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(54) **MULTIPURPOSE GOLF ASSEMBLY**

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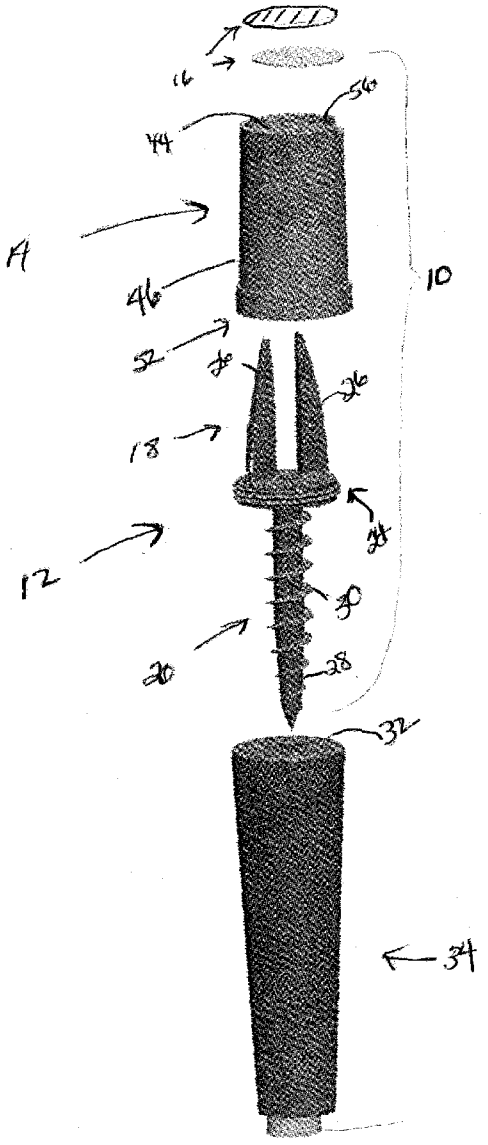
(57) **ABSTRACT**

The instant invention relates to a multipurpose golf assembly capable of being attached to a golf club. The assembly includes a turf repair tool having a first side and a second side interconnected by a median portion. The first side having at least one integrally attached turf repair implement, and the second side having an integral attachment device for creation of a reliable interference fit upon insertion into a golf club. The assembly further includes a cover constructed and arranged to enclose the first side of the turf repair tool by removable engagement with the median portion of the turf repair tool. The assembly may include at least one ball spot marker constructed and arranged to removably attach to the cover.



