United States Patent [19]

Solheim

[11] **3,845,955**

[45] **Nov. 5, 1974**

[54] **GOLD CLUB INDICIA**

[76] Inventor: **Karsten Solheim,** 10412 N. 37th St., Phoenix, Ariz. 85028

[22] Filed: **Oct. 4, 1972**

[21] Appl. No.: **294,775**

[52] **U.S. Cl.** ..... **273/77 A,** 273/162 R, 273/167 A

[51] **Int. Cl.** **A63b 53/04**

[58] **Field of Search**...273/77 R, 77 A, 164, 167-175, 273/162 R

[56] **References Cited**

UNITED STATES PATENTS

1,046,343	12/1912	Smith	273/164
1,139,985	5/1915	Legh	273/169
1,917,774	7/1933	Ogg et al.	273/167 F
2,174,212	9/1939	Newsome	273/167 F UX
2,254,528	9/1941	Hoare	273/167 F UX
3,059,926	10/1962	Johnstone	273/167 R X
D125,455	2/1941	Newsome	273/167 F UX
D163,961	7/1951	Penna	273/167 D X
D191,211	8/1961	Forest	273/167 F UX
D226,568	3/1973	Morris	273/167 D UX
D266,319	2/1973	Sanders	273/167 F UX

FOREIGN PATENTS OR APPLICATIONS

29,603	12/1913	Great Britain	273/167 F

Primary Examiner—Richard J. Apley
Attorney, Agent, or Firm—Lindenberg, Freilich, Wasserman, Rosen & Fernandez

[57] **ABSTRACT**

In a set of golf clubs of the type commonly referred to as irons, where the loft of each club is unique and is indicated by indicia on the club head, first and second surfaces are provided on a backside of the club head such that those surfaces slope away from the striking face of the club head, and toward each other to form a ridge disposed about a rounded corner from the sole to the toe of the head. The ridge extends further away from the striking face at the center of the rounded corner than any other portion of the backside of the club head so that one surface may be easily viewed by a person holding the club by the shaft with the shaft extending away from him. The other surface may be easily viewed from a generally opposite direction. An indicia is placed on at least the one of the two surfaces to indicate the loft of the club head.

