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(54) **CLUB HEAD STRUCTURE OF A GOLF PUTTER**

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(75) Inventor: **Li-Yang Lai**, Shanghai (CN)

(57) **ABSTRACT**

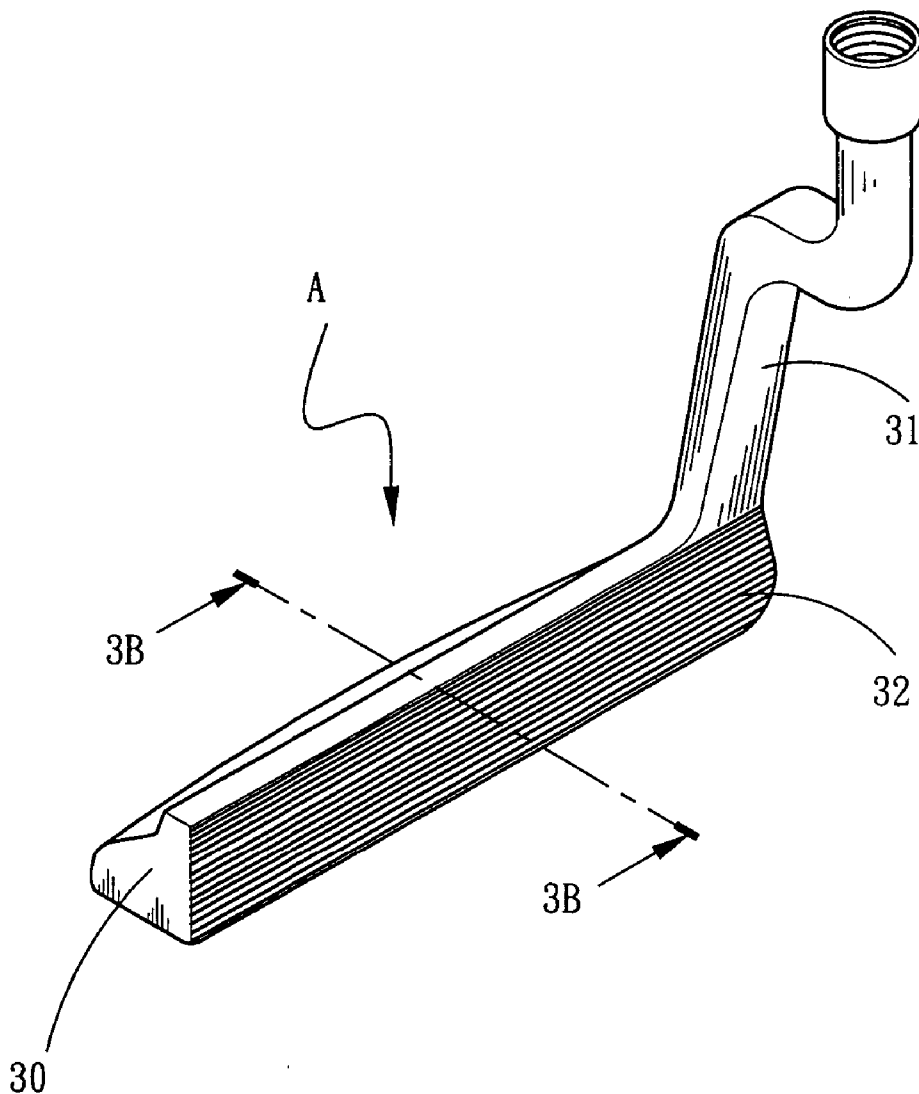
Correspondence Address:
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747 (US)

The present invention discloses a club structure of a golf putter that includes a club head and a shock absorbent member embedded in the club head. The club head is a long transversal main body. A neck is extended from a side of the main body and connected to a rod. A striking blade is disposed at the front side of the main body, and a chamber is disposed at the bottom of a rear side of the striking blade for embedding the shock absorbent member. The shock absorbent member absorbs the collision force produced by the striking of the golf ball so as to improve the elasticity and stability of striking ball as well as making the sound of striking the ball clearer and more pleasant.

