Feb. 6, 1934. L. A. YOUNG 1,945,844

GOLF CLUB

Filed May 16, 1932

Fig. 1.

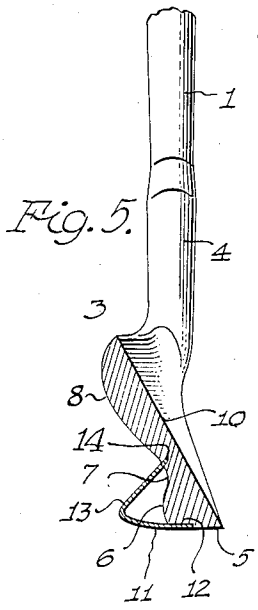


Fig. 5.

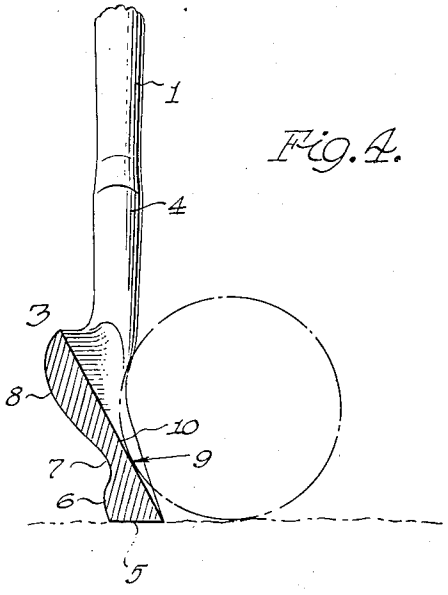


Fig. 4.

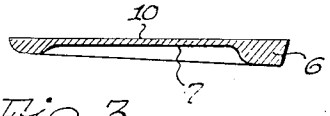
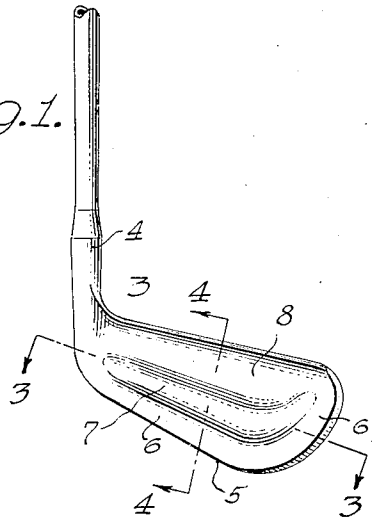


Fig. 3.



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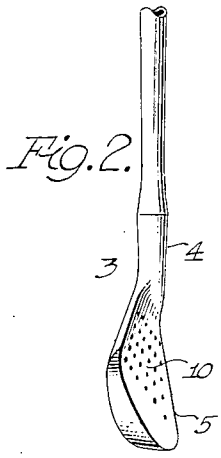

Fig. 2.

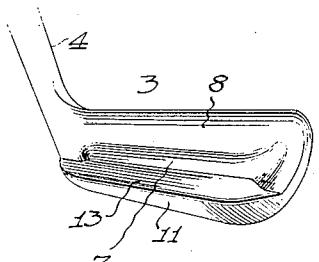

Fig. 6.

INVENTOR

Leonard A. Young,

BY

ATTORNEYS

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1,945,844

GOLF CLUB

Leonard A. Young, Detroit, Mich.

Application May 16, 1932. Serial No. 611,563

2 Claims. (Cl. 273—77)

This invention relates to improvements in golf clubs and more particularly to that class of clubs known as "irons" wherein the head or blade of the club has a ball engaging face which is inclined upwardly and rearwardly so that when the ball is struck, the lower edge of the blade will engage the surface of the ground directly beneath the ball and the surface of said blade will engage the ball at a distance upwardly from the lower edge of the blade, imparting forward flight and loft to the ball.

Ordinarily clubs of this type have a blade, the lower edge of which is narrow and presents little surface to the ground to prevent said edge from digging into the ground when the ball is struck, and if this digging in occurs, the force of the blow is lessened thereby, the blade is tilted, lessening the loft, and in many instances the blade is deflected by such digging in, thus changing the line of flight.

Another object of the invention is to distribute the weight of the blade or head of the golf club in such a manner as to assist the "follow through" and at the same time avoid excessive vertical flight or loft of the ball. Still another object is to shift the most favorable striking spot on the face of the head from its usual position near the heel to a more forward position approximately midway between the toe and heel or even still nearer the toe. It has been found in practice that only the highly skilled player strikes the ball at the proper spot on the club face and that the ordinary player strikes the ball at a more forward point on the face of the head, with undesirable results that are quite well known. Thus, the shifting of the most favorable striking spot to a more forward point is quite advantageous for ordinary players while not introducing any serious damage when the ball is struck at the usual spot on the face by skilled players. This shifting of the most favorable striking spot is also accomplished by novel distribution of the weight of the club head or blade. In the accompanying drawing illustrating the invention,

Fig. 1 is a side elevation of a club illustrative of an embodiment of the present invention;

Fig. 2 an elevation of Fig. 1, looking toward the end of the blade thereof;

Fig. 3 is a transverse section of the blade, substantially upon the line 3—3 of Fig. 1;

Fig. 4 is a view similar to that of Fig. 2 and showing the blade in transverse section substantially upon the line 4—4 of Fig. 1;

Fig. 5 is a sectional view similar to that of Fig. 4 and showing a modified construction; and

Fig. 6 is a perspective view of the rear side of the club head shown in Fig. 5.