5 Claims, 20 Drawing Figures

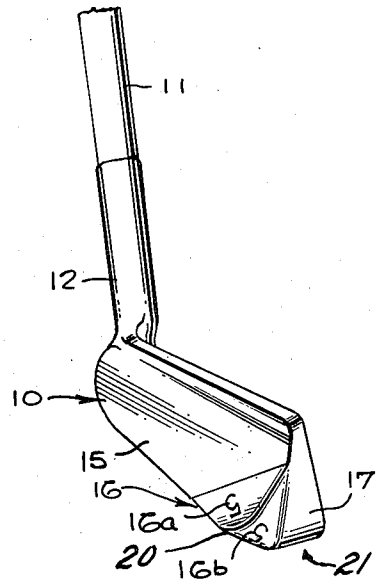


Fig. 2

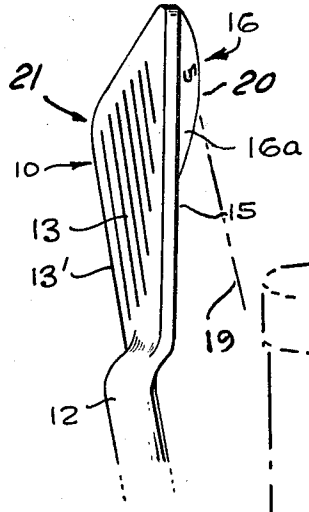


Fig. 3

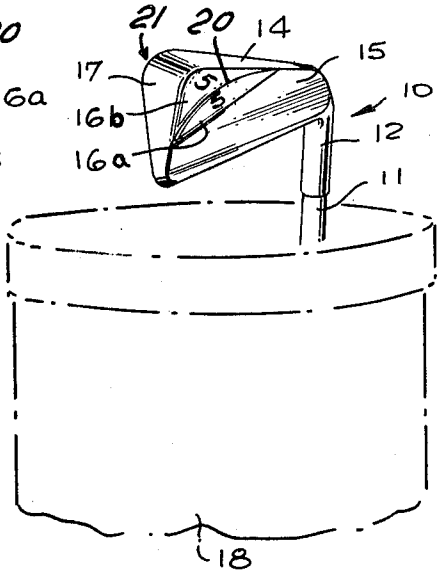
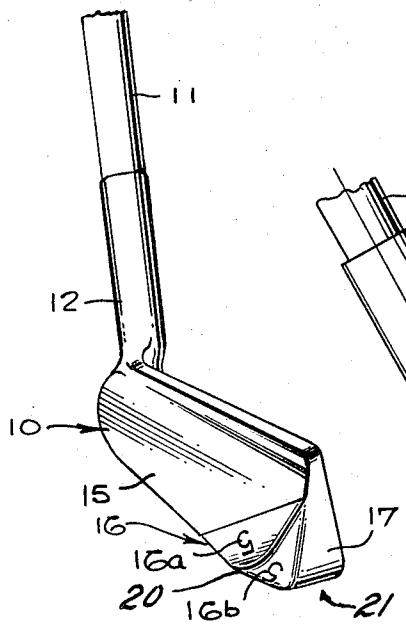


Fig. 1



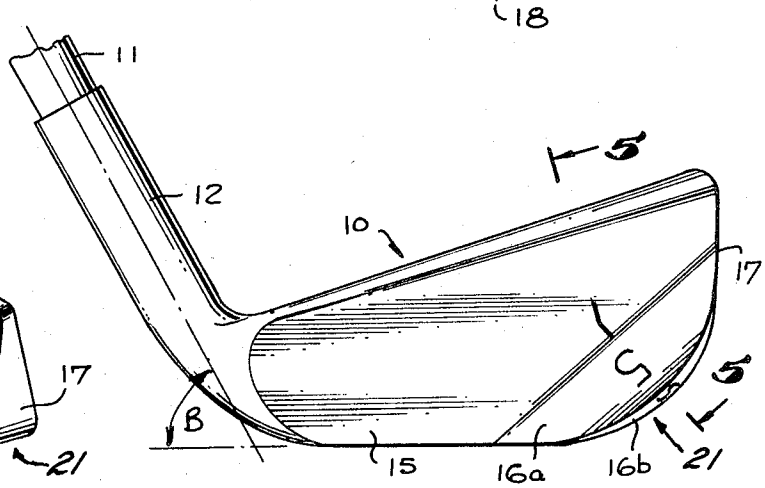


Fig. 5

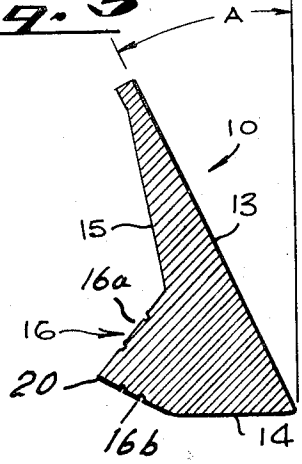


Fig. 4

Fig. 6

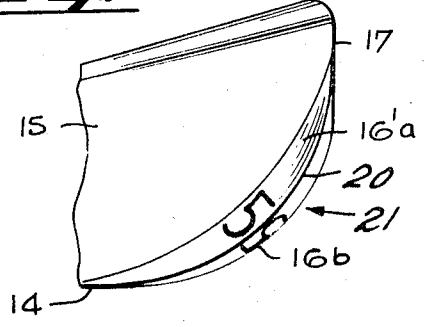


FIG. 7.

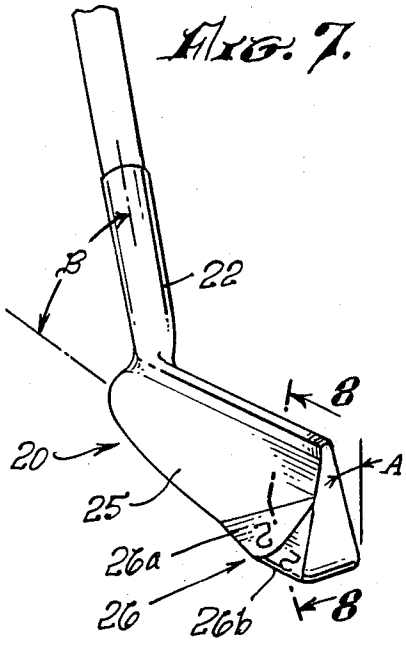


FIG. 9.

