

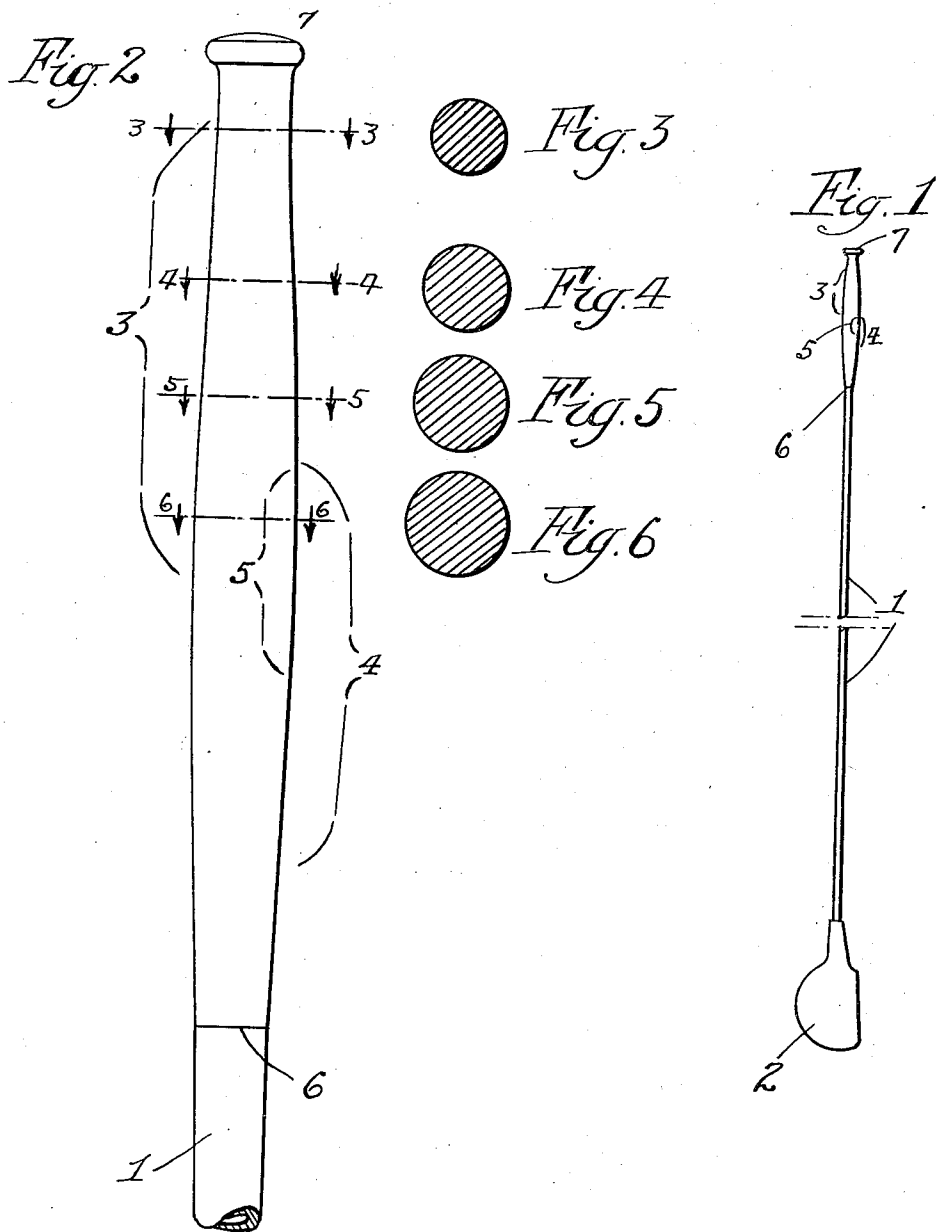
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GOLF CLUB

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GOLF CLUB

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2 Claims. (Cl. 273—81)

This invention relates generally to new and useful improvements in golf clubs but relates more particularly to the handle or gripping part of the club shaft.

5 The general object of the invention is to provide a golf club handle or grip wherewith it shall be possible to control and swing the club more efficiently than with constructions heretofore devised.

10 A number of attempts have been made to devise golf club grips which would enable the more efficient handling or swinging of a golf club, but in actual fact, little, if any, progress has been made in that direction. It has been proposed to provide the shaft or grip of the club with a series of grooves for the fingers of the hands with recesses to accommodate the thumbs. In other cases it has been proposed to cut away portions of the round handle; again to provide 20 longitudinal ridges. Indeed, ridges of various forms have been suggested.

Also, handles have been proposed in which there are numerous facets, bulges, grooves and the like of various shapes and sizes and disposed in different angular planes.

