Dec. 22, 1970 D. T. PELZ 3,549,300

GOLF CLUB WITH USER ALIGNING MARKS

Filed July 11, 1967

Fig. 1.

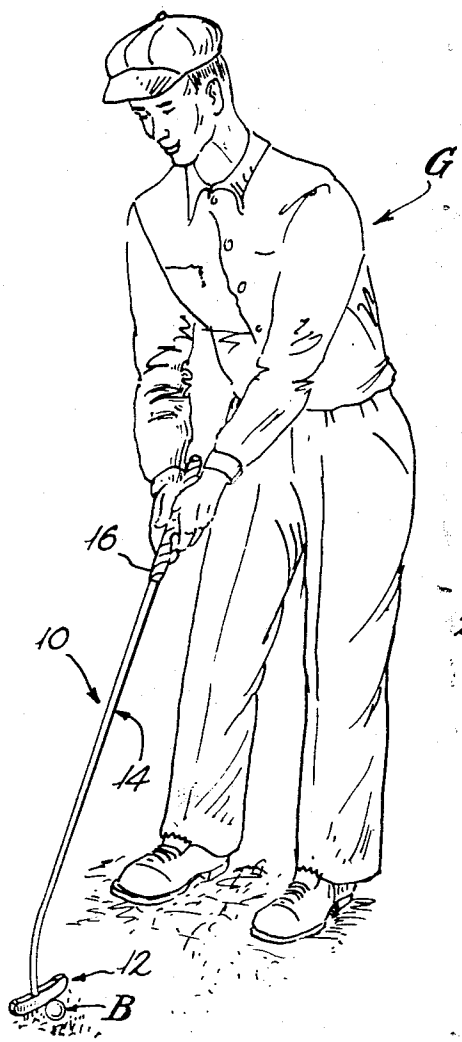



Fig. 2.

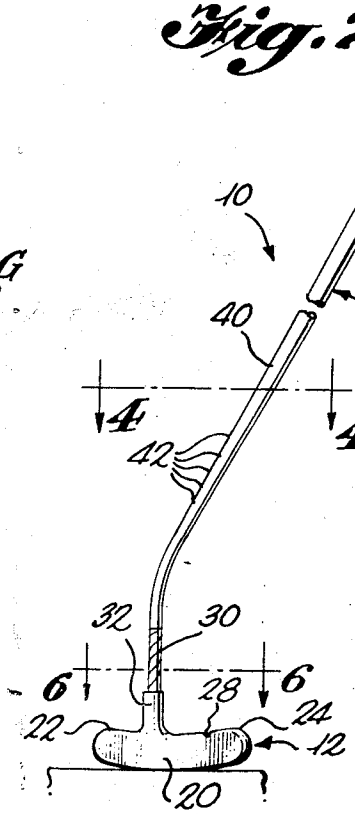



Fig. 3.

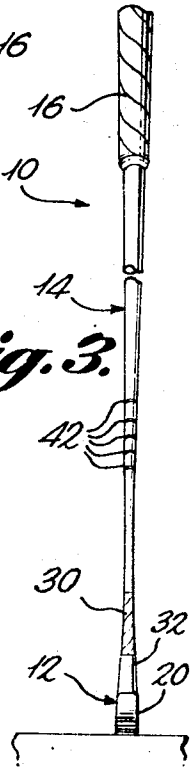



Fig. 4.

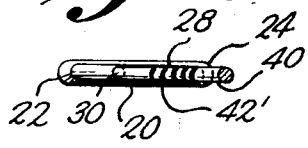



Fig. 5.

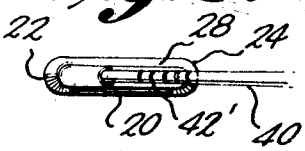



Fig. 6.

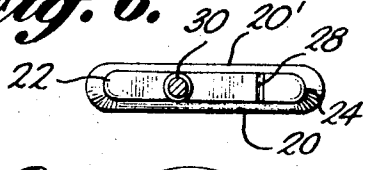



Fig. 7.