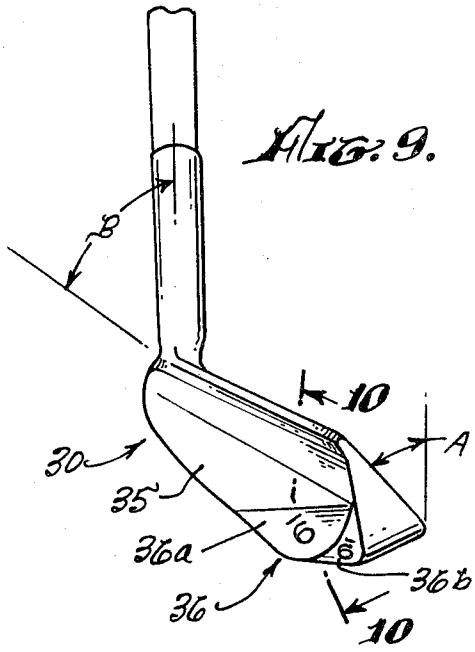


FIG. 8.

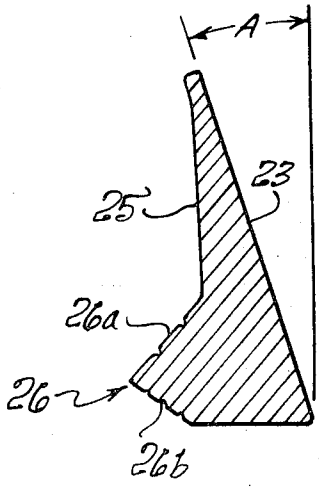
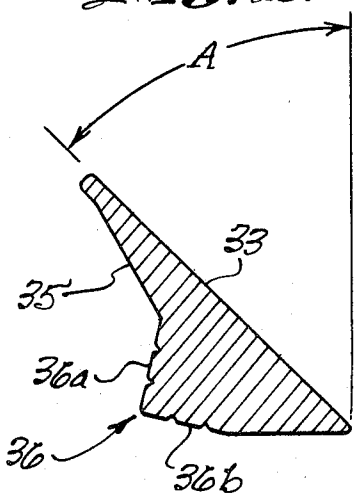


FIG. 10.



GOLD CLUB INDICIA

BACKGROUND OF THE INVENTION

This invention relates to golf clubs of the class commonly known as irons, and more particularly to an arrangement for providing surfaces for indicia on each golf club of a set indicating the left of the golf club.

Custom and demand has generally standardized golf clubs with respect to loft, which is by definition the backward slant of the striking face. Each club of a set will have a different loft, and when the clubs of a set are arranged in order of increasing loft, the practice is to number the clubs in sequence from **1** through **11,** although beyond the number **9,** golf clubs with a greater loft (commonly referred to as pitching wedges, sand wedges and the like) are generally designated by letters such as W and S for the pitching wedge and the sand wedge, respectively.

While all manufacturers will not provide exactly the same loft for the same club of a set, such as a number **5** iron, they all will have very nearly the same loft. In any case, the loft of each club in a set is indicated by indicia (number or letter) on the club head. This permits the golfer to select the exact club for the distance and arc desired on the next stroke of his game.

It has been the standard practice to place the identifying indicia on the sole of each club so that the golfer may easily select the golf club from a carrying bag. This is so because golf clubs are carried in the bag upside down, that is with the shaft inserted into the bag and the club head hanging out of the bag with the sole facing upwardly. If the golf bag is laying on the ground, the golfer will usually stand the bag up while selecting the club to facilitate removing the selected club from the bag. It also facilitates viewing the indicia on the soles of the golf clubs.

