**ABSTRACT**

A golf glove for providing wrist control which consists of a body portion having a palm side, a back side, a plurality of finger portions, a thumb portion, an integral wrist portion and an operative closure mechanism. The golf glove also features an elongated pocket extending along the back side of the body portion and an elongated and rigid insert portion fitted snugly and removably inside the pocket, the insert portion further having a bend in the middle, wherein use of the glove maintains the wrist of a player in a fixed, predetermined position during golf play.
GOLF GLOVE WITH WRIST INSERT

FIELD OF THE INVENTION

[0001] The invention relates to a game improving golf glove and more particularly, to a golf glove with rigid insert that facilitates consistent and accurate club swing by restricting wrist bending angle.

BACKGROUND OF THE INVENTION

[0002] A full swing in driving a golf club is a complex rotation of the body aimed at accelerating the club head to a great speed. For a right-handed golfer, it consists of a backswing to the right, a downswing to the left (during which the ball is hit), and a follow through. A right-handed golfer usually holds the club right-hand-below-left and vice versa for left-handed golfer.

[0003] As generally understood among golfers, a golfer's swing accuracy is generated by combination of body movements relative to club swings. For example, a golfer's grip is faulty, the golfer may not have control of club when he reaches the top of his backswing, thereby failing to shot the ball to a target point. To further facilitate grip and swing motion, a golf glove is worn on one hand that grips the club handle with the other hand slightly covering finger portions of the glove-clad hand. There is quite a bit of prior art intended to enhance a golfer's grip on the club such as U.S. Pat. No. 4,831,301, issued to Werner on Sep. 21, 1990, U.S. Pat. No. 6,228,354, issued to Carothers on May 1, 2001, U.S. Pat. No. 5,253,367, issued to Lappley on Oct. 19, 1993, etc.

[0004] Draws and fades are caused by slight misalignments between the clubface and swing plane, resulting in a slightly "open" or "closed" clubface at contact with the golf ball. Swing accuracy is known to substantially improve if the following hand, i.e., right for right-handed players and vice versa for left-handed players, is maintained without backward or forward leaning during the entire swing. Numerous prior art references provide a wrist support and/or restraint as an attachment to a golf glove in order to prevent the unwanted forward or backward leaning of a golfer's wrist during the swing motion.

[0005] U.S. Pat. No. 5,158,298, issued to Gains on Oct. 27, 1992 teaches a wrist guide that is pivotally attached to the arm guide and positioned on the hand of a golfer. The pivotal attachment of the wrist guide to the arm guide ensures that the golfer's hand pivots properly relative to the forearm.

[0006] U.S. Pat. No. 5,286,391 discloses a sports glove for primarily for a bowler including a glove body having sleeves, a flexible cover attached to the sleeves to form a pouch, and cushioning pad disposed in the pouch to weight distribution and balance a bowler grabbing a bowling ball.

[0007] U.S. Pat. No. 7,220,188, issued to Lee on May 22, 2007 teaches a golf glove comprising outer and inner sections connected to each other by a thumb loop and a little finger loop to become worn from fingers to substantially above a wrist and toward a player's arm is disclosed. The invention is supposed to promote club swing accuracy by stabilizing the posture of a golfer's hand and wrist from address to club swing while providing flexibility in the hand's sidewise movement.

[0008] U.S. Pat. No. 3,606,302, issued to Albertson Jr. on Jun. 30, 1969 discloses a wrist control device having a hand member for engaging the back of the hand, an independent arm member for engaging the top of the arm above the wrist, a pivot means pivotally connecting the members together for pivotal movement relative to one another.

[0009] U.S. Pat. No. 5,634,854, issued to Albertson on Jun. 3, 1997 discloses yet another a wrist control device which includes a rigid brace with layers of wrist straps to maintain wrist control. Other wrist control devices disclosed also include U.S. Pat. No. 5,511,788, issued to Manley et al. on April 30. They are however not in a glove format.

[0010] There is a need in the market for a golf glove that combines the traditional function of grip improvement with wrist bending control. The present invention is a golf glove that features a back pouch and a replaceable wrist insert which helps golfers maintain an optimum wrist bending angle.

ADVANTAGES AND SUMMARY OF THE INVENTION

[0011] One advantage and object of the present invention is to provide a cost effective way to acquire one of the most common game improving techniques, i.e., wrist control in golf without expensive gadgets.

[0012] Another advantage and object of the present invention is to provide an easy to use game improvement device, combined with the ease of use of an ordinary glove.

[0013] Another advantage and object of the present invention is that, unlike other wrist control training devices, the present invention can be worn and used at all time during practice and real play.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1 is a representative isometric view of an embodiment of the golf glove with wrist insert 100 of the present invention.

[0015] FIG. 2 is a representative isometric view of an embodiment of the golf glove with wrist insert 100 of the present invention in an open mode.

