

Aug. 17, 1937.

A. M. FERRY

2,090,348

GOLF APPARATUS

Filed Jan. 18, 1935

FIG. 1.

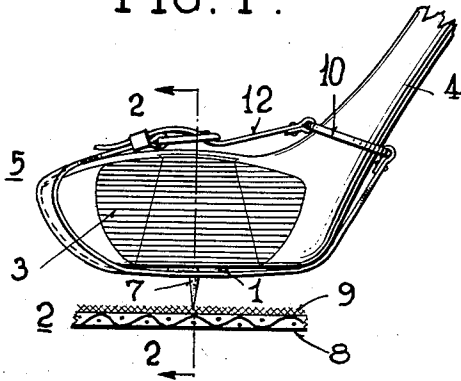


FIG. 3.

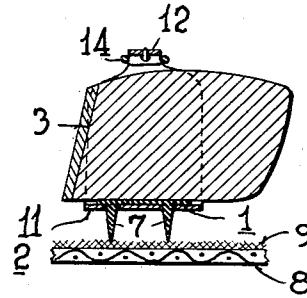


FIG. 2.

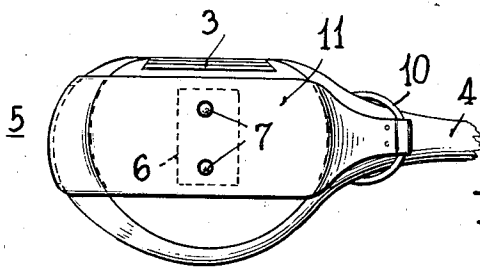


FIG. 4.

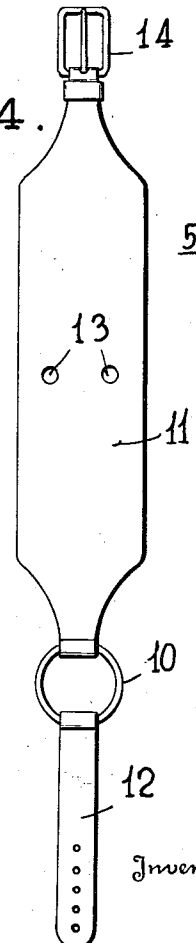


FIG. 5.

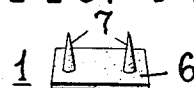


FIG. 5a.

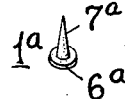
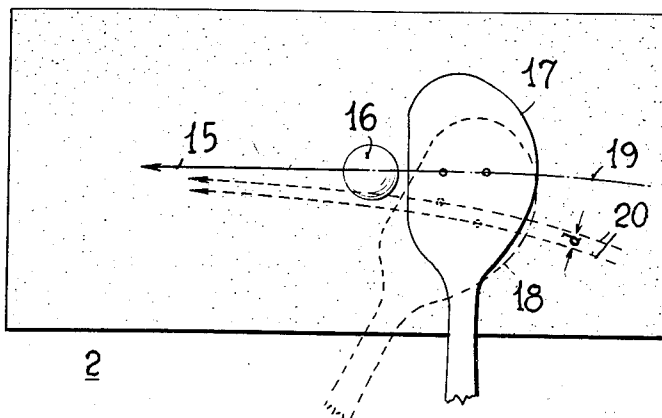


FIG. 6.



Inventor

Albert M. Ferry,

F. Gerald Toye
Attorney

UNITED STATES PATENT OFFICE

2,090,348

GOLF APPARATUS

Albert M. Ferry, Kenwood, Md.

Application January 18, 1935, Serial No. 2,432

13 Claims. (Cl. 273—35)

My invention relates to golf apparatus and more particularly to means for indicating the path which a golf club head follows and the angle of the face of the club head with respect to the path which the club head follows as the club head is propelled through an arc by a player in making a stroke.

