, an "outside-in" swing of the golf club will cause a "pulled" or a "sliced" shot depending upon the position of the club face, horizontally, with respect to the path of travel of the club head at the instant of impact with the ball; and an "inside-out" swing of the golf club will cause either a "pushed" or a "hooked" shot of the ball depending upon the position of the club face, horizontally, relative to the path of travel of the club at the instant of impact.

Normally, it is the desire of every golfer, whether he be an expert golfer or not, to develop a "grooved" swing which he can repeatedly make time after time to produce a "perfect" shot. It is an important object of the present invention to afford a novel practice golf club which may be beneficially used by a golfer to practice and develop such a golf swing.

Although, normally, under perfect conditions, the golf swing which a golfer desires to make is the aforementioned usual golf swing which will produce the "perfect" shot, there are certain conditions, such as, for example, when an obstacle is disposed between the golfer and the intended target area, or when a crosswind is blowing, when it is desirable to intentionally make a shot which will "hook" or "slice". It is another important object of the present invention to afford a novel practice golf club, which may be effectively used by both expert and inexpert golfers in the practice and development of golf swings which will intentionally cause such "hooked" or "sliced" golf shots.

Another object of the present invention is to afford a novel practice golf club which may be effectively used by golfers to practice controlling the amount of "hooking" or "slicing" produced when intentional "hooks" or "slices" are struck.

Practice golf clubs have been heretofore known in the art. Certain of them, such as, for example, golf clubs of the type disclosed in U.S. Pat. No. 3,172,688

issued to Mindon V. Blake on Mar. 9, 1965, U.S. Pat. No. 2,158,211 issued to M. Aitken on May 16, 1939, and U.S. Pat. No. 3,106,403 issued to F. J. Kirkman on October 8, 1963, have embodied mechanism in the heads thereof or in attachments to the clubs for indicating the speed of swing of the golf club. Others, such as, for example, clubs of the type shown in U.S. Pat. No. 3,070,373, issued to D. K. Mathews on Dec. 25, 1962, have embodied attachments for golf clubs for indicating the path of travel, and the orientation of the club face during a golf swing. Still others of the clubs heretofore known, such as clubs of the type shown in U.S. Pat. Nos. 1,817,896, issued to J. B. Henderson on Aug. 4, 1931, U.S. Pat. No. 2,787,470, issued to R. W. Barrus on Apr. 2, 1957, and U.S. Pat. No. 3,191,939, issued to F. G. Hooper on June 29, 1965, have embodied indicating mechanism on or in the head of the golf club for indicating the path of travel and the orientation of the front face of the club during a golf swing, with certain clubs, such as the club shown in the aforementioned Aitken U.S. Pat. No. 2,158,211 embodying mechanism for indicating both the speed and orientation or direction of swing.

However, the practice golf clubs heretofore known in the art, commonly have embodied certain inherent disadvantages, such as, for example, affording a golf club of unnatural weight or balance; affording a golf club which was unnatural or displeasing in appearance; affording a golf club which was difficult for the average golfer to use intelligently in the interpretation of the characteristics of his golf swing; affording a golf club which could not be readily adjusted for practicing different types of golf swings; affording a golf club which was inefficient or unreliable in operation; or affording a golf club which was complicated in construction and operation and difficult to manufacture, or the like. It is another important object of the present invention to overcome such disadvantages of practice golf clubs heretofore known in the art.

Another object of the present invention is to afford a novel practice golf club which embodies indicators constituted and arranged in a novel and expeditious manner effective to afford a reliable and readily interpreted indication to the average golfer as to the quality or type of golf swing which he has made.

An object ancillary to the foregoing is to enable such indication to be made in a novel and expeditious manner with the use of no more than two indicators.

Yet another object of the present invention is to afford a novel practice golf club which may be quickly and easily adjusted, in a novel and expeditious manner, for practicing different types of swings, such as, for example, the aforementioned "perfect", "hooked", or "sliced" swings.

A further object of the present invention is to afford a novel practice golf club of the aforementioned type, the weight and balance of which may be quickly and easily changed and adjusted.

Another object of the present invention is to afford a novel practice golf club wherein the indicating mechanism, for indicating the type of golf swing which has been made, is embodied in the head of the club in a novel and expeditious manner.

An object ancillary to the foregoing is to afford a novel practice golf club of the aforementioned type which embodies novel indicating mechanism.

