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PUTTER WITH ALIGNMENT FACILITATING AND WEIGHTING MEANS

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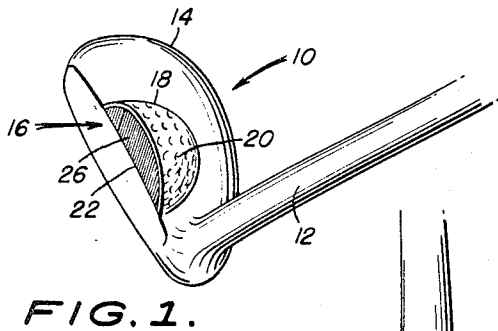


FIG. 1.

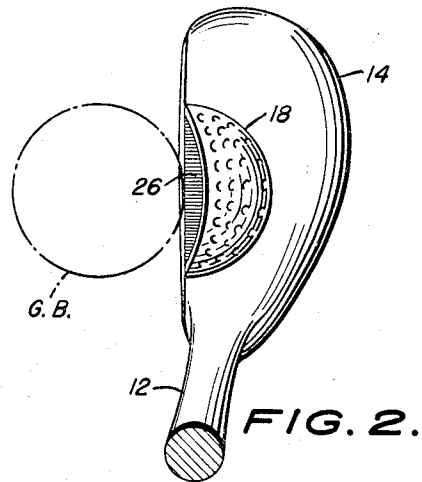


FIG. 2.

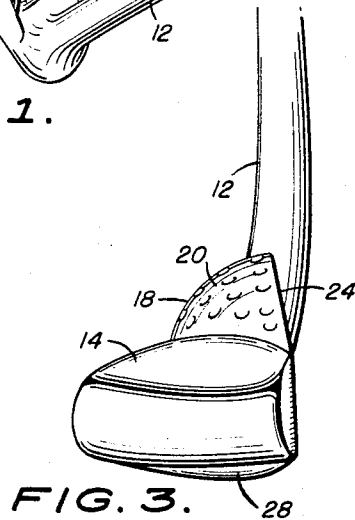


FIG. 3.

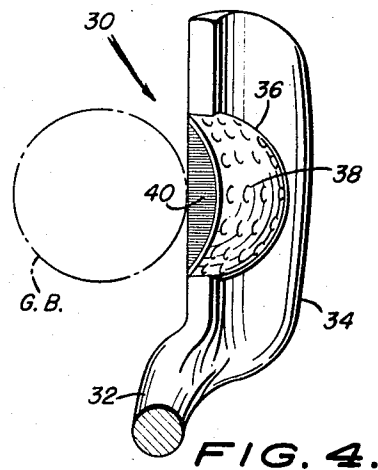


FIG. 4.

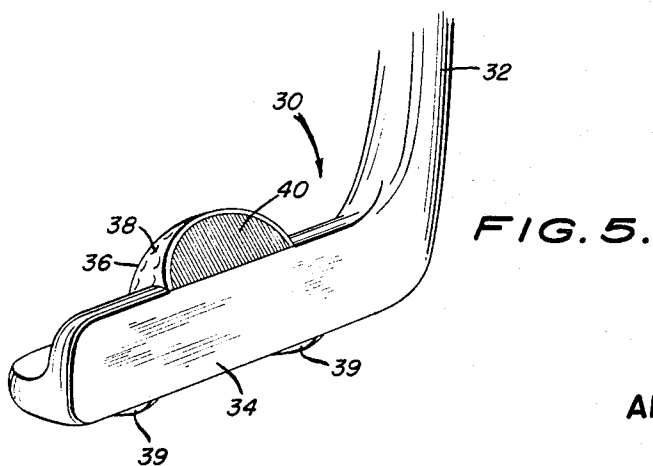


FIG. 5.

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PUTTER WITH ALIGNMENT FACILITATING AND WEIGHTING MEANS

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ABSTRACT OF THE DISCLOSURE

A putter is provided with a weighted spherical section of the same shape and size as a golf ball. The spherical section is rigid with the top of the putter head and positioned on a line where the putter contacts the ball. The spherical section is cut at a rearward angle to a vertical plane so that when viewed from above the cut sector presents an alignment indicia.