It is well known that for a player to achieve control in the execution of golf strokes it is necessary that the swing be "grooved" to the extent that the club head follows exactly the same path during the flat arc at the bottom of the swing each time a stroke is made. It is for this reason that golf instructors advocate a great deal of practice in swinging a club without actually addressing and stroking a ball. One difficulty with this practice may be attributed to the fact that the player has no means of ascertaining whether or not the practice swings are properly executed with the result that he is quite likely to train the muscles of the body to execute and "groove" an improper or faulty swing. By the proper use of my novel golf apparatus, the player is enabled to intelligently review the exact nature of each stroke executed and thus is given a positive aid in the elimination of faults due to improper stroking of the ball.

My invention has for one of its objects to provide an improved means for giving the golf player a visual indication of the nature of the stroke which he makes as he propels a golf club through a swing.

Another object of my invention is to provide a device to be attached to a golf club which will record on a suitable recording surface the path of the club head and will leave a record on the recording surface indicating the angle of the club head face with respect to the path which the club head follows as a stroke is made by a player.

A further object of my invention is to provide an improved attachment for golf clubs which will apprise the player of the faults in his swing, which is of simple construction, which may be readily attached to a golf club and which is equally adaptable for use in actual play or in practice.

The novel features which I believe to be characteristic of my invention are set forth with particularity in the appended claims. My invention itself, however, both as to construction and the method of using the same together with further objects and advantages thereof, may best be understood by reference to the following description taken in connection with the accompanying

drawing, in which Figure 1 shows one embodiment of my invention including an attachment made in accordance therewith attached to the head of a golf club; Figure 2 is a bottom view of the club and the attachment illustrated in Figure 1; Figure 3 is a cross sectional view taken along the line 2—2 of Figure 1; Figure 4 shows the details of the attaching means; Figure 5 shows in detail one modification of the device to be attached to the golf club head; Figure 5a shows a second modification of the device; and, Figure 6 illustrates the method of practicing my invention and the indications resulting from a proper use thereof.

Referring to Figures 1, 2, and 3, I have shown therein an attachment 1 for a golf club which is adapted to make a record on a recording surface 2 as a stroke is made with the club. The attachment is firmly held in position against the sole of the head 3 of a golf club 4 by a suitable securing means 5.

In the preferred embodiment of my invention the attachment 1 comprises a base member 6 having a plurality of relatively long fingers 7 integrally connected thereto and extending therefrom as shown in detail in Fig. 5. In Figure 5a I have illustrated a modification wherein each base member 6a is provided with a single finger 7a. The fingers are preferably from three-fourths of an inch to an inch and a half in length and the attachment including the base and finger or fingers is molded or otherwise formed from flexible material such as rubber. It will be understood that the fingers may be made of non-flexible material and may be either rigidly or yieldingly connected to the club head, depending upon the type of recording surface which is used.

The use of flexible fingers is advantageous, however, since the flexible fingers will bend easily and thus will not interfere with the soling of the club while the player is addressing a ball. Flexibility of the fingers is also desirable since it minimizes the wear on the recording surface.

I have illustrated the recording surface 2 in Figures 1 and 3 as consisting of a rug 8 having a nap 9 thereon of sufficient height to record the path of the fingers 7 which contact the nap as a stroke is made with the club. Any suitable recording surface may be employed which is adaptable for use with a particular type of finger 7. In practicing my invention during actual play a smooth spot should be selected on the ground on which to tee the ball so that the fingers will leave an accurate record on the surface

of the earth of the nature of the stroke. When earth is used as a recording surface the fingers may be made of non-flexible material and may be rigidly fastened to the club if desired.

