

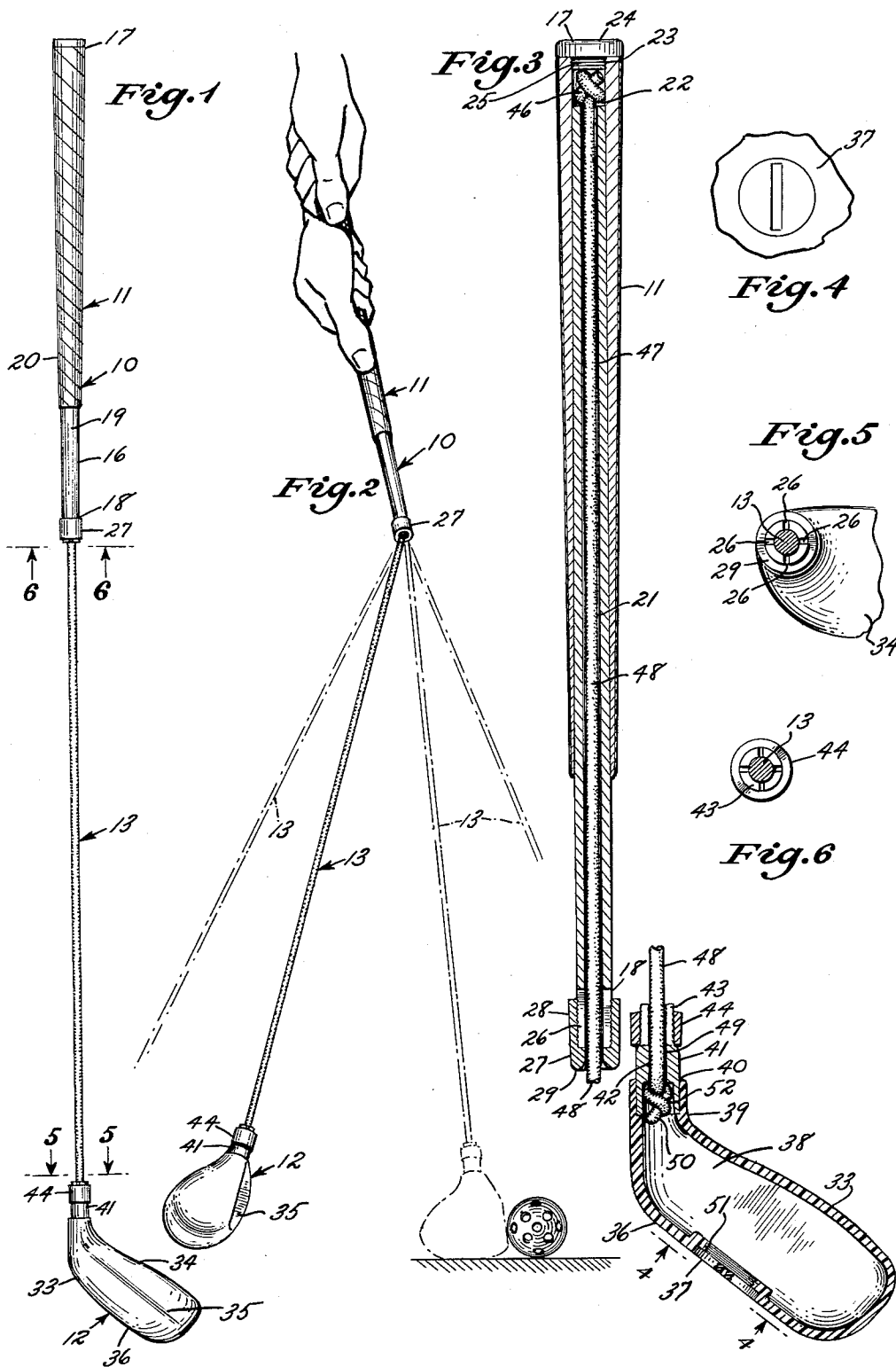
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PRACTICE GOLF CLUB

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PRACTICE GOLF CLUB

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1 Claim. (Cl. 273—186)

This invention relates generally to golf club structures, and more particularly to an improved form of golf club training device which, by virtue of its operation, is useful in correcting an improper swing in the use of both woods and irons.