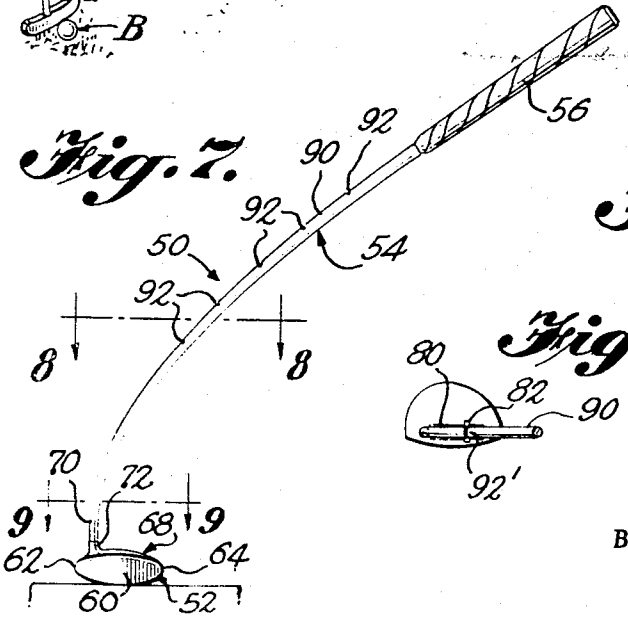
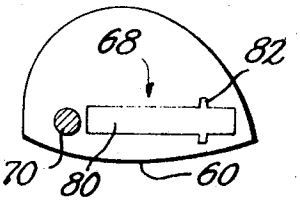



Fig. 8.




Fig. 9.

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# GOLF CLUB WITH USER ALIGNING MARKS

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Int. Cl. A63b 53/00
U.S. Cl. 273—162 7 Claims

## ABSTRACT OF THE DISCLOSURE

A golf club includes a shaft extending upward and toward the golfer from adjacent the toe portion of the head and alignment members formed on the top portion of the club head and on a portion of the club shaft, these alignment members being visually alignable with one another so that the golf club can be properly aligned with respect to the golfer in a direction fore and aft of the line of the stroke as well as perpendicular to the line of the stroke so that the relative position of the golfer and the golf club will be the same each time the golf club is used.

## BACKGROUND OF THE INVENTION

The present invention relates to a club used in the game of golf and may comprise an iron, a wood or a putter.

In general, the invention relates to a means for properly aligning the club and for indexing the club with respect to a golfer's body to obtain the same relative relationship between the golfer's body and the club each time the club is used.

In order to accomplish the purposes of the present invention, cooperating aligning means is provided on the club head and the shaft of the golf club.

A prior U.S. patent discloses an arrangement employed with a putter having a striking face extending substantially the entire length of the club head in a vertical plane which is substantially parallel with the axis of the shaft of the club. With this arrangement, wherein the club head shaft joins with the toe of the club, the shaft extends between the eyes of the player and the club head and may be utilized as an elongated sighting element.

The principle employed in the aforementioned U.S. patent is applicable only in cases where the striking face of the club extends substantially the entire length of the club and is disposed in a vertical plane which is substantially parallel with the axis of the shaft. This may be true of certain types of putters, but this arrangement would not be satisfactory with irons having a certain degree of loft or with woods which have not only a certain degree of loft on the striking faces thereof, but which also have a somewhat convex curvature.

It is apparent that in those instances wherein the club head is provided with a striking face which is not disposed in a vertical plane substantially parallel with the axis of the shaft, the elongated shaft could not be accurately used as a sighting element disposed parallel with the striking face of the club.

Additionally, an arrangement such as shown in the aforementioned U.S. patent may be successfully employed to align the golf club fore and aft of the line of stroke, but there is no means for properly aligning the club in a direction extending substantially perpendicular to the line of stroke. Accordingly, the handle of the golf club will not be accurately indexed in relation to the body of the golfer, and the golfer is not aware of whether or not the handle of the club is properly spaced from his body.



This is an important consideration, since small differences in the position of the handle of the club with respect to the golfer's body may result in very large differences in the flight of the ball after it is struck, particularly when considering the longer clubs such as woods or the long irons.