(73) Assignee: **Shanghai Precision Technology Corporation**

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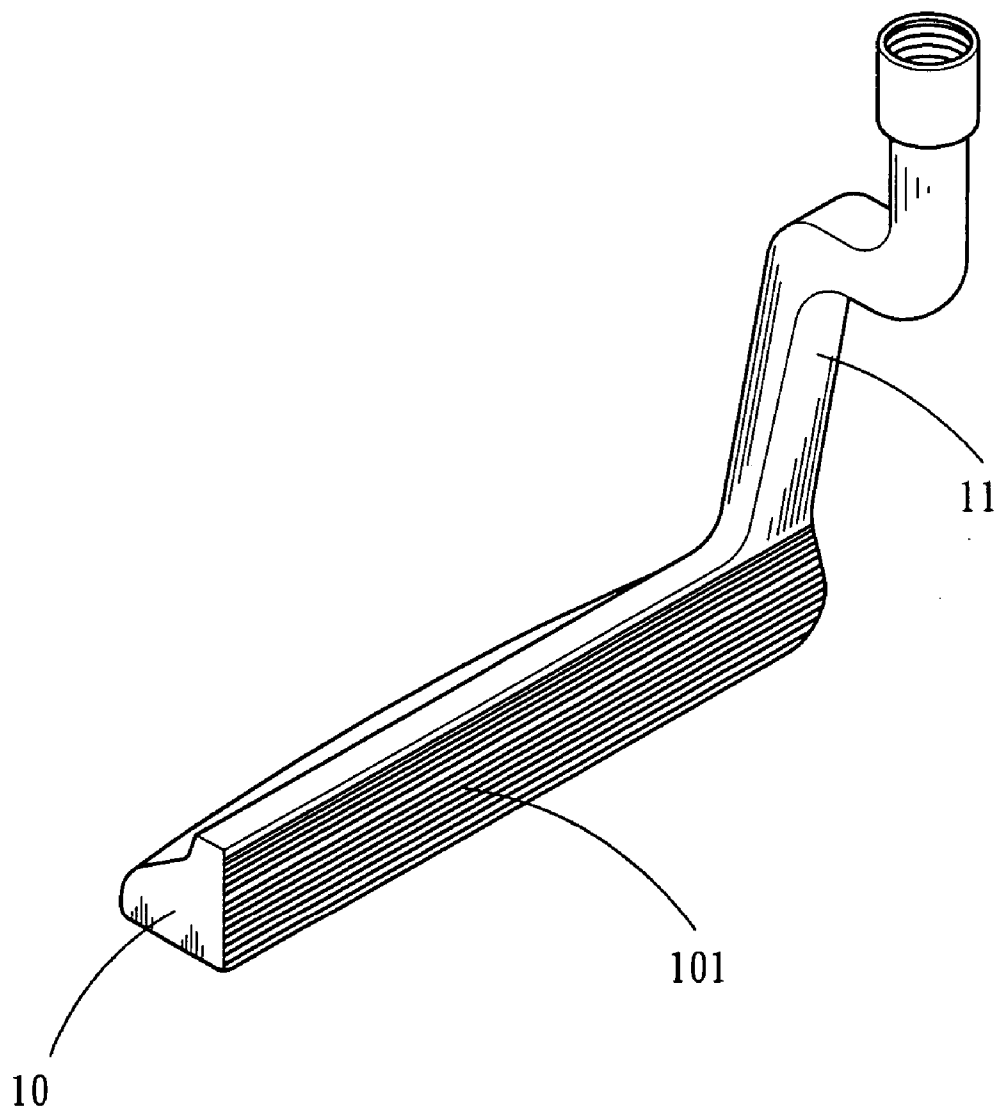