Placing the indicia on the back side of each club head will facilitate selecting the golf club while the bag is on the ground, or while the golf clubs are otherwise being viewed in the bag from the side. This arrangement has a further advantage in that, having selected a particular golf club, the golfer can quickly check to see which iron he did select at the time of addressing the ball by tilting the shaft sharply in the direction of the striking face, thus tilting the back side of the club face upwardly. However, the back-side arrangement has not been entirely satisfactory because in order to see the symbol on the club head, the golfer must alter the position of his hands too far from the position of addressing the ball. Moreover, the back-side arrangement makes it difficult to select the proper club from the bag when the set of golf clubs are being viewed from a position off the open end of the bag, instead of the side. It would be desirable to have some means for so placing a symbol on the head of each club that the proper club may readily be selected from a bag as the set is viewed from a position either off the open end or off the side of the golf bag, and also permit the golfer to view the symbol on the golf club selected, after he has assumed the proper stance for addressing the ball, without having to alter his position significantly.

SUMMARY OF THE INVENTION

According to the present invention, a golf club is provided with first and second connected surfaces on the backside of the club head, and those surfaces are arranged to be sloping everywhere with respect to a striking face of the club head and sloping toward each other so as to provide a ridge disposed about a rounded corner of the club head between the sole and the toe thereof from a point near the bottom of the rounded corner and adjacent the sole of the head to a point near the top of the rounded corner and adjacent the toe. The ridge extends further away from the striking face at the center of the rounded corner than any other portion of the backside of the club head. In that manner, one of the surfaces may be easily viewed by a person holding the club by the shaft with the end of the shaft connected to the head extending generally away from him, and the other surface may be viewed from a direction generally opposite. Indicia is provided on at least the one surface to indicate the magnitude of the loft of the club.

The novel features that are considered characteristic of this invention are set forth with particularity in the appended claims. The invention will best be understood from the following description when read in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a representative golf club of a set, namely a No. 5 iron, showing the shaft thereof partially broken away.

FIG. **2** is a view of the golf club of FIG. **1** as seen by a golfer while addressing a ball with it.

FIG. **3** shows the golf club of FIG. **1** generally as viewed in a golf bag while the bag is in an upright position.

FIG. **4** is a back elevation of the golf club of FIG. **1.**

FIG. **5** is a sectional view at the line **5—5** of FIG. **4.**

FIG. **6** illustrates a partial back elevation of a second embodiment of the present invention.

FIG. **7** is a perspective view of a second representative golf club of a set, namely a No. 2 iron.

FIG. **8** is a sectional view of the club head shown in FIG. **7** taken at line **8—8** of FIG. **7.**

FIG. **9** is a sectional view of a third representative golf club of a set, namely a No. 9 iron.

FIG. **10** is a sectional view of the club head shown in FIG. **9** taken at line **10—10** of FIG. **9.**

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the drawings in detail, a representative golf club of a set, a No. 5 iron, is shown having a head **10** connected to a shaft **11** through a hosel **12** cast or otherwise formed as a unitary part of the club head **10.**

The club head of this representative No. **5** iron has a striking face **13** shown in FIG. **2** at an angle A from the vertical as shown in FIG. **5.** That angle, commonly referred to as the loft of the club, is typically about 28° for a No. 5 iron. An angle B shown in FIG. **4** is correlated with the loft of the golf club, and is typically about 61° for a No. 5 iron. This angle B is commonly referred to as the lie of a golf club and is the angle between the ground and the axis of the club shaft in a vertical plane while the sole of the golf club is laying on the ground with the generally straight portion of the leading edge **13'** of the striking face **13** horizontal. The following table illustrates the correlation between the loft and lie

of an exemplary set of "iron" golf clubs numbered **1** through **11.**

Club No.	A	B
1	16°	58°
2	18° 07′	58° 50′
3	21° 15′	59° 40′
4	24° 30′	60° 30′
5	27° 52′	61° 25′
6	32°	62° 20′
7	36° 30′	63° 15′
8	41° 15′	64° 10′
9	45° 30′	65° 05′
10 (W)	51°	65° 05′
11 (S)	58°	65° 05′