## SUMMARY OF THE INVENTION

In the arrangement of the present invention, the club head and the shaft are provided with cooperating aligning means thereon so that the club can be properly aligned with respect to the golfer's body whether or not the club face extends substantially in a vertical plane and parallel with the axis of the shaft. In other words, in the present invention, the club may be properly indexed where the striking face of the club head extends with considerable degree of loft, and further wherein the club face may have a convex curvature as is the case with woods. Accordingly, the present invention may be successfully employed for properly aligning different types of golf clubs such as irons, woods and putters.

Additionally, the aligning means of the present invention permits the golf club to be properly indexed with respect to the golfer's body in a direction both fore and aft of the line of stroke as well as laterally of the line of stroke. This enables the golf club to be held in substantially the identical relationship with respect to the golfer's body each and every time it is used thereby resulting in greater consistency of the golf swing and accordingly greater accuracy of the resulting shots.

An object of the present invention is to provide a new and novel golf club including aligning means to enable the golf club to be properly indexed with respect to a golfer's body each time it is used.

## BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a top perspective view illustrating a golfer holding a putter incorporating the structure of the present invention;

FIG. 2 is a side view of the putter shown in FIG. 1 partly broken away;

FIG. 3 is an end view of the putter shown in FIG. 2;

FIG. 4 is a sectional view taken substantially along line **4**—**4** of FIG. 2 looking in the direction of the arows;

FIG. 5 is an illustration of the view presented to the golfer's eye when looking down on the putter shown in FIG. 2;

FIG. 6 is a sectional view taken substantially along line **6**—**6** of FIG. 2 looking in the direction of the arrows;

FIG. 7 is a side view of a wood such as a driver incorporating the structure of the present invention;

FIG. 8 is a sectional view taken substantially along line **8**—**8** of FIG. 7 looking in the direction of the arrows; and

FIG. 9 is a sectional view taken substantially along line **9**—**9** of FIG. 7 looking in the direction of the arrows.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawing wherein like reference characters designate corresponding parts throughout the several views, a golfer is indicated by the reference character G in FIG. 1 holding a golf club indicated generally by reference numeral **10** in his hand, the golf club in this instance being a putter which is disposed in striking position and properly indexed with respect to the golfer's body. A ball B is supported on the underlying putting surface.

Referring now to FIGS. 2–4 inclusive, the golf club includes a club head indicated generally by reference numeral **12** connected with the lower end of a club shaft indicated generally by reference numeral **14**. A conven-

tional handle portion or grip **16** is disposed at the upper end of the club shaft.

The club head includes a striking face **20**, which slopes downwardly and outwardly from the top portion of the club face. An opposite face **20'** is similar to face **20**, the upper and lower edges of the striking face and the opposite face **20'** being disposed substantially parallel with one another.

The club head includes a toe portion **22**, the toe portion being defined as that portion of the club head which is remote from the handle thereof. The club head also includes a heel portion **24** which is defined as being that portion of the club head which is nearest to the handle.

Aligning means is provided on the top portion of the club, the aligning means being indicated by reference numeral **28** and comprising in this form of the invention a notch or groove formed in the top portion of the club head. This forms an index mark, and it is apparent that the index mark may also be formed in other manners as by providing a suitable indicating means on the top portion of the club by painting or bonding a separate member thereon. It will be noted that this index mark **28** extends substantially perpendicular to the striking face **20**.

The club shaft includes a lowermost portion **30** which is interconnected with the club head through the intermediary of an integral neck or socket **32**. It should be noted that the neck or socket **32** is formed on the club head at a point which is nearer to the toe portion **22** of the club head than the heel portion thereof. Accordingly, the lowermost portion of the club shaft is interconnected with the club head at a point nearer to the toe portion than the heel portion, and in fact the shaft may be connected further to the left as seen in FIG. 2 for example so as to be interconnected with the club head substantially at the left-hand toe portion of the club head.

It is important in the present invention that the club shaft join with the club head nearer to the toe portion than the heel portion so that the shaft can extend upwardly and thence over the club head when the golf club is in striking position to enable the cooperating aligning means of the present invention to be visually aligned by the golfer.