A further object is to afford a novel practice golf club wherein the indicating mechanism embodied in the head of the club is readily accessible for repair or replacement.

Yet another object of the present invention is to afford a novel practice golf club which is practical and efficient in operation and which may be readily and economically produced commercially.

Other and further objects of the present invention will be apparent from the following description and claims and are illustrated in the accompanying drawings which, by way of illustration, show a preferred embodiment of the present invention and the principles thereof and what I now consider to be the best mode in which I have contemplated applying these principles. Other embodiments of the invention embodying the same or equivalent principles may be used and structural changes may be made as desired by those skilled in the art without departing from the present invention and the purview of the appended claims.

DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a front perspective view of a practice golf club embodying the principles of the present invention;

FIG. 2 is a top view of the head of the club shown in FIG. 1, with the shaft thereof broken away;

FIG. 3 is a top view of the head shown in FIG. 2, with the cover thereof removed;

FIG. 4 is a transverse sectional view of the head shown in FIG. 2, taken substantially along the line 4—4 in FIG. 3;

FIG. 5 is a section view of the head shown in FIG. 2, taken substantially along the line 5—5 in FIG. 3;

FIG. 6 is a transverse sectional view of the head shown in FIG. 2, taken substantially along the line 6—6 in FIG. 3;

FIG. 7 is a detail sectional view with a portion of the head shown in FIG. 2, taken substantially along the line 7—7 in FIG. 3;

FIG. 8 is an exploded, fragmentary perspective view of a portion of the mechanism shown in FIG. 3; and

FIG. 9 to 14, inclusive, are diagrammatic top views of the golf club head shown in FIG. 2, illustrating various types of swings of the golf club.

DESCRIPTION OF THE EMBODIMENT SHOWN HEREIN

A golf club 1, embodying the principles of the present invention is shown in the drawings to illustrate the presently preferred embodiment of the present invention.

The golf club 1, like the usual golf club, embodies an elongated shaft 2 having a hand grip 3 on the upper end portion 4 thereof, and a head 5 on the lower end portion 6 thereof. However, preferably, the shaft 2 is somewhat shorter than the usual golf club of the same type, so as to insure that a golfer taking a practice swing therewith will not strike the ground or floor at the bottom of the swing.

The shaft may be made of any suitable material, such as, for example, steel, and preferably is of tapered construction, diminishing in cross sectional size throughout its length from the hand grip 3 to the lower end of the shaft. The lower end portion 6 of the shaft 2 is disposed in the neck or hosel 7 of the head 5 and is secured therein by suitable means such as a screw or bolt 8 ex-

tending through a partition wall 9 in the hosel 7 and threaded into the lower end portion 6 of the shaft 2.

The head 5 is hollow in construction and embodies a body portion 10 of which the hosel 7 forms a part.

The body portion 10 may be made of any suitable material, but, preferably, is made of a suitable impact-resistant plastic material such as, for example, high impact polystyrene, or the like. The body portion 10 embodies a lower portion or base 11 and an upper portion or cover 12, FIG. 5, which, when the club 1 is in assembled condition, are secured together by a bolt 13.

The base 11 embodies an upwardly and rearwardly projecting neck 14, which forms part of the hosel 7, and the wall 9, through which the bolt 8 projects, is embodied in the neck 14. The lower end portion 6 of the club shaft 2, preferably, is disposed in the neck 14 with a relatively snug but freely slidable fit.

The cover 12 of the head 5 also embodies a neck 15, which forms part of the hosel 7, FIG. 5. When the club 1 is in assembled position, the neck 15 is disposed around the lower end portion 6 of the shaft 2, outwardly of the neck 14, as shown in solid lines in FIG. 5. When the bolt 13 is removed, the cover 12 of the body portion 10 may be moved upwardly along the shaft 2, as illustrated in broken lines in FIG. 5, to thereby uncover the top of the base 11 of the body 10 for access to the interior thereof.