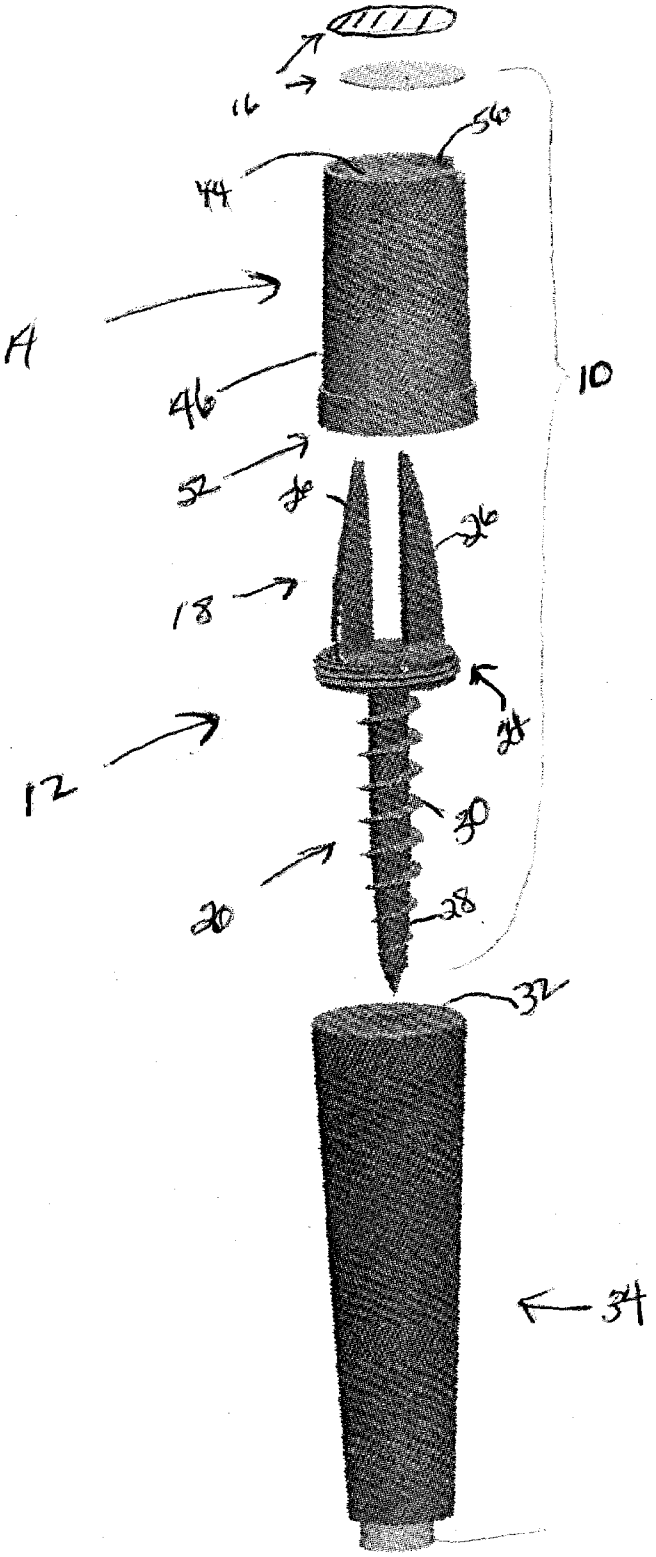


FIG1

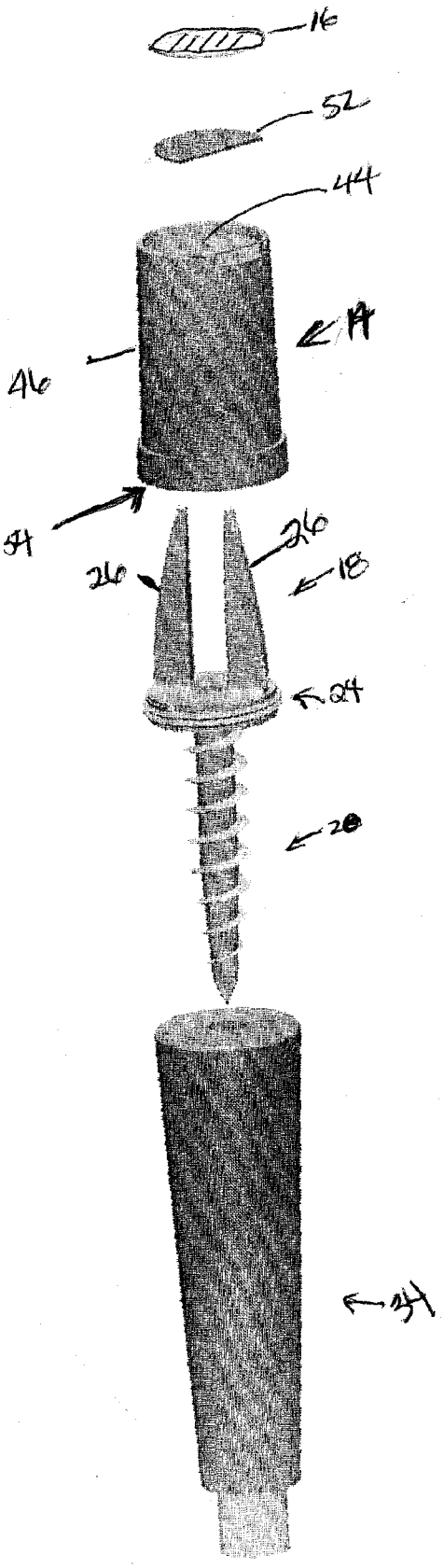


FIG 2

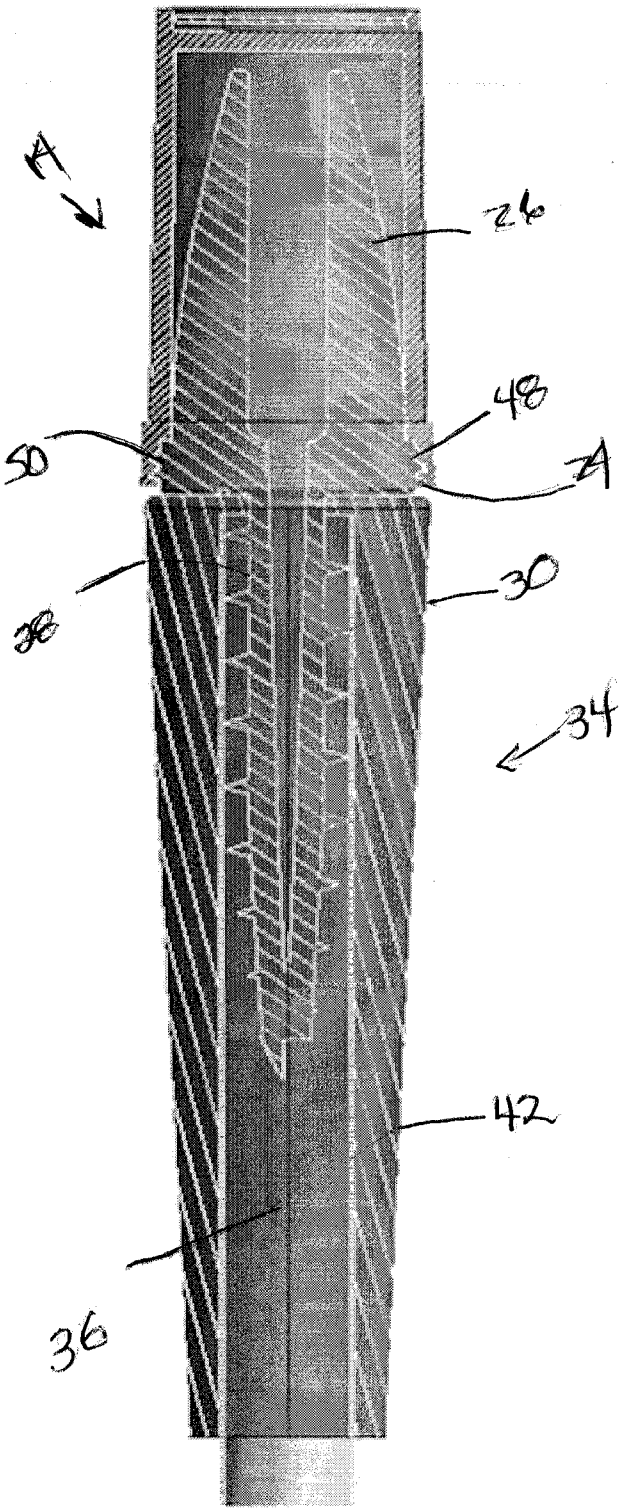


FIG 3.