Fig. 1 PRIOR ART

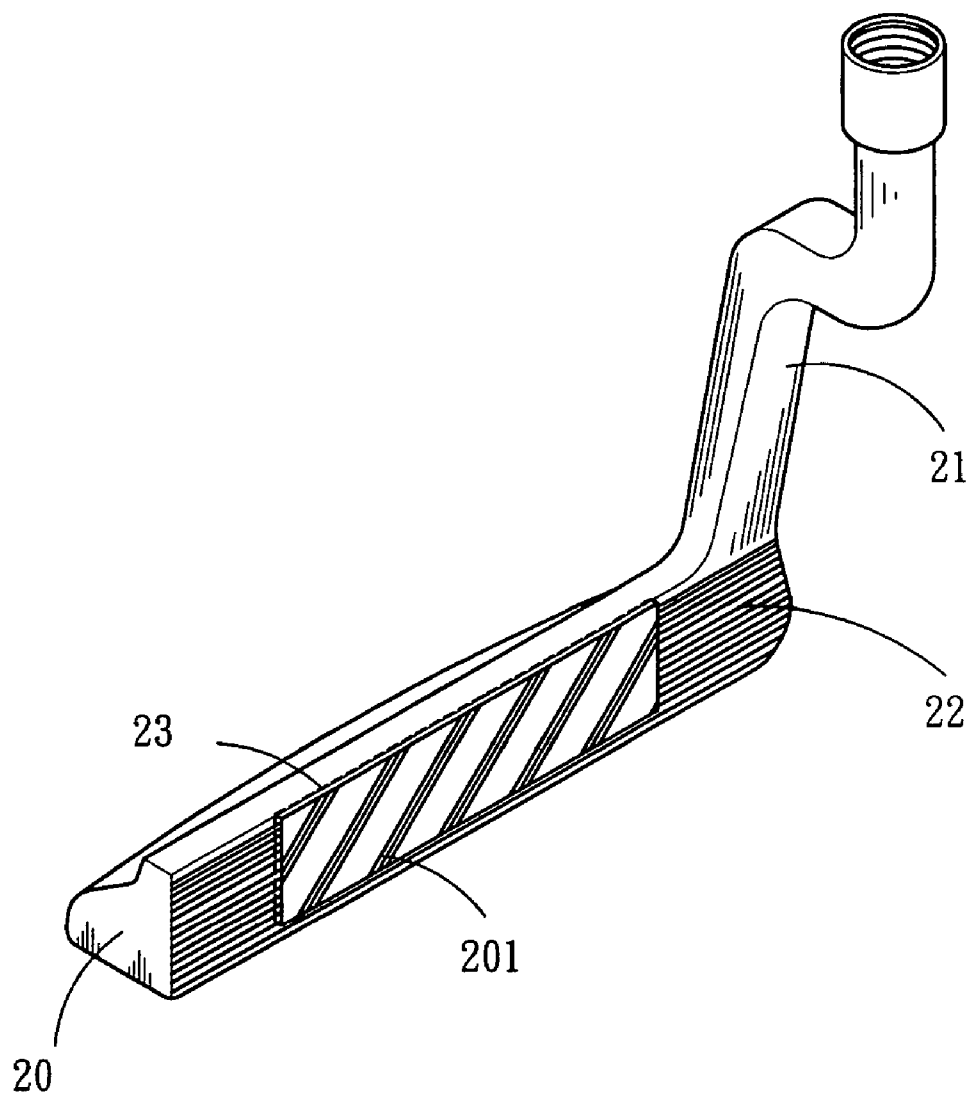


Fig. 2 PRIOR ART

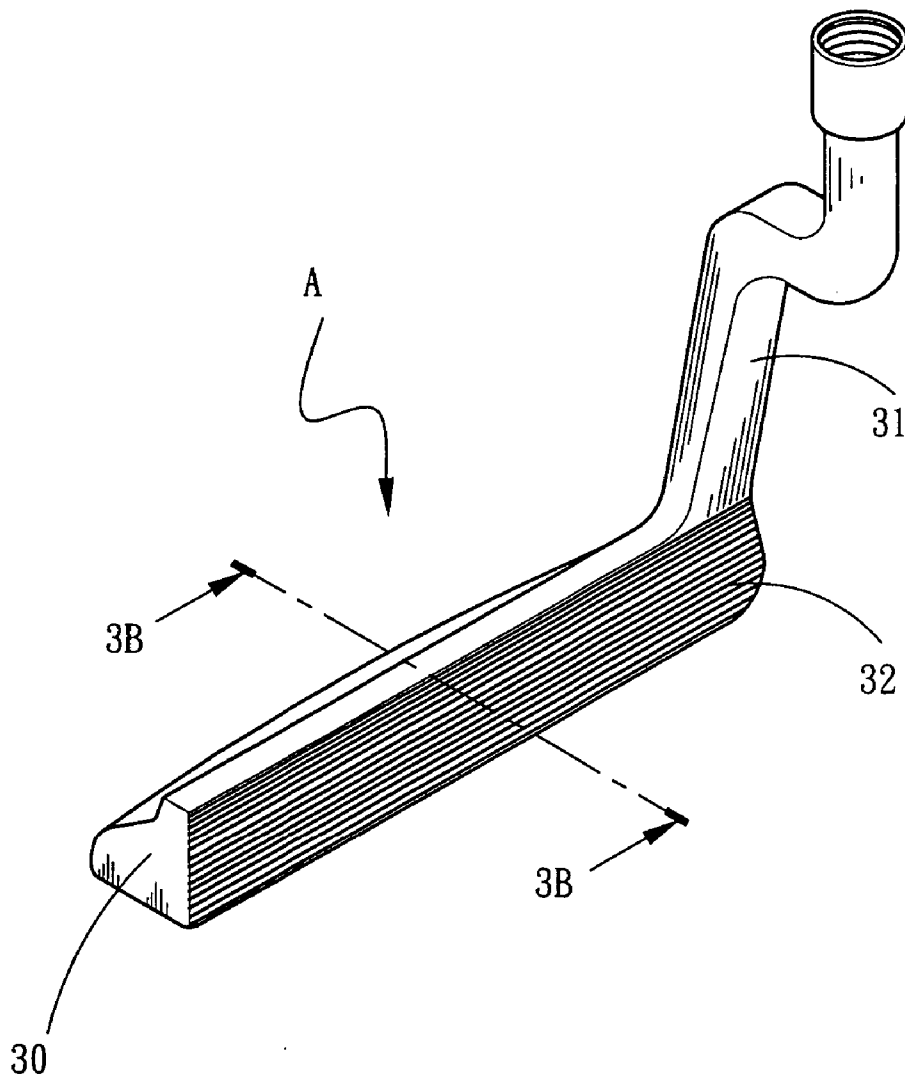


Fig. 3A

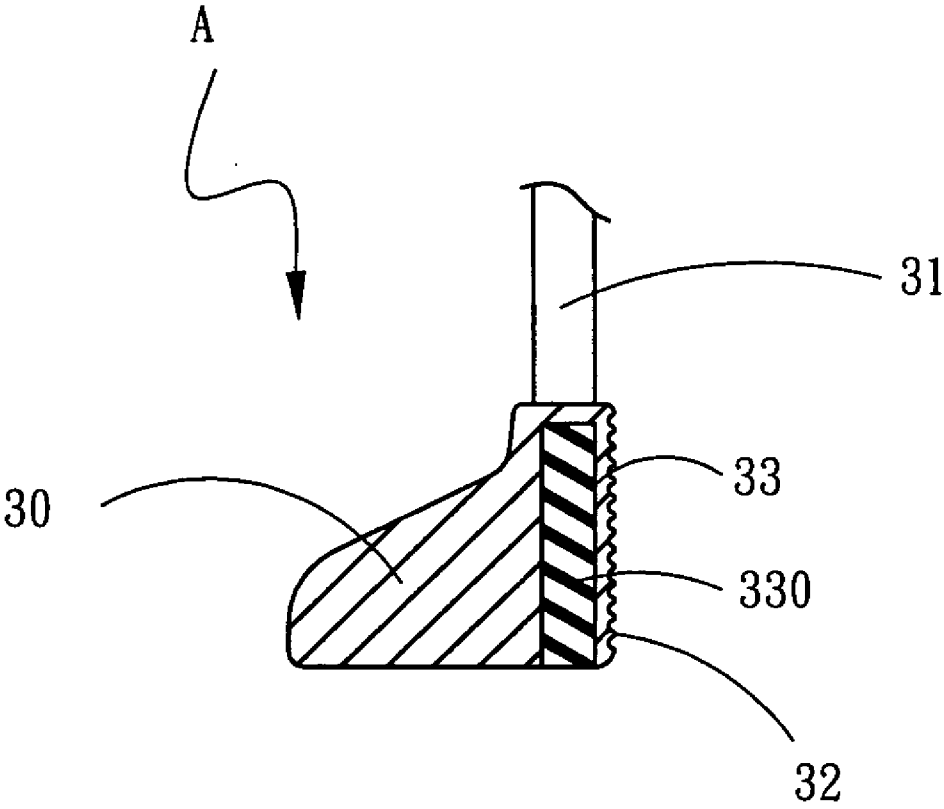


Fig. 3B

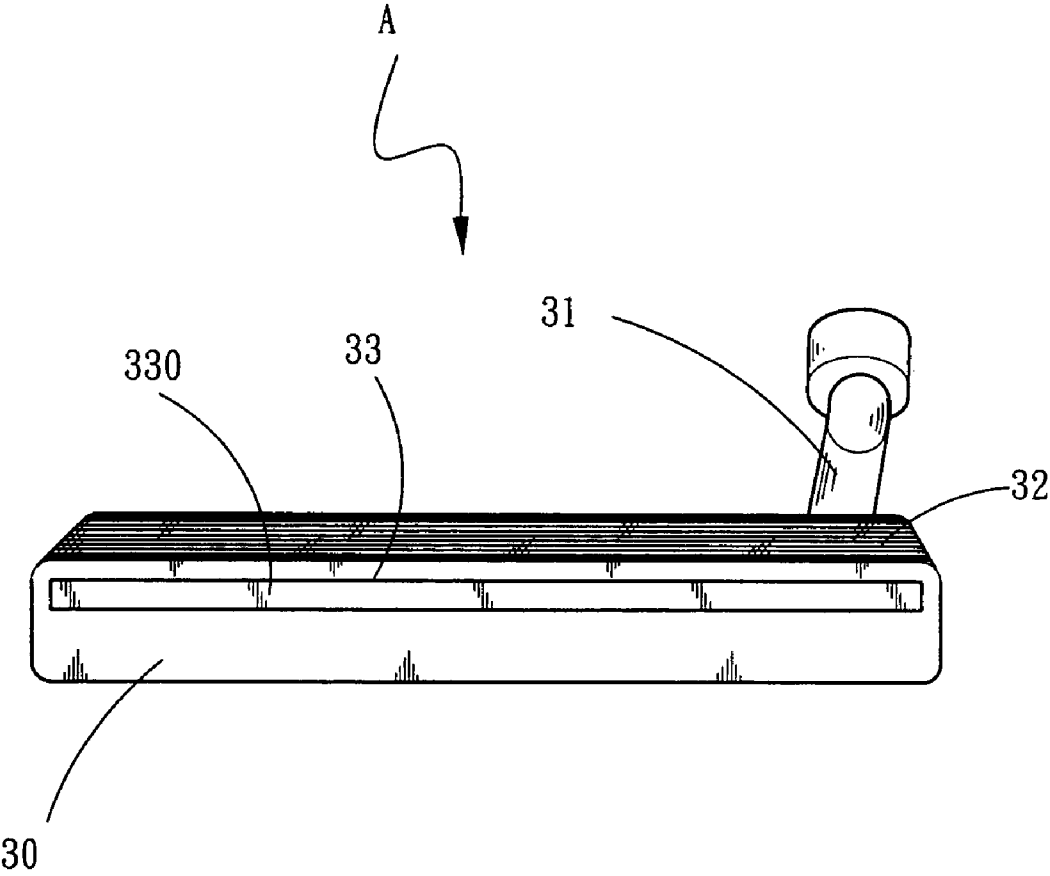


Fig. 4

CLUB HEAD STRUCTURE OF A GOLF PUTTER

FIELD OF THE INVENTION

[0001] The present invention relates to a club head structure of a golf putter, and more particularly to a club head structure that installs a shock absorbent member at the bottom of a rear side of a striking surface of a golf putter for absorbing collision forces and improving the elasticity of striking a golf ball, so as to enhance the stability of striking golf balls.

BACKGROUND OF THE INVENTION

[0002] Referring to FIG. 1, a prior art club structure of a golf putter is an integral metal cast object comprising a long transversal main body 10, a striking surface 101 disposed on a front side of the main body 10, and a connecting neck 11 connected to a rod body (not shown in the figure) and extended upward from a side of the main body 