Embodiments of the present general inventive concept provide a sport swing aid device configured to be worn around the head and/or neck of a wearer during a sports swing in order to encourage proper posture of the wearer’s head before and during the sport swing. In some example embodiments, the device includes a solid rotation plate adapted to engage one side of the wearer’s neck and mandibular region so as to prevent the wearer from rotating his or her head prematurely before and during a sport swing. The device also includes a conforming strap adapted to conform to and encircle the neck of the wearer, with a proximate end of the strap coupled to one side of the rotation plate and a distal end thereof provided with a means to releasably secure it to the rotation plate.
SPORTS SWING AID DEVICE

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] N/A

FIELD OF INVENTION

[0002] The present inventive concept relates generally to a sports swing aid device, and more particularly to a device to be worn on a wearer's neck that promotes proper head posture during a sports swing by limiting movement of the head in the direction of the swing.

BACKGROUND

[0003] Sports that include participants striking a moving object, such as a ball, with a bat, club, or like instrument generally require the participants to have a sound swinging motion. For example, the sports of golf and baseball both encourage individuals to practice and perfect their swing of a golf club and baseball bat, respectively, in order to experience success in the sport. Heretofore, multiple devices, techniques, and methods have been developed to assist players in improving their swings. Some of these implementations work by exposing the individual to efficient, repetitive opportunities to engage in the swing motion, thereby relying on the individual's own assessment to determine whether improvement is actually occurring. Other implementations work by physically manipulating a player's body during the swinging motion to preclude improper movements or techniques.

[0004] It will be understood that both golf and baseball promote a perpendicular relationship between the orientation of the swinging player and the directional path of the subsequently struck ball. That is to say that both sports contemplate a ninety-degree offset between the direction that the player faces during the swing and the intended direction of travel of the hit ball.

[0005] In golf and baseball, as well as other swing-reliant sports, the importance of keeping one's head still before and during the course of the swing is typically significant. For example, in baseball, it is important for the batter to maintain the position of his or her head while the pitched ball approaches the swinging zone in order to permit the batter to see the ball before and during the swing. "See the bat to the ball" is often used as an expression to succinctly convey this idea. If the batter sees the ball up to and through contact with the bat, then the chances that good contact occurs between the bat and the ball, thereby resulting in a harder-hit ball, increase substantially. Likewise in golf, if the player's eyes remain on the ball up to and during contact with the golf club, then the chances that good contact occurs between the club and the ball, thereby resulting in a well-struck and accurate ball, also increase substantially.

[0006] Players that experience pre-mature head movement during their swings generally produce less positive results than players that have mastered the technique of keeping their heads still. Accordingly, there exists a need in the art for an aid to assist those who have difficulty in maintaining proper head positioning during a swing. Specifically, what is needed is a device that limits the movement of a player's head during a sport swing, thereby promoting proper posture and technique before and during the sports swing.

SUMMARY

[0007] Embodiments of the present general inventive concept provide a sport swing aid device to be worn by a wearer and encourage proper swing posture before and during a sports swing, the device including a rotation plate configured to conform to one side of the wearer's neck and mandibular region so as to limit movement of the wearer's head in one direction, a conforming strap configured to encircle the wearer's neck having a proximal end coupled to a side of the rotation plate, and a means for releasably securing a distal end of the conforming strap to the rotation plate such that the device may be secured to the wearer during a sports swing.

[0008] In some embodiments, a padded lining is provided to a top edge of the rotation plate in order to provide comfort to the wearer's mandibular region.

[0009] In some embodiments of the present general inventive concept, the securing means includes hook and loop fasteners provided to the distal end of the conforming strap and to the rotation plate.

[0010] In some embodiments, the rotation plate includes a cut-out section configured to leave the wearer's throat exposed while the device is being worn.

[0011] In some embodiments, at least part of the conforming strap comprises an elastomeric material.

[0012] In some embodiments of the present general inventive concept, the conforming strap includes a front portion and a rear portion, the front portion being smaller than the rear portion so as to allow the wearer's throat to be exposed when wearing the device.