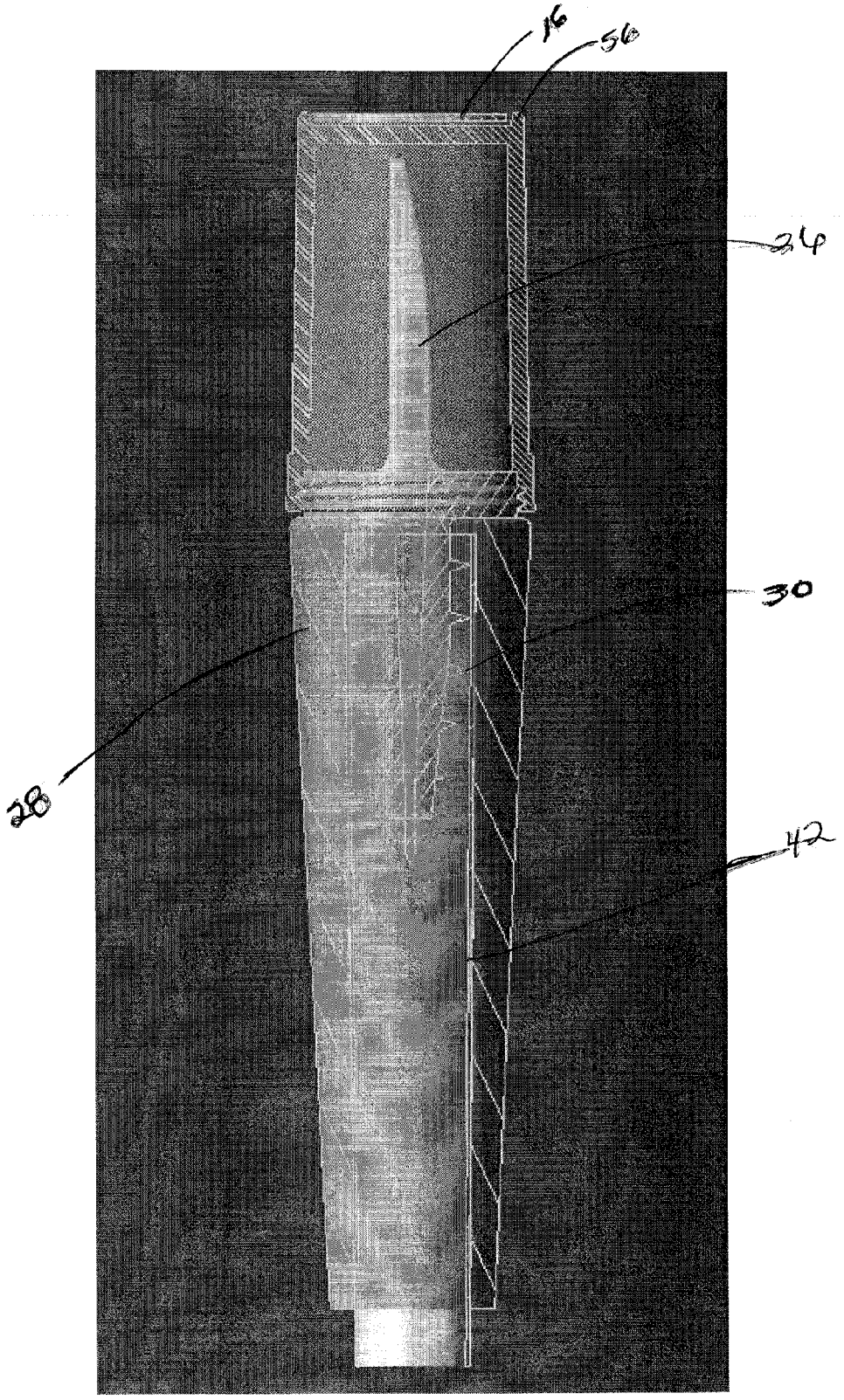


FIG. 4

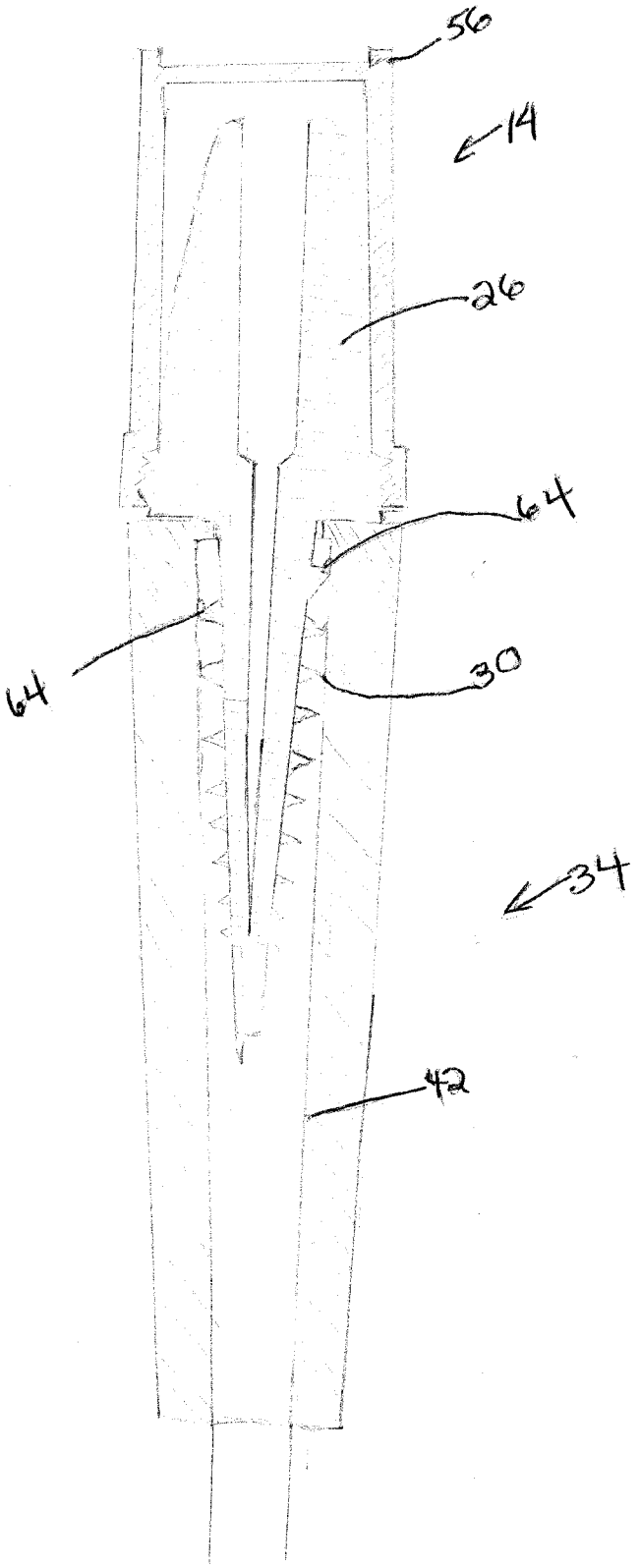


FIG. 5

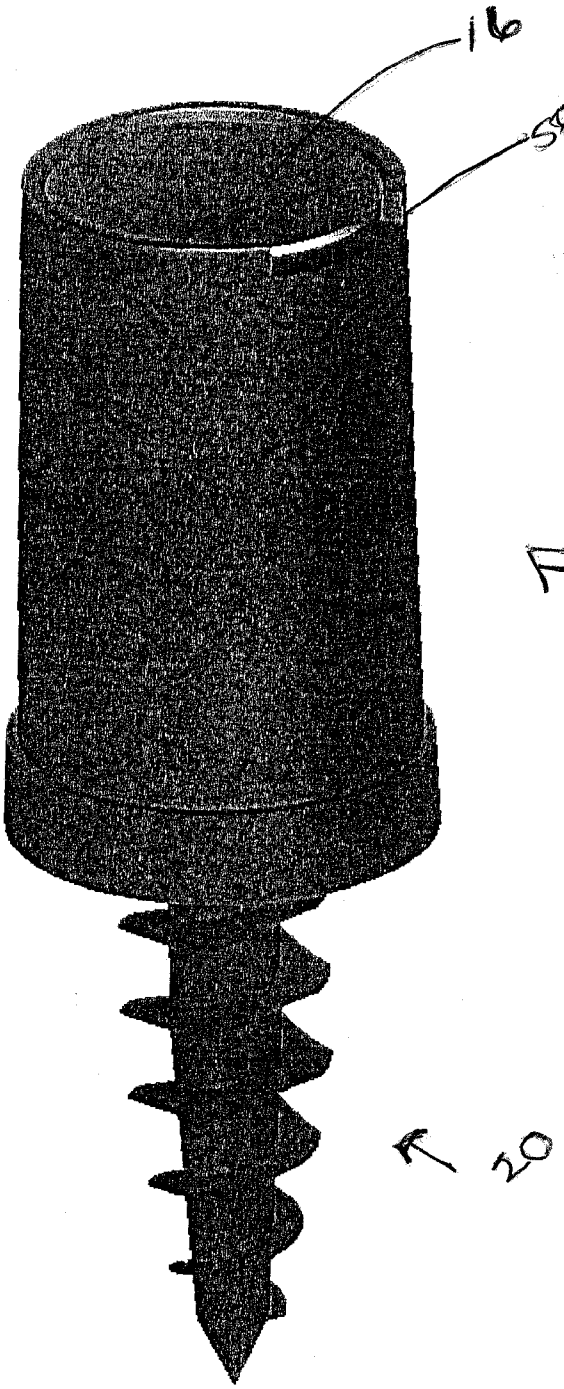


FIG. 6

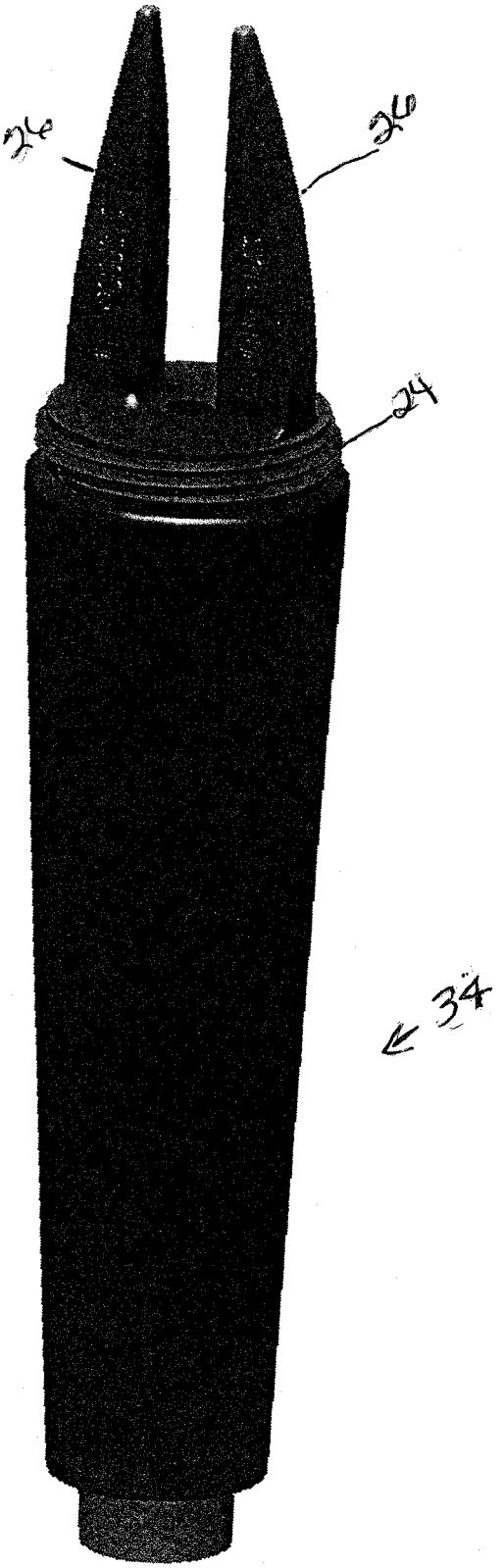


FIG. 7

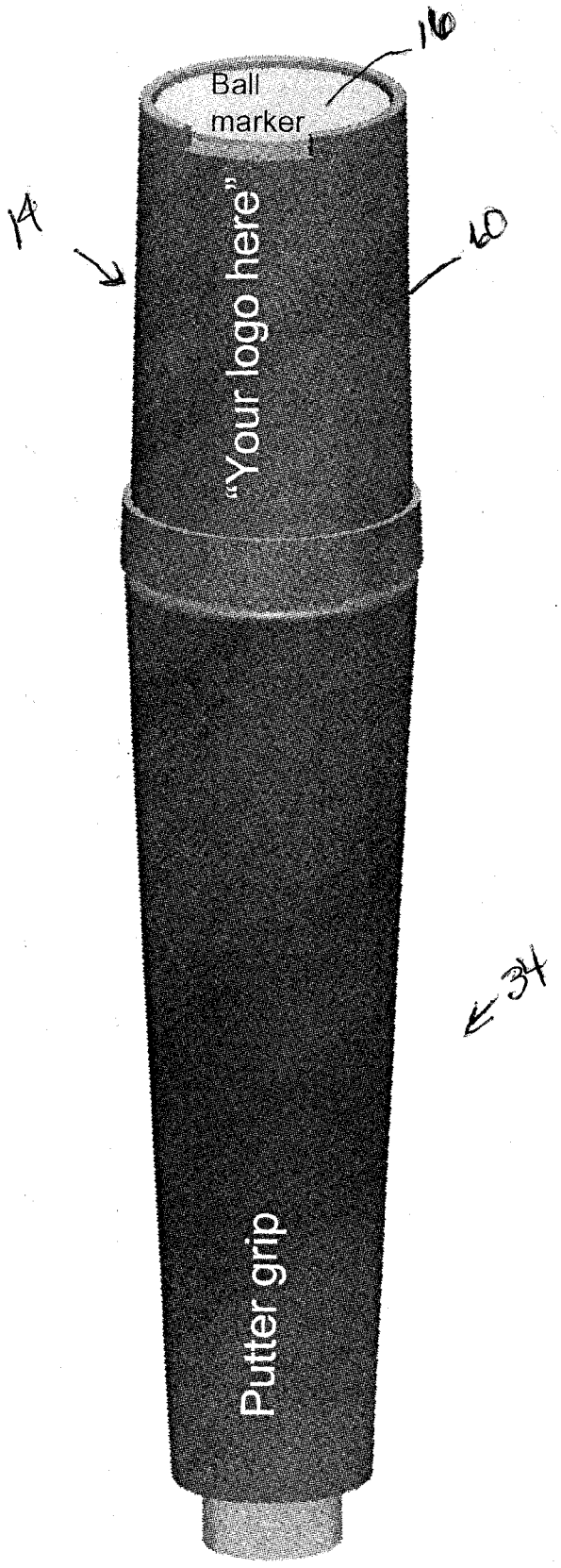


FIG. 8

MULTIPURPOSE GOLF ASSEMBLY

FIELD OF THE INVENTION

[0001] The invention generally relates to sporting equipment. Particularly, a multipurpose golf assembly that includes a divot repair tool, and optionally, a ball marker both capable of being integrated into the shaft of a golf club.

BACKGROUND OF THE INVENTION

[0002] The quality and beauty of golf courses rely on carefully maintained greens; unfortunately, most greens are fragile and easily damaged during play. Golf etiquette requests that each individual golfer repair divots (also referred to as, dimples or marks) created when the golfer's ball strikes the green, since these divots may