A vertically extending rib 16 having a recess 17 in the free edge thereof and facing toward the heel 18, is formed in the base 11 of the head 5, at the toe portion 19 thereof, in inwardly spaced relation to the wall defining the front face 20 of the head 5, FIG. 3. A similar, elongated vertically extending rib 21 projects rearwardly from the front face 20, the rib 21 having a longitudinally extending recess 22 facing toward the toe 19. A mounting plate 23, made of suitable electrical insulating material such as, for example, a suitable plastic material such as high impact polystyrene, extends between, and is removably mounted in the ribs 16 and 21, with its opposite end edges disposed in the recesses 17 and 22, respectively. An upwardly and forwardly opening socket 24 is formed in the mounting plate 23 adjacent the rib 21 for releasably receiving a light bulb 25 with a relatively snug frictional fit. Two contact strips 26 and 27 are mounted on the mounting plate 23 in overlying relation to the recess 24. The contact strip 27 has an inwardly projecting ledge or shoulder 28 thereon, FIG. 8, and the contact strips 26 and 27 are disposed in such position that the strip 26 engages the outer sheath 29 of the bulb 25 and the shoulder 28 engages the end contact 30 of the bulb 25 when the latter is disposed in operative position in the socket 24.

An upstanding partition wall of rib 31 projects rearwardly from the toe 19 in the base 11 in substantially parallel spaced relation to the mounting plate 23, and in spaced, adjacent relation to the rear edge 32 of the head 5. The partition wall 31 has an upwardly opening recess 33, FIG. 3, which is disposed in alignment with a similar upwardly opening recess 34, FIGS. 5 and 8, in the mounting plate 23. The recesses 33 and 34 are of such size and configuration, and are so constituted and arranged relative to each other that two batteries 35 and 36 of a suitable type, such as, for example, elongated dry cell batteries of the type commonly used in flashlights, and the like, may be disposed therein in stacked, parallel relation to each other, with the batteries extending horizontally between the contact strips 26

and 27 at the front of the club head 5 and a contact strip 37, mounted in the base 11 in upwardly extending position between the partition wall 31 and the rear edge portion 32 of the head 5. An elongated rib 38, FIG. 6, projects downwardly from the cover 12 of the head 5 and extends rearwardly from the toe 19 of the club 1 into position wherein it is disposed in closely overlying relation to the battery 35 when the club 1 is in assembled condition, for holding the batteries 35 and 36 in the slots 33 and 34.

The contact strip 37 preferably is so disposed in the base 11 of the head 5 that when it is disposed in normal, unactuated position, with the batteries 35 and 36 disposed in engagement with the contact strips 26 and 27, respectively, the contact strip 37 is disposed out of engagement with the battery 35, as shown in solid lines in FIG. 6. A suitable, manually operable actuating member or control, such as a screw 39 is threadedly mounted in the rear wall portion of the base 11 in such position that when the screw 39 is advanced inwardly from its normal unactuated position to its actuated position, it is effective to press the upper end portion of the contact strip 37 inwardly, into engagement with the adjacent end of the battery 35. With this construction, it will be seen that when the screw 39 is disposed in unactuated position, so that the contact 37 is disposed in spaced relation to the battery 35, the bulb 25 remains unenergized, but when the screw 39 is disposed in actuated position, wherein it is effective to engage the contact strip 37 with the adjacent ends of both of the batteries 35 and 36, as shown in broken lines in FIG. 6, a circuit is completed from the batteries 35 and 36 through the bulb 25 to thereby energize the latter and cause it to be illuminated.

The bulb 25 is mounted in the base 11 in upright position, with the upper end thereof preferably disposed in such position that, when the cover 12 of the head 5 is disposed in operative position on the base 11, the bulb 25 is disposed in immediately underlying, vertical alignment with an aperture 40 extending through the front portion of the top wall of the cover 12, FIG. 3. A translucent lens or cover 41 is mounted in the aperture 40, and the bulb 25 and the lens 41, preferably, are of the type which are effective to project light from the energized bulb 25 through the aperture 40 in such a manner that the light rays pass upwardly therefrom in an expanding, substantially cone shape, which, at the height at which a golfers' eyes are disposed above the club head 5 during a normal golf swing, affords a light pattern having a diameter of somewhere in the range of 9 to 18 inches. The aperture 40 preferably is red in color, round in shape and relatively small in diameter, preferably having a diameter of not substantially less than one-sixteenth of an inch and not substantially more than three-sixteenths of an inch and, preferably, in the nature of one-eighth of an inch.