[0013] Additional features and embodiments of the present general inventive concept will be set forth in part in the description which follows and, in part, will be obvious from the description, or may be learned by practice of the present general inventive concept.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The following example embodiments are representative of example techniques and structures designed to carry out the features of the present general inventive concept, but the present general inventive concept is not limited to these example embodiments. Moreover, in the accompanying drawings and illustrations, the sizes and relative sizes, shapes, and qualities of lines, entities, and regions may be exaggerated for clarity. A wide variety of additional embodiments will be more readily understood and appreciated through the following detailed description of the example embodiments, with reference to the accompanying drawings in which:

[0015] FIG. 1 illustrates a perspective view of an example embodiment sport swing aid device;

[0016] FIG. 2 illustrates a side profile view of the example embodiment sport swing aid device of FIG. 1;

[0017] FIG. 3 illustrates the example embodiment sport swing aid device of FIG. 1 being worn around the head and neck of a wearer; and

[0018] FIG. 4 illustrates the example embodiment sport swing aid device of FIG. 1 being worn around the head and neck of the wearer of FIG. 3, with the wearer occupying a right-handed batting stance in anticipation of performing a baseball swing.

DETAILED DESCRIPTION

[0019] Reference will now be made to example embodiments of the present general inventive concept, examples of
which are illustrated in the accompanying drawings and illustrations. The example embodiments are described herein in order to explain the present general inventive concept by referring to the figures.

[0020] It is noted that the following detailed description may recite various descriptive terms such as horizontal, vertical, top, bottom, upward, downward, left, right, front, back, etc., when referring to the exemplary figures, but the present general inventive concept is not limited to such terms or physical orientations. Such terms are used for convenience of description only, and could be reversed, modified, or interchanged without departing from the broader scope and spirit of the present general inventive concept.

[0021] Those of skill in the art will understand that while the instant application references the sports of golf and baseball while discussing various example embodiments, the present general inventive concept is not limited in its applicability to just golf and baseball. To the contrary, the present general inventive concept may be applied or otherwise incorporated into a wide variety of sports, particularly in sports where an individual swings an instrument in an effort to make contact with a ball or like object. Thus, the reference to the specific sports of golf and baseball is merely out of convenience and does not limit the scope or spirit of the present general inventive concept in any way, unless otherwise expressly stated herein.

[0022] Embodiments of the present general inventive concept provide a sport swing aid device capable of being worn around the neck and/or chest of a wearer and configured so as to limit rotation of the wearer’s head in the direction of the swing. Generally, the device includes at least one solid plate shaped to conform to the neck and/or mandibular region of a wearer’s head and a means of securing the plate proximate the head of the wearer. In some embodiments, the securing means includes a cloth and/or foam-like material coupled to one side of the plate that conforms to and encircles the profile of the wearer by wrapping around the wearer’s chest and/or neck in order to be releasably secured to the opposite side of the plate.

[0023] The present general inventive concept is designed to promote proper swinging posture of the head before and during a sport swing. With the device properly positioned and secured proximate the head of a wearer, the included plate will prevent premature rotation of the wearer’s head in the direction of the swing—i.e., the direction corresponding to the side of the head occupied by the plate. However, because a total restriction of movement would be both uncomfortable and detrimental to the swing, the device permits the user to rotate their head in the opposition direction of the swing, or the direction away from the plate.

[0024] With reference now to the drawings in which like reference characters designate like or similar parts throughout, the several views, FIG. 1 illustrates a perspective view of an example embodiment sports swing aid device 100. Similarly, FIG. 2 illustrates the same example embodiment of FIG. 1 in a side, profile view.

