A golf putter having a magnetic ball marker mounted thereon, a ball retrieval and marker retrieval and putting surface repair device incorporated therein and to allow ball marker placement whereby a ball can be retrieved from a golf hole or putting surface, a marker can be placed or retrieved and a ball mark can be repaired by the user all from an erect or upright standing position.
GOLF PUTTER, BALL RETRIEVER, BALL MARKER, AND PUTTIN GREEEN REPAIR DEVICE

FIELD OF THE INVENTION

[0001] The present invention relates to the field of golfing, golf equipment and golf clubs. More particularly, the present invention relates to a golf putter which incorporates within it a magnetic ball marking device, a ball retrieval device, a ball marker retrieval device and a putting surface repair device, all usable from a standing or erect position.

BACKGROUND OF THE INVENTION

[0002] From the hallowed acres of the Royal and Ancient Golf Club at St. Andrews, Scotland, to the local municipal golf course and across the sands of bunkers and time, the golfer has faced similar problems on the putting surface. The putter has been both the savior and the bane to many practitioners of this ancient sport. Further, the related activities of ball marking with a marker or coin, ball retrieval from putting surface and golf hole and repair of the mark or dimple left on the putting surface by the landing of a golf ball have been a cause for concern and fatigue and the resultant stooping, bending, squatting and similar motions have caused wear and tear on many a knee and hip, especially to those practitioners in the senior set, the legions of venerable white haired or hairless duffers.

[0003] Many retrieval devices have come to the fore over the decades to alleviate these problems as they relate to retrieval of golfballs such as telescoping type devices with cages or scoops to retrieve balls from an otherwise watery grave or tube type devices for use with a number of balls at a practice range.

[0004] Devices for picking up of balls from a golf putting surface have also been brought to the public often with the use of a novel claw or grabbing device or a suction cup mounted on the handle of a golf putter. Cavities in the head of golf putters have also been used to sweep up ball from a putting surface but not to conveniently allow such a function for a holed ball.

[0005] Devices for marking the position of a ball on a green have run the range of coins to small stemmed markers usually of plastic which are placed and retrieved by bending over or stooping or squatting to place the marker and then to retrieve it. This can be particularly burdensome to the less flexible among us, especially the portly or the older practitioner.

[0006] Devices for repair of a ball mark on a green have been known to include golf tees, pens, pencils, spiked shoes and a myriad of fork-like devices either sold or given away as souvenirs or promotional devices or key chain lobs. Yet with all of these devices, the act requires physicality of stooping, bending or squatting with its concomitant stress and strain.

[0007] None of these devices or these retrieval devices have overcome the shortcomings and problems set forth above. Many require the purchase of a separate device.

[0008] Accordingly, it is the object of the present invention to provide a device which overcomes these long standing shortcomings in the art with one combination device.

[0009] It is a further object to provide a ball marker and ball marker retrieval system with a golf putter without diminishing the primary function of the putter.

[0010] It is a further object to incorporate a ball mark or divot or scar repair device into the configuration of a golf putter without diminishing the primary function of the golf putter.

[0011] It is a further object of the present invention to provide a golf ball retrieval device which is incorporated into the configuration of the golf putter to provide for retrieval of the golf ball from the golf hole or putting surface without damage to either and without adversely effecting the balance, utility and primary function of the golf putter.

[0012] All of these objects and others and advantages and advances in the art of golf ball putters will be achieved and become readily apparent from a review of the present disclosure.

SUMMARY OF THE INVENTION

[0013] The present invention provides a golf putter which incorporates a ball marker, a ball retriever, a ball marker retriever and a divot or ball mark repair in a combination golf putter while not adversely affecting the primary function of the putter to accurately put the golf ball. This is achieved by a putter head which has a receptacle defined therein wherein a ball marker, which can be of standard configuration and having a stem, can be stored. A cavity in the side of the putter head opposite the face which allows a ball or a marker to be scooped from the putting surface or from inside a golf hole, as will be latter disclosed and a tongue extending from the putter head at the end opposite to the end at which the shaft is attached to the putter head to provide for the repair of marks in the putting surface while the user remains in an erect, standing upright position.