To indicate the number of the club, a flange **16** is so disposed on the back side **15** of the club head at the end **17** commonly referred to as the toe, and next to the sole **14,** as to provide two surfaces **16***a* and **16***b* one surface **16***a* facing generally upwardly with respect to the sole **14** while the sole is on or near the ground as viewed in FIG. **2.** The two surfaces slope away from each other to form a ridge **20** disposed about a rounded corner **21** of the striking face between the toe **17** and sole **14** from a point near the bottom of the rounded corner and adjacent to the sole to a point near the top of the rounded corner and adjacent the toe. The ridge extends further away from the striking face **13** at the center of the corner than any other portion of the backside of the club head so that the surface **16***a* may be easily seen by a golfer while addressing the ball or otherwise holding the golf club with the head extended. That upwardly facing surface is provided with the number 5 so oriented that, as viewed by the golfer generally along a line **19** shown in FIG. **2** while holding the club by the grip at the end of the shaft (not shown), the number 5 is seen "right side up." The surface **16***a* is flat in the embodiment of FIGS. **1** to **5** but may be convex, or concave as illustrated by the surface **16′***a* in the second embodiment of FIG. **6** where a different but equally satisfactory orientation for the symbol is shown. In both embodiments, the other surface **16***b* of the flange is convexly curved to generally conform to the contour of the toe, namely the curve in the club head which blends the toe into the sole of the club head as seen in FIG. **4.** The convex surface **16***b* is also beveled or sloped upwardly with respect to the sole in order that contact with the ground during a stroke be avoided, or minimized. When the symbol is placed on the sole, as in the prior art, the symbol is continually scraped as the sole scrapes or cuts through the ground during each stroke. The result of this prior art arrangement is that the symbol tends to wear off, and if engraved or otherwise impressed deeply, the symbol tends to fill with dirt. The present arrangement of the symbol on the sloped or beveled surface **16***b* avoids or minimizes the scraping and filling problem of the prior art arrangement.

The number of the club is preferably placed on the beveled surface **16***b* with the bottom of the number nearest the toe **17** as shown for both exemplary embodiments so that, while the club is in an inverted position in a golf bag **18,** the number may be readily viewed "right side up" from a direction off the open end of the bag. This orientation is preferred for the number on this beveled convex surface because most often the bag is not standing in a vertical position while a club is being selected, but is instead at some angle with respect to the vertical such that the head of each club in the bag will hang with the toe down, thus placing the number in the upright position for viewing by the golfer. However, any other orientation of the symbol on this beveled convex surface may be employed with equal advantage as to avoiding or minimizing the problem of scraping or filling the symbol with dirt.

The exact shape of the sloped surfaces will depend upon the particular shape of the club head, which varies among manufacturers. The shape of the club head may even vary from club to club within a correlated set. Therefore, although particular embodiments of the invention have been described and illustrated herein, it is recognized that modifications and variations may be required to adapt the invention to golf clubs having heads of different shapes, or as may otherwise readily occur to those skilled in the art. Consequently, it is intended that the appended claims cover such modifications and variations. For example, the flange may be in the shape of a triangular or quadrilateral prism placed diagonally across the corner of the club head between the toe and the sole, or bent around to conform to the shape of that portion of the club head. What is essential is only that the flange have two surfaces facing generally away from each other. One surface faces upwardly with respect to the sole, and rearwardly with respect to the toe, in order that the number or symbol on that surface may be seen from a direction generally off said hosel as indicated by the line of sight **19** in FIG. **2.** The other surface slopes upwardly away from the sole and faces downwardly with respect to the sole and outwardly with respect to the toe. The slope of the latter surface avoids or minimizes drag of the wedge. That helps keep the symbol from being scraped and filled with dirt.