influence the roll of the ball for subsequent players. The most common tool used to repair greens is a handheld single or multi-pronged device that requires the golfer stoop or kneel to place the prong(s) under the divot and forcibly lever the damaged turf flush with the surrounding green.

[0003] Periodically, during a golf game the player will need to mark the position of their ball on the green so as not to interfere with another golfer's path to the hole. The player will replace their ball with the spot marker until it is their turn again. Spot markers have been made in various colors, materials (e.g., plastic, metal, wood), textures, and shapes (circular, square, etc.). Furthermore, some spot markers include a post integrally formed on one side which is pressed into the ground by the player to help hold it in place on the turf.

[0004] These individual turf repair devices and ball makers are usually carried by a player inside their pocket or golf bag. Often golfers forget to bring these devices with them to the golf course or cannot locate them during play. Thus, it is the purpose of the present invention to teach a repair device, and optionally, at least one spot marker that removably attaches onto the handle end of a conventional golf club so that both are readily available during play and not left behind. Moreover, the present invention does not require the player bend or stoop to use them, which is particularly desirable for elderly or physically impaired players.

DESCRIPTION OF THE PRIOR ART

[0005] Numerous patents and publications have been directed to divot fixing tools, spot markers, or combinations thereof, attached the handle of a golf club, however, these devices often require specialized golf clubs or grips, or extensive modifications to existing golf clubs.

