Description

Title of Invention: A GRIP FOR A GOLF CLUB

Technical Field

[1] The invention relates to the field of sports equipment and, particularly but not exclusively, to a grip for use in a sports equipment such as a golf club.

Background Art

[2] Like many sports, the sport of golf requires precision at a chain of events which relies heavily on fine control and coordination between the player and the golf club. Traditional golf clubs such as putting clubs, which are also commonly called 'putters', are often equipped with hand grips aimed to improve hand feel, to assist a tighter holding, as well as to facilitate a smoother movement of the hands and arms of the user. For example, most of the traditional putter grips are designed to encourage mobility of the joints in the hands and arms. One typical design is to provide the putter grip with a substantially cylindrical body, and optionally with a flat top surface for the user to position their thumb pads, such those as shown in Figs. 1 and 2. This configuration enables the palms of the user to face each other on opposing sides of the grip during a holding action, which is known to allow good mobility of the joints at the hands and arms to enable a full range of motion. Nevertheless, such mobility may also encourage inconsistencies in control, which may result in undesirable rotation of the putter during the holding, and thus misalignment to target and deviation of intended ball path. This is particularly difficult for golfers who suffer from the 'yips' - a movement disorder known to interfere with putting - which is known to be a relatively common movement disorder leading to involuntary joint movements in hands and arms.

Disclosure of Invention

[3] The techniques disclosed herein may provide for an improved grip for a golf club.

[4] The techniques disclosed herein may also provide a golf club having a novel grip configured to reduce mobility of the joints at the user's hands and arms in use.

[5] The techniques disclosed herein may also mitigate or obviate to some degree one or more problems associated with known grips for golf clubs.

[6] Aspects of the invention are defined in the independent claims. Some optional features of the invention are defined in the dependent claims.

[7]

[8] In general, there is disclosed a grip for use in a golf club such as, but not limited to, a putting club or putter. Specifically, the grip is configured such that, when being held by a user's hands in use, it guides the user into a specific holding posture which reduces or restricts the degree of movement available at the user's hands and arms. Particularly, there is provided a grip comprising a gripping member which extends longitudinally along at least a part of the grip. The gripping member comprises a longitudinal base portion and at least two angled side portions extending from the base portion. When the base portion engages medial or central parts of the user's palms when the grip is being held, the user's fingers are guided and encouraged to naturally rest onto the respective base portions of the gripping member. With this specific holding posture, mobility of the joints at the user's hands and arms, and particularly when during a putting and/or a swing, will be substantially reduced or restrict to allow control and consistency over the series of motions required during the play. The limitation to joints movement is particularly beneficial to players who experience involuntary hands and arms movement, such as those who suffer from the yips. Furthermore, the holding posture results in both of the user's palms facing forwards from a back surface of the gripping member, i.e. the palms are not opposed to each other as in a typical putter holding posture, but both facing the same direction.

[9] In a first exemplary arrangement, there is provided a grip for a golf club. The grip comprises a gripping member having a base portion extending longitudinally along a portion of the gripping member adapted to engage one or more palms when held by one or more hands of a user, and at least two side portions extending from said base portion; wherein the at least two side portions are inclined towards one another, such that when the based portion is engaged by the one or more palms of the user during a holding, one or more fingers of the or each of the user's hands are guided to rest on the at least two inclined side portions to thereby reduce or restrict mobility of joints at the user's hands and arms.

[10] In a second exemplary arrangement, there is provided a golf club comprising the grip according to the first aspect.

[11] In a third exemplary arrangement, there is provided a method of manufacturing a grip for a golf club. The method comprises the step of providing a grip body and providing a gripping member. The gripping member has a base portion extending longitudinally along a portion of the gripping member adapted to engage one or more palms when held by one or more hands of a user, and at least two side portions extending from said base portion; wherein the at least two side portions are inclined towards one another, such that when the based portion is engaged by the one or more palms of the user during a holding, one or more fingers of the or

each of the user's hands are guided to rest on the at least two inclined side portions to thereby reduce or restrict mobility of joints at the user's hands and arms.

[12]

Brief Description of Drawings

Description of Drawings

[13] The foregoing and further features of the present invention will be apparent from the following description of preferred embodiments which are provided by way of example only in connection with the accompanying figure, of which:

[14] Figure 1 shows the holding at a conventional putter grip in the prior art;

[15] Figure 2 shows the holding at another conventional putter grip in the prior art;

[16] Figure 3 is a perspective view showing an embodiment of a grip for a putter;

[17] Figure 4 is a bottom view showing a base portion of the grip of Figure 3;

[18] Figure 5 is a top view showing two side portions and a front edge of the grip of Figure 3;

[19] Figure 6 is a side view showing the grip of Figure 3;

[20] Figure 7 is a front view showing a shaft receiving portion of the grip of Figure 3;

[21] Figure 8 is a rear view of the grip of Figure 3;

[22] Figure 9 shows the holding of the grip of Figure 3 by a user; and

[23] Figure 10 is a full body view of Figure 9 showing position of the hands and the wrists of the user.