[0016] FIG. 3 shows a representative method of use of an embodiment of the golf glove with wrist insert 100 of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0017] The description that follows is presented to enable one skilled in the art to make and use the present invention, and is provided in the context of a particular application and its requirements. Various modifications to the disclosed embodiments will be apparent to those skilled in the art, and the general principals discussed below may be applied to other embodiments and applications without departing from the scope and spirit of the invention. Therefore, the invention is not intended to be limited to the embodiments disclosed, but the invention is to be given the largest possible scope which is consistent with the principals and features described herein.

[0018] It will be understood that in the event parts of different embodiments have similar functions or uses, they may have been given similar or identical reference numerals and descriptions. It will be understood that such duplication of reference numerals is intended solely for efficiency and ease of understanding the present invention, and are not to be construed as limiting in any way, or as implying that the various embodiments themselves are identical.
FIG. 1 is a representative isometric view of an embodiment of the golf glove with wrist insert 100 of the present invention. Swing accuracy of golfers is substantially improved due to the following hand (right hand for right-handed player and vice versa for left-handed players) maintained without backward or forward leaning during the entire swing. The present invention provides golfers control and maintenance with a firm and rigid wrist bending angle during the entire swing. As discussed earlier, the main advantage of the present invention is to avoid draws and fades, caused by slight misalignments between the club face and swing plane, by restricting wrist bending movement of the following arm.

FIG. 1 shows the right-hand version of the golf glove with wrist insert 100 of the present invention for right-handed golfers. Understandably, the invention concept can be adapted to create a left-hand version of the golf glove with wrist insert 100 of the present invention.

As shown in FIG. 1, golf glove with wrist insert 100 of the present invention, resembles a conventional golf glove, and consists of finger sheaths 102 and body portion 101. In one embodiment, body portion 101 has a palm side 200 and a back side 202. Unlike conventional golf gloves, in one embodiment, body portion 101 of the glove 100 extends to cover the entire wrist of users and ends approximately one-third up of the forearm. As best shown in FIG. 2, there is an insert pocket 109 which is an elongated space created to accommodate wrist insert 120 (not shown) on the back side 202 of body portion 101. In one embodiment, insert pocket 109 extends almost the entire length of body portion 101 and ends near the base 204 of finger sheaths 102. As shown in FIG. 1, the glove 100 further includes an upper securing flap 104 and a lower securing flap 106 on the body portion 101.

In one embodiment, upper securing flap 104 and lower securing flap 106 is positioned on either side of the user’s wrist. The upper securing flap 104 and the lower securing flap 106 are positioned on the back side 202 of the body portion 101 and cross over insert pocket 109. A function of securing flaps 104 and 106 is to maintain the position of the insert 120 within the pocket 109, and enclose the entire golf glove with wrist insert 100. The glove 100 is secure and maintains the optimum position of insert 120 and pocket 109. As best shown in FIG. 1, an optimum position of insert pocket 109 and wrist insert 120 is the middle of user’s wrist and palm in order to maintain a constant wrist bending angle α in the peripheral plane (for flexion and extension).

FIG. 2 is a representative isometric view of an embodiment of the golf glove with wrist insert 100 of the present invention in an open, unsecured mode. As shown in FIG. 2, upper securing flap 104 and lower securing flap 106 are positioned in the middle of the back side 202 of body portion 101 of the glove 100. In one embodiment, upper securing flap 104 and lower securing flap 106 each has a matching base 108 and 110 respectively. The undersides 206 of securing flaps 104 and 106 and their matching bases 108 and 110 are made with Velcro™ or other similar hook and loop material fabric providing a firm but detachable closure.

As best shown in FIG. 2, insert pocket 109 is an elongated, tubular space in the middle of body portion 101 running from the arm opening 200 to the base of finger sheaths 102. In one embodiment, insert pocket has an insert opening 105 situated close to or otherwise adjacent the arm opening 200 which is the opening for wrist insert 120.

As shown in FIG. 2, wrist insert 120 is an elongated roughly L-shaped plate providing rigid structure which is bent to attain a certain optimum angle α. Since it will be placed in close proximity to user’s wrist, it should be contoured along its width in order to provide a close, ergonomic fit. In one embodiment, wrist insert 120 is made of inelastic, resilient, water proof and light material or materials, such as plastic, plastic, polymer etc. The insert 120 can be formed utilizing mono-construction or multiple components. The main purpose of wrist insert 120 when it is secured inside the insert pocket 109 of the golf glove with wrist insert 100 is to provide wrist restraint to players to prevent wrist flex or extension of the wrist during golf swing. Consequently, the wrist bending angle of the glove 100 will conform to the bending angle α of wrist insert 120.

In one embodiment, wrist insert 120 should be slid inside insert pocket 109 through insert opening 105 until it reaches the sealed end 204 of insert pocket 109. After wrist insert 120 is in place, player can put on the golf glove with wrist insert 100 of the present invention through arm opening 208 like any gloves. After all fingers are inside their corresponding finger sheaths 102, the user’s wrist can be bent to an angle essentially corresponding to or conforming with the bending angle α of the wrist insert 120. Player can close upper securing flap 104 and lower securing flap 106 by adhering to their matching base 108 and 110 respectively. The fit should be tight enough to avoid the glove 100 from sliding off the player’s hand and shifting of position of insert pocket 109.