Two elongated slots or apertures 42 and 43 are formed in the cover 17 of the head 5 in longitudinal alignment with each other on opposite sides of the aperture 40, and in parallel, inwardly spaced relation to the front face 20 of the head 5. Two covers or lenses 44 and 45 are mounted in the apertures 42 and 43, respectively, and, preferably, are translucent, and substantially closer to opaque than the lens 41, as will be discussed in greater detail presently. The lenses 44 and 45 are also colored and preferably are of a color, such as, for example, yellow, which is readily distinguished

from and which will not be confused with the color of the lens 41.

An elongated lever 46 is rotatably mounted on a pin or bolt 47 extending through one end thereof and mounted in the upper end of a boss 48' disposed in rearwardly spaced relation to the mounting plate 23 in the base 11 of the head 5. The lever is disposed between the bolt 47 and the hosel 7, and has an end portion 48 projecting outwardly through a slot 49 formed in the rear edge portion 32 of the head 5 at the junction of the base 11 and the cover 12 thereof. The lever 46 has an opening 50 extending vertically therethrough in relatively closely adjacent, but inwardly spaced relation to the rear edge portion 32 of the head 5, for a purpose which will be discussed in greater detail presently.

An elongated, flexible light transmitting member 51, extends between the bulb 25 and the opening 50 in the lever 46. The light transmitting member 51 preferably is in the form of a flexible cylindrical member or rod, made of a suitable material, such as, for example, an acrylic resin such as methyl methacrylate resin, that has the characteristic of being capable of transmitting light longitudinally thereof.

One end 52 of the rod 51 is mounted in a sleeve 53 mounted on the mounting plate 23, with the end 52 being disposed in closely adjacent, facing relation to the bulb 25 so that when the bulb 25 is illuminated the end 52 picks up light for transmission through the rod 51. The other end 54 of the rod 51 is mounted in the opening 50 in the lever 46, being inserted from the bottom of the opening 50 so that it is disposed in upwardly facing relation to the head 5. A transparent or translucent cover or lens 55 is mounted on the end 54 of the rod 51, and preferably is of a color contrasting relatively sharply with the color of the lens 41. I prefer that, with the lens 41 being red in color, the lens 55 be green in color, although, as will be appreciated by those skilled in the art, this is merely by way of illustration of the preferred form of the embodiment of the present invention, and other colors may be used for the lenses 41, 44, 45 and 55 without departing from the broader aspects of the present invention and the purview of the appended claims.

An elongated, arcuate slot 56 extends through the cover 17 of the head 5. The slot 56 is radially disposed relative to the pin 47, and the lens 55 is disposed therein with a relatively snug but freely slidable fit for movement back and forth along the slot 56 during oscillation of the lever 46 around the pin 47, for a purpose which will be discussed in greater detail presently. The lens 55, like the lens 41, preferably, is relative small in diameter, preferably being not substantially less than one-sixteenth of an inch or more than three-sixteenths of an inch in diameter and preferably being in the nature of one-eighth of an inch in diameter.

The lens 55 and the slot 56 preferably are so positioned in the head 5 that, with the bulb 25 illuminated, when the lens 55 is disposed in a predetermined position, in spaced relation to the opposite ends of the slot 56, such as, for example, the position A shown in broken lines in FIG. 2, and a golfing swing is made with the club 1 wherein the face 20 is horizontal perpendicular to the line between the ball and the intended target area and the path of travel of the club head 5 at the moment of impact of the ball is along the line between the ball and the intended target area, so as to produce the aforementioned "perfect" swing, the indicators af-

forded by the lenses 41 and 55 appear to the eyes of the golfer making the swing to be traveling along the same path of travel. Preferably, the lenses 41 and 55 are so disposed relative to each other, when the lens 55 is disposed in this last mentioned position, that if the path of travel of the club head, and the aforementioned line between the ball and the intended target area is along the line 57, as shown in FIG. 9, the aforementioned paths of travel of the lenses 41 and 55 are also along the line 57.

On the other hand, with the lenses 41 and 55 disposed in the aforementioned position relative to each other, if, during a swing of the club 1, they appeared to the golfer to travel in the same line, but in a line 58 disposed clockwise to the line 57, as illustrated in FIG. 10, this would mean that the golfer had made an "inside-out" swing along the line 58 with the club face 22 disposed horizontally perpendicular to the line of swing 58, thereby resulting in a "pushed" shot; and if the line of travel of the lenses 41 and 55 was along a line disposed counterclockwise to the line 57, such as, for example, along the line 59 shown in FIG. 11, this would mean that the golf swing has been an "outside-in" swing with the club face 22 horizontally perpendicular to the line of swing 59, which would result in a "pulled" shot.