Mode for the Invention

Mode for Invention

[24] The following description is of preferred embodiments by way of example only and without limitation to the combination of features necessary for carrying the invention into effect.

[25] Reference in this specification to 'one embodiment' or 'an embodiment' means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment of the invention. The appearances of the phrase 'in one embodiment' in various places in the specification are not necessarily all referring to the same embodiment, nor are separate or alternative embodiments mutually exclusive of other embodiments. Moreover, various features are described which may be exhibited by some embodiments and not by others. Similarly, various requirements are described which may be requirements for some embodiments but not other embodiments.

[26] The present techniques relate to a hand grip or grip for use in a golf club. Although specific embodiments of putter grips have been described and illustrated, the techniques are generally applicable to any known type of golf clubs, such as woods, irons and putters, etc. and

therefore, the disclosure is not limited to a grip for use in a putting club, although this is its preferred application. In addition, a person skilled in the art will also appreciate that the grip will be applicable in other types of sports equipment which requires hand gripping by the user, as long as such application does not depart from the spirit and scope of the present invention.

[27] In the context of the present description, any descriptions on the dimensions of the grip, components of the grip and/or the golf club in one or more embodiments generally relate to exemplified dimensions of such item or items in their average, standard sizes suitable for use by a user with an average palm size and body height. It will be apparent to the skilled person that any proportional variations based on the described dimensions, for example, a reduction in the overall dimension of grip and/or a golf club so as to fit a user with a smaller than average palm size such as, a child or a teenager, shall also be encompassed.

[28] Referring to Fig. 3, shown is an embodiment of a grip 10 for use in a golf club such as a putting club. The grip 10 comprises a gripping member 20 which extends along at least part of the grip 10 at a distance sufficient to enable a user to place two hands on the gripping member 20 in longitudinal alignment, for example, with one hand behind another along a longitudinal axis of the gripping member 20, or alternatively, with overlapping or partially overlapping hands on the gripping member 20. In one embodiment, the gripping member 20 extends along at least part of the grip 10 a distance of at least about 14 inches.

[29] It is preferred for the gripping member 20 to be manufactured from a light-weight material such as, but not limited to, one or more of rubber, leather, wood, cork, as well as synthetic polymers such as polyurethane (PU), polyvinyl chloride (PVC) and poly (ethylene-vinyl acetate) (PEVA), etc. Without being limited to the specific materials described above, a person skilled in the art will appreciate that many other materials which are considered suitable and applicable to the present techniques, should also be encompassed.

[30] As shown in Figs. 3 to 6, the gripping member 20 is preferred to comprise a base portion 22 extending longitudinally along a portion of the gripping member 20 adapted to engage one or more palms, and more specifically, medial or central parts of the user's palms, when held by one or more hands of a user during a golf play, and at least two side portions 24 extending from said base portion 22. The at least two side

stop a few inches before reaching the rear end 14 to thereby reserve space for positioning a counter weight.

[37] The present disclosure further relates to a method of manufacturing a grip 10 for a golf club as described above. The method comprises the step of providing a grip body 12 by any known manufacturing methods such as, but not limited to, molding, 3-dimensional printing, carving, sculpting, etc. The method further comprises the step of providing a gripping member 20 as hereinbefore described.

[38] The present techniques are advantageous in that it allows, when the medial or central part of the user's palms engage the base portion of the gripping member during a holding at the golf grip, the user's fingers to be guided and encouraged by the specific configuration of the grip to rest comfortably on the respective inclined base portions of the gripping member, as shown in Figs. 9 and 10. Fig. 9 shows the holding posture when the golf club is in a horizontal orientation and Fig. 10 shows the holding posture when the club is in an in use orientation, e.g. a putting orientation. Positioning of the palms and the fingers and therefore the corresponding holding posture are naturally guided by the specific configuration of the grip, which keep the palms of the user facing upward when the club is horizontal, i.e. substantially aligned with and facing the front edge of the gripping member during the grip, as shown in Fig. 9. The thumb and the other fingers of one hand are encouraged to rest on the two respective side portions, i.e. the thumb at one side and the other fingers at the other side, with the thumb and the wrist of the same hand being substantially aligned and arranged at the same side and direction, as shown in Fig. 10. The specific dimensions of the grip further assist in reducing rotational movement of the user's palms about the longitudinal axis of the grip. This holding posture, as allowed by the specific configuration of the grip as herein disclosed, substantially reduces or restricts mobility of joints at the user's hands and arms during a putting and/or a swinging action or a series of actions during a golf play. The restriction in joint movement is particularly beneficial to players who experience involuntary movements at their hands and/or arms, such as those who are suffered from the YIPS.

[39] The present description illustrates the principles of the present invention. It will thus be appreciated that those skilled in the art will be able to devise various arrangements that, although not explicitly described or shown herein, embody the principles of the invention and are included within its spirit and scope.