[0006] For example, U.S. Pat. No. 6,244,356, to Luna discloses a divot repair tool that attaches to the handle end of the shaft of a golf club for repairing golf ball marks on a putting green and includes a body with prongs on a first side. The means for attaching the divot repair tool to the club requires a complicated assembly that includes a slotted skirt attached to the second side of the tool body in combination with a tapered plug, a bolt and a nut, that fits into the shaft and expands outward to tightly attach the tool to the golf club. The cap includes a groove sized and shaped to releasably engage ridges formed in the prongs to securely hold the cap onto the tool. Unlike the present invention, the golfer must utilize a separate tool (screwdriver) to remove the divot repair tool from the handle. Moreover, the prongs of the divot are prone to become deformed, and/or the ridges in the prongs occluded with debris, after being used to repair divots in the turf. This configuration can prevent the cap of the '356 patent from properly attaching onto the divot repair tool.

[0007] U.S. Pat. Nos. 6,223,829, and 6,502,646 both to Wiens, also describe a divot repairing tool rotatably mounted to the top of the handle of a putter. U.S. Pat. No. 5,277,425, to Petriano, Sr., is drawn to a divot repair tool mounted on the grip end of a putter. U.S. Pat. No. 3,771,794 to Crockett, discloses a turf repair implement attached to a club. In order to combine the turf repair attachment means with the tubular shaft of the tubular of the club, the outer end of the hand grip section need to be severed by a saw or by other cutting implement in order to expose an opening of the tubular shaft. Unlike the present invention, all of these aforementioned patents disclose a divot repair tool comprising of a plurality of parts, thereby making them expensive to manufacture, difficult to assemble and/or attach.

[0008] U.S. Pat. No. 2,979,335, to Pruitt, discloses a golf club which has a recess at the top of the golf club grip. A ball marker is magnetically held in the recess. Unlike the present invention, this patent fails to disclose an integrally formed divot repair device.

[0009] U.S. Pat. No. 6,758,762, to Markwood, describes a golf grip capable of retaining both a divot repairer and a ball marker. The grip has an open end, a closed end, and a hollow body portion for accepting a golf club shaft. The closed end of the grip is formed for insertion and retention of a divot repairer and at least one aperture is formed in the grip for insertion and retention of a ball marker. Unlike the present invention, the addition of the grip of this patent over the club shaft can alter the balance, look, or feel of the club. Similarly, U.S. Pat. No. 5,779,558, to Britton, is drawn to a golf putter that is provided with a ball mark repair tool integrally stored on a grip of the putter. The repair tool has at least two tines which are received in the grip so that they remain outside of the putter shaft and include recesses to store ball markers. U.S. Pat. No. 3,791,652, to Schuler, discloses a ball marker and a dimple mark repair device for repairing damage done to the turf by a golf club, which are held in the handle of a golf club. Lastly, U.S. Pat. No. 3,774,913, to Dien, describes a combination green fixing tool and ball marker detachably secured to one another and releasably received within the grip end of a golf club. While these references do disclose a golf club in combination with a ball marker and divot repair device, none of these patents disclose a combination turf repair device and ball spot marker wherein the turf repair device is constructed and arranged to removably fit into a golf club such that the player does not have to stoop or kneel to repair the divot or to pick up the ball spot marker.

[0010] While the foregoing described prior art golf tools may have advanced the art in a variety of ways, there nevertheless remains a need for a simple multipurpose golf assembly which includes a divot repair tool, and optionally a ball spot marker, that is inexpensive to manufacture and that will easily and securely attach to a golf club.

[0011] All patents and publications mentioned in this specification are indicative of the levels of those skilled in the art to which the invention pertains. All patents and publications are herein incorporated by reference to the

same extent as if each individual publication was specifically and individually indicated to be incorporated by reference.

SUMMARY OF THE INVENTION

[0012] Consequently, in response to the aforementioned problems found in the prior art, the present invention is related to a multipurpose golf assembly capable of being easily attached to, and removed form, the handle end of a golf club. The inventive assembly includes a turf repair tool including a first side and a second side interconnected by a median portion. The first side having at least one integrally attached turf repair implement, and the second side having an integral attachment means for creation of a reliable interference fit upon insertion into the golf club without the need for separate tools for attaching (e.g., screwdriver). The device includes a cover constructed and arranged to enclose the first side of the turf repair tool. The cover is constructed and arranged for removable engagement with the median portion of the turf repair tool. According to one embodiment, the assembly may include at least one ball spot marker constructed and arranged to removably attach to the cover.

[0013] It is an objective of the instant invention to provide a multipurpose device that allows the golfer to attract the ball spot marker onto the cap and repair a divot without the player having to stoop or bend down.

[0014] Yet another objective of the instant invention is to disclose the multipurpose golf assembly wherein the cover is constructed and arranged for removable attachment with the median portion such that any damage to, or debris on, the turf repair implement does not inhibit attachment.

[0015] Another objective of the instant invention to provide a divot repair tool comprising a single, unitary construction. The unitary construction provides increased structural integrity without the need of separate attachment components (e.g., fasteners), making the tool economical to manufacture in that it has few components.

[0016] It is a further objective of the present invention to provide a multipurpose golf assembly that can be incorporated into an existing golf club without influencing the balance, appearance, or feel of the club.

[0017] Yet another objective of the present invention is to disclose an embodiment of the divot repair tool that is constructed and arranged to removably attach to golf club handles of various sizes.

[0018] Still another objective of the instant invention is to disclose a multipurpose golf assembly capable of displaying advertising means, such as trademarks, trade-dresses, logos, or other messages.

[0019] Still yet another objective of the present invention is to disclose a multipurpose golf assembly that will remain securely in the golf club during use, yet is removable from the club if desired.

