

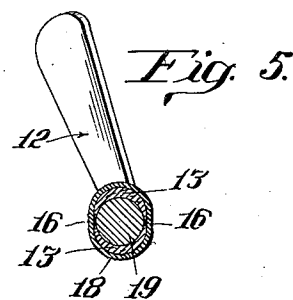
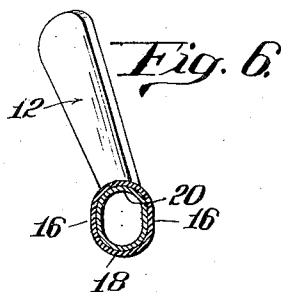
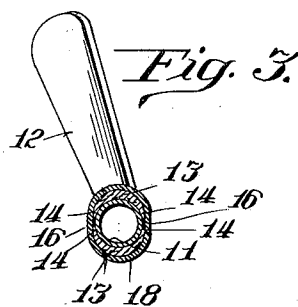
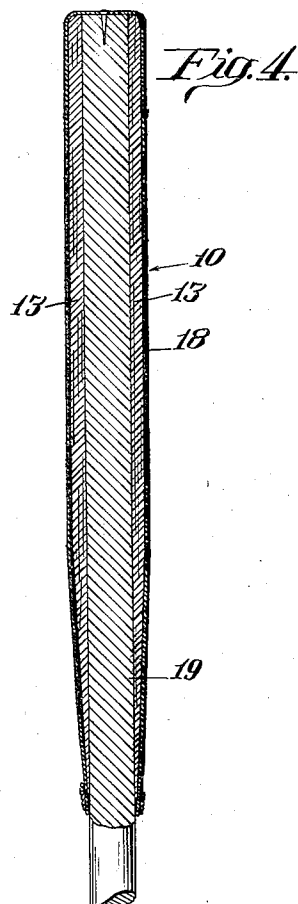
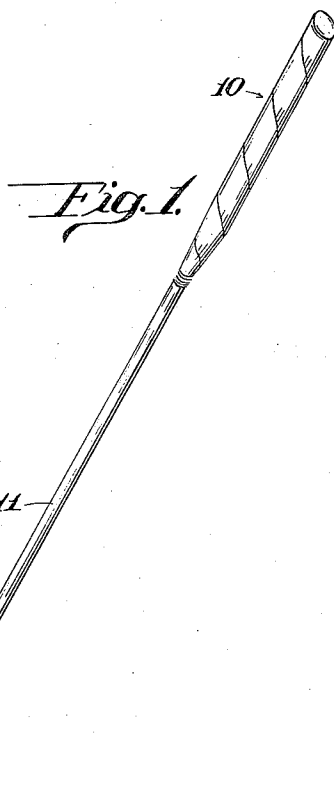
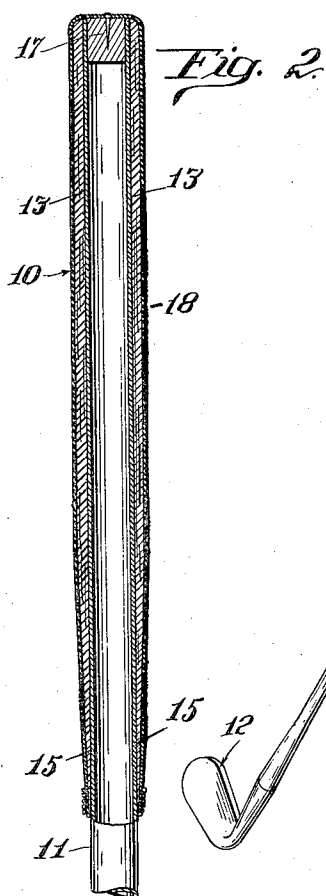
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L. D. WINTERS

1,994,556

GOLF CLUB SHAFT

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Witnesses
Milton Lenoir
H. W. Howell

Inventor
Leroy J. Winters,
George Heidman,
Attorney

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GOLF CLUB SHAFT

Leroy D. Winters, Evanston, Ill.

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2 Claims. (Cl. 273-81)

My invention relates more particularly to the construction of the handle or grip end of a golf club shaft, whether the shaft be of wood or steel; the invention having for its object a construction affording what may be termed a natural grip, namely a handle portion better adapted to the hands or grip of the user; with the handle portion of the shaft so constructed that rotational movement of the club during the stroke is impossible.

Another object of the invention is to provide a handle portion of the character defined which is also so arranged, relative to the forward or striking face of the club-head, that the latter will be properly disposed in "addressing" the ball and therefore a more accurate "shot" made than otherwise would be the case.

The invention also has for its object the provision of such handle or grip, whether constructed during manufacture of the shaft or applied to shafts of clubs in use, which will not interfere with the proper balance of the club.

All of these features and advantages will be readily comprehended from the description of the accompanying drawing, wherein:

Figure 1 is a perspective view of a golf club provided with my invention.

Figure 2 is a longitudinal sectional view of the upper end of a steel shaft with my improved grip or hand-grasping portion applied thereto.

Figure 3 is a cross-sectional view through the grip portion of a steel shaft, provided with the hand grasping portion applied as in Figure 2, and showing a club-head as viewed from above.