25 The proposals heretofore made have been open to one or more objections. Where it has been proposed to provide the grips with indentations and a series of grooves to accommodate the fingers, it would be necessary actually to mold the grooves to fit the particular fingers of the user. Even then in actual practice there would be danger of the ridges cutting, injuring or making the fingers uncomfortable. Furthermore, 30 with such a construction, it would not be possible to place the hands except in one definite position, either longitudinally of the shaft or circumferentially thereof, whereas the actual playing of the game of golf frequently requires that the head be "laid back" or "toed" in slightly for specific shots. Again, at certain times, it may be desired to move one or both of the hands to a point more nearly on the top of the club or more nearly under the club, which could not, 45 conveniently, be done with clubs having grooves, indentations and the like.

Certain of the other constructions proposed would be impracticable from a manufacturing commercial production standpoint.

50 The golf clubs in most general use are of a construction tapering gradually to the largest diameter at the top or free end of the club. In some instances the shafts are cylindrical at the grip. Neither of these forms now in actual use 55 is believed to coact properly with the hand in

gripping the shaft in a manner to produce the best results.

It is generally known that the golf swing, for the right-handed player, is primarily a left arm control swing, but it is not so generally known, that in order to transmit the body forces to the arm and thence through the club to the hands, that the forces flow to the shaft of the club in a predominant manner through the smaller fingers of the left hand, i. e. the medius or middle 10 finger, the annularis or ring finger, and auricularis or little finger. This last mentioned fact has been consciously recognized in the present invention and there has been designed a shaft club or grip which conforms to and harmonizes 15 with this physical anatomic action.

Another well known and recognized fact is that the left arm should be reasonably straight during the swing. However, this desired result cannot properly be effected unless the grip be of 20 correct form. It has been discovered that by providing a construction which enables the proper contraction of the middle, ring and little fingers of the left hand, the extensor muscles and particularly the muscle extensor carpi ulnaris (the 25 predominant functioning muscles of the left arm) are nicely tensioned, thus giving the user a straight left arm and not merely a rigid and more or less lifeless left arm such as results from gripping a club improperly formed. In this way, 30 a very live and resilient left arm is obtained which enables accurate control, and which permits imparting to the club the desired movement through the hands and wrists. That is to say, one can, in this way, feel or sense the action, 35 which cannot be done so well if the grip is improperly formed to coact with the fingers.

Furthermore, by providing for the proper and adequate gripping of the club by the last three fingers of the left hand, it is not necessary to 40 grip so tightly with the thumb and index finger. In this way, there is no sacrifice of that freedom of wrist action which is so necessary for good golf. That is to say, a grip formed to coact properly with the fingers induces or assures better 45 wrist action, in addition to providing for the natural normal tensioning of the extensor muscles of the left arm through or by means of the contracting movement of the fingers which the grip of the present invention induces. 50

Thus, the fundamental purpose of the invention is to provide a golf shaft or grip whereby one or more of the foregoing advantageous results can be accomplished.

With the above mentioned objects in view, as 55

well as others which will appear hereinafter as the description of the invention is proceeded with, the invention consists in the novel features set forth in the accompanying drawing and more particularly pointed out in the appended claims.

In the drawing:

Fig. 1 is a front elevation of a golf club provided with a shaft or gripping part embodying the invention;

Fig. 2 is a view of the handle or gripping part of the shaft or club, the same being on a scale approximately actual size although the size may vary depending upon the size and character of the hand of the user;

Fig. 3 is a cross section on the line 3—3 of Fig. 2;

Fig. 4 is a cross sectional view on the line 4—4 of Fig. 2;

Fig. 5 is a cross sectional view on the line 5—5 of Fig. 2, and

Fig. 6 is a cross section on the line 6—6 of Fig. 2.

The numeral 1 designates the shaft of a golf club and 2 the head thereof. The shaft 1 may be of any desired material such as hickory, steel or the like and the head 2 may, likewise, be of any desired material and may be shaped as required for the "wood" clubs, driver, brassie, etc., or for the "iron" clubs, midiron, mashie, niblick, etc.

The end of the shaft of the club opposite the head 2 terminates in a handle or gripping portion, and it is that portion of the club to which this invention particularly relates.

While the gripping portion or shaft of the present invention is adapted for use when gripping the club by a number of different methods now in use, i. e., the interlocking grip, the overlapping grip, etc., the invention will be described particularly in connection with the overlapping grip because that is the one most extensively used and advocated by expert players.

Within the bracket 3 (see Fig. 2) is a portion which will be referred to as the left hand zone. The part within the bracket 4 will be generally referred to as the right hand zone. As here shown, the portion of the shaft within the bracket 5, which is partly in the left hand zone and partly in the right hand zone, is of cylindrical form and of a diameter say of the order shown in Fig. 6. The cross section (Fig. 3) shows the diameter approximately at the outermost end of the left hand zone in the vicinity where the little finger is to engage the club. The grip tapers from a larger diameter to a smaller diameter preferably on a gradual taper as is indicated by the cross sectional views 5, 4 and 3. For the sake of convenience, the part within the bracket 5 will be referred to as the overlapping zone, being generally that part of the grip adjacent the point where the little finger of the right hand overlaps the index finger of the left hand and where the third finger of the right hand engages the shaft. It will, of course, be understood that the index finger of the left hand and the thumb of the left hand normally will grip the shaft in the vicinity of the overlapping zone.