The problem of developing and maintaining a proper swing by the typical amateur golfer is proverbial, owing to the multitude of small details, the proper execution of which is necessary in the sum total of movements which constitute the execution of a proper stroke. One of the principal faults of the tyro, and a common fault even with relatively more experienced golfers, is the tendency to "chop" or "hack." This fault arises from the natural tendency of the golfer to employ as much strength as possible in hitting the ball, with a view toward obtaining the utmost possible yardage, and in so doing there is a tendency to use the club somewhat in the manner of an axe (hence the term "chopping"). Such motion usually expends itself in ripping up the course, but seldom does it result in superior performance.

I have found that by constructing a training device resembling in most respects a conventional club, but in which the shaft is formed from completely flexible albeit inextensible material, the tendency to "hack" or "chop" may be eliminated through practice. This result is obtained by the fact that when using the device, the head of the club operates as a pendulum, and in order to swing the same in a definite arc, the user must time his swing with the normal harmonic motion executed by the head of the club, so that the flexible interconnection between the handle and the club head is held taut solely through the action of centrifugal force. By maintaining the effective mass of the head of the club at a level substantially less than a conventional club, and as the effort involved is much less than that involved in swinging a normal club, it is possible to practice the swing for extended periods without becoming unduly fatigued. Further, because of the harmonic period involved, repeated rapid hacking motions are impossible.

It is therefore among the principal objects of the present invention to provide an improved golf training device whereby a golfer may acquire the habits constituting a correct golf swing with a minimum of effort.

Another object of the invention lies in the provision of an improved golf training device which resembles a conventional golf club to the extent that the golfer can feel the effect of a proper golf swing, and have a basis of comparison of such a proper swing with an improper swing.

A further object of the invention lies in the provision of an improved golf training device in which the handle and club head elements are interconnected by a completely flexible length of rope, whereby the same may be held rigid only through the effect of centrifugal force as the device is swung in a normal arc.

Yet another object of the invention lies in the provision of an improved golf training device of the class described in which the cost of fabrication may be of a reasonably low order, with consequent wide sale, distribution and use.

A feature of the invention lies in the fact that the device may take the form of any of the conventional woods and irons, and may be used in practicing any of the well-known golf strokes with the exception of putting.

These objects and features, as well as other incidental

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ends and advantages, will more fully appear in the progress of the following disclosure, and be pointed out in the appended claim.

In the drawing, to which reference will be made in the specification, similar reference characters have been employed to designate corresponding parts throughout the several views.

FIGURE 1 is a view in elevation of an embodiment of the invention.

FIGURE 2 is a fragmentary view in perspective showing the device in use in striking a practice-type golf ball.

FIGURE 3 is a fragmentary enlarged central sectional view of the embodiment.

FIGURE 4 is a fragmentary angular plan view as seen from the plane 4—4 in FIGURE 3.

FIGURE 5 is a horizontal enlarged fragmentary sectional view as seen from the plane 5—5 in FIGURE 1.

FIGURE 6 is a transverse sectional view as seen from the plane 6—6 in FIGURE 1.

In accordance with the invention, the device, generally indicated by reference character 10, comprises broadly: a handle element 11, a club head element 12, and rope connecting means 13.

The handle element 11 may be conventional construction including a tapered metallic tubular member 16, having an upper end 17, a lower end 18, and an outer surface 19 provided with conventional cover means 20 of leather or synthetic resinous material. Extending between the upper end 17 and the lower end 18 is an axially disposed bore 21, communicating at an upper end thereof with a counterbored recess 22, the upper end 23 of which is threaded. A threaded cap member 24 is selectively engageable with the threaded upper end 23, whereby the handle element 11 may resemble a conventional golf club handle. As best seen in FIGURE 3, the cap member 24 includes a generally centrally disposed threaded shank 25, the diameter of which is substantially less than the main portion of the cap member.

At the lower end 18, the member 16 is castellated and threaded to accommodate a plurality of slits 26 defining individually flexible segments, the outer surface of which is threaded to accommodate a correspondingly threaded collet chuck or constricting member 27. The outer surface 28 of the member 27 may be knurled to permit manual tightening of the same. Again, as best seen in FIGURE 3, the lower end 29 of the member 27 is of rounded configuration to avoid presenting a sharp edge which might tend to cut the means 13 with continued use.