Figure 4 is a longitudinal sectional view, similar to Figure 2, of the upper end of a wood shaft with my improved grip or hand grasping portion applied thereto.

Figure 5 is a cross-sectional view through the grip portion of a wood shaft, provided with the hand grasping portion applied as in Figure 4, and showing a club-head as viewed looking down.

Figure 6 is a view similar to Figures 3 and 5, illustrating the formation of a steel shaft to provide my improved hand grasping portion.

My invention involves the provision of a golf club with a hand grasping portion or handle oval or elliptical in cross-section, with the major axis of the hand grasping portion preferably disposed at a proper or acute angle relative to the forward face of the head of the club, as is more clearly shown in Figures 3, 5 and 6.

This hand grasping portion, indicated at 10 in Figure 1, is of proper prescribed length and

preferably tapers toward the bottom or lower end as shown.

In the particular exemplification of the invention as disclosed in Figures 2 and 3, my improved hand grasping portion is shown subsequently applied to a steel golf club shaft 11 of circular cross-section, see Figure 3.

The steel shaft having been formed in the usual manner and the head 12 of the club having been applied thereto, the hand grasping portion of the shaft 11 is then formed by applying elongated channel sections or segments 13, 13 thereto; the segments being applied in any suitable manner, as for example by a suitable adhesive.

The channel sections or segments 13, 13 are preferably made of a light material, in order that the balance of the club may not be affected, by using molded rubber, molded cork, aluminum, or a suitable light wood.

Applicant has found that the use of balsa wood is especially suitable for this use, because of its extreme lightness and spongy or yielding nature.

The channel sections or segments 13, 13 are preferably made with their greatest thickness intermediate of the longitudinal edges; that is to say, the segments are made to taper toward both longitudinal edges into a comparatively thin edge, as shown at 14. Both segments 13, 13 are identical in construction and are also made with a proper taper toward or at the bottom or lower end as shown at 15 in Figure 2.

The arcs of the inner faces of the segments are preferably such that the opposing longitudinal edges of the segments will be in slight spaced relation, thereby somewhat increasing the width of what may be termed the flat sides 16, 16 of the handle 10; although the longitudinal edges may contact each other if desired.

As is more clearly shown in Figure 3, these segments 13, 13 are preferably so secured to the shaft 11 that the major axis of the elliptical or oval handle 10 will be disposed in a direction at an acute angle to the head of the club. The oval or elliptical handle provides a natural grip for the club; and by having the major or long axis of the handle arranged as shown and described, a proper presentation of the head of the club is ensured and as a result "hooking" or "slicing" of the ball is obviated.

After the segments 13, 13 have been secured to the shaft in the manner shown, the segments are then provided with the usual wrapping, namely leather, which may be wound about the segments in the manner usually employed. With

steel shafts, the end of the shaft is generally provided with a small wood core as at 17, Figure 2, which also enables the initial end of the leather or wrapping strip 18 to be tacked thereto.

5 In Figures 4 and 5 I show the application of my invention to a previously constructed wood shaft 19 of circular cross-section. Like in the steel shaft club shown in Figures 2 and 3, the channel sections or segments 13, 13 are glued
10 or otherwise suitably secured to the shaft against movement and applied thereto so as to provide the oval or elliptical hand grasping portion having its long or major axis disposed at an angle to the head 12, as shown in Figure 5.

15 The hand grasping portion 10 of the club is then provided with a suitable covering or wrapping 18 in the usual manner and as previously described.

The invention, as thus described, defines exemplification of the provision of my improved hand grasping portion to previously made clubs having the usual shafts of circular cross-section.

It is apparent, however, that my improved natural grip may be formed in the shaft during
25 its manufacture; as for example in Figure 6 I show its application to a steel shaft wherein the upper or hand grasping portion 20 is compressed or somewhat flattened into oval or elliptical form as shown, with the major axis of this oval or
30 hand grasping portion disposed in a direction at an angle to the head 12 or striking face thereof as previously described and thus providing the two somewhat flat sides 16, 16. The hand grasping portion 20 of the shaft after being formed as
35 shown is then, of course, provided with a suitable grip providing wrapping of leather or other suitable material as shown at 18.

Where the channel sections or segments 13 are made of metal, such as aluminum to be applied to a steel shaft, the segments may be welded or otherwise suitably secured in place; it being understood, of course, that where the grip portion is formed by subsequently applying the segments to the shaft, the segments must be rigidly secured against any possibility of shifting movement.

I have shown various exemplifications of my invention which have been described in terms employed for the purpose of description and not as terms of limitation, as modifications are possible and may be made without, however, departing from the spirit of my invention.

What I claim is:

1. A golf club shaft comprising a club-head section and an upper section integral with the club-head section, the upper section being provided with an immovable hand-grasping portion of elliptical cross-section with the major axis disposed at approximately twenty-two degrees rearward relative to a horizontal line lying on the striking face of the club-head.

2. A golf club shaft provided with a head at one end and a hand-grasping portion at the other end, the hand-grasping portion being of elliptical cross-section with the major axis immovably arranged at approximately twenty-two degrees rearward relative to a horizontal line lying on the striking face of the head, said hand-grasping portion involving elongated segmental portions fixedly secured to diametrically opposite sides of the main body of the shaft.

LEROY D. WINTERS.