FIG. 3 shows a representative method of use of an embodiment of the golf glove with wrist insert 100 of the present invention. As shown in FIG. 3, player 80, who is a right-handed golfer, is wearing the glove 100 on his left arm. During the swing motion, golf glove 100 is worn on the right hand that grips over the club handle, with the left hand slightly covering finger portions of the glove 100-clad hand. As discussed earlier, left handed players will wear golf glove 100 on their left hand. As shown in FIG. 3, due to the constraint provided by golf glove 100, a player is able to hold and sustain a firm wrist at an optimum wrist bending angle during the entire swing through contact and follow through.

To avoid draws and fades which are caused by slight misalignments between the club face and swing plane, some golf experts advocate the optimum wrist bending angle α should be approximately 45°. However, players can adjust the optimum bending angle α by selecting wrist insert 120 with slightly different bending angles α. Players can wear golf glove with wrist insert 100 at all time and treat it as a game improvement tool. Alternatively, the golf glove 100 can be used as a training tool to get players accustomed to sustaining a firm wrist during golf swings until they can do it without the help of golf glove 100.

Unless defined otherwise, all technical and scientific terms used herein have the same meaning as commonly understood by one of ordinary skill in the art to which the present invention belongs. Although any methods and materials similar or equivalent to those described can be used in the practice or testing of the present invention, the preferred methods and materials are now described. All publications and patent documents referenced in the present invention are incorporated herein by reference.

While the principles of the invention have been made clear in illustrative embodiments, there will be immediately obvious to those skilled in the art many modifications of structure, arrangement, proportions, the elements, materi-
als, and components used in the practice of the invention, and otherwise, which are particularly adapted to specific environments and operative requirements without departing from those principles. The appended claims are intended to cover and embrace any and all such modifications, with the limits only of the true purview, spirit and scope of the invention.

1 claim:

1. A golf glove for providing wrist control, the golf glove comprising:
   a body portion having a palm side, a back side, a plurality of finger portions and a thumb portion located at a proximal end, and a distal end;
   an wrist portion extending integrally from the distal end of the body portion;
   an elongated pocket extending at least partially through the length of the back side of the body portion and the wrist portion, the pocket further having a closed end positioned adjacent the base of the finger portions and an opening at the distal end of the wrist portion;
   an elongated and rigid plate-like insert portion having an operative bend adjacent a middle point thereof, the insert plate portion fitting snugly inside the pocket; and
   an operative closure mechanism for securing the golf glove to a user's hand, wherein use of the glove maintains the wrist of a player in a fixed, predetermined position during golf play.

2. The golf glove of claim 1 in which the bend of the insert portion is about 45 degrees.

3. The golf glove of claim 1 in which the bend of the insert portion is between about 30 degrees and about 56 degrees.

4. The golf glove of claim 1 in which the insert plate portion further having a downward side and an upward side.

5. The golf glove of claim 5 in which the downward side of the insert plate portion is contoured to fit the shape of a human wrist bent at a predetermined angle.

6. The golf glove of claim 6 in which the downward side of the insert plate portion is ergonomically contoured.

7. The golf glove of claim 1 in which the insert plate portion is made using resilient building material.

8. The golf glove of claim 1 in which the building material is selected from the group consisting of plaster, natural materials including vegetable-, mineral- and animal-based materials, and synthetic materials including plastics and composites.

9. The golf glove of claim 1 in which the building material is selected from the group consisting of plaster, natural materials including vegetable-, mineral- and animal-based materials, and synthetic materials including plastics and composites.

10. The golf glove of claim 1 in which the closing mechanism comprise one or more operational pairs of hook and loop material straps, each member of the one or more pairs of straps positioned on the back side of the body portion and the wrist portion, respectively.

11. A golf glove for providing wrist control, the golf glove comprising a body portion having a palm side, a back side, a plurality of finger portions, a thumb portion, an integral wrist portion and an operative closure mechanism; an elongated pocket extending along the back side of the body portion; and an elongated and rigid insert portion fitted snugly and removably inside the pocket, the insert portion further having a bend in the middle, wherein use of the glove maintains the wrist of a player in a fixed, predetermined position during golf play.

12. A method for golf swing training and instruction, the method comprising:
   selecting a game improving golf glove, the game improving golf glove comprising a body portion having a palm side, a back side, a plurality of finger portions, a thumb portion, an integral wrist portion and an operative closure mechanism; an elongated pocket extending along the back side of the body portion; and an elongated and rigid insert portion fitted snugly and removably inside the pocket, the insert portion further having a bend in the middle, wherein use of the glove maintains the wrist of a player in a fixed, predetermined position during golf play;
   optionally replacing the insert portion with insert portions having different bending angles;
   determining a following hand;
   putting the game improving golf glove on the following hand;
   closing the game improving golf glove with the closure mechanism; and
   practicing golf swings.

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