A golf course marker comprising of at least one extendable member made of multiple telescoping sections capable of existing in a fully contracted configuration underground or a fully extended configuration above the ground, and housed in an underground container.
GOLF COURSE RETRACTABLE MARKER

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 61/018,582, filed Jan. 2, 2008. All references cited in this application, and their references, are incorporated by reference herein where appropriate for teachings of additional or alternative details, features, and/or technical background.

BACKGROUND

[0002] In the game of golf fairway markers are used in various forms, such as distance markers, golf cart direction markers, and tee-off markers. These markers help golfers select the proper club for driving the ball, indicating where the course would like the golf carts to travel, and where a player should tee off. Each marker is intended to assist the golfer with his game and maintain the quality of the course.

[0003] 1. Field of the Invention

[0004] The present invention relates generally to devices that assist playing the game of golf and maintaining the quality of the course. More specifically it relates to markers that indicate instructions and assistance on a golf course. These markers make it possible to improve the quality of play and reduce the cost of maintenance on the course.

[0005] 2. Description of the Related Art

[0006] The common approach for placing golf markers is to have these markers permanently fixed on the ground. They are generally in the shape of flat plate or some other structure anchored flush with the ground, and they usually contain markings indicating distance, direction or some other instruction. Sometimes sprinkler heads are used as distance markers since most golf courses are usually equipped with sprinkler heads that are permanently fixed at various positions throughout the golf course. However, such markers are difficult to see from a distance and are permanent.

[0007] Another way of marking is with poles that are removably affixed in the ground. These poles contain color codes painted thereon to indicate distance or wording related to instruction or assistance. When such poles are used, they have to be manually removed during the game to prevent them from interfering with playing the game in their vicinity. They also must be removed during course maintenance when grass is being groomed by machines such as lawn mowers. Failure to remove these markers will result in damage to the marker or injury to persons within proximity of the grooming machine.

SUMMARY

[0008] This invention discloses devices in the form of a telescoping poles that serve as a markers on a golf course. When in stowed configuration, these poles are fully retracted under the ground level, and are housed in containers located underground so as not to present any obstruction to playing the game of golf, or to any machinery used for golf course maintenance.

[0009] In one embodiment a marker is manually extendable from its container by pulling on the telescoping sections to extend the marker to its final configuration.

[0010] In another embodiment a marker is automatically extended by a spring contained within the telescoping sections. This spring is compressed by a motor when it becomes desirable to retract the marker.

[0011] In yet another embodiment a marker is extendable remotely by radio control or a control mechanism operated in conjunction with the golf course watering system. The activation of the remote control is either by a hand-held transmitter or from a remote panel, for example one that activates the golf course watering system.

BRIEF DESCRIPTIONS OF DRAWINGS

[0012] FIG. 1. Diagrammatic form of an exemplary golf course marker in fully extended configuration in accordance with the present disclosure;

[0013] FIG. 2. Golf course marker in its stowed configuration;

[0014] FIG. 3. Top view of golf marker in its stowed configuration and the immediate surrounding area;

[0015] FIG. 4. Top of the top section of the golf course marker with a flange and a hole for manually extending the marker;

[0016] FIG. 5. Block diagram of the electronic control system used for automatically extending and retracting the golf course marker;

[0017] FIG. 6. Hand held radio operated control unit for activating the electronic control system used for automatically extending and retracting the golf course marker;

[0018] FIG. 7. Golf course marker in a retracted state having a pair of extendable sections with an informational sign affixed between the extendable sections; and

[0019] FIG. 8. Top view of a golf course marker shown in FIG. 7.

DETAILED DESCRIPTION

[0020] The golf course marker in accordance with the present disclosure is composed of one or more extendable members, each member having a plurality of tubular sections of decreasing diameter. In one configuration shown on FIG. 1 the marker 4 is a single extendable member having three telescoping sections 10, 12, and 14. If the marker is a yardage marker, these sections can be painted in different colors to indicate codes that are standard for such markers in the game of golf. Markers designed for other uses can also be configured as described below. The top section 14 is capped by a solid cover 20 to prevent foreign matter such as dirt or water from entering the interior of the marker. Alternatively, this section can be made from a solid piece of material. The outer diameters and the inner diameters of the tubular sections 12 and 14 are such that these sections fit closely inside each other, i.e., the inside diameter of section 10 is only minimally larger than the outside diameter of section 12 etc. This ensures that these sections slide inside each other without any side-to-side movement, and that no foreign matter such as dirt enters into the spaces between the sections and creates additional resistance when these sections slide past each other.

[0021] The bottom-most telescoping section 10 slides inside the container 8 that is in the shape of a sleeve. This container encloses the marker when it is in its fully retracted configuration, and also serves as an anchoring base for the marker.

[0022] FIG. 2 shows the container 8 for the marker 4 completely buried in subsoil 30 on the golf course, such that its top rim 6 is level with the subsoil surface 32. A layer of turf 36 grows on top of the subsoil 36, this turf being the playing...
surface for playing the game of golf. FIG. 3 shows a top view of the marker in its container 8 as it is surrounded by the turf 36.