FIGS. **7** and **9** illustrate two additional golf clubs of the set, namely the Nos. 2 and 9, each strictly in accordance with the invention as described with reference to the No. 5 iron shown in FIG. **1.** The No. 2 iron has a head **20** with a hosel **22** at a lie (angle B) and a striking face **23** (FIG. **8**) at a loft (angle A) selected from the table set forth hereinbefore. The backside **25** is provided with a flange **26** having two surfaces **26***a* and **26***b* sloping away from the face **23** and toward each other to form a ridge extending across the rounded corner of the club head. Indicia are provided on those sloping surfaces as shown to indicate the lie and loft of the club head. The indicia on the upper sloping surface **26***a* may be viewed by the golfer with even greater ease than on the upper sloping surface **16***a* of the No. 5 iron because the club head is more upright, as may be more readily appreciated from the sectional view of FIG. **8** taken along the line **8—8** of FIG. **7.**

The club head **30** of a No. 9 iron shown in FIG. **9** has greater lie and loft than the Nos. 2 and 5, as is commonly understood. Typical lie and loft angles are shown in the table set forth hereinbefore for an illustrative set. The backside **35** is provided with a flange **36** having two surfaces **36***a* and **36***b* sloping away from the face **33** and toward each other to form a ridge extending across the rounded corner of the club head. Indicia are provided on those sloping surfaces to indicate the lie and loft of the club head. The indicia on the upper sloping surface **36***a* may be viewed by the golfer even though the club head lays back more, although with less ease than on the upper sloping surface **16***a* of the

No. 5 iron. However, the ease with which that may be done is still much greater than if the indicia were put on the backside **35** as in prior art golf clubs. Obviously the golfer need only shift the position of his hands forward slightly from the address positions, thus moving the club shaft through a small angle to put the club head in about the same upright position as the No. 5 iron without otherwise moving the club head from the position of address. A slight tilting of the golfers head toward the rear of the club head would decrease the arc through which the shaft would need to be moved to view the indicia.

Although particular embodiments of the invention have been described and illustrated herein, it is recognized that modifications and variations may readily occur to those skilled in the art, and further that the feature of the present invention may be practiced in golf clubs of other designs embodying other features as well, all without significantly affecting the feature of the present invention. Consequently, it is intended that the claims be interpreted to cover such modifications and variations.

What is claimed is:

1. A set of at least two golf clubs, each golf club being comprised of a head having a toe and a heel, said heel being connected to a shaft, said head having a striking face between said toe and heel with a rounded lower corner at said toe, and a sole extending from said heel to said toe around said rounded corner at said toe, said striking face extending upwardly from said sole between said toe and heel at a unique and acute loft angle, and said head having a backside between said toe and heel extending upwardly from said sole, a portion of said backside having first and second surfaces sloping away from said striking face and toward each other to form a ridge about said rounded corner from a point near the bottom of said rounded corner and adjacent said sole to a point near the top of said rounded corner and adjacent said toe, said ridge extending further away from said striking face at the center of said rounded corner than any other portion of said backside, said first surface being of such sloping configuration and of such rearward extent, and with the club head being so configured, that said first surface may be seen by a person holding said club at the end thereof remote from said head and viewing said golf club head along a line substantially parallel to said shaft, said second surface being connected to said sole and being of such sloping configuration relative to the configurations of said first surface, said sole, and said club head that said second surface may be viewed by a person facing said club head from a direction generally opposite to the direction said shaft extends from said head, and indicia on at least said one of said first and second surfaces indicative of the magnitude of said unique loft angle.

2. The combination of claim **1** wherein said first surface is flat.

3. The combination of claim **1** wherein said first surface is concave.

4. The combination of claim **2** wherein said second surface is convex with a curvature generally conforming to said rounded corner of said club head between said sole and said toe.

5. The combination of claim **3** wherein said second surface is convex with a curvature generally conforming to said rounded corner of said club head between said sole and said toe.

* * * * *

UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,845,955 Dated November 5, 1974

Inventor(s) KARSTEN SOLHEIM

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the title, delete "GOLD" and substitute -- GOLF --.

Column 1, line 8, delete "left" and substitute -- loft --.

Signed and sealed this 14th day of January 1975.

(SEAL)
Attest:

McCOY M. GIBSON JR.
Attesting Officer

C. MARSHALL DANN
Commissioner of Patents

USCOMM-DC 60376-P69
★ U.S. GOVERNMENT PRINTING OFFICE : 1969 O—366-334.