[0014] The ball marker itself is magnetized and the putter head is of a ferrous base to allow the marker to be attached to the bottom surface of the putter head, pressed into the putting surface and disconnected from the putter head by moving the putter head away with sufficient force to break the magnetic connection. The marker can then be later retrieved by dislodging it from the putting surface by either utilizing the ball scoop cavity or the tongue portion to dislodge the marker from the putting surface and then magnetically retrieving it. It should be noted that utilizing the tongue allows for retrieval of the marker when it is in close proximity to the ball without disturbing the ball location.

BRIEF DESCRIPTION OF DRAWINGS

[0015] FIG. 1—Front face elevation
[0016] FIG. 2—Rear face elevation
[0017] FIG. 3—Top
[0018] FIG. 4—Cross-section at marker location with marker shown
[0019] FIG. 5—Repair elevation hinge
[0020] FIG. 6—Retrieval from hole elevation
[0021] FIG. 7—Marker placement or retrieval
[0022] FIG. 8—Marker
[0023] FIG. 9—Shaft elevation
With reference to FIGS. 1, 2, and 3, the putter, without shaft, is depicted. The putter head, 1, is constructed with a front face, 3, which strikes the ball when in use and a back side, 4, which has a cavity, 15, defined therein. The top surface shown in FIG. 3 and numbered 5, shows the relationship of the cavity to the front or toe end, 9, see FIG. 3, of the putter head. It is of a diameter greater than the diameter of a golf ball and is proximate to the toe end, 3, of the putter head, 1, to provide for the function of scooping the golf ball, 40, FIG. 6, from the putting surface by a lateral or scooping action or from a hole, 30, as demonstrated in FIG. 6. This function would not work as to the golf hole retrieval if the cavity was not so placed without risk of damage to the edge of the golf hole, 30. A tongue portion, 14, FIG. 3, is provided extending from the bottom of the front side of the putter head, towards the toe end as shown in FIG. 3 to a length which is equal to the leading edge of the toe end, 9, FIG. 3, so as not to protrude and cause damage to other equipment or difficulty in storage. This tongue portion, 14, FIG. 3, is used to repair divots or ball marks when utilized as shown in FIG. 5 by placing the tongue into the putting surface, applying leverage through the putter shaft to lift the turf or putting surface and pull it back to the center of the hole, as is otherwise done with a hand tool, but from a standing position with the present invention.

The bottom surface, 7, of the putter is arched as shown in FIGS. 1 and 2, which allows for a smooth stroke and minimizes drag on the putting surface by the putter head except for the middle portion around which point, the putter is face balanced, its optimal ball striking spot. This affords a smooth, effective and duplicatable putting stroke which is most desired by users. The location of this point is marked by the logo insert at location 6, FIG. 3, to provide the user ease in alignment prior to stroking the golf ball. This arched configuration also allows a smooth stroke in the ball retrieval function from the putting surface.

In FIG. 1, the putter head, 1, uses a shaft portion, 2, on its top side, 5, FIG. 3, at the shaft end, 8, FIG. 3, the latter two elements shown in FIG. 9, which protrudes at an angle of about 90° from the plane of the top surface. At the upper end of shaft portion, 2, in FIGS. 1 and 9 is defined a receptacle, 22, into which a putter shaft of standard configuration is inserted and fixedly attached. Various handle lengths can thereby accommodate a complete variety of users from short to tall and user preferences as to shaft length.

Refering to FIGS. 1, 3 and 4, the operation of the interaction of the putter head, 1, FIG. 1, and ball marker, 11, FIGS. 4 and 8, will be understood. Defined in the back side, FIGS. 2 and 4, of the putter head, 1, see FIGS. 3 and 4, is a cylindrical receptacle, 10. The ball marker, 11, see FIG. 4, is configured with a cylindrical magnetized flat top portion, 13, and a centrally located protruding cylindrical stem portion, 12. The receptacle, 10, shown in FIG. 3, is accommodatingly larger than the stem, 12, FIG. 4, to allow the stem to slide into the receptacle and be stored and carried therein. When the need arises to mark a ball location on the putting surface, the user removes the marker from the receptacle and magnetically attaches it to the bottom surface of the putter head see FIG. 7, with the stem, 12, facing outwardly. While standing and utilizing the handle length of the entire putter, the marker can be pressed into the putting surface. Once this is completed, the putter head can be moved away along the plane of the putting surface with sufficient force to break the magnetic connection thereby leaving the marker in the desired location. By next scooping up the golfball, 40, as previously described, by a stroke and subsequent upward lifting motion, the marking is completed without the need to bend, kneel or stoop.