If, on the other hand, with the lenses 41 and 55 disposed in the aforementioned position in the club head 5, wherein they appear to travel along the same path of travel during a "perfect" shot, if, during a club swing, they appear to travel along parallel paths, and at an angle to the line 57, this indicates to the golfer that the golf swing has been such as to cause either a "sliced" or a "hooked" shot. Thus, for example, if the paths of travel 60 and 61 of the lenses 41 and 55, respectively, appear to be parallel, but at an angle opening counterclockwise to the line 57, as shown in FIG. 12, this would indicate that the golfer had made an "outside-in" swing, cutting the club face 20 across the ball in a direction normally effective to cause a "sliced" shot; and if the paths of travel 62 and 63 of the lenses 41 and 55 were at a clockwise opening angle to the line 57, as shown in FIG. 13, this would indicate that the golfer had made an "inside-out" swing, cutting the club face 22 across the ball in a direction normally effective to cause a "hooked" shot.

There are, of course, other variations and combinations in swings and club head positions which will produce other readily interpreted paths of travel for the indicators 41 and 55. For example a swing along the line 57, but with the club head disposed in the position shown in FIGS. 10 or 11, will normally produce a "pushed" or "sliced" shot or a "pulled" or "hooked" shot, respectively, and be indicated by the lenses 41 and 55 traveling along paths parallel to each other and to the line 57, with the path of the lens 57 being further from or closer to the toe 19, respectively, than the path of the lens 41.

Thus, it will be seen that the indicators afforded by the lenses 41 and 55 when they are disposed in the last mentioned position relative to each other in the club head 5, are effective to show a golfer whether he has made a proper swing for the aforementioned "perfect" shot, and, if he has not, to show him the type of error that he has made in his swing.

As previously mentioned, it is sometimes desirable for a golfer, playing a game of golf, to hit an intentional

"slice" or "hook". Such conditions most commonly arise when a golfer finds himself "stymied", that is, with an obstacle, such as a tree, or the like, directly in the line between his ball and the intended target area, or when the wind conditions are such that, in order to place the ball on the intended target area, it is necessary to correct for wind drift, and the like. The present invention affords a novel and highly practical practice golf club for practicing such intentional "slices" and "hooks". Thus, for example, if the line between the ball and the intended target area is along the aforementioned line 57, and the previously mentioned position of the lens 55 is the position A, shown in FIGS. 9-13, wherein it is aligned with the lens 41 along the line 57, with the club face 22 disposed horizontally perpendicular to the line 57, the lever 46 may be manually moved by actuating the outer end portion 48 thereof toward the toe 19 or the heel 18 of the club head 5, to thereby correspondingly dispose the lens 55 toward the toe of the club in a position, such as the position B, or toward the heel of the club, in a position, such as the position C, respectively, shown in FIG. 14. The position B is for practicing an "outside-in" or "slicing" swing, and the position C is for practicing an "inside-out" or "hooking" swing, as will now be discussed in greater detail.

Thus, for example, it will be seen that with the lens 55 disposed in the position B, and with the club face 22 disposed horizontally perpendicular to the line 57, if the golfer swings the club in an "outside-in" path wherein the lenses 41 and 55 appear to travel along the same line, such as the line 64, FIG. 14, a "slicing" type of swing has been produced. By adjusting the position of the lens 55 along the slot 49 a greater or lesser distance from the position A toward the toe 19, the amount of "slice" produced by an aligned swing of the lenses 41 and 45 may be controlled so that the golfer may effectively practice, and get the "feel" of the types of swing which will produce various degrees of a controlled "slice".

Similarly, when the lens 55 is disposed on the other side of the position A, toward the heel 18 of the club, such as, for example, in the position C shown in FIG. 14, if the golfer swings the club 1 in such a manner as to cause the lenses 41 and 55 to appear to move along the same line 65, FIG. 14, with the club face 22 disposed horizontally perpendicular to the line 57, he knows that he has made an "inside out" swing under conditions which are normally effective to cause a "hook". Again, by adjusting the position C further or closer to the position A, the swings necessary for various amounts of "hook" may be effectively practiced.