[0023] In one embodiment shown on FIG. 4 a small-diameter hole 22 is provided in the cover 20 of the top section 14 to make it possible to pull the telescoping sections of the yardage marker from the container 8 in order to extend the marker manually. Other pulling means attached to the top section 14, such as rings, can also be employed for this purpose.

[0024] In yet another embodiment, an information sign such as a pennant may be affixed to a single extendable telescoping member. An appropriate arrangement may provide for the sign to be extended and rotated about the centerline axis of the top telescoping section 14 by an additional motor or some other means.

[0025] In another embodiment illustrated on FIG. 1 the marker 4 can be extended and compressed automatically. For this purpose a spring 42 is provided inside the container 8 and the telescoping sections 10 and 12. When the marker is retracted, the spring 42 is compressed inside the container 8 and the telescoping sections 10 and 12. When it is desirable to extend the marker, the spring is activated to expand and pushes the telescoping sections 10, 12, and 14 into their extended position.

[0026] Details of this embodiment are shown on FIGS. 5 and 6. An electric motor 40 connected to a remote control radio receiver 42 is housed in container 8. These units are powered by a battery 62 housed in the top collapsible section 14. The electric motor 40 rotates a reel 41 that pulls a line 43 to compress spring 42, thus retracting the marker. The battery 62 is connected by a pair of wires 48 to the motor 40 and the remote control unit 44. The remote control unit 44 is a radio receiver configured to receives signals from a hand-held unit 50 shown on FIG. 6. This hand-held unit 50 has a transmitter 28 configured to transmit radio signals to the receivers. Activation of individual markers is accomplished by selecting the appropriate frequency matched to the receiver frequency of the remote control unit 44. Alternatively, other activation means could be employed to activate the extension and contraction of the yardage markers, such as those using visible or infrared light, ultrasound, or the like.

[0027] The markers can also be controlled by an activating device other than a hand-held unit 50, such as a transmitter located in the irrigation control panel for controlling the lawn sprinklers for the golf course.

[0028] The markers themselves can be permanently mounted or can be removable for reinstallation in alternative locations. They may also be portable, such as for temporary use. In such a case they may be removable for cleaning, maintenance, for storage during the off season, or to prevent them from being stolen.

[0029] Materials used for the markers may comprise: metal, plastic, rubber, or some other suitable material having properties consistent with the design and use. For example, portions of the marker may be made of rubber to allow resiliency against strikes with a golf ball or being hit by a golf cart.

[0030] In yet another configuration of the golf course marker shown on FIGS. 7 and 8, a marker is made of two telescoping members, each having three sections 110, 112, and 114. The two members are housed in container 108 that is buried underground, in subsoil 30, immediately under a layer of turf 36. An information sign or some other indicator 122 is affixed between the two sections 114. This sign may have printed thereon any information relating to rules for the golf course or information relating to playing the game of golf.

[0031] A cover plate 150 is affixed to the tops of sections 114. This cover plate has a roughly rectangular shape that tightly fits into the inside of container 108. When the marker is in its fully retracted position, the top of this cover plate is at the same level as the top of the subsoil 32, and it protects the container and its contents from any foreign matter entering from the outside.

[0032] The two telescoping members made of sections 110, 112, and 114 are extended and contracted by an electric motor or some other drive means 140 and an appropriate drive mechanism that is remotely controlled by a radio-activated receiver 142. In a manner similar to the single-marker configuration described previously. The telescoping members may also each contain a spring, a retracting mechanism for retracting the spring, and a battery for powering the electric motor 140 and the radio-activated receiver 142. In a variation of the above embodiment, the information sign may be affixed to a single extendable telescoping member. The sign may extend to a degree where a portion of the sign remains within the container to maintain alignment of the sign. An alternative arrangement may provide for the sign to be extended and rotated about the centerline axis of the telescoping member by an additional motor.

[0033] Markers may take various forms, such as without limitation, tee-off markers, golf cart direction indicators, distance indicators, and field of play signs or markers.

STATEMENT REGARDING PREFERRED EMBODIMENTS

[0034] While the invention has been described with respect to the foregoing, those skilled in the art will readily appreciate that various changes and/or modifications can be made to the invention without departing from the spirit or scope of the invention as defined by the appended claims.

What is claimed is:
1. A golf course marker comprising: one or more extendable members, each made of multiple telescoping sections capable of existing in a fully contracted configuration under ground or a fully extended configuration above the ground; and an underground container housing said one or more extendable members.
2. The golf course marker in claim 1 wherein the one or more extendable members are extended and contracted manually.
3. The golf course marker in claim 1 wherein the one or more extendable members are operably activated to extend and contract by a drive mechanism.
4. The golf course marker in claim 1 wherein the marker is removable.
5. The golf course marker in claim 1 wherein the marker is portable.
6. The golf course marker in claim 1 wherein the contents of the container is removable.
7. The golf course marker in claim 3 wherein said drive mechanism is an electric motor.
8. The golf course marker in claim 7 wherein said drive mechanism is remotely controlled.

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