When the user desires to remove the marker, the cavity, 15, in FIG. 3, can be drawn against the top of the ball marker, 13, thereby dislodging it from the putting surface. The marker can also be dislodged using the tongue, 14, FIG. 3, in a prying motion, also while remaining erect or standing, as stated above. A simple magnetic attachment then allows the marker, 11, FIGS. 4 and 8, to be picked up, and reinserted into the receptacle, 10, FIG. 3, all while the user remains erect.

The overall dimension of the putter head although not critical in general, requires the cavity to be larger in diameter than a golf ball to allow ease of scooping the golfball with a sliding motion. Various dimensions have been tried but a radius of about 1.25" has been shown to be effective. Generally the shaft part, 22, FIG. 1, is perpendicu lar to the top face but the top face is slightly arched to comport to the bottom face arching discussed above. A tangent line drawn at the location of the connection of the shaft portion to the top face of about 93.7° has proven workable, FIG. 9. A change in this angle however will change the center of gravity of the putter head so this angle is, selected to place the center of gravity in the putter head, 1, FIG. 1, at a location between the rear dimension of cavity, 15, FIG. 3, and the shaft putter connection point, 23, FIG. 1. The process of placing this location, which is the location of center mark 6, FIG. 3, is known in the art as “face balancing” and the final location of mark 6 is often referred to as the sweet spot, that is the optimal spot to strike the ball.

The preferred length of the putter head is under five inches and its preferred width is under one inch with the length of the shaft portion, 2, FIG. 1, from top side, 5, FIG. 3, to receptacle, 22, is less than two inches.

In one particular configuration, the actual dimension although not offered to be limiting but only to further teach the invention were as follows:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putter head length overall</td>
<td>4.7108&quot;</td>
</tr>
<tr>
<td>Putter head width overall</td>
<td>0.8750&quot;</td>
</tr>
<tr>
<td>Cavity radius</td>
<td>1.25&quot;</td>
</tr>
<tr>
<td>Shaft portion angle to top face</td>
<td>93.6823°</td>
</tr>
<tr>
<td>Handle length (overall)</td>
<td>31 inches</td>
</tr>
<tr>
<td>Shaft portion (Face to receptacle)</td>
<td>1.8596&quot;</td>
</tr>
<tr>
<td>Putter head height</td>
<td>1.000&quot;</td>
</tr>
</tbody>
</table>

In operation, the user utilizes the present invention as he would a normal putter with his normal putting stroke. The marking of the ball and removal from the green can be accomplished as set forth herein and the removal from the hole or cup is with a simple insertion of the toe end into the
cup, a light rotation to allow the golf ball to enter the cavity and a simple upward lift to remove the ball, all without leaving the standing or erect position.

[0032] The above described embodiment of the invention, although preferred, may be changed, modified and altered without departing from the spirit and scope of the invention set forth herein and claimed in the appended claims.

I claim as my invention:

1. A golf putter ball marker, ball marker retriever and ball retriever, comprising:
   a shaft portion;
   a putter head attached to the shaft portion, the putter head having a front face, upon which the ball is struck; a back side opposite the front face; a top surface, upon which the optimal striking point of the putter head to the ball is marked to be seen by a user; a bottom surface; a shaft end where the shaft portion attaches; a toe end opposite the shaft end; and, a ball marker receptacle of circular cross section defined in the back side wherein the ball marker is releasably attached to the putter head;
   a magnetized ball marker comprising a cylindrical stem portion with a diameter accommodatingly smaller than the diameter of the ball marker receptacle; and, a circular, flat top portion which can be placed on the putting surface by the user by removing it from the receptacle, magnetically attaching the top portion to the putter head bottom surface so that the stem portion faces outwardly, pressing the stem portion into the putting surface; and, removing the putter head with sufficient force to break the magnetic connection between the putter head and the ball marker, thereby leaving the ball marker in the desired location on the putting surface; a tongue portion extending from the toe end to provide a means for repairing marks in a putting surface, and dislodging the marker from the putting surface, while the user of the golf putter remains in an upright, standing position; and

2. The invention of claim 1 wherein the optimal striking point of the putter head is at a location between the point where the cavity ends opposite the toe end and the point where the shaft portion attaches and is marked on the top surface to be visible to a user in normal user position.

3. The invention of claim 2 wherein the bottom surface is of arched configuration.

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