[0025] The example embodiment of the present general inventive concept illustrated in FIGS. 1 and 2 include a rotation plate 101 coupled to a conforming strap 111. The rotation plate 101 may include a lower portion 103 shaped to conform to the chest and/or neck of a wearer, and an upper portion 105 shaped to conform to a mandibular region of the wearer’s head. As illustrated at 109 in the illustrated example embodiment, the top of the upper portion 105 has been lined with a soft padding or like material to increase the comfort experienced by the wearer, as it is this part of the rotation plate 101 that engages with the head of the wearer before and during a sport swing. Further, a cut-out region 107 has been provided to the example embodiment rotation plate 101 so as to prevent the rotation plate 101 from engaging the throat of the wearer, while still enabling the upper portion 105 of the rotation plate 101 to engage the wearer’s chin.

[0026] The conforming strap 111 illustrated in the example embodiment of FIGS. 1 and 2 may include a front portion 113 and a rear portion 115. The front portion 113 engages the wearer’s chest, sternum, and/or front neck areas, while the rear portion 115 engages the back of the wearer’s neck, or nape. Together, both portions 113 and 115 enable the conforming strap 111 to wrap around the neck and/or chest of the wearer in order to position and secure the rotation plate 101 in place. Generally, the size of the conforming strap’s front portion 113 is smaller than that of the rear portion 115 and shaped so as to limit the amount of material that engages the wearer’s throat.

[0027] Also included on the conforming strap 111 and/or rotation plate 101 is a means for securing the rear portion 115 of the conforming strap 111 to the rotation plate 101. In the illustrated example embodiment, hook and loop fasteners have been provided to the distal end 117 of the conforming strap 111. Hook and loop fasteners have also been provided to the rear side of the rotation plate 101, as illustrated at 108. One of skill in the art will understand that the present general inventive concept is not limited to the currently illustrated example embodiment means for securing the rotation plate 101 and the conforming strap 111. Contrarily, numerous other means may be used without departing from the scope or spirit of the present general inventive concept, including snaps, buttons, buckles, or any other type of securing means in accordance with sound engineering judgment.

[0028] FIGS. 3 and 4 both illustrate the example embodiment sport swing aid device 100 of FIGS. 1 and 2 being worn by a wearer. In FIG. 3, the sport swing aid device 100 has been secured around the head 301 of a wearer 300. Specifically, the rotation plate 101 is engaging the wearer’s left mandibular region 303 and neck, while the conforming strap 111 is wrapped around the remainder of the wearer’s neck. The rotation plate 101 may span from the wearer’s chin 304, along the wearer’s mandibular region 303, and terminate proximate the wearer’s ear. As illustrated, the top of the rotation plate 101 has been provided with a soft padding 109 to increase the comfort experienced by the wearer. The wearer’s throat 302 is left exposed in the current example embodiment due to the conforming plate’s cut-out region 107 and the size and shape of the front portion 113 of the conforming strap 111. Further, the currently illustrated embodiment includes the hook-and-loop fastener securing means at 108 and 117 that was also included in FIGS. 1 and 2.

[0029] Likewise, FIG. 4 illustrates the sport swing aid device and wearer of FIG. 3, with the wearer occupying a batting stance in anticipation of performing a baseball swing. The wearer 300 in FIG. 4 is occupying a right-handed batting stance, however one of skill in the art will recognize that the present general inventive concept is not limited in its applicability to either right- or left-handed sports swings.

[0030] Referring to FIG. 4, the rotation plate 101 is engaging the wearer’s left mandibular region 303 and chin 304, in order to prevent the wearer from prematurely over-rotating his or her head 301 in the direction of the rotation plate 101. The top edge of the rotation plate as been provided with a
padded lining 109 comprising, at least in part, an elastomeric material. Thus, the areas of the wearer’s mandibular region 303 and chin 304 that engage with the rotation plate 101 initially interact with the padded lining 109, thereby increasing the comfort experienced by the wearer. The front portion 113 of the conforming strap 111 is originating at one end of the rotation plate 101, proximate the cut-out region 107 of the rotation plate 101. The wearer’s throat 302 is left exposed by the conforming strap 111 and the rotation plate 101, in order to maximize the comfort experienced by the wearer 300. The distal end 117 of the conforming strap 111, and a portion of the rotation plate, illustrated at 108, have been provided with hook-and-loop fasteners in order to secure the device 100 around the wearer 300.