As shown, the club comprises the usual shaft 1 having the usual handle portion or hand grip 2 at its upper end and a head or blade indicated as a whole by the numeral 3, on its lower end. said blade being formed at one end with the usual hosel 4 integral with said blade to receive the lower end of said shaft. As shown in Figs. 1 to 4 inclusive, the blade is given a particular shape to properly distribute its weight and to increase the width and weight at its lower edge 5, it being formed with a rearwardly projecting rib 6 extending along said edge to increase the width of said ground engaging face of its lower edge 5, which rib, as shown in Fig. 1, is extended along the toe of the blade as well. Above this rib 6, the blade is hollowed out or formed with a depression 7 in its rear face so that the blade is thickened toward its upper edge as at 8, without increasing its over-all weight, to bring added weight toward the upper edge of the blade above the point 9 as shown in Fig. 4, where the flat inclined forward face 10 of the blade normally strikes the ball in play, the ball being indicated by a dot and dash line in said figure.

The force of the impact is concentrated by means of the weighted ribs 6 and 8 at two levels respectively below and above the point of contact 9 with the golf ball. The lower weight assists the desired "follow through", and the upper weight prevents the ball from "skying" or taking too much loft.

It will be seen that the depression or groove 7 terminates short of the toe of the blade, leaving a thickened and weighted portion as illustrated more clearly in Fig. 3. Ordinarily the horizontal axis of balance of the club determined by supporting the club horizontally at two points, namely the upper end of the shaft and a point on the face of the blade, passes through the blade at a point near the heel thereof or at least rearward of the longitudinal center of the blade. This point on the blade is the most favorable point for striking the ball, but experience shows that only the highly skilled player is able to strike the ball at this point. The less skilled or ordinary player strikes the ball approximately at the longitudinal center of the blade or forwardly thereof, causing deflection of the ball in flight and loss of distance. The provision of extra weight at the toe in the manner described shifts the most favorable striking point forwardly and causes the horizontal axis of balance to pass through blade at approximately the longitudinal center thereof or even still

nearer the toe. Thus, the club is accommodated to the habits of the usual player, affording him more satisfactory play while not interfering materially with the shot of a skilled player who is able to strike the ball at the usual favorable striking spot near the heel of the blade. The official over-all weight of the club may be maintained, if necessary, by shortening or otherwise lightening the hosel 4.

By increasing the width of the lower edge 5 of the blade in the manner described, the tendency of the blade to dig into the earth is greatly decreased. To further increase the width of the lower edge 5 of the blade and avoid digging into the earth, an extension of said lower surface thereof may be provided as shown in Fig. 5, by securing the forward edge of the lower wall 11 of a hollow extension member within a groove 12 in the edge surface 5, letting this wall extend rearwardly the desired distance with an upward curve and then bending the same upwardly to form a rear side wall 13 for this hollow extension. The upper edge of the wall 13 is secured within a groove 14 in the back of the blade, to securely attach this hollow extension member to the blade.

The ground contacting surface of the lower edge of the blade may thus be made of any desired width to counteract its tendency to dig into the ground, and this without increasing the overall weight of the blade as this extension is hollow and may be formed of a light thin sheet metal the edges of which may be welded or otherwise firmly secured within said grooves in the blade, thus providing a smooth outer surface without projections or sharp angles.

With this arrangement and construction of blade for clubs of the "irons" type, such blades are prevented from digging into the ground, due to the extension of the width of the lower edge thereof and the weight of the blade may be distributed to obtain the desirable results already described, the club complying with the rules of the game and being formed with a ball contacting face of any desired inclination and which may be roughened as shown in Fig. 2, or not, as desired.

Obviously other changes may be made in the construction within the scope of the appended claims without departing from the spirit of the invention and such changes are contemplated.

Having thus fully described my invention, what I claim is:—

1. A golf club including a blade having a lower edge face, and a sheet metal member providing a wall secured at its forward edge to said lower edge of said blade and forming a rearward extension of the lower face of said edge, said wall being extended upwardly and forwardly to meet said blade at a distance above its lower edge.

2. A golf club including a blade having a lower edge face formed with a groove, and a hollow member formed of sheet metal and providing a lower wall secured at its forward edge in said groove and forming a rearward continuation of the lower surface of said edge of said blade, said member being formed to provide a wall extending upwardly and forwardly from the rear portion of said lower wall and meeting said blade at a distance above the lower edge of said blade.

LEONARD A. YOUNG.