It will be remembered that in the preferred form of the practice golf club 1 shown in the drawings, the lenses 44 and 45 are disposed in relatively closely adjacent, parallel relation to the front face 20 of the head 5. These afford a visual aid to the golfer in properly positioning the club face 20 when he is "addressing" the ball. This is particularly effective when the practice golf club 1 is being used in relatively dim light, such as, for example, if it is being used indoors wherein the room illumination is such that it might be difficult to clearly see the club face 22 for properly aligning the latter with the intended target area. In addition, even when the practice club 1 is being used under conditions wherein the club face 22 may be readily seen, the indicators afforded by the elongated slots 42 and 43 and the lenses 44 and 45 act as a reminder to the golfer of the impor-

9 tance of properly aligning the club face 22 when he is addressing the ball in preparation for making a golfing swing. Preferably the lenses 44 and 45 are translucent to an extent that relatively little light will emanate therefrom, as compared to the light from the lenses 41 and 55, so as not to seriously detract from the visibility of the latter during a golf swing.

Preferably, a scale 66 is afforded on the upper face of the club head 5, adjacent the slot 56, with the scale having various spaced indicia, such as the lines 67, FIG. 2, for indicating the position of the lens 55 relative to the position A of the club 1. With such a scale, a permanent indicator is afforded the individual golfer for showing him the proper setting of the lens 55 for use in his practicing of various types of swings ranging from the swing effective to afford a "perfect" shot to swings affording various degrees of controlled "slices" or "hooks".

Although, if desired, the practice golf club 1 may be constructed with a length corresponding to the length of the particular club which it is intended to emulate, such as, for example, a driver, a number three wood, or the like, I prefer that the club be made somewhat shorter, such as, for example, 1½ or 2 inches shorter, than the corresponding actual club which would be used in the actual playing of a game of golf, so as to aid in assuring that the golfer will not strike the ground or floor, while making a golfing swing with the club, so as not to put excessive shock on the mechanism contained within the head 5.

Similarly, it is preferred that the practice club 1 not be used to actually strike a regulation golf ball, although it may be, and, in fact, it is highly desirable that it is used with a suitable "practice" ball, such as, for example, the hollow, light plastic balls readily available on the market, and which, if the club 1 is shorter than the regular club of the type it represents, may be "teed-up" at a higher level to compensate for the shorter club. The latter balls have a relatively short range of flight, and, normally, have an exaggerated path of flight when struck in such a manner as to produce a "hook" or "slice", or the like. As a result, use of the practice club 1, with such a practice ball, affords an effective visual confirmation to the golfer using the club that the swing that he made was the type of swing which the paths of travel of the lenses 41 and 55 indicated to him that he had made.

The head 5 of the club 1 is hollow and, as previously mentioned, preferably is made of a relatively light material, such as, for example, a suitable plastic such as high impact polystyrene. The contents of the head 5, such as, for example, the batteries 35 and 36, the mounting plate 23, and the like, of course, add a certain amount of weight to the head 5. However, I prefer to be able to adjust the overall weight of the head 5 and to be able to adjust the balance of the club 5. For this purpose, a sole plate 68 is mounted in the lower face 69 of the base 11 of the club head 5. As may be seen in FIGS. 4 and 5, in the preferred form of the club 1, the sole plate 68 is disposed in the lower face 69 of the base 11, in inwardly spaced relation to the outer peripheral edges thereof, and is secured thereto by a single, readily removable fastener in the form of a bolt 70, FIGS. 3 and 7. With this construction, sole plates of various mass and weight may be quickly and easily substituted for adjusting the overall weight of the head 5, and for balancing the weight thereof in accordance

with the type of golfer for which the particular club is intended and in accordance with the desires of that particular golfer.

From the foregoing it will be seen that the present invention affords a novel and highly practical practice golf club.

In addition, it will be seen that the present invention affords a novel practice golf club which a golfer may effectively use not only to "groove" his swing, which will produce a "perfect" shot, but, which he can effectively use to produce a "grooved" swing for producing various degrees of "hooks" or "slices".

Also, it will be seen that the present invention affords a novel and practical practice golf club which is practical and efficient in construction and operation, and which may be readily and economically produced commercially.

Thus, while I have illustrated and described the preferred embodiment of my invention, it is to be understood that this is capable of variation and modification, and I therefore do not wish to be limited to the precise details set forth, but desire to avail myself of such changes and alterations as fall within the purview of the following claims.