[0031] One of skill in the art will understand from the disclosed example embodiments that the present general inventive concept is configured to prevent the premature, over-rotation of the wearer’s head, in relation to the wearer’s torso, in the direction of the sport swing. In FIG. 4, the wearer’s head 301 has been rotated to the limit allowed by the swing aid device 100. In some embodiments, this limit allows the wearer to see the incoming baseball pitch. However, at the same time, the device 100 is precluding the wearer’s head from over-rotating, relative the wearer’s torso, past a point that is detrimental to the swing. Thus, the present general inventive concept assists the wearer in maintaining the positioning and posture of the wearer’s head before and during a sport swing.

[0032] Still other embodiments will become readily apparent to those skilled in the art from reading the above-recited detailed description in view of all the drawings and figures. It is noted that the simplified diagrams and drawings do not illustrate all the various connections and assemblies of the various components, however, those skilled in the art will understand how to implement such connections and assemblies, based on the illustrated components, figures, and descriptions provided herein.

[0033] It is also noted that numerous variations, modifications, and additional embodiments are possible, and accordingly, all such variations, modifications, and embodiments are to be regarded as being within the spirit and scope of the present general inventive concept. For example, regardless of the content of any portion of this application, unless clearly specified to the contrary, there is no requirement for the inclusion in any claim herein or of any application claiming priority hereto of any particular described or illustrated activity or element, any particular sequence of such activities, or any particular interrelationship of such elements. Moreover, any activity can be repeated, any activity can be performed by multiple entities, and/or any element can be duplicated. Accordingly, while the present general inventive concept has been illustrated by description of several example embodiments, it is not the intention of the applicant to restrict or in any way limit the scope of the inventive concept to such descriptions and illustrations. Instead, the descriptions, drawings, and claims herein are to be regarded as illustrative in nature, and not as restrictive, and additional embodiments will readily appear to those skilled in the art upon reading the above description and drawings.

What is claimed is:

1. A sport swing aid device to be worn by a wearer and encourage proper swing posture before and during a sports swing, the device comprising:
   a rotation plate configured to conform to one side of the wearer’s neck and mandibular region so as to limit movement of the wearer’s head in one direction;
   a conforming strap configured to encircle the wearer’s neck having a proximal end coupled to a side of the rotation plate; and
   a means for releasably securing a distal end of the conforming strap to the rotation plate such that the device may be worn by the wearer during a sports swing.

2. The sport swing aid device of claim 1, further comprising:
   a padded lining provided to a top edge of the rotation plate in order to provide comfort to the wearer’s mandibular region.

3. The sport swing aid device of claim 1, wherein the securing means comprises hook and loop fasteners provided to the distal end of the conforming strap and to the rotation plate.

4. The sport swing aid device of claim 1, wherein the rotation plate comprises a cut-out section configured to leave the wearer’s throat exposed while the device is being worn.

5. The sport swing aid device of claim 1, wherein at least part of the conforming strap comprises an elastomeric material.

6. The sport swing aid device of claim 1, wherein the conforming strap comprises a front portion and a rear portion, the front portion being smaller than the rear portion so as to allow the wearer’s throat to be exposed when wearing the device.

7. A sport swing aid device to be worn by a wearer and encourage proper swing posture before and during a sports swing, the device comprising:
   a rotation plate configured to conform to one side of the wearer’s neck and mandibular region so as to limit movement of the wearer’s head in one direction, a padded lining provided to a top edge of the rotation plate, the rotation plate including a cut-out section configured to leave the wearer’s throat exposed;
   a conforming strap configured to encircle the wearer’s neck having a proximal end coupled to a side of the rotation plate, at least part of the conforming strap comprising an elastomeric material and wherein the conforming strap comprises a front portion and a rear portion, the front portion being smaller than the rear portion so as to allow the wearer’s throat to be exposed when wearing the device; and
   hook and loop fasteners provided to a distal end of the conforming strap and to the rotation plate for releasably securing the distal end of the conforming strap to the rotation plate such that the device may be secured to the wearer during a sports swing.

* * * * *