Referring to Figure 4, I have shown the means for securing the attachment 1 to the sole of the club head as comprising a ring 10 which is adapted to be telescoped over the shaft of the club and to be held in position by the club head 3 as shown in Figure 1, and a leather harness consisting of the straps 11 and 12, each having one end attached to the ring 10. The strap 11 is provided with openings 13 which are just large enough to accommodate the fingers 7 and which are so positioned that the fingers extending therethrough are aligned with the center of the striking surface of the face of the club on a line perpendicular to the club face edge of the sole of the club when the attachment is attached to the club as shown in Figure 2. If an attachment made in one piece as shown in Figure 5 is used the holes are spaced apart a distance equal to the distance between the fingers 7. If desired, a plurality of individual fingers of the type shown in Figure 5a may be used instead of the unitary attachment shown in Figure 5. The strap 11 is so shaped that it conforms to the contour of the club head when the attaching means is secured in position as shown in Figure 1. The strap 12 and the buckle 14 attached to the free end of the strap 11 are provided to tighten the strap 11 around the club head and thereby firmly secure the attachment 1 in the correct position. By this arrangement it will be seen that the fingers for marking on the recording surface may be readily and economically replaced when necessary. By constructing the attaching means in the above described manner the face of the club is left unobstructed when it is desired to practice my invention in actual play.

Referring to Figure 6, I have shown the type of record which is portrayed on the recording surface 2 when a stroke is made with the club. The recording surface is provided with an imaginary line of ball flight 15 and an actual golf ball, or a simulated ball as indicated at 16 having a diameter equal to that of a regulation golf ball. The full line 17 and the dotted line 18 indicate a golf club head at approximately the bottom of the arc of a stroke. As the club head approaches the recording surface during the stroke the fingers 7 contact the surface thereof as shown in Figures 1 and 3 and record the path of the club head during the relatively flat arc at the bottom of the stroke. If the club is traveling with the face perpendicular to the path of travel, as shown by the full line 17, a single line will be generated as indicated by the dot and dash line 19 since the tracings of the fingers on the recording surface will be superimposed upon each other. If the center of the face of the club travels exactly above the center of the simulated golf ball this single line will pass exactly through the center of the simulated ball as shown. However, if the stroke is improperly executed so that the center of the face of the club does not travel exactly above the center of the simulated ball the single line will not pass through the center of the same and will thus indicate to the player that he is standing too far away from or too near the ball. The single line generated will also indicate to the player whether he is swinging the club in such a manner as to produce a hook or in such a manner as will necessarily result in a slice.

If a stroke is made such that the club head travels with the striking face at an improper angle with respect to the path of the club head as shown by the dotted line 18, the paths of the fingers 7 will necessarily be independent because of their being secured to the sole of the club head on a line perpendicular to the club face edge of the sole of the club in the manner hereinbefore described. As a consequence, the tracings of the fingers 7 will follow the spaced apart paths indicated by the dotted lines 20. The distance d between the two lines will indicate to the player the approximate angle of the face of the club head with respect to the path of the club head and will enable him to estimate what correction should be made in his grip on the club handle to correct the fault. Thus, it will be seen that the divergence of the paths of the fingers represented by the distance d will give to the player a visual indication of the magnitude of the angular deviation from a right angle of the club face edge of the sole of the club head with respect to the path of the club head at all points along the flat arc at the bottom of the stroke. In this connection it is desirable to provide an attachment 1 having fingers, each capable of leaving a mark on the recording surface distinguishable from the mark made by another finger in order to apprise the player in which direction the grip on the club should be shifted to bring the club face to the correct position.

From the above description, it will be apparent that by using my novel golf practice apparatus the player is enabled to practice intelligently since the record made on the recording surface by the fingers placed on the sole of the club head, as described herein, will indicate clearly the exact position of the club head during the interval including the instant when the club head face contacts the ball.

While I have shown a particular embodiment of my invention, it will of course be understood that I do not wish to be limited thereto since various modifications may be made. I contemplate, by the appended claims, to cover any such modifications as fall within the true spirit and scope of my invention.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. An attachment for a golf club including a base member having a plurality of fingers extending therefrom, a strap having spaced apart openings therein large enough to accommodate said fingers, and means including said strap for securing said base member to the sole of the head of a golf club.

2. An attachment for a golf club including a strap having a plurality of openings cut therein, a plurality of fingers adapted to extend through said openings and having base portions adapted to rest against one side of said strap, and means including said strap for securing said base portions to the sole of the head of a golf club.