The portion of the right hand zone below the overlapping portion 5 preferably tapers to a smaller diameter, merging at a point 6 with the main part of the shaft 1.

The grip may be turned from wood, built up upon a steel shaft or formed in any other suitable way which will be readily understood by those skilled in the art to which this appertains.

Likewise, the surface may be of leather or other suitable material.

In gripping the club, the player wraps the fingers of the left hand around the club at the part marked left hand zone, the little fingers being adjacent the end of the club and in the general vicinity of the cross section 3—3. The index finger of the left hand and the thumb grip the club from opposite sides in the vicinity of the lower end of the left hand zone. The other two fingers of the left hand, i. e. middle finger and ring finger are wrapped around the club in the space between the index finger and the little finger. The cross sectional size of the shaft at the place where the little finger is to be positioned, and the gradual increase in size of the shaft toward the place where the index finger and thumb are positioned are such that the fingers of the left hand and particularly the three smaller fingers, little finger, ring finger and middle finger substantially envelop the shaft, slightly touching or coming into close proximity to the fleshy part of the palm of the hand. By making the shaft in this way, a number of very important advantages are obtained. Because of the tapering construction, enabling the fingers of different lengths substantially fully to envelop the shaft, it is possible to contract the fingers on the shaft in a manner better to tension the extensor muscles of the left arm. This results in giving a straight left arm but not merely a rigid one.

Again, because of the tapering construction, permitting the substantially complete enveloping of the shaft by the three dominant fingers, i. e. little, ring and middle fingers, it is not necessary to grip so tightly with the thumb and index finger of the left hand and this combination coacts in inducing better wrist action.

Again, at the top of the swing, there is less danger of the fingers opening up and causing loss of control of the club because the fingers more nearly make a ring around the shaft and it is much more difficult to open them when so formed.

Again, with the taper as shown, there is a greater tendency of the fingers of the left hand to remain closely together and hence to provide more compact action.

The foregoing advantages relate particularly to the left hand and arm which are the dominant and vital parts in connection with the golf swing. It is generally conceded that the function of the right hand is primarily to provide the "punch" at the instant of impact or slightly therebefore and that in the back swing, it should be relatively inactive except to follow generally the course which the dominant left arm and wrist impel. This means that the shape of the right hand zone of the club is not so critical. However, I prefer generally to taper the same toward the shaft 1 proper, maintaining the shaft of fairly substantial diameter at the point where the index finger and thumb of the right hand grip the club. This will facilitate rather light gripping in the right hand, thus further avoiding danger of the right hand taking control during the back swing but still affording a good surface against which the index finger of the right hand can push as it forces the club through just prior to and after impact with the ball.

The free or upper end of the club is preferably formed with a slight enlargement 7 to avoid any danger of the little finger accidentally slipping off the club, but this is not essential and its shape may be modified considerably where it is used.

The construction of the present invention is such that it lends itself to quantity production. Furthermore, if desired, several basic sizes can be provided to accommodate hands having basically different characteristics, i. e. for the hand with long thin fingers, the hand with medium length fingers and the more or less thick type hand with short fingers. In each instance, of course, the grip diameter and the taper would be such as to permit of the enveloping of the shaft in the manner and to accomplish the beneficial results heretofore mentioned.

However, even though but a single size be provided, some adjustment or fit to the hand may be made by a slight shifting of the left hand position of the club longitudinally of the shaft in one direction or the other. Because of the relatively non-critical character of the right hand grip, the right hand can readily accommodate itself to the placed position of the left hand.

In the specification, the terms "left hand zone" and "right hand zone" are used. This has reference to the use of the club by the normal right handed player. Obviously, the hands would be reversed for a left handed player so that the terms should be construed accordingly.

The invention has been illustrated and described in sufficient detail so that it is believed that those skilled in the art will have no difficulty in understanding the principles involved but it should be understood that changes may be made in the details of construction without departing

from the spirit of the invention as set forth in the following claims.

I claim as my invention:

1. A golf club handle having a gripping portion, of a length adapted to accommodate the two hands of the player, said gripping portion having a point of larger cross-section intermediate its handle, the upper portion of the grip tapering toward the top of the club so as to have its smallest cross-section adjacent the top of the club and the lower portion of the grip tapering toward the head end of the club said upper portion being of such cross sectional size that it may be substantially enveloped by the little, ring and middle fingers.

2. A golf club handle having a gripping portion, of a length adapted to accommodate the two hands of the player, said gripping portion having a point of largest cross-section intermediate its handle, the upper portion of the grip tapering toward the top of the club so as to have its smallest cross-section adjacent the top of the club and the lower portion of the grip tapering toward the head end of the club said upper portion being of such cross sectional size that it may be substantially enveloped by the little, ring and middle fingers; a portion of said grip being substantially cylindrical between said oppositely tapered upper and lower portions of the grip.

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