[0020] Other objects and advantages of this invention will become apparent from the following description taken in conjunction with any accompanying drawings wherein are set forth, by way of illustration and example, certain embodiments of this invention. Any drawings contained herein constitute a part of this specification and include exemplary embodiments of the present invention and illustrate various objects and features thereof.

BRIEF DESCRIPTION OF THE FIGURES

[0021] FIG. **1** is an exploded view of the multipurpose golf assembly and golf club handle portion according to one embodiment of the present invention;

[0022] FIG. **2** is another exploded view of the multipurpose golf assembly and golf club handle portion according to the features of another embodiment of the present invention;

[0023] FIG. **3** is a cross-sectional front view of the multipurpose golf assembly shown attached to the handle portion of the golf club, the threads provide stability by preventing movement perpendicular to the axis of the shaft when installed within in the club;

[0024] FIG. **4** is a cross-sectional side view of the multipurpose golf assembly of FIG. **3**;

[0025] FIG. **5** is a cross-sectional front view according to another embodiment of the multipurpose golf assembly illustrating substantially flexible threads that permit the divot repair device to be installed onto a club where the dimension between the inner surfaces of the club is less than the dimension of a portion the threads;

[0026] FIG. **6** is an upper perspective of the divot repair tool with the removable cover installed thereon;

[0027] FIG. **7** is an upper perspective of the divot repair tool installed on the golf club shown without the cover attached; and

[0028] FIG. **8** is an upper perspective of the divot repair tool of FIG. **7** shown with the cover attached.

DETAILED DESCRIPTION OF THE INVENTION

[0029] Detailed embodiments of the instant invention are disclosed herein, however, it is to be understood that the disclosed embodiments are merely exemplary of the invention, which may be embodied in various forms. Therefore, specific functional and structural details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representation basis for teaching one skilled in the art to variously employ the present invention in virtually any appropriately detailed structure.

[0030] Referring now to FIGS. **1-8**, wherein like elements are numbered consistently throughout, FIG. **1** illustrates an exploded view the multipurpose golf assembly according to one embodiment of the instant invention, generally referenced as **10**. By way of an overview the multipurpose golf assembly includes a turf repair tool **12**, a protective cover **14**, and optionally, at least one ball spot marker **16** (two shown here) removably attached thereto.

[0031] The turf repair tool **12** is capable of being removably attached to a golf club handle portion (i.e., grip) **34** through an opening **32** which provides access to the hollow shaft of the club. Although, most golf clubs have a preformed opening to provide access to the hollow interior **38** of the club shaft **40** (FIG. **3**), it is hereby contemplated that the instant assembly may be used in a club where the user creates the necessary opening prior to installation of the instant invention.

[0032] The turf repair tool of the present invention is of a single, unitary construction that includes a first side **18** and a second side **20** interconnected by a median portion **24**. The

first side has at least one integrally attached turf repair implement **26** (e.g., prong, tine, fork, or the like). Although shown in the FIGS as two spaced apart turf repair implements disposed substantially perpendicular to the first side, it is contemplated that the implements could be of any shape or design projecting from the first side that allows the player to easily repair the damaged green using the club. For example, the implements could be designed in a manner similar to the spirally projecting tines taught by Crockett in U.S. Pat. No. 3,771,794 (previously incorporated by reference). The second side of the turf repair tool has an integral attachment means **20** constructed and arranged to provide a secure and reliable interference fit into the club.

[0033] According to a preferred, albeit non-limiting embodiment, the attachment means **20** comprises a post **28** integrally connected to the second side and constructed and arranged to provide an interference fit within the opening of the club. In this embodiment, the post includes helically formed threads **30** disposed and extending substantially perpendicular therefrom. As shown in the cross-sectional views of FIGS. **3-5**, the threads proximate the second side **20** of the median portion of the divot repair tool are constructed with dimensions greater than the dimension of shaft opening **32** which serve to hold the divot repair tool inside the shaft when installed therein. Moreover, as shown in FIGS. **3-4**, at least a portion of the threads, formed along the axial dimension of the post, are constructed with dimensions approximate to the lateral dimension (distance between the inner surfaces **42** of the hollow shaft) to stabilize the installed divot repair tool by preventing movement perpendicular to the axis of the post during use repairing divots in the green (FIGS. **3-4**).

[0034] Referring now to another embodiment shown in FIG. **5**, the threads may be formed from a flexible material that allows the divot repair device to be installed inside another club where the dimension between the inner surfaces **42** of the hollow shaft is less than the dimension of the threads, shown here with the thread portion proximate the median portion of the divot repair tool flexed against the inner surface of the club. This configuration allows the threads to flex once installed in the club, providing enhanced lateral stability. Moreover, the golf assembly of this embodiment is versatile in that it may be removed and attached to another sized club.

[0035] Although illustrated herein as a post having circular threads, as seen along the axis of the divot repair device, it is hereby contemplated that the threads may be formed in any shape deemed necessary without departing from the scope of the invention (e.g., square, polygon, etc.)

[0036] During installation of the embodiment of the divot repair tool into the handle end of the club, as shown in the FIGS., the user simply rotates the threaded post of the divot repair device about its longitudinal axis, while applying downward pressure as the threads are fed through the opening **32** and into hollow interior of the shaft until the second side of the divot repair tool is substantially flush with the grip (see, FIGS. **3-5**). Once installed on the grip, the repair tool is always available when the player is on the green. The divot repair device may be constructed from any rigid and durable material known in the art, such as, plastic, metal, wood or combinations thereof.

[0037] As discussed above, the multipurpose golf assembly also includes a cover or cap **14** constructed and arranged to fit over and protect the first side of the turf repair tool (see FIGS. **3-6**). The cover has an endwall **44** integrally connected to at least one sidewall **46** forming a substantially open opposite end **54** that is constructed and arranged for removable attachment to the median portion **24** of the divot repair tool. According to one non-limiting embodiment, as best illustrated in FIGS. **3-5**, the inner surface of the open end of the cover includes threads **50** constructed and arranged to cooperate with threads **48** formed on the median portion of the divot repair tool.