3. An attachment for a golf club comprising a ring adapted to be telescoped over the shaft of a golf club and to rest against the head thereof, a strap having one end connected to said ring, said strap having a plurality of openings cut therein, a plurality of fingers adapted to extend through said openings and having base portions adapted to rest against one side of said strap, a second strap having one end connected to said ring and a buckle for connecting the free ends of said straps.

4. In combination, a golf club, and means including a plurality of relatively long slender flexible fingers depending from the sole of the club head on a line perpendicular to the club face edge of the sole of said club head for recording on a suitable surface the path of the club head and the magnitude of the angular deviation from a right angle of the club face edge of the sole of said club head with respect to the path described by the club head over said surface as the club is propelled through a stroke.

5. In combination, a golf club, and means including a plurality of relatively long flexible fingers depending from the sole of the club for recording on a suitable surface the path of the club head and the magnitude of the angular deviation from a right angle of the club face edge of the sole of said club head with respect to the path described by the club head over said surface as the club is propelled through a stroke.

6. In combination, a golf club, and means attached to the sole of the club head including a plurality of spaced marking points flexibly supported at a relatively large distance from the sole of said club head for recording on a suitable surface the path of the club head and the magnitude of the angular deviation from a right angle of the club face edge of the sole of said club head with respect to the path described by the club head over said surface as the club is propelled through a stroke.

7. Golf apparatus comprising a recording surface having a spot simulating a golf ball thereon, a golf club, and means including a plurality of relatively long flexible fingers depending from the sole of said club for recording on said surface the path of said club head and the magnitude of the angular deviation from a right angle of the club face edge of the sole of said club head with respect to the path described by said club head over said surface as the club is propelled through a stroke.

8. Golf apparatus comprising a recording surface having a spot simulating a golf ball thereon, a golf club, and means attached to said club including a plurality of spaced marking points flexibly supported at a relatively large distance from the sole of said club for recording on said surface the path of said club head and the magnitude of angular deviations of the face of said club from a line perpendicular to the path described by the club head over said surface and in a plane substantially parallel to the sole of said club head as the club is propelled through a stroke.

9. Golf apparatus comprising a recording surface having a spot simulating a golf ball and a line simulating a line of ball flight thereon, a golf club, a plurality of relatively long flexible fingers

depending from the sole of said club and adapted to record on said surface the path of said club head and the magnitude of the angular deviation from a right angle of the club face edge of the sole of said club head with respect to the path described by said club head over the surface as the club is propelled through a stroke and means for firmly securing said fingers to the sole of said club head.

10. A device adapted to be secured to a golf club including a plurality of spaced marking points flexibly supported at a relatively large distance from the sole of said club and adapted to record on a suitable surface the path of the club head and the magnitude of the angular deviation from a right angle of the club face edge of the sole of the club head and the path described by the club head over said surface as the club is propelled through a stroke, and means for securing said device to the head of a golf club.

11. A device adapted to be secured to a golf club to record on a suitable surface the path of the club head and the magnitude of the angular deviation from a right angle of the club face edge of the sole of the club head and the path described by the club head over said surface as the club is propelled through a stroke, said device comprising a plurality of relatively long flexible fingers, and means for securing said fingers to the head of a golf club so that the tips of said fingers are distantly spaced from the sole of said club.

12. A device adapted to be secured to a golf club to record on a suitable surface the path of the club head and the magnitude of the angular deviation from a right angle of the club face edge of the sole of the club head and the path described by the club head over said surface as the club is propelled through a stroke, said device comprising a plurality of relatively long flexible fingers, and means for securing said fingers to the sole of the head of a golf club on a line substantially perpendicular to the club face edge of the sole of the club head so that the tips of said fingers are distantly spaced from said sole.

13. An attachment for a golf club comprising a finger for indicating the path of the club head as the club is propelled through a stroke, means including a second finger for indicating, as the club is propelled through a stroke, the magnitude of the angular deviation from a right angle of the club face edge of the sole of the club head relative to the path of the club head, and means for securing said fingers to the head of a golf club.

ALBERT M. FERRY.