This improvement relates to the art of golf clubs, and more particularly to putters which include improved means for facilitating the alignment of the club for stroking the ball and for weighting the club head.

In the art of golf numerous constructions have been proposed for golf clubs to weight the club head and to allegedly improve alignment of the club with the ball prior to stroking the same. However, as shown by the lack of significant adoption of these club constructions by the average golfer, it could be said that the prior art arrangements are less than completely successful. Accordingly, it is the object of this invention to provide a golf club with an alignment arrangement and combined club head weighting means which will hold the golfer's attention and will utilize the golfer's natural instinct to cause him to align the ball, club head and target quickly and positively.

True or square alignment of a golf club face is difficult to obtain and to repeat with accuracy. Lack of assurance creates tension and anxiety which causes the golfer to lose concentration and/or become taut. This will cause a golfer to have faulty timing in his stroke and erratic motion in his swing, which can cause the ball to be pushed, pulled, topped and other undesirable results. This invention provides alignment means using an alignment image having the exact spherical profile and diameter of the golf ball.

Visual alignment by aligning the profile of two like objects, such as is accomplished by the putter of this invention, intensifies a golfer's concentration to such a degree that it relaxes a golfer's faculties as required for accurate putting. Use of the putter of this invention will minimize or eliminate existing distortion of the peripheral vision. A golfer encounters this when putting in the usual style with the shoulders parallel to a straight line from ball to cup.

The golf club of this invention has concentrated weight exactly behind and above the percussion area or "sweet-spot" of club. This weight distribution principle permits a more solid blow to be delivered to ball by club face at impact. A smoother pendulum "swing feel" is created to allow a free release of putter head to back of ball by golfer when putting with the putter of this invention. A more true and longer roll of the ball is produced by such an application of weight distribution.

Other objects of the invention will be pointed out in the following description and claims and illustrated in the accompanying drawings, which disclose, by way of example, the principle of the invention and the best mode which has been contemplated of applying that principle.

In the drawings:

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FIG. 1 is a perspective view of this invention as applied to a mallet head putter;

FIG. 2 is a top plan view of the mallet head putter of FIG. 1 when properly positioned in alignment with a ball;

FIG. 3 is an end elevation view of the putter of FIG. 1;

FIG. 4 is a top plan view of this invention as applied to a blade type putter;

FIG. 5 is a perspective view of the blade type putter including the principles of this invention;

Referring to the drawings, FIGS. 1-3 illustrate the principles of this invention as applied to mallet head putter. In these figures a golf club 10 is a mallet head putter type and it includes the usual club shaft 12 and club head 14. The club and ball alignment facilitating means combined with weighting means, which is the subject of this invention, is indicated generally at 16 and includes a weighted spherical section 18 which may be cast brass or the like having an external surface 20 preferably simulating the cover of a golf ball and always having substantially the same size and shape, namely 1.68 inches diameter the same as a regulation golf ball. The spherical section 18 is rigidly attached at 22 to the head 12, or may be formed integrally therewith. It is important that the point of attachment is generally at the percussion where the club would ordinarily meet the golf ball GB in a manner shown in FIG. 2. As noted in FIGURES 1-4, the spherical section defines a hemispherical mass when viewed from above.

The spherical section is sliced or cut to provide a face 24 which when viewed from above as shown in FIG. 2 appears as a sector of a circle 26. This section may be darkened by any suitable means to provide a contrast against the white of the ball and the green of the grass to facilitate alignment. The curvature of the circular section 26, the curvature of the ball and the curvature of the target, if it is the edge of a cup in a green, will all be in alignment. The curved circle of the sector 26, the curved surface 20 of the spherical section 18, and the curved surface of the ball (see FIGURE 2) tend to cause the golfer by his instinct and human nature to align the club properly with the ball. If desired, indicia sector 26 could be continued on the club face below the top of the putter to provide a complete circular indicia of golf ball diameter.