[0038] Other means of removably attaching the cover to the divot repair tool are contemplated herein. For example, one embodiment might include notches formed on either the median portion, or the cap, constructed and arranged to receive lugs that snap-fit the cap onto the divot repair tool.

[0039] According to a particularly preferred embodiment, the endwall of the cover is formed from a magnetic material capable of magnetically attracting and holding thereon at least one ball marker composed of a magnetic material (e.g., steel, iron, etc.) FIG. **2** illustrates another embodiment where the endwall includes a separate magnet **52** attached thereto and used to releasably hold a ball marker **16**. The endwall may also include an integral lip **56**, shown here formed around a substantial portion of the perimeter of the endwall to help prevent the attached marker from becoming dislodged from the cap. The lip may also include a notch portion **58** for easy release of the marker from the cover, such that when the user presses down on the marker in the vicinity of the notch, the marker will pivot away from the magnet for easy removal (see FIG. **6**). The magnetic cover is a particularly preferred embodiment in that it allows the player to attract a ball spot marker located on the turf and attach onto cover without the player having to stoop or bend down. Moreover, the magnetic cover allows multiple ball marks to be readily stacked atop each other.

[0040] In an alterative embodiment not shown, the endwall and/or lip may be constructed and arranged to include means for retaining (e.g., tabs, lugs, or the like) the marker when the user presses it against the endwall. As with the previous embodiment, the player can remove the ball marker by lifting upward on the ball maker at the notch. Although not depicted in the FIGS., the cover may include an opening constructed and arranged to removably receive a post integrally formed and projecting perpendicularly from one side of the ball spot mark. The post of the ball marker is pressed into the ground by the player to help hold it in place on the turf. In addition, the post may include lugs or notches that interference fit into the opening to help hold the ball marker in place.

[0041] FIG. **7** illustrates the divot repair tool attached the handle end of the golf club without the cover attached thereto. FIG. **8** illustrates the divot repair tool attached to the club with the cover attached thereto. As shown in FIG. **8**, any or all elements of multipurpose golf assembly (cover, divot repair tool, ball maker) may include an advertising means **60** formed thereon to provide a unique advertising medium. Non-limiting examples of suitable advertising means include pictures, designs, logos, trademarks, tradedress, etc.

[0042] Once the assembly is attached to the club, the player can remove the cap from the divot repair tool and invert the club so that the divot repair implement(s) is inserted into the damaged turf. The player uses the shaft of the club to wedge the soil up around the damaged turf until substantially level with the surrounding turf without having to stoop or bend down. Once finished, the cap may be

replaced onto the divot repair tool to protect the player from becoming accidentally injured by the repair implement(s) when not in use.

[0043] Although the invention is shown in the FIGS. as having a cylindrical cover, a circular ball maker and a circular median portion, it is hereby contemplated that the cover, ball marker and median portion could be in any shape desired, including, albeit not limited to, cylindrical, polygonal or the like, so long as the cover, ball marker, and divot repair tool are able to attach together.

[0044] It is to be understood that while a certain form of the invention is illustrated, it is not to be limited to the specific form or arrangement herein described and shown. It will be apparent to those skilled in the art that various changes may be made without departing from the scope of the invention and the invention is not to be considered limited to what is shown and described in the specification and any drawings/figures included herein.

[0045] One skilled in the art will readily appreciate that the present invention is well adapted to carry out the objectives and obtain the ends and advantages mentioned, as well as those inherent therein. The embodiments, methods, procedures and techniques described herein are presently representative of the preferred embodiments, are intended to be exemplary and are not intended as limitations on the scope. Changes therein and other uses will occur to those skilled in the art which are encompassed within the spirit of the invention and are defined by the scope of the appended claims. Although the invention has been described in connection with specific preferred embodiments, it should be understood that the invention as claimed should not be unduly limited to such specific embodiments. Indeed, various modifications of the described modes for carrying out the invention which are obvious to those skilled in the art are intended to be within the scope of the following claims.

1. (canceled)

2. The multipurpose golf assembly of claim **6**, wherein said golf assembly includes at least one ball spot marker constructed and arranged to removably attach to said cover.

3. The multipurpose golf assembly of claim **2**, wherein said cover is constructed and arranged to magnetically hold at least one of said ball spot markers thereon.

4. The multipurpose golf assembly of claim **2** wherein at least one member selected from the group consisting of said cover, said at least one ball spot marker, or said divot repair implement includes an advertising means.

5. (canceled)

6. A multipurpose golf assembly capable of being attached to a golf club comprising:

a turf repair tool including a first side and a second side interconnected by a median portion, said first side having at least one integrally attached turf repair implement, and said second side having an integral attachment means for creation of a reliable interference fit upon insertion into a golf club, said attachment means includes a post having helical threads integrally connected along the length thereof and extending substantially perpendicular therefrom, wherein at least a portion of said threads is constructed and arranged to provide lateral stability when said divot repair tool is attached to said club, said threads are formed from a substantially flexible material,portions of said threads deflecting in a substantially vertical direction upon encountering an inner wall of a shaft of said golf club thereby providing an interference fit with various size shafts of golf clubs;

a cover constructed and arranged to enclose said first side of said turf repair tool, said cover constructed and arranged for removable engagement with said median portion of said turf repair tool; and

whereby said multipurpose golf assembly allows the player to repair damaged turf without having to stoop or bend down.

7. The multipurpose golf assembly of claim **6**, wherein said cover is constructed and arranged to removably hold at least one of said ball spot markers thereon.

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