[40] Moreover, all statements herein reciting principles, aspects, and embodiments of the invention, as well as specific examples thereof, are intended to encompass both structural and functional equivalents thereof. Additionally, it is intended that such equivalents include both

currently known equivalents as well as equivalents developed in the future, i.e., any elements developed that perform the same function, regardless of

Claims

[Claim 1] A grip for a golf club, comprising:
a gripping member having a substantially constant cross-section along its length, the gripping member having:
a base portion extending longitudinally along a portion of the gripping member adapted to engage one or more palms when held by one or more hands of a user, and
at least two substantially flat side portions extending from said base portion;
wherein the base portion comprises a curved surface, and the at least two substantially flat side portions are inclined towards one another, such that when the base portion is engaged by the palms of the user during a holding, fingers of the user's hands are guided to rest on the at least two inclined and substantially flat side portions to thereby reduce or restrict mobility of joints at the user's hands and arms.

[Claim 2] The grip according to claim 1, wherein the at least two side portions define an acute angle therebetween.

[Claim 3] The grip according to claim 2, wherein the acute angle is ranged from 20 deg to 80 deg.

[Claim 4] The grip according to claim 1, wherein the at least two side portions meet at a front edge of the gripping member relative to the base portion.

[Claim 5] The grip according to claim 1, wherein the base portion is of a width ranged from 1.0 inch to 1.5 inches.

[Claim 6] The grip according to claim 1, wherein the curved surface comprises a substantially semi-cylindrical surface having a radius of curvature of 0.5 inch to 0.75 inch.

[Claim 7] The grip according to claim 1, wherein the at least two side portions extend a sufficient distance away from the base portion such that, when the base portion is engaged by the one or more user's palms during a holding, one or more finger pads of respective hands of the user are allowed to engage respective opposed inclined side portions.

[Claim 8] The grip according to claim 1, wherein the at least two side portions are arranged such that, when the base portion is engaged by the one or more user's palms during a holding, one or more thumb pads of respective hands of the user are allowed to engage the respective side portions as their respective wrists.

[Claim 9] The grip according to claim 1, wherein the at least two side portions are inclined towards a central vertical plane of the gripping member, the gripping member is of a height of 1.2 inches to 1.75 inches along said central vertical plane.

[Claim 10] The grip according to claim 1, wherein the gripping member is configured substantially symmetrically along a longitudinal central plane.

[Claim 11] The grip according to claim 1, wherein the gripping member is formed of one or more anti-slipping materials and/or provided with one or more anti-slipping patterns.

[Claim 12] The grip according to claim 1, wherein the gripping member is of a length of at least 14 inches.

[Claim 13] The grip according to claim 1, further comprising a shaft receiving portion adapted to receive a shaft of a golf club.

[Claim 14] The grip according to claim 13, wherein the shaft receiving portion comprises a bore extending longitudinally and at least partially along the grip.

[Claim 15] The grip according to claim 14, wherein the bore is arranged to offset from both of a central vertical plane and a central horizontal plane of the grip.

[Claim 16] The grip according to claim 15, further comprising an elongated body comprising the shaft receiving portion and the gripping member.

[Claim 17] The grip according to claim 16, wherein the elongated body, the shaft receiving portion and the gripping member are integrally formed.

[Claim 18] The grip according to claim 1, wherein the gripping member is arranged to extend in a direction substantially parallel to an axis of a shaft of the golf club.

[Claim 19] The grip according to claim 1, wherein the grip is of less than or equal to 100 grams in weight.

[Claim 20] The grip according to claim 1, further comprising a counter weight positioned at an end distal to a head of the golf club.

[Claim 21] A golf club comprising the grip according to any one of the preceding claims.

[Claim 22] The golf club according to claim 21, wherein the grip is integrally formed with a shaft of the golf club.

[Claim 23] The golf club according to claim 21, wherein the gripping member is integrally formed with the grip and a shaft of the golf club.

[Claim 24] The golf club according to claim 21, wherein the base portion of the gripping member of the grip is positioned at a rear side of the grip relative to a direction of extension of a ball striking surface of a head of the golf club.

[Claim 25] The golf club according to claim 21, wherein the base portion comprises a curve surface having a central axis substantially parallel to a longitudinal axis of a shaft of the golf club.

[Claim 26] A method of manufacturing a grip for a golf club, comprising the step of:
providing a grip body;
providing a gripping member having a substantially constant cross-section along its length, the gripping member having:
a base portion extending longitudinally along a portion of the gripping member adapted to engage one or more palms when held by one or more hands of a user, and
at least two substantially flat side portions extending from said base portion;
wherein the base portion comprises a curved surface, and the at least two substantially flat side portions are inclined towards one another, such that when the base portion is engaged by the palms of the user during a holding, fingers of the user's hands are guided to rest on the at least two inclined and substantially flat side portions to thereby reduce or restrict mobility of joints at the user's hands and arms.