As shown in FIGS. 4 and 5, the principles of this invention can also be applied to a blade type putter 30. The putter includes the usual shaft 32 and head 34 to which this invention is applied. A spherical weighted section 36 is formed integrally with or rigidly attached to the blade head at the point where the blade would meet the ball as shown in FIG. 4. The section 36 has an external surface 38 simulating the cover of the ball and is sliced to provide a sector of a circle 40 when viewed from above as shown in FIG. 4. FIG. 5 shows a front perspective of the club. The principles of this invention are also applicable to other shapes of putters, for example a stirrup shape putter having the toe and heel of the club face both attached to the shaft.

In order to prevent the club from digging too deeply into the ground during a stroke pontoon like projection or deflection, skids are provided on the bottom of the club head. These are shown as projection 28 in FIG. 3, and projections 39, 39 in FIG. 5. These projections or deflection skids may be pontoon shaped as shown or they may be other various shapes to deflect the club head sole and edge from hitting too "fat" i.e. taking too large a divot. Although two deflectors are shown there may be more of them on the sole of the club.

In all of the embodiments the weighted spherical section is positioned on the club head in alignment at the position the club head will move through the ball position to provide more weight at the "sweet-spot"

or percussion center of the club head. Further, the external surface simulating a golf ball cover is aesthetically pleasing. Most important, the sector of a circle used for alignment purposes with either the putters or irons provides a pair of circular surfaces when considered with the surface of the ball to be addressed by the club and aligned to the center of these two circles should point toward the target. If the target is a cup, there in effect are three circular surfaces having their centers on a line between the center of the cup, the center of the ball and the center of the alignment circle on the club head.

The visual aid which provides exact image, contour or silhouette alignment means positioned at the proper location, i.e. the so-called "sweet-spot," has the following advantages:

A golfer can align club face of the putter to the ball quicker and true than with conventional putters.

A golfer feels more confident and assured that ball is properly aligned to sweet-spot of club face. Slightest deviation can be easily observed by golfer before he starts club swing.

A golfer's concentration is intensified so that he has only one prime object to think about at the time—alignment of the exact image on the club to back side of ball to be struck. This means of alignment, permits the golfer to visually check for "squareness" of club face to ball and target. Alignment by use of like objects will minimize if not eliminate any distortion to a golfer's vision (perspective, depth or peripheral).

A golfer will automatically be sighting or aligning bottom edge of club head. Golfers often mistakenly use top edge of club face, which tilts considerably depending on selection of a club, to align or square-up to ball.

Use of the alignment arrangement will permit a golfer to acquire confidence in his swing much quicker than other clubs. Consequently, greater skill and ability will be attained in a shorter period of time than required by other clubs.

Having an image on the club face permits a golfer to get a better "feel" of the required or desired path the club head must follow—both on the backswing and downswing.

Finally, a very important requirement for good golf. A golfer will be forced to keep his club face cleaned so that he can use the visual means, thereby getting the most out of his game by good alignment and good solid contact of club face to ball.

While the invention has been particularly shown and

described with reference to preferred embodiments thereof, it will be understood by those skilled in the art that the foregoing and other changes in form and details may be made therein without departing from the spirit and scope of the invention.

What is claimed is:

1. In a golf club of the putter type, a club shaft and a putter head with its face in a substantially vertical plane, improved ball-club head alignment facilitating and weighting means on the club head, such means comprising, a weighted spherical section including a generally spherical surface having the same diameter as a golf ball and when viewed from above defining essentially a hemispherical mass, the section being rigid with the top surface of the putter head and on a line through the head where the head meets the ball, and an alignment indicia on the spherical section, the alignment indicia provided by the spherical section being cut at a rearward angle to the vertical plane so that the surface of the cut presents a sector of a circle, the circle sector having a diameter the same as a golf ball so that when viewed from above by a golfer's eye with the curvature of the circle, the curvature of the spherical surface, and the curvature of the ball being slightly spaced from one another and the center of the curvatures being on a line extending toward the target, the club is properly positioned for stroking the ball.

2. A golf club as defined in claim 1 wherein the external surface of the spherical weighted section includes dimples simulating a golf ball cover.

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