10, so that when a golf ball is struck, a striking blade 101 is in contact with the golf ball. Since the metal club head is hard, therefore the golf ball is struck rigidly and the collision force cannot be absorbed. As a result, the time of the striking surface 101 being in contact with the golf ball is very short, and the golf ball cannot be struck with a good control. What is more, it also will produce a sharp irritating sound while striking the ball.

[0003] Referring to FIG. 2, another improved club structure of a golf putter comprises a long transversal main body 20, a striking blade 22 disposed at the front side of the main body 20, a neck 21 connected to a connecting rod (not shown in the figure) and extended upward from a side of the main body 20, a chamber 23 disposed at the center of the striking blade 22 of the main body 20, and a corresponding shock absorbent member 201 embedded in the chamber 23, and the shock absorbent member 201 is made of an elastic material such as resin.

[0004] Since the shock absorbent member 201 is made of an elastic material having a higher elasticity and a lower rigidity, therefore a better deformation is provided for the shock absorbing member 201 for striking a golf ball. However, it is not easy for a golfer to control the direction of striking the ball, when the golf ball is struck at the shock absorbent member 201 having a high elasticity and low rigidity for deformation. As a result, the pushing force of the shock absorbent member 201 is not even, and the golf ball cannot be struck at a specific direction. The stability of striking the ball is lowered, and the sound of striking the ball is almost silent.

SUMMARY OF THE INVENTION

[0005] In view of the foregoing shortcomings of the prior art, the inventor of the present invention overcomes the shortcoming by building a chamber at the bottom of a rear side of the striking blade of the putter head and embedding a shock absorbent member in the chamber, such that the shock absorbent member absorbs the collision force when striking the golf ball, improves the elasticity of striking the ball, so as to enhance the stability of striking the ball and make the sound of striking the ball clear and pleasant.

[0006] To achieve the foregoing objective, the present invention provides a club structure of a golf putter compris-

ing a club head and a shock absorbent member embedded in the club head. The club head comprises a long transversal main body, a neck connected to a rod body and extended upward from a side of the main body, a striking blade disposed at the front side of the main body, and a chamber disposed at the bottom of a rear side of the striking blade for embedding the shock absorbent member.

[0007] With the elastic contraction of the foregoing shock absorber, the striking blade curves backward at the moment when the striking blade is in contact with the golf ball. Further, the time of contacting the golf ball can be extended to improve the control of striking balls, and the collision force produced during the striking of the ball can be absorbed by the shock absorbent member.