The lowermost portion **30** of the club shaft joins with a further club shaft portion **40** which extends angularly with respect thereto and which extends over the club head when the golf club is in striking position. This portion **40** has aligning means formed thereon and comprises a plurality of index marks **42**. These index marks may comprise a plurality of notches or other indicia provided on the shaft portion **40**. The indicia may be formed on the shaft in any suitable manner as previously discussed in connection with the club head.

When using the golf club illustrated in FIGS. 1–5, the club head is initially indexed a suitable distance from one or the other of the golfer's feet. The golfer then looks down on the club and he actually sees what is represented in FIG. 5 wherein the width of the club head appears to be greater due to the fact that the line of sight from each eye crosses over beyond the club shaft portion **40**.

Depending on the stature of the golfer, one of the index marks **42** is selected by the golfer as being the proper one for alignment with the index mark **28** formed on the top portion of the club head. As seen in FIGS. 4 and 5, the golfer has selected index mark **42'** as a proper one of the index marks on the club shaft for alignment with index mark **28**.

The golfer first aligns the shaft in a direction fore and aft of the direction of stroke by positioning the club shaft so that it is symmetrically disposed with respect to the opposite surfaces of the club head. In other words, the club shaft is disposed parallel with these opposite faces of the club head. This is possible when the club head is a putter of a type having a relatively straight planar striking face and/or opposite face which can be aligned parallel with the club shaft.



The golfer also then indexes the club with respect to his body by making suitable adjustments to align index mark **42'** with index mark **28**, this of course being done visually by the golfer.

After these suitable alignments and adjustments have been made, the golfer knows that the golf club is in a particular relative position with respect to his body, and this relative position can be repeated each time the golf club is used by making the same adjustments as hereinbefore described.

Referring now to FIGS. 7–9, a modified form of the invention is illustrated. In this form of the invention, a wood such as a driver is illustrated.

The golf club is indicated generally by reference numeral **50** and includes a club head **52**, a club shaft **54** and a grip or handle portion **56** is disposed at the upper end of the club shaft.

The club head includes a striking face **60**, and a toe portion **62** is disposed remote from the handle portion. The club head also includes a heel portion **64** disposed nearest to the handle. Aligning means indicated generally by reference numeral **68** is disposed on the top portion of the club head and is described hereinafter in more detail.

The lowermost portion of the club shaft is indicated by reference numeral **70** and is connected with the club head through the intermediary of an integral neck or socket **72**. As in the aforedescribed embodiment, the club shaft is connected with the club head at a point nearer to the toe portion than the heel portion thereof for the same reason as previously discussed.

Referring particularly to FIG. 9, the aligning means **68** includes a first index mark **80** extending generally parallel with the striking face **60**. The striking face **60** on a wood has a slightly convex surface, and the convexity of such surface has been exaggerated in this view. However, it will be understood that index mark **80** extends generally parallel with the striking face, or in other words, substantially perpendicular to the intended line of stroke. This index mark **80** is intended to be disposed substantially parallel with the club shaft, and when looking down on the club from above, the golfer will align the shaft with this index mark **80** which should be visible on both sides of the shaft so as to center the shaft with respect to this index mark.

Asecond index mark **82** extends substantially perpendicular to the first-mentioned index mark **80**, this second index mark being adapted to be aligned with suitable index marks provided on the club shaft as hereinafter described.

Referring now particularly to FIG. 7, the lowermost portion **70** of the club shaft joins with a further club shaft portion **90** which extends up and over the club head when the club is disposed in striking position. This further club shaft portion has a plurality of index marks **92** spaced therealong comprising aligning means to cooperate with the index mark **82** previously described.

It will be noted that since this club is considerably longer than the putter, and since the golfer's stance will be quite different from that employed in putting, the index marks extend considerably farther up along the shaft than is the case with a putter thereby enabling the golfer to accurately align one of the index marks **92** with the index mark **82** as the case may be.

Dependent upon the golfer's stature and the way he addresses the ball, different ones of the index marks **92** may be selected for alignment with the index mark **82** to provide the proper alignment.

When using the golf club illustrated in FIGS. 7–9, the golfer will align the shaft portion **90** with the index mark **80** as seen in FIG. 8 so as to center the shaft with respect to the elongated index mark **80** thereby obtaining proper alignment of the golf club in a direction extending fore and aft of the intended line of stroke.