I claim:

1. A practice golf club comprising
 - a. an elongated shaft
 - b. a head mounted on one end of said shaft
 - c. two light emitting indicator members
 1. carried by said head within the peripheral border thereof, and
 2. in position to be visible on said head to a golfer during a golf swing by said golfer,
 - d. said indicator members having a position on said head relative to each other so as to appear to said golfer to be traveling along the same path of travel at the lower-most portion of such a golf swing when
 1. the front face of said head is horizontally perpendicular to the path of travel of said head, and
 2. the path of travel of said head is directly at the target area at said lowermost portion of said swing.
2. A practice golf club as defined in claim 1, and which includes
 - a. means in said head for energizing said indicator members.
3. A practice golf club as defined in claim 1, and in which
 - a. one of said indicator members is adjustably movable from said position toward and away from the toe of said head.
4. A practice golf club comprising
 - a. an elongated shaft having
 1. an upper end, and
 2. a lower end,
 - b. a head mounted on said lower end and including
 1. a front face,
 2. a rear edge,
 3. an upper face,
 4. a lower face, and
 5. a toe
 - c. two light emitting indicators carried in said head and visible on said upper face for indicating the position and path of travel of said front face during a golfing swing of said club,
 - d. said indicators having one position relative to each other wherein they will travel along what appears

to the person making the swing as the same path of travel when said front face is perpendicular to the intended line of flight of a golf ball and said club head travels along said line of flight during said golfing swing.

5. A practice golf club as defined in claim 4, and in which

a. one of said indicators is movable along said upper face transversely to the line between said indicators.

6. A practice golf club as defined in claim 4, and which includes

a. means mounted in said head for energizing said indicators.

7. A practice golf club as defined in claim 4, and

a. which includes an elongated lever pivotally mounted at one end in said head for swinging movement of the other end thereof toward and away from said toe, and

b. in which one of said indicators is mounted on said other end of said lever and is movable therewith.

8. A practice golf club as defined in claim 7, and in which

a. said other end of said lever projects outwardly through a slot in said head and is movable along said slot for moving said one indicator relative to the other of said indicators.

9. A practice golf club as defined in claim 8, and which includes

a. a second slot along which said one indicator is movable, and

b. a scale disposed adjacent to said second slot for indicating the position of said one indicator relative to said other indicator.

10. A practice golf club as defined in claim 7, and in which

a. the other of said indicators comprises an electrically energized light bulb disposed in said head between said upper and lower faces, and

b. said one indicator comprises the end of a light transmitting tubular member disposed in said head in position to transmit light received from said bulb outwardly through said upper face.

11. A practice golf club as defined in claim 10, and which includes

a. a battery mounted in said head between said upper and lower faces for energizing said bulb.

12. A practice golf club as defined in claim 11, and a. which includes a switch operatively connected between said bulb and said battery,

b. said switch being mounted in said head and having a control portion projecting outwardly from said head.

13. A practice golf club as defined in claim 11, and which includes

a. a plate removably mounted in said lower face.

14. A practice golf club as defined in claim 4, and in which

a. said upper face is

- 1. releasably secured to said lower face, and
2. movable along said shaft toward and away from said lower face.

15. A practice golf club comprising

a. an elongated shaft having

- 1. an upper end, and
2. a lower end,

b. a head mounted on said lower end and including

- 1. a front face,
2. a rear edge,
3. an upper face, and
4. a toe, and

c. two illuminated indicator means, mounted in said head and visible from above said upper face, for indicating the position and path travel of said front face during a golfing swing of said club,

d. one of said indicator means being disposed closer to said front face than to said rear edge,

e. the other of said indicator means being disposed closer to said rear edge than to said front face, and

f. supporting means

- 1. mounted in said head in supporting relation to said other indicator means, and
2. having a portion projecting outwardly from said head,

g. said other indicator means having one position relative to said one indicator means wherein said one and other indicator means appear to a golfer making a golfing swing with said club to be traveling along the same path of travel at the lowermost portion of such a golf swing when said front face is horizontally perpendicular to the path of travel of said head and the path of travel of said head is directly along the intended path of flight of a golf ball at said lowermost portion of such a golf swing, and

h. said portion of said supporting means is manually movable from exteriorly of said head for moving said other indicator means toward and away from said toe transversely to the line between said one and other indicator means.

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