[0008] The foregoing striking blade is made of a metal having a higher rigidity than the resin, so that a golf striker can control the direction of striking the ball easily. As a result, the pushing force of the striking blade is even that gives a specific directing of striking the golf ball. Furthermore, the sound of striking the golf ball is clearer and more pleasant than the prior art putter.

BRIEF DESCRIPTION OF THE DRAWINGS

- [0009] FIG. 1 is a perspective view of the prior art;
- [0010] FIG. 2 is another perspective view of the prior art;
- [0011] FIG. 3A is a perspective view of the present invention;
- [0012] FIG. 3B is a cross-sectional view of Section 3B-3B as depicted in
- [0013] FIG. 3A; and
- [0014] FIG. 4 is a bottom view of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0015] Refer to FIGS. 3A, 3B and 4 for a club structure of a golf putter according to a preferred embodiment of the present invention. The club structure comprises a club head A and a shock absorbent member 330 embedded into the club head A; wherein:

[0016] A club head A is extended upward from a long transversal main body 30 and coupled to a neck 31 of a rod (not shown in the figure), and the main body 30 includes a striking blade 32 disposed at its front side for striking a golf ball (not shown in the figure) and a chamber 33 disposed at the bottom of a rear side along the striking blade 32. The thickness of a gap between the chamber 33 of the main body 30 and the striking blade 32 is less than 1.5 mm.

[0017] The shock absorbent member 330 is made of a soft material with a small specific gravity such as a synthetic rubber including polyurethane (PTU) elastomer, polyurethane (PU), and ethylene propylene dien monomer (EPDM) as shown in the figure. The shock absorbent member 330 is integrally connected with the chamber 33 at the bottom of a rear side along the striking blade 32 of the main body 30 selectively by thermal pressing, injection, or injection with adhesion, such that when the striking blade 32 is in contact with a golf ball (not shown in the figure), the vibration transmitted from the striking blade 32 to the main body 30 can be controlled to achieve a stability of striking the ball.

[0018] The striking blade 32 is made of a metal having a higher rigidity than the elastic material such as resin, and thus golfer can have a better control on the striking direction and make the pushing force of the striking blade 32 even, so that the golf ball can be struck at a specific direction.

[0019] In an application of the present invention, the elastic contraction of the shock absorbent member 330 makes the striking blade 32 to curve backward at the instance when the striking blade 32 is in contact with the golf ball, and the time of contacting the golf ball can be extended to improve the control of striking the ball.

[0020] In view of the description above, the striking force on the golf ball can be diversified when the striking blade 32 is in contact with the golf ball. The shock absorbent member 330 is provided to absorb the collision force produced during the striking of the ball. When the golf ball is struck, the pushing force of the striking blade 32 is even, and thus improving the stability of striking the ball. After the ball is struck, the sound produced by hitting the ball is clearer and more pleasant than that produced by a prior art golf putter.

What is claimed is:

1. A club structure of a golf putter, comprising a chamber disposed at the bottom of a side along a striking blade of a main body of a club head, and a shock absorbent member being embedded and integrally coupled with said chamber.

2. The club structure of a golf putter of claim 1, wherein said shock absorbent member is made of synthetic rubber.

3. The club structure of a golf putter of claim 2, wherein said shock absorbent member is made of polyurethane (TPU) elastomer.

4. The club structure of a golf putter of claim 2, wherein said shock absorbent member is made of polyurethane (PU).

5. The club structure of a golf putter of claim 2, wherein said shock absorbent member is made of ethylene propylene dien monomer (EPDM).

6. The club structure of a golf putter of claim 1, wherein said shock absorbent member is embedded into said chamber by thermal pressing.

7. The club structure of a golf putter of claim 6, wherein said shock absorbent member is formed by injection and embedded into said chamber of said main body.

8. The club structure of a golf putter of claim 6, wherein said shock absorbent member is formed by injection and adhered with said chamber of said main body.

9. The club structure of a golf putter of claim 1, wherein the thickness between said chamber of said main body and said striking blade is less than 1.5 mm.

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