The golfer will further adjust the position of the club

with respect to his body so as to properly align a selected index mark 92' as seen in FIG. 8 with the index mark 82 formed on the upper portion of the club head.

When both of these alignments have been made as discussed hereinabove, the club will be properly indexed with respect to the golfer's body, and the golfer can be assured that the relative position of the golf club and his body are the same each time he addresses the ball.

It will be noted that in each form of the invention, the lowermost portion of the club shaft extends initially away from the club head at a substantial right angle thereto. The club shaft then joins with a further club shaft portion which extends upwardly and over the club head. By providing an arrangement wherein the lowermost portion of the club shaft extends at such an angle to the club head, it is possible to space the aligning means on the club shaft a greater distance from the aligning means on the club head as compared for example with an arrangement as shown in the aforementioned U.S. patent. This greater distance of the index marks on the club shaft from the index mark on the club head to be aligned therewith enables greater accuracy and more consistency of the positioning of the club head with respect to the golfer's body.

It is apparent from the foregoing that there is provided according to the present invention a new and novel golf club which includes aligning means formed on the club head and the shaft of the club which enables proper alignment and indexing of the golf club with respect to the body of the golfer both in a direction fore and aft of the line of stroke as well as laterally thereof to provide a more consistent positioning of the club with respect to the golfer and thereby enabling greater accuracy of the resultant golf shots.

It should be noted that although for illustrative purposes only the case wherein the golfer and the golf club are both on flat (horizontal to local earth radius vector) ground has been discussed, the indexing principle is very useful for executing golf shots from sloping terrain. The index marks form a norm from which deviations may be accurately judged time after time.

As this invention may be embodied in several forms without departing from the spirit or essential characteristics thereof, the present embodiment is therefore illustrative and not restrictive, and since the scope of the invention is defined by the appended claims, all changes that fall within the metes and bounds of the claims or that form their functional as well as conjointly cooperative equivalents are therefore intended to be embraced by those claims.

I claim:

1. A golf club comprising a club head, a club shaft connected with said club head, a handle portion disposed at the upper end of said club shaft, said club head including a toe portion remote from said handle and a heel portion nearest to said handle, said club head having a striking face, aligning means fixed on a top portion of the club head, the lowermost portion of said club shaft being connected with said club head at a point nearer to the toe portion of the club head than the heel portion



thereof, and a plurality of fixed spaced apart aligning means along the shaft cooperating with the aligning means on said top portion of the club head to enable the golf club to be properly aligned with respect to a person using the golf club, the arrangement of said spaced apart aligning means along the shaft relative to the aligning means on the club head being such that said shaft may be adjustably moved in a substantially vertical plane to permit the execution of a conventional club swing when any one of the aligning means along the shaft i saligned with the aligning means on the club head whereby a golfer may readily select a desired inclination of the shaft and repeat same.

2. A golf club as defined in claim 1 wherein said aligning means on the top portion of said club head includes a first index mark extending generally parallel with said striking face and a second index mark extending substantially perpendicular to said first index mark, said index marks being disposed intermediate the heel portion of the club head and the point at which the lowermost portion of said club shaft is connected with said club head.

3. A golf club as defined in claim 1 wherein the lowermost portion of said club shaft extends initially away from said club head at a substantially right angle thereto.

4. A golf club as defined in claim 3 wherein said lowermost portion of the club shaft joins with a further club shaft portion which extends upwardly and over said club head when the golf club is disposed in striking position.

5. A golf club as defined in claim 4 wherein the aligning means on said club shaft is provided on said further club shaft portion.

6. A golf club as defined in claim 1 wherein the lowermost portion of said club shaft extends initially away from said club head at a substantial right angle thereto and joins with a further club shaft portion which extends up and over said club head when the golf club is in striking position, the aligning means on said club shaft comprising a plurality of index marks permanently in said further club shaft portion.

7. A golf club as defined in claim 6 wherein the aligning means on the top portion of said club head comprises an index mark thereon and disposed intermediate said heel portion of the club head and the point where the lowermost portion of said club shaft is connected with said club head.


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U.S. Cl. X.R.

273—80, 164, 168, 175, 187