The club head element 12 is preferably formed as a synthetic resinous blow molding to resemble a conventional club head, but having considerably lighter mass. As best seen in FIGURE 3, a hollow head member 33 includes an upper wall 34, a peripheral wall 35 which forms a ball-engaging club face, and a lower wall 36 having a selectively engageable threaded plug 37 communicating with a hollow interior 38. The rearward end 39 of the member 33 is tapered to a vertically disposed opening 40 into which a metallic tubular shank 41 is fitted, preferably at the time of molding the member 33. The shank 41 includes a hollow bore 42, the upper end 43 being castellated to accommodate a knurled constricting member 44 resembling the member 27.

The rope connecting means 13 is preferably formed of nylon rope, of a type widely used as sash cord, and includes a first knotted end 46 disposed within the recess 22, a section 47 enclosed by the handle element 11, an exposed flexible portion 48, a lower second enclosed section 49, and a second knotted end 50 disposed within the hollow interior 38. The effective length of the flexible section 48, and therefore the effective length of the device 10, is adjusted by simply removing the threaded cap member 24 and retying the knotted end 46 to include a

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different total effective length of the means 13. This permits a single device to be used by golfers of varying height and arm length. In the alternative, the identical adjustment may be made at the lower knotted end 50 by removing the plug 37.

The device is assembled preferably by threading the means 13 through the bore 42 and out the opening 51 normally closed by the plug 37. After the end 50 has been knotted, the means 13 may then be pulled outwardly to engage the knot in the recess 52 in the shank 41, following which the constricting member 44 is tightened to securely engage the outer surface of the section 49. The threaded plug 37 may then be replaced. Next, the upper end 46 of the means 13 is threaded through the handle element 11, and when the proper length of the section 48 has been determined, the knot is tied on the end 46 and the section 48 pulled downwardly to locate the knot within the recess 22. The cap member 24 is then replaced, and the constricting member 27 tightened to effect a similar result upon the upper enclosed section 47. It will be observed that the knotted ends provide a reaction for the centrifugal force developed during use of the club, the constricting means 27 and 44 serving to prevent twisting of the means 13 within the elements 11 and 12 so that the club head element 12 will remain in proper orientation during the swing of the club.

During use, as may be seen in FIGURE 2 of the drawing, the club is swung in a manner resembling that employed in using a conventional club. Owing to the complete flexibility of the means 13, the club head element will swing in a manner resembling a pendulum, and, as has been mentioned, since the mass of the club head element is relatively light, the handle element may be swung at normal speed, wherein centrifugal force developed will maintain the flexible section 48 in relatively stiff condition.

Any attempt to "hack" or "chop" produces a result immediately visible to the user, which manifests itself in an inability to make the club head follow a normal arc. This results from the fact that the "hacking" or "chopping" motion is not a uniform swing as is required to create the pendulum effect in the club head element.

Where desired, the effective mass of the club head element may be altered by placing small weights within the hollow interior 38, preferably associated with the knotted end 50, so as to maintain the mass center close to the axis of the shank 41.

It may thus be seen that I have invented novel and highly useful improvements in a golf training device, in which there is provided a means resembling a conven-

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tional golf club which will simulate the movement of such club when properly swung, and which cannot be swung with any degree of success unless a proper movement is employed. The device may be fabricated at a reasonably low manufacturing cost, and may be readily adjusted for different club lengths by those possessing only ordinary skill, and without resort to tools. Because of the nature of the device, it may be successfully employed in the absence of a coach or instructor, and the swing acquired is a natural effortless one of the type displayed by professional golfers.

I wish it to be understood that I do not consider the invention limited to the precise details of structure shown and set forth in this specification, for obvious modifications will occur to those skilled in the art to which the invention pertains.

I claim:

A device for self-teaching a correct golf swing, comprising: an elongated hollow tubular handle element, a club head element of hollow configuration and having a hollow shank extending outwardly therefrom and communicating with the hollow interior of said head element, and flexible interconnecting means extending through said handle element and said shank to flexibly interconnect the same; said handle element including a recess at a free end thereof, said flexible means including a rope having a knot on a free end thereof disposed within said recess to prevent relative movement between said rope and said handle element in a direction toward said club element; said rope having a second end thereof having a knot thereon disposed within said club head element to prevent withdrawal therefrom; and axially arranged collet chuck means on the lower end of said handle element and the upper end of said shank element engaging the outer surface of said rope to prevent twisting thereof.

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